DIGroupArchitecture

ADDENDUM NO. 07

Union County Government Complex
For Union County Improvement Authority
Elizabeth, Union County, NJ

Addendum Date: 01-12-24

Project No.: 20.072

Project Dated: 11-08-23

The original specifications and drawings, for the project noted above have been amended as noted in this Addendum. Receipt of this Addendum shall be acknowledged by inserting its number and date in the space provided on the Form of Proposal.

I. THIS ADDENDUM CONSISTS OF THE FOLLOWING :

Number of Pages: **75 pages** (Including the cover page, description of Addendum, and divider pages)

Included:

- Bidder Questions & RFI Log 16 pages
- Specifications 45 pages
- Vol 1 &Vol 2 Drawings List of Revised Dwgs 8 pages
- Revised Drawings Volume 1 and Volume 2 *

*(items with * submitted as a separate attachment)*

II. RESPONSE TO REQUESTS FOR INFORMATION (RFIs)

1. **THIS IS THE FINAL ADDENDUM SCHEDULED FOR THE PROJECT.**
2. The RFI period ended 12/29/23, as of that date (84) RFIs were received.
3. (11) RFIs responses are included with this Addendum.
4. All RFIs have been addressed. Attached with this addendum is a log of those RFIs.

III. SPECIFICATIONS:

1. **Clarification Section 084413 –** where curved curtain wall is detailed, Contractor must utilize stick-built system. Unitized system may be utilized on upper stories.

   At Building 1 where curtain wall extends along the communicating stair from Level 1 Lobby to Level 2, curtain wall system must increase 8” profile (refer to A-350 detail) to accommodate integral steel within curtain wall framing. Refer to Section 088000 -2.2 E.9.d for U-value of glazing.

2. **Section 033000 Cast-in Place Concrete**, Part 3 Execution 3.12 Application of Liquid Floor Treatments – the following notes have been added as item C.

   C1. Concrete subfloor to be flat (Maximum variation not to exceed 1/4" in 10 feet) and to have a steel trowel finished surface. DO NOT OVER TROWEL TO DARK SHEEN. No curing agents or other additives should be used.

   C2. The slab should have an efficient moisture barrier conforming with ASTM E-1745 CLASS "A" directly beneath and in direct contact with the concrete slab when placed directly on grade.

   C3. Saw cutting of control joints must be done between 12 AND 24 HOURS after placement of the structural concrete. The concrete to receive EPOXY TERRAZZO shall be of flatness MINIMUM 1/4" IN A 10 FOOT SPAN (NOT CUMULATIVE) PER NTMA recommendations.

   C4. If lightweight aggregate concrete is specified consult epoxy resin manufacturer for precautions and moisture sensitivity.

3. **Section 095123 ACOUSTIC BAFFLE SYSTEMS** added – attached.

4. Strike Sections 096613 and 096616 and replace with **Section 096623 Epoxy Resin Terrazzo**. Attached with Addendum.
5. **Section 096513 RESILIENT BASE AND ACCESSORIES** section added to align with "ST-1" on A-820 Finish Schedule. (section noted below no specification attached)

2.2 ANGLE FIT RUBBER STAIR TREAD WITH INTEGRATED RISER

A. Classification specify: ASTM F2169, [Type TS, Class 2 embossed pattern]
B. For Raised Round/Square or Hammered pattern specify: full width of existing stairs.
C. Colors and Patterns: As selected by Architect from full range of industry colors
D. Test data:
   1. Hardness (ASTM D2240): ≥ 85 Shore A
   2. Resistance to Chemicals (ASTM F925): Passes
   3. Resistance to Heat (ASTM F 1514): $\Delta E \leq 8$
   4. Static Coefficient of Friction (ASTM D 2047): ≥ 0.5 SCOF
   5. Flammability (ASTM E648, Critical Radiant Flux): Class 1 (≥ 0.45 W/cm^2)
   6. Limited Commercial Warranty: 5 years

6. **Section 098000 ACOUSTIC METAL BAFFLES** added – attached.
7. **Section 102600 WALL PROTECTION** added - attached.
8. **Section 263213 GASEOUS EMERGENCY ENGINE GENERATORS** added – attached**.**

IV. DRAWINGS:

1. (12) Architectural Drawings:
   (9) VOLUME 1 – Refer to drawing list narrative.
   (3) VOLUME 2 – Refer to drawing list narrative.
2. (0) Civil Drawings (VOLUME 1) – no revisions.
3. (13) Structural Drawings (VOLUME 1) – refer to drawing list narrative.
4. (3) Mechanical Drawings (VOLUME 2) – refer to drawing list narrative.
5. (1) Plumbing Drawings (VOLUME 2)- refer to drawing list narrative.
6. (4) Fire Protection (VOLUME 2) – refer to drawing list narrative.
7. (54) Electrical Drawings (VOLUME 2) – refer to drawing list narrative.
8. (1) Fire Alarm Drawing (VOLUME 2) – refer to drawing list narrative
9. Drawings are clouded where edits occurred.

End of Addendum Description

Union County Government Complex
For Union County Improvement Authority
Elizabeth, Union County, NJ

Addendum Date:
01-12-24

Project No.: 20.072

Project Dated: 11-08-23

The original specifications and drawings, for the project noted above have been amended as noted in this Addendum. Receipt of this Addendum shall be acknowledged by inserting its number and date in the space provided on the Form of Proposal.

RFI LOG & BIDDER QUESTIONS

RFI No. DIG	RFI No. DEV	RFI NAME (SUBJECT)	DATE RECV'D	DATE RET'D	ADD NO.
DBCO_RFI01	RFI-01	Award Date & Notice to proceed date	12/29/23	01/05/24	ADD 06
DBCO_RFI02	RFI-02	Digital files by Architect with no costs?	12/29/23	01/05/24	ADD 06
DBCO_RFI03	RFI-03	LEED administrator	12/29/23	01/05/24	ADD 06
DBCO_RFI04	RFI-04	Code complaince review & inspections	12/29/23	01/05/24	ADD 06
DBCO_RFI05	RFI-05	Issuing permit	12/29/23	01/05/24	ADD 06
DBCO_RFI06	RFI-06	Contractor	12/29/23	01/05/24	ADD 06
DBCO_RFI07	RFI-07	Water & electrical power usage costs	12/29/23	01/05/24	ADD 06
DBCO_RFI08	RFI-08	Structural steel contactor - AISC certification	12/29/23	01/05/24	ADD 06
DBCO_RFI09	RFI-09	Scope of work performed by others or owner	12/29/23	01/05/24	ADD 06
DBCO_RFI10	RFI-10	Earthwork/ excavation - soil removal	12/29/23	01/05/24	ADD 06
DBCO_RFI11	RFI-11	Clean fill cost	12/29/23	01/05/24	ADD 06
DBCO_RFI12	RFI-12	Hazardous materials on the site?	12/29/23	01/05/24	ADD 06
DBCO_RFI13	RFI-13	Low voltage systems	12/29/23	01/05/24	ADD 06
DBCO_RFI14	RFI-14	Elevator Openings	12/29/23	01/05/24	ADD 06
DBCO_RFI15	RFI-15	Samples of cast in place concrete walls	12/29/23	01/12/24	ADD 07
DBCO_RFI16	RFI-16	Structural steel finish	12/29/23	01/05/24	ADD 06
DBCO_RFI17	RFI-17	Approvals from utility providers & sewer connection points	12/29/23	01/05/24	ADD 06
DBCO_RFI18	RFI-18	Excavation system	12/29/23	01/05/24	ADD 06
DBCO_RFI19	RFI-19	Global stability check	12/29/23	01/05/24	ADD 06
DBCO_RFI20	RFI-20	Building risk policy by owner?	12/29/23	01/05/24	ADD 06
DBCO_RFI21	RFI-21	Sidewalks close during construction/	12/29/23	01/05/24	ADD 06
DBCO_RFI22	RFI-22	Sidewalk sheds required during construction?	12/29/23	01/05/24	ADD 06
DBCO_RFI23	RFI-23	Rock excavation cost ?	12/29/23	01/05/24	ADD 06

RFI No. DIG	RFI No. DEV	RFI NAME (SUBJECT)	DATE RECV'D	DATE RET'D	ADD NO.
EPIC_RFI01	RFI-01	Parking Control Equipment	12/28/23	12/28/23	ADD 05
EPIC_RFI02	RFI-02	Telecom	12/28/23	01/05/24	ADD 06
EPIC_RFI03	RFI-03	Telecom	12/28/23	01/05/24	ADD 06
EPIC_RFI04	RFI-04	Telecom	12/28/23	01/05/24	ADD 06
EPIC_RFI05	RFI-05	Telecom	12/28/23	01/05/24	ADD 06
EPIC_RFI06	RFI-06	Electrical Light Fixtures	12/28/23	12/28/23	ADD 05
EPIC_RFI07	RFI-07	Tile	12/28/23	12/28/23	ADD 05
EPIC_RFI08	RFI-08	Exterior Signage	12/28/23	01/05/24	ADD 06
EPIC_RFI09	RFI-09	Aluminum Composite Materials	12/28/23	12/28/23	ADD 05
EPIC_RFI10	RFI-10	Mailboxes required?	12/28/23	01/05/24	ADD 06
EPIC_RFI11	RFI-11	Security Window Film location	12/28/23	01/05/24	ADD 06

RFI No. DIG	RFI No. DEV	RFI NAME (SUBJECT)	DATE RECV'D	DATE RET'D	ADD NO.
HALL_RFI01	RFI-01	Full time off hours security required?	12/20/23	12/22/23	ADD 04
HALL_RFI02	RFI-02	Permit fees by the contractor	12/20/23	12/22/23	ADD 04
HALL_RFI03	RFI-03	Elevator finishes allowances	12/21/23	12/22/23	ADD 04

RFI No. DIG	RFI No. DEV	RFI NAME (SUBJECT)	DATE RECV'D	DATE RET'D	ADD NO.
NTLI_RFI01	RFI-01	Sample pictures/aggregate composition of terrazzo floor	12/29/23	01/12/24	ADD 07
NTLI_RFI02	RFI-02	Terrazzo Floor Specification	12/29/23	01/12/24	ADD 07
NTLI_RFI03	RFI-03	Terrazzo Tiles	12/29/23	01/05/24	ADD 06
NTLI_RFI04	RFI-04	thickness requirement of terrazzo	12/29/23	01/12/24	ADD 07
NTLI_RFI05	RFI-05	Bench at stair	12/29/23	01/05/24	ADD 06
NTLI_RFI06	RFI-06	Terrazzo base	12/29/23	01/05/24	ADD 06
NTLI_RFI07	RFI-07	Crack isolation membrane	12/29/23	01/12/24	ADD 07
NTLI_RFI08	RFI-08	Finish on elevator cabs?	12/29/23	01/05/24	ADD 06
NTLI_RFI09	RFI-09	Steps in Lobby #2001 gets precast terrazzo?	12/29/23	01/05/24	ADD 06
NTLI_RFI10	RFI-10	Phase 2 scheduled?	12/29/23	01/05/24	ADD 06
NTLI_RFI11	RFI-11	Stair tread detail	12/29/23	01/05/24	ADD 06
NTLI_RFI12	RFI-12	#2121 Finish	12/29/23	01/05/24	ADD 06
NTLI_RFI13	RFI-13	Employee lobby - Bldg. 2 Lvl. 0floor and base?	12/29/23	01/05/24	ADD 06
NTLI_RFI14	RFI-14	Moisture vapor primer required?	12/29/23	01/12/24	ADD 07
NTLI_RFI15	RFI-15	Tax and insurance status of the project?	12/29/23	01/05/24	ADD 06
NTLI_RFI16	RFI-16	Underlayment requirements underneath terrazzo and resinous flooring?	12/29/23	01/12/24	ADD 07
NTLI_RFI17	RFI-17	Thk. requirement for EF-1 resinous flooring ?	12/29/23	01/12/24	ADD 07
NTLI_RFI18	RFI-18	Price Dex-O-tex product in lieu of Stonhard?	12/29/23	01/05/24	ADD 06
NTLI_RFI19	RFI-19	Confirm cove base height is 6" high for resinous flooring?	12/29/23	01/05/24	ADD 06
NTLI_RFI20	RFI-20	Enlarged detail of resinous wall base	12/29/23	01/12/24	ADD 07
NTLI_RFI21	RFI-21	Telecommunication	12/29/23	01/05/24	ADD 06

RFI No. DIG	RFI No. DEV	RFI NAME (SUBJECT)	DATE RECV'D	DATE RET'D	ADD NO.
TRM_RFI01	RFI-01	Smoke Curtains (Building 2)	12/05/23	12/22/23	ADD 04
TRM_RFI02	RFI-02	ACP specifications	12/05/23	12/08/23	ADD 02
TRM_RFI03	RFI-03	Permit and Building fees	12/05/23	12/08/23	ADD 02
TRM_RFI04	RFI-04	Finish specifications	12/05/23	12/22/23	ADD 04
TRM_RFI05	RFI-05	AV conduit detail	12/05/23	12/08/23	ADD 02
TRM_RFI06	RFI-06	Light Fixtures	12/05/23	12/08/23	ADD 02
TRM_RFI07	RFI-07	AV conduit detail	12/05/23	12/08/23	ADD 02
TRM_RFI08	RFI-08	Light fixture tag	12/05/23	12/08/23	ADD 02
TRM_RFI09	RFI-09	Light fixture specifications	12/20/23	12/28/23	ADD 05
TRM_RFI10	RFI-10	Telecommunication EMT	12/20/23	01/05/24	ADD 06
TRM_RFI11	RFI-11	PVC Conduits for telecom	12/20/23	01/05/24	ADD 06
TRM_RFI12	RFI-12	Guard service by GC?	12/22/23	12/28/23	ADD 05
TRM_RFI13	RFI-13	Independent testing and inspection services	12/22/23	12/28/23	ADD 05
TRM_RFI14	RFI-14	Building permit cost	12/22/23	12/28/23	ADD 05
TRM_RFI15	RFI-15	Keyscan system	12/22/23	12/28/23	ADD 05
TRM_RFI16	RFI-16	Keyscan - model, version & no. of card readers, panels	12/22/23	12/28/23	ADD 05
TRM_RFI17	RFI-17	Keyscan during construction process	12/22/23	12/28/23	ADD 05
TRM_RFI18	RFI-18	Phasing and cut/over schedule	12/22/23	01/12/24	ADD 07
TRM_RFI19	RFI-19	Keyscan software	12/22/23	12/28/23	ADD 05
TRM_RFI20	RFI-20	Number of card credentials and format	12/22/23	12/28/23	ADD 05
TRM_RFI21	RFI-21	Keyscan Server	12/22/23	12/28/23	ADD 05
TRM_RFI22	RFI-22	Number of people to be trained	12/22/23	12/28/23	ADD 05
TRM_RFI23	RFI-23	Commision report and logbook Manual	12/22/23	01/05/24	ADD 06
TRM_RFI24	RFI-24	Number of monitors and size	12/22/23	12/28/23	ADD 05
TRM_RFI25	RFI-25	Electrical detail	12/27/23	01/12/24	ADD 07
TRM_RFI26	RFI-26	Specification 270500	12/29/23	01/05/24	ADD 06

EXHIBIT G-5

REQUEST FOR INFORMATION (RFI)

PROJECT: **UNION COUNTY GOVERNMENT COMPLEX**

RFI Number	Contractor	
#15	Dobco Inc.	

Description:

Miscellaneous Questions

NOTE _ AUTHOR SHALL PROVIDE REFERENCED DRAWING/ SPEC/ LOCATION

Referenced Doc; Drawing - # Spec - #	Other;	

Question :

Please provide colored pictures of samples showing the anticipated architectural cast in place concrete walls, the level of finish and expected look can affect the value of concrete work.

Issued By :	Date
Darya Bunin	12/29/23

Response :

At the exterior board-formed concrete (as-cast) is specified at building elevations and throughout the plaza. Refer to Specification 033300 - ARCHITECTURAL CAST-IN-PLACE CONCRETE for details regarding the form-liner and execution. Section 014339 Mockups calls for review of these walls.

Concrete color shall be from standard range of 'grey' colors, aggregate shall be consistent with that which is required to achieve the pattern of the form liner.

At the interior, where CON-02 is specified, design intent is the same as above.

By: J.MaslerBeach Firm: DIG	Date 1/12/24	☐ ☐

Dist: **Jaime Masler**
jmasler@digrouparchitecture.com
Troy Marziotti
tmarzziotti@mastconstruction.com
Bibi Taylor
btaylorUCIA@ucnj.org
Leslie London
llondon@msbnj.com

	Date	

EXHIBIT G-5

REQUEST FOR INFORMATION (RFI)

PROJECT: **UNION COUNTY GOVERNMENT COMPLEX**

RFI Number	Contractor	
#01	Natoli	

Description:

NOTE _ AUTHOR SHALL PROVIDE REFERENCED DRAWING/ SPEC/ LOCATION

Referenced Doc; Drawing - # Spec - #	Other;	

Question :

1. Please send us Sample pictures/aggregate composition of terrazzo floor.

Issued By :	Date
Mussdaq Siddique	12/29/23

Response :

Epoxy resin color to be custom and standard marble aggregate to be used (size 0,1 or 2) with 20% premium aggregate (mother of pearl or equal).

NATOLI RFI-02 notes the inclusion of Specification 096623 Epoxy Terrazzo with this Addendum.

By: J.MaslerBeach	Date	☐ ☐
Firm: DIG	1/12/24	

Dist: **Jaime Masler**
jmasler@digrouparchitecture.com
Troy Marziotti
tmarzziotti@mastconstruction.com
Bibi Taylor
btaylorUCIA@ucnj.org
Leslie London
llondon@msbnj.com

	Date	

EXHIBIT G-5

REQUEST FOR INFORMATION (RFI)

PROJECT: **UNION COUNTY GOVERNMENT COMPLEX**

RFI Number	Contractor	
#02	Natoli	

Description:

NOTE _ AUTHOR SHALL PROVIDE REFERENCED DRAWING/ SPEC/ LOCATION

Referenced Doc; Drawing - # Spec - #	Other;	

Question :

Terrazzo flooring has 2 specs -096616 & 096613. Which one should be used ? Are TZ-1A and TZ-2A to be epoxy terrazzo or cement terrazzo?

Issued By :	Date
Mussdaq Siddique	12/29/23

Response :

Attached with this Addendum is Specification Section 096623. Epoxy Resin Terrazzo is basis of design for TZ-1A and TZ-2A. Stair treads and landings are precast cement terrazzo.

Strike 096616 and 096613 from project manual.

By: J.MaslerBeach	Date	☐ ☐
Firm: DIG	1/12/24	

Dist: **Jaime Masler**
jmasler@digrouparchitecture.com
Troy Marziotti
tmarzziotti@mastconstruction.com
Bibi Taylor
btaylorUCIA@ucnj.org
Leslie London
llondon@msbnj.com

	Date	

EXHIBIT G-5

REQUEST FOR INFORMATION (RFI)

PROJECT: **UNION COUNTY GOVERNMENT COMPLEX**

RFI Number	Contractor	
#04	Natoli	

Description:

NOTE _ AUTHOR SHALL PROVIDE REFERENCED DRAWING/ SPEC/ LOCATION

Referenced Doc; Drawing - # Spec - #	Other;	

Question :

What is the thickness requirement of terrazzo (TZ-1A & TZ-2A) ?

Issued By :	Date
Mussdaq Siddique	12/29/23

Response :

Epoxy Resin Terrazzo (TZ-1A and TZ-2A shall be 3/8" thickness.

By: J.MaslerBeach Firm: DIG	Date 1/12/24	☐ ☐

Dist: **Jaime Masler**
jmasler@digrouparchitecture.com
Troy Marziotti
tmarzziotti@mastconstruction.com
Bibi Taylor
btaylorUCIA@ucnj.org
Leslie London
llondon@msbnj.com

	Date	

EXHIBIT G-5

REQUEST FOR INFORMATION (RFI)

PROJECT: **UNION COUNTY GOVERNMENT COMPLEX**

RFI Number	Contractor	
#07	Natoli	

Description:

NOTE _ AUTHOR SHALL PROVIDE REFERENCED DRAWING/ SPEC/ LOCATION

Referenced Doc; Drawing - # Spec - #	Other;	

Question :

As per 1/A-704 crack isolation membrane is shown under terrazzo. Is the membrane required wall to wall or just over cracks for poured Terrazzo flooring ?

Issued By :	Date
Mussdaq Siddique	12/29/23

Response :

Crack isolation membrane is required over the cracks of poured Terrazzo.

By: J.MaslerBeach Firm: DIG	Date 1/12/24	☐ ☐

Dist: **Jaime Masler**
jmasler@digrouparchitecture.com
Troy Marziotti
tmarzziotti@mastconstruction.com
Bibi Taylor
btaylorUCIA@ucnj.org
Leslie London
llondon@msbnj.com

	Date	

EXHIBIT G-5

REQUEST FOR INFORMATION (RFI)

PROJECT: **UNION COUNTY GOVERNMENT COMPLEX**

RFI Number	Contractor	
#14	Natoli	

Description:

NOTE _ AUTHOR SHALL PROVIDE REFERENCED DRAWING/ SPEC/ LOCATION

Referenced Doc; Drawing - # Spec - #	Other;	

Question :

Is moisture vapor primer required?

Issued By :	Date
Mussdaq Siddique	12/29/23

Response :

YES.

By: J.MaslerBeach Firm: DIG	Date 1/12/24	☐ ☐

Dist: **Jaime Masler**
jmasler@digrouparchitecture.com
Troy Marziotti
tmarzziotti@mastconstruction.com
Bibi Taylor
btaylorUCIA@ucnj.org
Leslie London
llondon@msbnj.com

	Date	

EXHIBIT G-5

REQUEST FOR INFORMATION (RFI)

PROJECT: **UNION COUNTY GOVERNMENT COMPLEX**

RFI Number	Contractor	
#16	Natoli	

Description:

NOTE _ AUTHOR SHALL PROVIDE REFERENCED DRAWING/ SPEC/ LOCATION

Referenced Doc; Drawing - # Spec - #	Other;	

Question :

Is there any underlayment requirements underneath terrazzo and resinous flooring? If yes is the thickness required?

Issued By :	Date
Mussdaq Siddique	12/29/23

Response :

Stone/sand underlayment is not required.

Concrete subfloor to be flat (Maximum variation not to exceed 1/4" in 10 feet) and to have a steel trowel finished surface. DO NOT OVER TROWEL TO DARK SHEEN. No curing agents or other additives should be used. The slab should have an efficient moisture barrier conforming with ASTM E-1745 CLASS "A" directly beneath and in direct contact with the concrete slab when placed directly on grade. Saw cutting of control joints must be done between 12 AND 24 HOURS after placement of the structural concrete. The concrete to receive EPOXY TERRAZZO shall be of flatness MINIMUM 1/4" IN A 10 FOOT SPAN (NOT CUMULATIVE) PER NTMA recommendations.

By: J.MaslerBeach Firm: DIG	Date 1/12/24	☐ ☐

Dist: **Jaime Masler**
jmasler@digrouparchitecture.com
Troy Marziotti
tmarzziotti@mastconstruction.com
Bibi Taylor
btaylorUCIA@ucnj.org
Leslie London
llondon@msbnj.com

	Date	

EXHIBIT G-5

REQUEST FOR INFORMATION (RFI)

PROJECT: **UNION COUNTY GOVERNMENT COMPLEX**

RFI Number	Contractor	
#17	Natoli	

Description:

NOTE _ AUTHOR SHALL PROVIDE REFERENCED DRAWING/ SPEC/ LOCATION

Referenced Doc; Drawing - # Spec - #	Other;	

Question :

What is the thickness requirement for EF-1 resinous flooring?

Issued By :	Date
Mussdaq Siddique	12/29/23

Response :

EF-1 shall be 1/4" thick.

By: J.MaslerBeach	Date	☐ ☐
Firm: DIG	1/12/24	

Dist: **Jaime Masler**
jmasler@digrouparchitecture.com
Troy Marziotti
tmarzziotti@mastconstruction.com
Bibi Taylor
btaylorUCIA@ucnj.org
Leslie London
llondon@msbnj.com

	Date	

EXHIBIT G-5

REQUEST FOR INFORMATION (RFI)

PROJECT: **UNION COUNTY GOVERNMENT COMPLEX**

RFI Number	Contractor	
#20	Natoli	

Description:

NOTE _ AUTHOR SHALL PROVIDE REFERENCED DRAWING/ SPEC/ LOCATION

Referenced Doc; Drawing - # Spec - #	Other;	

Question :

Spec 096723/2.2 lists cant strips in base. Is this required? Can you send us the enlarged detail of resinous wall base?

Issued By :	Date
Mussdaq Siddique	12/29/23

Response :

No cant strips required.
Base at both poured epoxy terrazzo flooring to be integral coved base - 6"H.

By: J.MaslerBeach	Date	☐ ☐
Firm: DIG	1/12/24	

Dist: **Jaime Masler**
jmasler@digrouparchitecture.com
Troy Marziotti
tmarzziotti@mastconstruction.com
Bibi Taylor
btaylorUCIA@ucnj.org
Leslie London
llondon@msbnj.com

	Date	

EXHIBIT G-5

REQUEST FOR INFORMATION (RFI)

PROJECT: **UNION COUNTY GOVERNMENT COMPLEX**

RFI Number	Contractor	
18	Terminal Construction Corporation	

Description:

Phasing &/or Cut/Over Schedule

NOTE _ AUTHOR SHALL PROVIDE REFERENCED DRAWING/ SPEC/ LOCATION

Referenced Doc; Drawing - # Spec - #	Other;	

Question :

Is there a phasing and/or cut/over schedule?

Issued By :	Date
Joseph Zahuta **Senior Vice President / Chief Estimator of Terminal Construction**	**12/22/2023**

Response :

No drawings or specification sections were referenced with this RFI. There are no phasing plans included as part of the contract documents.

By: Jeff Lawrence Firm: H2M Architect's + Engineers	Date	☐ ☐

Dist: **Jaime Masler**
jmasler@digrouparchitecture.com
Troy Marziotti
tmarzziotti@mastconstruction.com
Bibi Taylor
btaylorUCIA@ucnj.org
Leslie London
llondon@msbnj.com

	Date	

EXHIBIT G-5

REQUEST FOR INFORMATION (RFI)

PROJECT: **UNION COUNTY GOVERNMENT COMPLEX**

RFI Number	Contractor	
25	Terminal Construction Corp	

Description:

NOTE _ AUTHOR SHALL PROVIDE REFERENCED DRAWING/ SPEC/ LOCATION

Referenced Doc; Drawing - # E110, E117 Spec - #	Other;	

Question :

Drawing E – 110 building 2 level 0 shows a 1600 amp docking station with 4/4" schedule 80 conduits. It does not show a wire size, and unlike building 1, the stainless steel box for termination is not shown on the drawing. I would like to know if the MI cables from the transfer switch shown on drawing E117 will terminate in a box in electrical room 2003 and then change to regular wire that will finish at the docking station.

Issued By : Brian Senyk	Date 12/27/23

Response :

The run from the building #2 docking station into the building will be 4 sets each consisting of 4-600 MCM and 1#4/0G in 4"C buried min 36" below grade. Immediately upon entering the building from below grade, within the 1st floor electrical room, it shall transition to 4 sets each consisting of 4#350MCM MI CABLE which will run up to the MTS within the roof emergency electrical room, where it shall again transition to 4 sets each consisting of 4-600 MCM and 1 # 4/0G just prior to termination in the MTS.

The run from the building #1 docking station shall be 3 sets each consisting of 4-600 MCM and 1#3/0G in 4"C from the docking station into a new NEMA 4X stainless steel enclosure directly under the docking station. Within the enclosure the contractor shall transition to 3 sets each consisting of 4#350MCM MI CABLE which will run down in to the garage level below, across that ceiling and then up through the building to the MTS within the roof emergency electrical room, where it shall again transition to 3 sets each consisting of 4-600 MCM and 1 # 3/0G just prior to termination in the MTS.

Interior enclosures shall be provided for all transitions from MI cable to wiring.

By: Jeff Lawrence Firm: H2M Architect's + Engineers	Date	☐ ☐

Dist: **Jaime Masler**
jmasler@digrouparchitecture.com
Troy Marziotti
tmarzziotti@mastconstruction.com
Bibi Taylor
btaylorUCIA@ucnj.org
Leslie London
llondon@msbnj.com

	Date	

DIGroupArchitecture

ADDENDUM NO. 07

Union County Government Complex
For Union County Improvement Authority
Elizabeth, Union County, NJ

Addendum Date:
01-12-24

Project No.: 20.072

Project Dated: 11-08-23

The original specifications and drawings, for the project noted above have been amended as noted in this Addendum. Receipt of this Addendum shall be acknowledged by inserting its number and date in the space provided on the Form of Proposal.

SPECIFICATIONS

SECTION 095123 - ACOUSTIC BAFFLE SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

A. Polyester fiber acoustical baffles

B. Principal Products:

1. Suspended acoustic panel treatment – ceilings:

a. Baffle systems.

1.2 RELATED SECTIONS

A. Section 09 – Acoustic Panel Ceilings

B. Section 09260 – Gypsum Board Assemblies

C. Section 15xxx- Air Outlets and Inlets

D. Section 16xxx – Interior Luminares

1.3 REFERENCES

A. ASTM C423 – Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.

B. ASTM E84 – Test Method for Surface Burning Characteristics of Building Materials.

C. AS ISO 9705 – 2003 – Test Method for Burning Characteristics of Interior Finishes.

D. AATCC 16.3 – Test Method for Lightfastness.

E. CDPH 01350 – Standard test method for VOC.

F. OEKO – testing for Formaldehyde and Urea

1.4 ACTION SUBMITTALS

A. Product Data: For manufacturer's product lines and accessories.

1. Include construction details, mounting, material descriptions, dimensions of individual components and profiles, and finishes.

B. Shop Drawings:

1. Include mounting devices and details; details at panel head, base, joints, and corners; and details at ceiling, floor base, and wall intersections. Indicate panel edge and core materials.
2. Include plans and elevations showing panel sizes and direction of fabric weave and pattern matching.

C. Samples for Initial Selections: For each type of fabric facing from acoustic treatment unit manufacturer's full range.

D. Samples for Verification: For the following products:

1. Fabric: Full-width by approximately [**12-inch**] long Sample, but not smaller than required to show complete pattern repeat, from dye lot to be used for the Work, and with specified treatments applied. Mark top and face of fabric.
2. Panel Edge: **12-inch** long Sample(s) showing each edge profile, corner, and finish.
3. Mounting Devices: Full-size Samples.
4. Mock-up Panels: Approximately **36 by 36 inches**, including joints and mounting methods for review on-site. Coordinate timing with construction progress meeting for architect's review.

1.5 INFORMATIONAL SUBMITTALS

A. Coordination Drawings: Elevations, plans, and other details, drawn to scale, on which the following items are shown and coordinated with each other, using input from installers of the items involved:

1. Electrical outlets, switches, and thermostats.
2. Suspended ceiling components above acoustic treatment units.
3. Structural members to which suspension devices will be attached.
4. Items penetrating or covered by acoustic treatment units including the following:

    a. Lighting fixtures.
    b. Air outlets and inlets.
    c. Speakers.
    d. Alarms.
    e. Sprinklers.
    f. Access panels.
    g. Any other ceiling mounted equipment/components.

5. Show operation of hinged and sliding components covered by or adjacent to acoustic treatment units.

B. Product Certificates: For each type of acoustic treatment unit, from manufacturer.

C. Warranty: Sample of special warranty.

1.6 CLOSEOUT SUBMITTALS

A. Maintenance Data: For sound-absorbing wall units to include in maintenance manuals. Include fabric manufacturers' written cleaning and stain-removal recommendations.

1.7 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials from same production run that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
   1. Fabric: For each fabric, color, and pattern installed, provide length equal to [**10**] percent of amount installed, but no fewer than 5 acoustic panels.
   2. Mounting Devices: Full-size units equal to [**5**] percent of amount installed, but no fewer than [**five**] devices, including unopened adhesives.

1.8 QUALITY ASSURANCE

A. Flame spread/smoke developed index with Class A fire rated certification when tested in accordance with ASTM E84.

B. Installer’s Qualifications: A firm experienced in producing acoustic treatment similar to that indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

1.9 FIELD CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer.

B. Field Measurements: Verify field measurements before fabrication.

1.10 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of acoustical units that fail in materials or workmanship within specified warranty period.

   1. Failures include, but are not limited to the following:

      a. Acoustical performance.
      b. Fabric sagging, distorting, or releasing from panel edge.
      c. Warping of core.

   2. Warranty Period: Two years from date of installation

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturer: Subject to compliance with requirements, provide

1. Ezobord Acoustic Clouds, Ayrsonics,LLC 820 Tollgate Road, Elgin, IL 60123
2. Zintra Acoustic Solutions by MDC Interior Solutions 400 High Grove Blvd. Glendale Heights, IL 60139
3. 3Form, Solo Felt Edge, 2300 South 2300 West, Salt Lake City, Utah, UT 84119
4. Or approved equal. See Section 01600 – Product Requirements.

B. Source Limitations: Obtain acoustic treatment system from single source from single manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. General Requirements for Acoustic Treatment: Provide systems that comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

B. Fire-Test-Response Characteristics: Provide fabric systems meeting the following requirements as determined by testing identical products by UL 723, UBC, or another testing and inspecting agency acceptable to authorities having jurisdiction:

1. Surface-Burning Characteristics: Comply with ASTM E 84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

a. Flame-Spread Index: [25] <Insert value> or less.
b. Smoke-Developed Index: [450] <Insert value> or less.

2. Fire Growth Contribution: Comply with acceptance criteria of local code and authorities having jurisdiction when tested according to [NFPA 265] [NFPA 286].

2.3 ACOUSTIC PANEL

A. Acoustic Panel: Manufacturer's standard acoustic treatment panel, tackable, and digitally printable.

1. Nominal Size: [**As indicated A-820**].
2. Finish: Matte.

a. Color: [**As indicated on A-820**]

3. Acoustical Performance: Sound absorption NRC of [**0.45 to 0.95**] according to ASTM C 423 for [**Type A**] mounting according to ASTM E 795.

4. Colorfastness to Light: Not less than 4.5 after 20 AFU (AATCC fading units) per AATCC 16.3, Option 3.

B. Core Material: Manufacturer's standard.

C. Trims: Manufacturer's standard anodized aluminum, satin finish.

D. Application: Apply acoustic panels in [**ceilings]**.

E. Installation Materials:

1. Installation Products, General: Concealed on back of system, recommended by manufacturer, and as follows:

a. Split batten.
b. Cable system.
c. Fasteners: [**Manufacturer's standard**].

2.4 ACOUSTIC PANEL TREATMENT - CEILINGS

A. Baffle Systems: Manufacturer's standard panel construction consisting of anodized aluminum facing material.

1. Configuration: [**As indicated on A-820]**.
2. Nominal Size: [[**As indicated on A-820**].
3. Baffle Depth:] [**As indicated on A-820**].
4. Thickness: [**As indicated on A-820].**
5. Hardware: Manufacturer's standard hardware including 5 ft. aircraft wire, adjustable fastener, and grommets.
6. Finish: Anodized aluminum.

a. Color: [**As selected by Architect from manufacturer's full range]**

7. Core Material: Manufacturer's standard.
8. Mounting: Back mounted with manufacturer's standard [**aircraft wire**], secured to substrate.
9. Edge Construction: Manufacturer's standard extruded-aluminum frame.

a. Cross Runner.
b. Frame connectors.
c. End caps.
d. Color: **[As indicated on Drawings**]

10. Acoustical Performance: Sound absorption NRC of [**0.90**] according to ASTM C 423 for [**Type A**] mounting according to ASTM E 795.

B. Composition: 100 percent virgin polyethylene terephthalate (PET).

C. Core Material: Manufacturer's standard.

D. Extruded Aluminum: ASTM B 221 (ASTM B 221M), Alloy 6063.

E. Adhesives: As recommended by manufacturer and with a VOC content of [70] <Insert value> g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

F. Adhesives: As recommended by demountable-partition manufacturer and that comply with the testing and product requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."

2.5 GENERAL FINISH REQUIREMENTS

A. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

2.6 ALUMINUM FINISH

A. Clear Anodic Finish: AAMA 611, AA-M12C22A31, Class II, 0.010 mm or thicker.

B. Color Anodic Finish: AAMA 611, [**Class I, 0.018 mm**] or thicker over a [**non-specular as fabricated**] mechanical finish.

C. Baked-Enamel or Powder-Coat Finish: AAMA 2603. Comply with coating manufacturer's written instructions for cleaning, conversion coating, application, and baking.

2.7 FABRICATION

A. General: Use manufacturer's standard construction except as otherwise indicated; with facing material applied to face, edges, and back border of dimensionally stable core; and with rigid edges to reinforce panel perimeter against warpage and damage.

B. Facing Material: Apply fabric facing fully covering visible surfaces of unit; with material stretched straight, on the grain, tight, square, and free from puckers, ripples, wrinkles, sags, blisters, seams, adhesive, or other visible distortions or foreign matter.

1. Square Corners: Tailor corners.
2. Radius and Other Non-square Corners: Attach facing material so there are no seams or gathering of material.
3. Fabrics with Directional or Repeating Patterns or Directional Weave: Mark fabric top and attach fabric in same direction so pattern or weave matches in adjacent units.

C. Dimensional Tolerances of Finished Units: Plus or minus **1/16 inch** for the following:

1. Thickness.
2. Edge straightness.
3. Overall length and width.
4. Squareness from corner to corner.
5. Chords, radii, and diameters.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine fabric, fabricated units, substrates, areas, and conditions, for compliance with requirements, installation tolerances, and other conditions affecting performance of sound-absorbing wall units.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Comply with manufacturer's written instructions for installation of acoustic treatment units using type of mounting devices indicated. Mount units securely to supporting substrate.

B. Unroll acoustic panels sheets and allow it to stabilize before cutting and fitting.

C. Align and level fabric pattern and grain among adjacent units.

D. Install wall units in locations indicated with vertical surfaces and edges plumb, top edges level and in alignment with other units, faces flush, and scribed to fit adjoining work accurately at borders and at penetrations.

E. Install ceiling units in locations indicated with edges in alignment with walls and other units, faces flush, and scribed to fit adjoining work accurately at borders and at penetrations.

3.3 INSTALLATION TOLERANCES

A. Variation from Alignment with Surfaces: Plus or minus [1/16 inch] <Insert dimension>.

B. Variation from Level or Slope: Plus or minus [**1/8 inch**].

C. Variation of Panel Joints from Hairline: Not more than [**1/16 inch**] wide.

3.4 CLEANING

A. Vacuum clean panels on completion of installation to remove dust and other foreign materials according to manufacturer's written instructions.

B. Remove spills immediately using clean damp cloth or with soap and water.

END OF SECTION 095123

SECTION 096623 - EPOXY RESIN TERRAZZO

PART I - GENERAL

1.1 SUMMARY

A. Section includes:

1. Epoxy terrazzo with divider and accessory strips.
2. Poured in place epoxy terrazzo wall units
3. Precast terrazzo units; base and stair assemblies.

B. Related Requirements:

1. Concrete subfloor, Section 033000
2. Backing for precast epoxy terrazzo base shall be 1/2 inch or greater thickness cement board, gypsum board or equivalent.

1.2 Definitions

A. NTMA: National Terrazzo and Mosaic Association, Inc.

1.3 PREINSTALLATION MEETINGS

A. Pre installation Conference: The General Contractor shall conduct a conference at project site before Terrazzo Contractor begins installation.

1. The General Contractor shall invite Terrazzo Contractor, the Architect and representatives of the Owner.
2. Review methods and procedures related to terrazzo including, but not limited to, the following:

a. Inspect and discuss condition of substrate and other preparatory work performed by other trades.

b. Review and finalize construction schedule and verify availability of materials, installer's personnel, equipment and facilities needed to make progress and avoid delays.

c. Review custom terrazzo mixes, designs and patterns.

d. Coordination with the work of other installers.

1.4 ACTION SUBMITTALS

A. Product Data: Terrazzo Contractor shall submit Product Data for each type of product required for installation including:

B. LEED Submittals: Terrazzo Contractor shall submit the following:

1. Product Data for Credit MR 4: For products having recycled content, submit documentation indicating percentages by weight of postconsumer and preconsumer recycled content.

2. Product Certificates for Credit MR 5: For products and materials required to comply with requirements for regional materials, submit documentation indicating location and distance from Project of material manufacturer and point of extraction, harvest, or recovery for each raw material.

3. Product Data for Credit IEQ 4.1: For adhesives, submit documentation including printed statement of VOC content.

4. Product Data for Credit IEQ 4.3: For sealers, submit documentation including printed statement of VOC content.

5. Laboratory Test Reports for Credit IEQ 4: For flooring system including adhesives and sealers, submit documentation indicating that products comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

C. Shop Drawings: Terrazzo Contractor shall prepare and submit Shop Drawings that include plans, elevations, sections, component details and attachments to other work. Include terrazzo installation requirements. Show layout of the following:

1. Divider strips.

2. Expansion joint strips.

3. Accessory strips.

4. Abrasive strips.

5. Terrazzo patterns.

D. Samples:

1. Terrazzo Contractor shall prepare and submit a maximum of three samples, sizes 6 by 6 inches for each color and type of terrazzo specified.

2. Terrazzo Contractor shall submit three samples, sizes 6 by 6 inches for each color and type of precast terrazzo specified.

3. Accessories: 6 inch long Samples of each type and kind of exposed strip item required

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: Terrazzo Contractor shall submit two copies of qualification data.

1. Include list of projects indicating name and location of project, name of Owner, name and contact information for General Contractor, and name and contact information for Architect.

2. The Terrazzo Contractor shall furnish a written statement from the manufacturer that the installer is acceptable.

B. Material Certificates:

1. Epoxy Resin: For each type of resin required indicating that materials meet specification requirements, signed by manufacturer.

2. Aggregate: For each type of aggregate required indicating compatibility with terrazzo mix, signed by aggregate supplier.

1.6 CLOSEOUT SUBMITTALS

A. Maintenance Literature: Terrazzo Contractor shall submit two copies of maintenance recommendations from NTMA and/or manufacturer's maintenance recommendations.

1.7 QUALITY ASSURANCE

A. Acceptable Epoxy Resin Manufacturer: An Associate Member of the NTMA, experienced in manufacturing epoxy resin in accordance with NTMA standards and with a record of successful in-service performance, as well as sufficient production capacity to produce required materials.

B. Acceptable Terrazzo Contractor: A Contractor whose work has resulted in construction with a record of successful in-service performance.

1. Installer shall have completed terrazzo installations within the past 5 years of scale and complexity similar to the proposed installation.

2. Installer must be approved by the manufacturer of the floor surfacing materials.

C. Terrazzo Standards: Terrazzo Contractor shall furnish materials and install terrazzo according to NTMA's “Terrazzo Specifications and Design Guide” and with written recommendations for terrazzo type indicated unless more stringent requirements are specified.

D. Source Limitations for Aggregates: Terrazzo Contractor shall obtain each color, grade, type and variety of granular materials from sources with resources to provide materials of consistent quality in appearance and physical properties.

E. Mockups: Terrazzo Contractor shall construct a mockup to demonstrate aesthetic effects and set quality standards for materials and execution. Mock-up size must not be less than 4 square feet for a portable mock-up.

1. Build mockup as indicated on Drawings. Acceptable mock-up to be standard of quality for installed work.

2. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.8 DELIVERY, STORAGE AND HANDLING

A. Materials shall be delivered to Project site in supplier's original wrappings and containers, labeled with source or manufacturer's name, material or product brand name, date of manufacture, and lot/batch numbers if any.

B. Materials shall be stored in their original, undamaged packages and containers, in a location where they will not be exposed to direct sunlight.

1. Epoxy components shall be stored in a space where the ambient temperature can be maintained 60 and 80 deg. F before use.

C. Follow all manufacturer's specific instructions and prudent safety practices for storage and handling.

1.9 Project Conditions

A. General Contractor shall provide sufficient water, temporary heat and light, and adequate electric power with suitable outlets connected and distributed for use within 100 feet of any working space.

B. General Contractor shall provide temporary enclosures and other suitable methods to protect adjacent spaces from damage during installation.

1. Maintain ambient temperatures in the area to receive terrazzo at not less than 60 deg. F.

2. Maintain adequate ventilation in the area to receive terrazzo.

C. Terrazzo Contractor shall protect other adjacent work from water and dust generated by grinding operations.

1.10 GUARANTEE

A. One year from date of substantial completion of terrazzo installation.

PART 2 - PRODUCTS

2.1 PERFORMANCE

A. As a basis of design, specifications based on Key Resin Company, Key Epoxy Terrazzo.

1. Local Representation: Jon Lattin, 610-559-8182

B. Provide conforming products based on:

1. Key Resin Company: Key Epoxy Terrazzo.

C. Other acceptable manufacturer's upon a compliance review include:

1. Dex-O-Tex Terrazzo

2. Terroxy Resin Systems

2.2 MATERIALS

A. Moisture Primer: Moisture Vapor Primer required for base bid.

1. MVT Primer: Key #597 MVT Primer

2. If MVT levels are greater than base bid MVT primer limits, additional MVT control will be an Add-On to the contract.

B. Primer: As recommended and required by supplier, manufactured and supplied by epoxy resin manufacturer.

1. Primer: Key #502 Primer

C. Crack Suppression/Isolation Membrane: As recommended, produced and supplied by approved terrazzo resin formulator, having minimum 120 percent elongation potential per ASTM D 412. Allow 15% crack coverage for slab-on-grade, 100% coverage for elevated slab.

1. Key #580 Flexible Epoxy

2. Reinforcement: Fiberglass scrim.

D. Epoxy Resin Matrix: Key #108 Epoxy resin, a two-component, 100% solids resin complying with specified performance requirements.

1. Color: As required for mix indicated.

E. Aggregates: As required to match architect's terrazzo sample

1. Comply with NTMA gradation standards.

2. Abrasion and Impact Resistance: Loss of 40 percent or less when tested according to ASTM C 131 (LA Abrasion).

3. Aggregates shall contain no deleterious or foreign matter.

F. Divider Strips:

1. Material: White alloy of zinc or Aluminum

2. Strip Thickness: 1/8".

3. Type: "L" strip: 3/8 inch by 1/2 inch.

2.3 PRECAST TERRAZZO

A. Provide conforming products based on:

1. Wausau Tile Precast Terrazzo

2. Romoco Precast Terrazzo

3. or approved equal

B. Precast Terrazzo Base: Minimum 3/8-inch-thick, epoxy terrazzo units cast in maximum lengths possible, but not less than 36 inches. Comply with precast manufacturer's written recommendations for fabricating precast terrazzo base units in sizes and profiles indicated.

1. Type: Straight Base for walls and Curved Column Base for columns or where otherwise necessary.

2. Top Edge: Eased edge with polished top surface.

3. Outside Corner Units: With finished returned edges and lapped joint at outside corner.

4. Color, Pattern, and Finish: Match adjacent poured-in-place terrazzo flooring field.

C. Precast Terrazzo Stair Units: 2-1/2-inch-thick, cement terrazzo stair units cast in maximum lengths possible. Comply with precast manufacturer's written recommendations for fabricating precast terrazzo units in sizes and profiles indicated. Finish exposed-to-view edges and reveals to match face finish. Ease exposed edges to 1/8-inch radius.

1. Provide the following types of precast stair units:

a. Stair treads.

2. Color, Pattern, and Finish: Match adjacent poured-in-place terrazzo flooring as indicated.

D. Setting Materials for Precast Terrazzo: One of the following acceptable to the manufacturer of precast terrazzo units.

1. Epoxy Adhesive: Two component, compatible with terrazzo units and substrate.

2.4 MISCELLANEOUS ACCESSORIES

A. Sealer: Terrazzo Contractor shall provide a non-ambering, clear sealer that is chemically neutral; does not impair terrazzo aesthetics or physical properties; is recommended by terrazzo matrix manufacturer. Sealers shall comply with the following:

1. Comply with requirements of authorities having jurisdiction.

2. Surface Friction: Not less than 0.6 (ADA) according to ASTM D 2047.

3. Water Based Sealer Properties: With pH factor between 7 and 10.

4. Sealers shall have a VOC content of 200 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

2.5 MIXES

A. Terrazzo Selection: Terrazzo Contractor shall provide standard terrazzo mix(es) according to the following:

1. Custom or Standard Mix Color and Pattern: Match Architect's sample

a. Custom Key Resin sample including 20% premium aggregates (mother of pearl or equal) and 75% standard marble aggregates (sizes 0, 1, 2).

B. Proportions for Epoxy Terrazzo Topping: Comply with resin supplier’s recommendations.

C. Mixing of Terrazzo Topping: Mix epoxy components with aggregates in accordance with manufacturer's recommendations.

PART 3 - EXECUTION

3.1 EXAMINATION

A. The General Contractor and Architect shall examine substrates and areas, with Terrazzo Contractor present, for compliance with requirements for installation tolerances and other conditions affecting performance of the work.

1. Slab Flatness Tolerance: Subfloor is not to vary more than 1/4 inch from true plane in a 10 foot span.

2. Cracks: Locate cracks and joints in concrete substrates. Verify location of control joints and expansion joints in epoxy terrazzo flooring.

    a. If required to prevent cracks in concrete substrates transmitting through epoxy terrazzo flooring, the Terrazzo Contractor shall make a written recommendation to install a crack suppression membrane and include specific recommendations on type and location.

B. The General Contractor shall retain the services of an independent testing laboratory to verify that concrete substrates are dry and moisture-vapor emissions are within acceptable levels according to epoxy resin manufacturer's written instructions.

1. Perform relative humidity test using in situ probes, ASTM F 2170. Proceed with installation only after substrates have a maximum 80 percent relative humidity level measurement.

2. If required because moisture readings exceed 80 percent and to prevent moisture vapor transmission in concrete substrates, the Terrazzo Contractor shall make a written recommendation to install moisture mitigation materials and include specific recommendations on type and location.

C. The General Contractor shall be responsible for correcting non-conforming concrete substrates using materials compatible with epoxy terrazzo flooring system and as approved by the Terrazzo Contractor.

1. Materials used to correct nonconforming conditions must be compatible with the selected epoxy system and be approved by the manufacturer of epoxy resin materials and Terrazzo Contractor.

D. Terrazzo Contractor shall proceed with installation only after unsatisfactory conditions, including levelness tolerances, cracking, and excessive moisture vapor transmission have been corrected.

3.2 PREPARATION

A. General Contractor shall broom clean area to receive terrazzo to remove loose chips and all foreign matter.

B. Terrazzo Contractor shall mechanically abrade concrete surface.

C. Terrazzo Contractor shall provide moisture mitigation materials according to instructions and recommendations of moisture mitigation materials manufacturer. Cost for moisture mitigation materials and installation shall be included as a base bid.

D. Terrazzo Contractor shall provide #580 flexible epoxy crack isolation/suppression membrane: Cost for materials and installation of not more than fifteen percent of the floor area receiving epoxy terrazzo shall be included in the Base Bid.

3.3 POURED-IN-PLACE TERRAZZO INSTALLATION

A. Strip Materials: Terrazzo Contractor shall install strip materials as follows:

1. Divider and Control-Joint Strips:

a. Locate divider strips in locations indicated.

b. Install control joint strips back to back in locations indicated.

c. Install strips in epoxy adhesive without voids below strips.

2. Accessory Strips: Install as required to provide a complete installation.

B. Placing Terrazzo:

1. Prime subfloor in accordance with manufacturer's recommendations.
2. Proportion and thoroughly blend the materials.
3. Place mixture to achieve specified thickness.

C. Finishing: Terrazzo Contractor shall finish the terrazzo topping as follows:

1. Rough Grinding:

a. Grind with 24 or finer grit stones or with comparable diamond abrasives.

b. Follow initial grind with 60/80 grit stones or with comparable diamond abrasives.

2. Grouting:

a. Clean terrazzo with clean water and rinse. Allow to dry.

b. Apply epoxy grout per manufacturer's instructions.

c. Allow grout to cure.

3. Fine Grinding/Polishing: Grind to a minimum 200 grit finish with comparable diamond abrasives until all grout is removed from surface.

D. Terrazzo Cleaning: Terrazzo Contractor shall clean finished terrazzo as follows:

1. Remove grinding residue from terrazzo surface.
2. Wash terrazzo surfaces immediately after final grinding of terrazzo flooring with water and allow surfaces to dry thoroughly.

E. Sealing: Terrazzo Contractor shall seal terrazzo according to sealer manufacturer's written instructions.

3.4 PRECAST TERRAZZO INSTALLATION

A. Terrazzo Contractor shall install precast terrazzo units as follows:

1. Precast terrazzo base and stair assemblies: Use water-cleanable, tile-setting epoxy to install precast terrazzo base and stairs over substrates indicated according to ANSI 108.6.

3.5 REPAIR

A. Terrazzo Contractor shall repair terrazzo areas that evidence lack of bond between topping and underbed according to NTMA's written recommendations.

3.6 PROTECTION

A. After application of the sealer, the Work shall be ready for final inspection and acceptance by the Owner or his agent.

B. The General Contractor shall protect the finished floor after the Terrazzo Contractor has completed final grinding and applied sealer to terrazzo surfaces.

END OF SECTION

SECTION 098000 ACOUSTIC METAL BAFFLES

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

A. Work of this Section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

1.2 SECTION INCLUDES

A. Work of this Section includes all labor, materials, equipment and services necessary to complete the acoustical wall panels as shown on the drawings and/or specified herein, including, but not limited to, the following:

1. 2" thick acoustical absorption panels wrapped in selected fabric.

1.3 RELATED SECTIONS

A. Carpentry - Section 062000.

B. Gypsum Drywall - Section 092900.

1.4 QUALITY ASSURANCE

A. Manufacturer Qualification: At least 5 years' experience fabricating and installing comparable work, employing skilled mechanics under competent supervision for all phases of the Work.

1.5 SUBMITTALS

A. Shop Drawings/Product Data

1. Base drawings on field measurements.
2. Show dimensioned wall elevations with seam and joint locations, cutout sizes and locations, anchor locations, relation to adjacent work; large scale joint and mounting details; materials type, weight/thickness, design, color; and other data necessary to fabricate and install work and coordinate work with affected trades.

B. Samples: Two 12" x 12" (minimum) panels in selected finish, showing seam, edge and cutout conditions.

C. Certification

1. Acoustical Performance: Certified reports of acoustical performance tests conducted and/or witnessed by a recognized, independent, testing agency. Tests shall have been done by specified methods or recognized equivalent. Sound absorption tests shall be not more than three years old. Reports on earlier tests are acceptable if it can be established to the Architect's satisfaction, that they are valid indications of compliance with Project requirements.
2. Fire Hazard: Evidence of compliance with regulatory agency and specifications requirements.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. Basis of design is:

Acoustical Metal Baffle System (OR APPROVED EQUAL)
Fry Reglet Corporation
405 N. 75th Ave., Bldg. # 2, Ste. 134
Phone 800-955-2343
Fax 623-344-8276

BASIS OF DESIGN : Fry Reglet Profile "E"
AND Fry Reglet Profile "Flat"

B. General Performance: The corrugated metal architectural Ceiling/Wall Baffles shall meet the requirements of ASTM E1265, shall have a flame spread classification of 0-25 feet for Class "A" rating when tested in accordance with ASTM E-84, and shall have an NRC rating of .90 when tested in accordance with ASTM C-423 for noise reduction.

2.2 MATERIALS

A. Baffle System

1. Metal Baffle Panel

A. Aluminum sheet and plate: Type 5005-H34 (anodized) or 3003-H14, 5052-H32 alloy complying with ASTM B209.
a. Thickness: .063 aluminum
b. Thickness: .090 aluminum-smooth (for "Flat" profile)

2. Framing members are to be made from 6063 extruded aluminum
c. Provide 2 framing members for baffles up to 48" in length.
d. Provide 3 framing members for baffles up to 96" in length.
e. Provide 4 framing members for baffles up to 120" in length

3. Mounting Devices:

a. Flush mount attachment method: Joggle cleat/Z-clip 6063 Extruded aluminum shall be finished to match baffles

b. Offset "Zee" attachment method: 2" shall be from extruded aluminum or 4" shall be produced from aluminum or steel custom brake form

4. Sound Absorption
a. Provide (2" or other thickness) x (1.5# or other density). The fiberglass shall be wrapped in Class A. (Black Polyvinylchloride) (Black Polyethylene)

2.3 PERFORATIONS

A. Metal Baffle Panel shall be provided in one of the options listed below. Many of the materials and finishes are available with the following perforation patterns (consult factory for specifics)

Custom perforation

2.4 FABRICATION

A. Standard height of wall panels shall be up to 10' without horizontal joints. Custom lengths can be provided up to 12'.

2.5 FINISHES

A. General: Comply with NAAMM's "Metal Finished Manual for Architectural and Metal Products" for recommendations relative to applying and designating finishes. . Metal finish shall have a Class "A" rating per ASTM E-84-01.

B. Pre-finished
   1. Natural/Mill finish

C. Fluoropolymer coating finish: Two-coat, factory applied, baked-on fluoropolymer coating based on Valspar Corporation or PPG Industries resin (polyvinylidene fluoride, PVDF), formulated by a licensed manufacturer and applied by manufacturer's approved applicator.

   1. Coating system shall provide minimum 1.0 mil dry film thickness consisting of minimum 0.20 mil primer and minimum 0.80 mil color coat.
   2. .063 aluminum minimum thickness required.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine job-site conditions for conditions that may adversely affect installation of Metal Baffles.

B. Verify dimensions of Metal Baffles prior to installation to ensure compatibility with job-site conditions.

C. Visually examine finished surfaces to ensure that blemished or dented surfaces are not present prior to installation.

3.2 INSTALLATION

A. Install components in accord with manufacturer's installation instructions and approved submittal drawings.

B. Metal Baffles shall be erected plumb, level, square, true to line, securely anchored and in proper alignment and relationship to work of other trades.

C. Baffles are all pre-engineered and factory assembled.

3.2 CLEANING AND PROTECTION

A. Visually inspect all exposed surfaces for scratches or blemishes. Protection of baffles from damage by other trades after installation shall be the responsibility of the General Contractor.

END OF SECTION 098413

SECTION 102600 WALL PROTECTION

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

A. Work of this Section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

1.2 SECTION INCLUDES

A. Work of this Section includes all labor, materials, equipment, and services necessary to complete the wall protection as shown on the drawings and/or specified herein.

1. Wall protection sheet.

1.3 RELATED SECTIONS

A. Gypsum Drywall - Section 092900.

1.4 SUBMITTALS

A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.

B. Samples: Wall protection sheets, 12" square.

C. Shop Drawings: Submit shop drawings for wall protection showing all anchorage devices.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Wall Protection: Provide impact-resistant wall covering sheets by P3TEC, J.Josephson, Inc, - Koroseal (Korogard Wall Protection Systems), Acrovyn C/S, IPC, or approved equal.

1. Basis of Design Product: P3TEC Advanced Wall Protection; decorative high-impact semi-rigid sheet.

a. Fire Rating: Class A.
b. Thickness: 0.032-038".varies by embossing and finsh
c. Color(s): As selected by Architect from manufacturer's standard range.
d. Pattern: As selected by Architect from manufacturer's standard range.
e. Texture: As be selected by Architect from manufacturer's standard range.
f. Low VOC emitting: meets California 01350 Specifications and California Department of Public Health CDPJ/EHLB/Standard Method V 1.2
g. PVF protective cap file
h. Backing Type: Heavy polyester/cotton knit.

B. Performance Properties:
   1. Surface Building characteristics: ASTM E84: Class A
      a. Flame Spread Index: 10
      b. Smoke Development Index: 120
   2. Impact Resistance ASTM D-5420 Gardner Drop Dart: 24 to 100+ inch-lbs
   3. Abrasion Resistance ASTM D-4060 Taber CS-10f wheel (500 gram load): 200 cycles, 0.02% weight loss
   4. Chemical Resistance ASTM D-1308 (10 cleaning agents, 10 staining agents): after 7 days, no change.
   5. Cleaning and Stain Resistance ASTM F-793 (10 cleaning agents, 10 staining agents): after 7 days, no change
   6. Streptoverticillium Reticulum Stain Resistance ASTM E1428: No visible stain

C. ASTM D4060 Standard Test Method for Abrasion Resistance of Organic Coatings by the Taber Abraser.

PART 3 - EXECUTION

3.1 INSPECTION

A. Examine the areas and conditions where wall protection is to be installed and correct any conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions are corrected to permit proper installation of the work.

3.2 INSTALLATION

A. Install wall protection following manufacturer's guidelines.

B. Rooms to receive material: Weather tight with HVAC settings, including pressure, temperature, and relative humidity (65-80 degrees, 35-55% humidity), the same as those of occupied building for 3 days before installation, throughout installation, and for 3 days after installation.

3.3 ADJUST AND CLEAN

A. Clean surfaces promptly after installation, exercise care to avoid damage to surfaces.

B. Protect wall protection sheets from damage until acceptance of work.

END OF SECTION 102600

SECTION 263213 GASEOUS EMERGENCY ENGINE GENERATORS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract apply to this Section.

1.2 SUMMARY

A. Section includes packaged engine generators for emergency use with the following features:

1. Natural gas engine.
2. Gaseous fuel system.
3. Control and monitoring.
4. Generator overcurrent and fault protection.
5. Generator, exciter, and voltage regulator.
6. Load banks.
7. Outdoor engine generator enclosure.
8. Remote radiator motors.
9. Vibration isolation devices.
10. Finishes.

B. Related Requirements:
1. Section 263600 "Transfer Switches" for transfer switches including sensors and relays to initiate automatic-starting and -stopping signals for engine generators.

1.3 DEFINITIONS

A. EPS: Emergency power supply.

B. EPSS: Emergency power supply system.

C. LP: Liquid petroleum.

D. Operational Bandwidth: The total variation from the lowest to highest value of a parameter over the range of conditions indicated, expressed as a percentage of the nominal value of the parameter.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties and accessories.
2. Include thermal damage curve for generator.
3. Include time-current characteristic curves for generator protective device.
4. Include fuel consumption in cubic feet per hour (cubic meters per hour) at 0.8 power factor at 0.5, 0.75, and 1.0 times generator capacity.
5. Include generator efficiency at 0.8 power factor at 0.5, 0.75, and 1.0 times generator capacity.
6. Include airflow requirements for cooling and combustion air in cubic feet per minute (cubic meters per minute) at 0.8 power factor, with air-supply temperature of 95, 80, 70, and 50 deg F (35, 27, 21, and 10 deg C). Provide Drawings indicating requirements and limitations for location of air intake and exhausts.
7. Include generator characteristics, including, but not limited to, kilowatt rating, efficiency, reactances, and short-circuit current capability.

B. Shop Drawings:

1. Include plans and elevations for engine generator and other components specified.
2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
3. Identify fluid drain ports and clearance requirements for proper fluid drain.
4. Design calculations for selecting vibration isolators and seismic restraints and for designing vibration isolation bases.
5. Vibration Isolation Base Details: Detail fabrication, including anchorages and attachments to structure and supported equipment. Include base weights.
6. Include diagrams for power, signal, and control wiring. Complete schematic, wiring, and interconnection diagrams showing terminal markings for EPS equipment and functional relationship between all electrical components.

1.5 INFORMATIONAL SUBMITTALS

A. Source Quality-Control Reports: Including, but not limited to, the following:

1. Certified summary of prototype-unit test report.
2. Certified Test Reports: For components and accessories that are equivalent, but not identical, to those tested on prototype unit.
3. Certified Summary of Performance Tests: Certify compliance with specified requirement to meet performance criteria for sensitive loads.
4. Report of factory test on units to be shipped for this Project, showing evidence of compliance with specified requirements.
5. Report of sound generation.
6. Report of exhaust emissions showing compliance with applicable regulations.
7. Certified Torsional Vibration Compatibility: Comply with NFPA 110.

B. Field quality-control reports.

C. Warranty: For special warranty.

D. The following performance verifications shall be provided for submitted generators.

1. Submit five copies of generator sizing program based upon the specified step/starting sequence and associated voltage/frequency dips and required starting KVA. Refer to next page for sequences.

2. As part of the submittal requirements the contractor shall enter all design step/starting sequence loads into the manufacturer's generator sizing program in the presence of the engineer to verify model proposed by manufacturer meets the specified requirements for ambient temperature, site altitude, voltage dip, frequency dip, and starting KVA.

Loads Summary Report

Project - DIGA2301 BUILDING 1

Comments

Project Requirements

Frequency, Hz	: 60.0	**Generators Running in Parallel**	: 1
Duty	: Standby	**Site Altitude, ft(m)**	: 500(152)
Voltage	: 277/480, Series Wye	**Site Temperature, °C**	: 40
Phase	: 3	**Max. Altr Temp Rise, °C**	: 80
Fuel	: NaturalGas	**Project Voltage Distortion Limit, %**	: 10
Emissions	: EPA, stationary emergency application		

Loads Summary List

***Note: Detailed Loads and Step Report available below**

Step No.	Load Name	Quantity	Running		Starting		Peak		Dip Limits, %		VTHD% Limit
			kW	kVA	kW	kVA	kW	kVA	Vdip	Fdip	
Step01	AIR COMPRESSOR 1	1	6.15	7.07	23.94	71.25	None	None	35.0	10.0	0.0
Step01	AIR COMPRESSOR 2	1	6.15	7.07	23.94	71.25	None	None	35.0	10.0	0.0
Step01	LIGHTING - 1DPLS	1	9.4	9.9	9.4	9.89	None	None	35.0	10.0	10.0
Step01	RECEPTACLES - IDPLS	1	2.25	2.5	2.25	2.5	None	None	35.0	10.0	0.0
Step01	MISC LOAD - IDPLS	1	7.76	9.7	7.76	9.7	None	None	35.0	10.0	0.0
Step01	RECEPTACLES - 1DPLR	1	24.84	27.6	24.84	27.6	None	None	35.0	10.0	0.0
Step01	LIGHTING - 1DPLR	1	0.47	0.5	0.47	0.49	None	None	35.0	10.0	10.0
Step01	MISC LOAD - 1DPLR	1	6.88	8.6	6.88	8.6	None	None	35.0	10.0	0.0
Step01	RECEPTACLES - 1DPOS1	1	1.62	1.8	1.62	1.8	None	None	35.0	10.0	0.0
Step01	MISC LOADS - 1DPOS1	1	39.12	48.9	39.12	48.9	None	None	35.0	10.0	0.0
	Step Summary		105.0	124.0	140.0	252.0	150.4	442.5	35.0	10.0	10.0
Step02	CRAC-1A	1	30.49	33.88	30.49	33.88	None	None	35.0	10.0	10.0
Step02	CRAC-1B	1	30.49	33.88	30.49	33.88	None	None	35.0	10.0	10.0
	Step Summary		61.0	68.0	61.0	68.0	150.4	442.5	35.0	10.0	10.0
Step03	ELEVATOR 1	1	23.81	26.75	107.1	255.0	None	None	35.0	10.0	0.0
	Step Summary		24.0	27.0	107.0	255.0	150.4	442.5	35.0	10.0	10.0
Step04	ELEVATOR 2	1	23.81	26.75	107.1	255.0	None	None	35.0	10.0	0.0
	Step Summary		24.0	27.0	107.0	255.0	150.4	442.5	35.0	10.0	10.0
Step05	HEAT - 1DPOS1	1	29.28	36.6	29.28	36.6	None	None	35.0	10.0	0.0
Step05	RTU-1-1	1	29.89	33.21	122.64	306.6	None	None	35.0	10.0	0.0
	Step Summary		59.0	70.0	152.0	343.0	150.4	442.5	35.0	10.0	10.0

Step06	RTU-1-2	1	50.07	55.63	110.93	513.57	None	None	35.0	10.0	0.0
Step Summary			50.0	56.0	111.0	514.0	150.4	442.5	35.0	10.0	10.0
Step07	RTU-1-3	1	50.07	55.63	110.93	513.57	None	None	35.0	10.0	0.0
Step Summary			50.0	56.0	111.0	514.0	150.4	442.5	35.0	10.0	10.0
Step08	RTU-1-4	1	50.07	55.63	110.93	513.57	None	None	35.0	10.0	0.0
Step Summary			50.0	56.0	111.0	514.0	150.4	442.5	35.0	10.0	10.0
Step09	RTU-1-5	1	50.07	55.63	110.93	513.57	None	None	35.0	10.0	0.0
Step Summary			50.0	56.0	111.0	514.0	150.4	442.5	35.0	10.0	10.0
Step10	UPS Load	1	92.0	102.22	92.0	102.22	None	None	35.0	10.0	10.0
Step Summary			92.0	102.0	92.0	102.0	150.4	442.5	35.0	10.0	10.0
Step11	Future Loads	1	40.0	50.0	40.0	50.0	None	None	35.0	10.0	0.0
Step Summary			40.0	50.0	40.0	50.0	150.4	442.5	35.0	10.0	10.0
Step12	Fire Pump Load	1	62.17	69.08	150.45	442.5	150.45	442.5	15.0	10.0	0.0
Step12	JOCKEY PUMP	1	0.87	1.24	5.38	11.8	None	None	35.0	10.0	0.0
Step12	BOOSTER PUMP 1	1	6.15	7.07	23.94	71.25	None	None	35.0	10.0	0.0
Step12	BOOSTER PUMP 2	1	6.15	7.07	23.94	71.25	None	None	35.0	10.0	0.0
Step Summary			75.0	84.0	204.0	597.0	150.4	442.5	15.0	10.0	10.0

Project Summary	Running		Max Starting		Cumulative Step		Cumulative Peak		Project VTHD% Limit
	kW	kVA	kW	kVA	kW	kVA	kW	kVA	
	680.0	773.9	203.7	596.8	808.4	1286.2	768.3	1147.3	10.0

Loads Summary Report

Project - DIGA2301 BUILDING 2

Comments

Project Requirements

Frequency, Hz	: 60.0	**Generators Running in Parallel**	: 1
Duty	: Standby	**Site Altitude, ft(m)**	: 1000(305)
Voltage	: 277/480, Series Wye	**Site Temperature, °C**	: 40
Phase	: 3	**Max. Altr Temp Rise, °C**	: 80
Fuel	: NaturalGas	**Project Voltage Distortion Limit, %**	: 10
Emissions	: EPA, stationary emergency application		

Loads Summary List

***Note: Detailed Loads and Step Report available below**

Step No.	Load Name	Quantity	Running		Starting		Peak		Dip Limits, %		VTHD% Limit
			kW	kVA	kW	kVA	kW	kVA	Vdip	Fdip	
Step01	AIR COMPRESSOR 1	1	6.15	7.07	23.94	71.25	None	None	35.0	10.0	0.0
Step01	AIR COMPRESSOR 2	1	6.15	7.07	23.94	71.25	None	None	35.0	10.0	0.0
Step01	LIGHTING - 2DPLS	1	7.89	8.3	7.89	8.31	None	None	35.0	10.0	10.0
Step01	RECEPTACLES - 2DPLS	1	0.45	0.5	0.45	0.5	None	None	35.0	10.0	0.0
Step01	MISC LOAD - 2DPLS	1	18.56	23.2	18.56	23.2	None	None	35.0	10.0	0.0
Step01	LIGHTING - 2DPLR	1	0.66	0.7	0.66	0.69	None	None	35.0	10.0	10.0
Step01	RECEPTACLES - 1DPLR	1	26.01	28.9	26.01	28.9	None	None	35.0	10.0	0.0
Step01	MISC LOAD - 2DPLR	1	29.36	36.7	29.36	36.7	None	None	35.0	10.0	0.0
Step01	MISC LOADS - 2DPOS1	1	94.48	118.1	94.48	118.1	None	None	35.0	10.0	0.0
Step01	RECEPTACLES - 2DPOS1	1	1.62	1.8	1.62	1.8	None	None	35.0	10.0	0.0
Step Summary			191.0	232.0	227.0	361.0	216.8	637.5	35.0	10.0	10.0
Step02	ELEVATOR 1	1	24.87	27.63	24.87	27.63	None	None	35.0	10.0	10.0
Step Summary			25.0	28.0	25.0	28.0	216.8	637.5	35.0	10.0	10.0
Step03	ELEVATOR 2	1	24.87	27.63	24.87	27.63	None	None	35.0	10.0	10.0
Step Summary			25.0	28.0	25.0	28.0	216.8	637.5	35.0	10.0	10.0
Step04	ELEVATOR 3	1	24.87	27.63	24.87	27.63	None	None	35.0	10.0	10.0
Step Summary			25.0	28.0	25.0	28.0	216.8	637.5	35.0	10.0	10.0
Step05	RTU-2-1	1	77.83	85.53	133.73	696.53	None	None	35.0	10.0	0.0
Step05	HEAT - 2DPOS1	1	14.4	18.0	14.4	18.0	None	None	35.0	10.0	0.0
Step Summary			92.0	104.0	148.0	715.0	216.8	637.5	35.0	10.0	10.0
Step06	RTU-2-2	1	77.83	85.53	133.73	696.53	None	None	35.0	10.0	0.0

Step Summary			78.0	86.0	134.0	697.0	216.8	637.5	35.0	10.0	10.0
Step07	RTU-2-3	1	77.83	85.53	133.73	696.53	None	None	35.0	10.0	0.0
Step Summary			78.0	86.0	134.0	697.0	216.8	637.5	35.0	10.0	10.0
Step08	RTU-2-4	1	77.83	85.53	133.73	696.53	None	None	35.0	10.0	0.0
Step Summary			78.0	86.0	134.0	697.0	216.8	637.5	35.0	10.0	10.0
Step09	RTU-2-5	1	77.83	85.53	133.73	696.53	None	None	35.0	10.0	0.0
Step Summary			78.0	86.0	134.0	697.0	216.8	637.5	35.0	10.0	10.0
Step10	RTU-2-6	1	77.83	85.53	133.73	696.53	None	None	35.0	10.0	0.0
Step Summary			78.0	86.0	134.0	697.0	216.8	637.5	35.0	10.0	10.0
Step11	Future	1	40.0	50.0	40.0	50.0	None	None	35.0	10.0	0.0
Step Summary			40.0	50.0	40.0	50.0	216.8	637.5	35.0	10.0	10.0
Step12	Fire Pump Load	1	58.89	65.43	216.75	637.5	216.75	637.5	15.0	10.0	0.0
Step12	JOCKEY PUMP	1	0.87	1.24	5.38	11.8	None	None	35.0	10.0	0.0
Step12	BOOSTER PUMP 1	1	4.14	4.87	17.38	47.5	None	None	35.0	10.0	0.0
Step12	BOOSTER PUMP 2	1	4.14	4.87	17.38	47.5	None	None	35.0	10.0	0.0
Step Summary			68.0	76.0	257.0	744.0	216.8	637.5	15.0	10.0	10.0
Project Summary			Running		Max Starting		Cumulative Step		Cumulative Peak		Project VTHD% Limit
			kW	kVA	kW	kVA	kW	kVA	kW	kVA	
			855.4	972.8	256.9	744.3	1044.2	1640.7	1013.2	1544.9	10.0

CLOSEOUT SUBMITTALS

E. Operation and Maintenance Data: For packaged engine generators to include in emergency, operation, and maintenance manuals.

1. In addition to items specified in Section 017823 "Operation and Maintenance Data," include the following:

a. List of tools and replacement items recommended to be stored at Project for ready access. Include part and drawing numbers, current unit prices, and source of supply.
b. Operating instructions laminated and mounted adjacent to generator location.
c. Training plan.

1.6 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Fuses: One for every 10 of each type and rating, but no fewer than one of each.
2. Indicator Lamps: Two for every six of each type used, but no fewer than two of each.
3. Filters: One set each of lubricating oil, fuel, and combustion-air filters.
4. Tools: Each tool listed by part number in operations and maintenance manual.

1.7 QUALITY ASSURANCE

A. Installer Qualifications: An authorized representative who is trained and approved by manufacturer.

B. Testing Agency Qualifications: Accredited by NETA.

1. Testing Agency's Field Supervisor: Certified by NETA to supervise on-site testing.

1.8 WARRANTY

A. Manufacturer's Warranty: Manufacturer agrees to repair or replace components of packaged engine generators and associated auxiliary components that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Per Table 01830.1.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by the following:

1. Blue Star Power Systems, Inc.

B. Source Limitations: Obtain packaged engine generators and auxiliary components from single source from single manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. B11 Compliance: Comply with B11.19.

B. NFPA Compliance:

1. Comply with NFPA 37.
2. Comply with NFPA 70.
3. Comply with NFPA 110 requirements for Level 2 EPSS.

C. UL Compliance: Comply with UL 2200.

D. Engine Exhaust Emissions: Comply with EPA Tier 2 requirements and applicable state and local government requirements.

E. Noise Emission: Comply with applicable state and local government requirements for maximum noise level at distance provided by acoustic consultant requirements due to sound emitted by engine generator, including engine, engine exhaust, engine cooling-air intake and discharge, and other components of installation.

F. Environmental Conditions: Engine generator system shall withstand the following environmental conditions without mechanical or electrical damage or degradation of performance capability:

1. Ambient Temperature: 5 to 104 deg F (Minus 15 to plus 40 deg C).
2. Relative Humidity: Zero to 95 percent.
3. Altitude: Sea level to 1000 feet (300 m).

2.3 ENGINE GENERATOR ASSEMBLY DESCRIPTION

A. Factory-assembled and -tested, water-cooled engine, with brushless generator and accessories.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and use.

C. EPSS Class: Engine generator shall be classified as Class 2 according to NFPA 110.

D. Service Load: Per drawings.

E. Power Factor: 0.8, lagging.

F. Frequency: 60 Hz.

G. Voltage: 480-V ac.

H. Phase: Three-phase, four-wire wye.

I. Induction Method: Naturally aspirated.

J. Governor: Adjustable isochronous, with speed sensing.

K. Mounting Frame: Structural-steel framework to maintain alignment of mounted components without depending on concrete foundation. Provide lifting attachments sized and spaced to prevent deflection of base during lifting and moving.

1. Rigging Diagram: Inscribed on metal plate permanently attached to mounting frame to indicate location and lifting capacity of each lifting attachment and engine generator center of gravity.

L. Capacities and Characteristics:

1. Power Output Ratings: Nominal ratings as indicated at 0.8 power factor excluding power required for the continued and repeated operation of the unit and auxiliaries.
2. Nameplates: For each major system component to identify manufacturer's name and address, and model and serial number of component.

M. Engine Generator Performance:

1. Steady-State Voltage Operational Bandwidth: 3 percent of rated output voltage, from no load to full load.
2. Transient Voltage Performance: Not more than 20 percent variation for 50 percent step-load increase or decrease. Voltage shall recover and remain within the steady-state operating band within three seconds.
3. Steady-State Frequency Operational Bandwidth: 0.5 percent of rated frequency, from no load to full load.
4. Steady-State Frequency Stability: When system is operating at any constant load within the rated load, there shall be no random speed variations outside the steady-state operational band and no hunting or surging of speed.
5. Transient Frequency Performance: Less than 5 percent variation for 50 percent step-load increase or decrease. Frequency shall recover and remain within the steady-state operating band within five seconds.

6. Output Waveform: At no load, harmonic content measured line to line or line to neutral shall not exceed 5 percent total and 3 percent for single harmonics. Telephone influence factor, determined according to NEMA MG 1, shall not exceed 50 percent.
7. Sustained Short-Circuit Current: For a three-phase, bolted short circuit at system output terminals, system shall supply a minimum of 250 percent of rated full-load current for not less than 10 seconds and then clear the fault automatically, without damage to generator system components.
8. Start Time: Comply with NFPA 110, Type 10, system requirements.

2.4 ENGINE

A. Fuel: Natural gas.

B. Rated Engine Speed: 1800 rpm.

C. Lubrication System: Engine or skid mounted.

1. Filter and Strainer: Rated to remove 90 percent of particles 5 micrometers and smaller while passing full flow.
2. Thermostatic Control Valve: Control flow in system to maintain optimum oil temperature. Unit shall be capable of full flow and is designed to be fail-safe.
3. Crankcase Drain: Arranged for complete gravity drainage to an easily removable container with no disassembly and without use of pumps, siphons, special tools, or appliances.

D. Cooling System: Closed loop, liquid cooled, with radiator factory mounted on engine generator mounting frame and integral engine-driven coolant pump.

1. Coolant: Solution of 50 percent ethylene-glycol-based antifreeze and 50 percent water, with anticorrosion additives as recommended by engine manufacturer.
2. Size of Radiator: Adequate to contain expansion of total system coolant, from cold start to 110 percent load condition.
3. Expansion Tank: Constructed of welded steel plate and rated to withstand maximum closed-loop coolant-system pressure for engine used. Equip with gage glass and petcock.
4. Temperature Control: Self-contained, thermostatic-control valve modulates coolant flow automatically to maintain optimum constant coolant temperature as recommended by engine manufacturer.
5. Coolant Hose: Flexible assembly with inside surface of nonporous rubber and outer covering of aging-, UV-, and abrasion-resistant fabric.

    a. Rating: 50-psig (345-kPa) maximum working pressure with coolant at 180 deg F (82 deg C), and noncollapsible under vacuum.
    b. End Fittings: Flanges or steel pipe nipples with clamps to suit piping and equipment connections.

E. Muffler/Silencer: Critical type, sized as recommended by engine manufacturer and selected with exhaust piping system to not exceed engine manufacturer's engine backpressure requirements.

1. Minimum sound attenuation of 25 dB at 500 Hz.
2. Sound level measured at a distance of 25 feet (8 m) from exhaust discharge after installation is complete shall be 75 dBA or less.

F. Air-Intake Filter: Standard-duty, engine-mounted air cleaner with replaceable dry-filter element and "blocked filter" indicator.

G. Starting System: 24-V electric, with negative ground.

1. Components: Sized so they are not damaged during a full engine-cranking cycle, with ambient temperature at maximum specified in "Performance Requirements" Article.
2. Cranking Motor: Heavy-duty unit that automatically engages and releases from engine flywheel without binding.
3. Cranking Cycle: As required by NFPA 110 for system level specified.
4. Battery: Nickel Cadmium, with capacity within ambient temperature range specified in "Performance Requirements" Article to provide specified cranking cycle at least twice without recharging.
5. Battery Cable: Size as recommended by engine manufacturer for cable length indicated. Include required interconnecting conductors and connection accessories.
6. Battery Stand: Factory-fabricated, two-tier metal with acid-resistant finish designed to hold the quantity of battery cells required and to maintain the arrangement to minimize lengths of battery interconnections.
7. Battery-Charging Alternator: Factory mounted on engine with solid-state voltage regulation and 35-A minimum continuous rating.

2.5 GASEOUS FUEL SYSTEM

A. Natural Gas Piping: Comply with requirements in Section 231123 "Facility Natural Gas Piping."

B. Gas Train: Comply with NFPA 37.

C. Engine Fuel System:

1. Natural Gas, Vapor-Withdrawal System:

a. Carburetor.
b. Fuel-Shutoff Solenoid Valves: NRTL-listed, normally closed, safety shutoff valves; one for each fuel source.

2. Fuel Filters: One for each fuel type.
3. Manual Fuel Shutoff Valves: One for each fuel type.
4. Flexible Fuel Connectors: Minimum one for each fuel connection.

2.6 CONTROL AND MONITORING

A. Automatic Starting System Sequence of Operation: When mode-selector switch on the control and monitoring panel is in the automatic position, remote-control contacts in one or more separate automatic transfer switches initiate starting and stopping of engine generator. When mode-selector switch is switched to the on position, engine generator starts. The off position of same switch initiates engine generator shutdown. When engine generator is running, specified system or equipment failures or derangements automatically shut down engine generator and initiate alarms.

B. Provide minimum run-time control set for 30 minutes, with override only by operation of a remote emergency-stop switch.

C. Comply with UL 508A.

D. Configuration: Operating and safety indications, protective devices, basic system controls, and engine gages shall be grouped in a common control and monitoring panel mounted on the engine generator. Mounting method shall isolate the control panel from engine generator vibration. Panel shall be powered from the engine generator battery.

E. Control and Monitoring Panel:

1. Digital controller with integrated LCD display, controls, and microprocessor, capable of local and remote control, monitoring, and programming, with battery backup.
2. Instruments: Located on the control and monitoring panel and viewable during operation.

    a. Engine lubricating-oil pressure gage.
    b. Engine-coolant temperature gage.
    c. DC voltmeter (alternator battery charging).
    d. Running-time meter.

3. Controls and Protective Devices: Controls, shutdown devices, and common visual alarm indication as required by NFPA 110 for Level 2 system, including the following:

    a. Cranking control equipment.
    b. Run-Off-Auto switch.
    c. Control switch not in automatic position alarm.
    d. Overcrank alarm.
    e. Overcrank shutdown device.
    f. Low water temperature alarm.
    g. High engine temperature.
    h. High engine temperature shutdown device.
    i. Overspeed alarm.
    j. Overspeed shutdown device.
    k. Coolant low-level alarm.
    l. Coolant high-temperature prealarm.
    m. Coolant high-temperature alarm.
    n. Coolant low-temperature alarm.

o. Coolant high-temperature shutdown device.
p. EPS load indicator.
q. Generator overcurrent-protective-device not-closed alarm.

F. Connection to Datalink:

1. A separate terminal block, factory wired to Form C dry contacts, for each alarm and status indication.
2. Provide connections for datalink transmission of indications to remote data terminals via ModBus. Data system connections to terminals are covered in Section 260913 "Electrical Power Monitoring and Control."

G. Common Remote Panel with Common Audible Alarm: Comply with NFPA 110 requirements for Level 2 systems. Include necessary contacts and terminals in control and monitoring panel. Remote panel shall be powered from the engine generator battery.

H. Remote Alarm Annunciator: Comply with NFPA 99. An LED indicator light labeled with proper alarm conditions shall identify each alarm event, and a common audible signal shall sound for each alarm condition. Silencing switch in face of panel shall silence signal without altering visual indication. Connect so that after an alarm is silenced, clearing of initiating condition will reactivate alarm until silencing switch is reset. Cabinet and faceplate are surface- or flush-mounting type to suit mounting conditions indicated.

1. Overcrank alarm.
2. Coolant low-temperature alarm.
3. High engine temperature pre-alarm.
4. High engine temperature alarm.
5. Low lube oil pressure alarm.
6. Overspeed alarm.
7. Low coolant level alarm.
8. Low-cranking voltage alarm.
9. Contacts for local and remote common alarm.
10. Audible-alarm silencing switch.
11. Air shutdown damper when used.
12. Run-Off-Auto switch.
13. Control switch not in automatic position alarm.

I. Supporting Items: Include sensors, transducers, terminals, relays, and other devices and include wiring required to support specified items. Locate sensors and other supporting items on engine or generator unless otherwise indicated.

J. Remote Emergency-Stop Switch: Flush or surface mounted as field conditions dictate; wall mounted unless otherwise indicated; and labeled. Push button shall be protected from accidental operation.

2.7 GENERATOR OVERCURRENT AND FAULT PROTECTION

A. Overcurrent protective devices for the entire EPSS shall be coordinated to optimize selective tripping when a short circuit occurs. Coordination of protective devices shall consider both utility and EPSS as the voltage source.

1. Overcurrent protective devices for the EPSS shall be accessible only to authorized personnel.

B. Generator Circuit Breaker: Molded-case, electronic-trip type; 100 percent rated; complying with UL 489.

1. Tripping Characteristics: Adjustable long-time and short-time delay and instantaneous.
2. Trip Settings: Selected to coordinate with generator thermal damage curve.
3. Shunt Trip: Connected to trip breaker when engine generator is shut down by other protective devices.
4. Mounting: Adjacent to or integrated with control and monitoring panel.

C. Generator Protector: Microprocessor-based unit shall continuously monitor current level in each phase of generator output, integrate generator heating effect over time, and predict when thermal damage of alternator will occur. When signaled by generator protector or other engine generator protective devices, a shunt-trip device in the generator disconnect switch shall open the switch to disconnect the generator from load circuits. Protector performs the following functions:

1. Initiates a generator overload alarm when generator has operated at an overload equivalent to 110 percent of full-rated load for 60 seconds. Indication for this alarm is integrated with other engine generator malfunction alarms. Contacts shall be available for load shed functions.
2. Under single- or three-phase fault conditions, regulates generator to 300 percent of rated full-load current for up to 10 seconds.
3. As overcurrent heating effect on the generator approaches the thermal damage point of the unit, protector switches the excitation system off, opens the generator disconnect device, and shuts down the engine generator.
4. Senses clearing of a fault by other overcurrent devices and controls recovery of rated voltage to avoid overshoot.
5. Indicate ground fault with other engine generator alarm indications.
6. Trip generator protective device on ground fault.

2.8 GENERATOR, EXCITER, AND VOLTAGE REGULATOR

A. Comply with NEMA MG 1.

B. Drive: Generator shaft shall be directly connected to engine shaft. Exciter shall be rotated integrally with generator rotor.

C. Electrical Insulation: Class H.

D. Stator-Winding Leads: Brought out to terminal box to permit future reconnection for other voltages if required. Provide 12-lead alternator.

E. Range: Provide limited range of output voltage by adjusting the excitation level.

F. Construction shall prevent mechanical, electrical, and thermal damage due to vibration, over-speed up to 125 percent of rating, and heat during operation at 110 percent of rated capacity.

G. Enclosure: Drip-proof.

H. Instrument Transformers: Mounted within generator enclosure.

I. Voltage Regulator: Solid-state type, separate from exciter, providing performance as specified and as required by NFPA 110.

1. Adjusting Rheostat on Control and Monitoring Panel: Provide plus or minus 5 percent adjustment of output-voltage operating band.
2. Maintain voltage within 15 percent on one step, full load.
3. Provide anti-hunt provision to stabilize voltage.
4. Maintain frequency within 5 percent and stabilize at rated frequency within two seconds.

J. Strip Heater: Thermostatically controlled unit arranged to maintain stator windings above dew point.

K. Windings: Two-thirds pitch stator winding and fully linked amortisseur winding.

L. Subtransient Reactance: 12 percent, maximum.

2.9 OUTDOOR ENGINE GENERATOR ENCLOSURE

A. Description: Vandal-resistant, sound-attenuating, weatherproof steel housing, wind resistant up to 100 mph (160 km/h). Multiple panels shall be lockable and provide adequate access to components requiring maintenance. Panels shall be removable by one person without tools. Instruments and control shall be mounted within enclosure.

1. Sound Attenuation Level: 3.

B. Description: Prefabricated or pre-engineered, galvanized-steel-clad, integral structural-steel-framed; erected on steel dunnage foundation.

C. Structural Design and Anchorage: Comply with ASCE/SEI 7 for wind loads up to 100 mph (160 km/h).

D. Seismic Design: Comply with seismic requirements in Section 260548.16 "Seismic Controls for Electrical Systems."

E. Hinged Doors: With padlocking provisions.

F. Space Heater: Thermostatically controlled and sized to prevent condensation.

G. Thermal Insulation: Manufacturer's standard materials and thickness selected in coordination with space heater to maintain winter interior temperature within operating limits required by engine generator components.

H. Muffler Location: Integral to enclosure.

I. Engine-Cooling Airflow through Enclosure: Maintain temperature rise of system components within required limits when unit operates at 110 percent of rated load for two hours with ambient temperature at top of range specified in system service conditions.

1. Louvers: Fixed-engine, cooling-air inlet and discharge. Stormproof and drainable louvers prevent entry of rain and snow.

J. Convenience Outlets: Factory-wired, GFCI. Arrange for external electrical connection.

2.10 VIBRATION ISOLATION DEVICES

A. Elastomeric Isolator Pads: Oil- and water-resistant elastomer or natural rubber, arranged in single or multiple layers, molded with a nonslip pattern and galvanized-steel baseplates of sufficient stiffness for uniform loading over pad area, and factory cut to sizes that match requirements of supported equipment.

1. Material: Standard neoprene separated by steel shims.
2. Shore A Scale Durometer Rating: 50.
3. Number of Layers: One.
4. Minimum Deflection: 1 inch (25 mm).

B. Restrained Spring Isolators: Freestanding, steel, open-spring isolators with seismic restraint.

1. Housing: Steel with resilient vertical-limit stops to prevent spring extension due to wind loads or if weight is removed; factory-drilled baseplate bonded to 1/4-inch- (6-mm-) thick, elastomeric isolator pad attached to baseplate underside; and adjustable equipment-mounting and -leveling bolt that acts as blocking during installation.
2. Outside Spring Diameter: Not less than 80 percent of compressed height of the spring at rated load.
3. Minimum Additional Travel: 50 percent of required deflection at rated load.
4. Lateral Stiffness: More than 80 percent of rated vertical stiffness.
5. Overload Capacity: Support 200 percent of rated load, fully compressed, without deformation or failure.
6. Minimum Deflection: 1 inch (25 mm).

C. Comply with requirements in Section 232116 "Hydronic Piping Specialties" for vibration isolation and flexible connector materials for steel piping.

D. Comply with requirements in Section 233113 "Metal Ducts" for vibration isolation and flexible connector materials for exhaust shroud and ductwork.

E. Vibration isolation devices shall not be used to accommodate misalignments or to make bends.

2.11 FINISHES

A. Indoor and Outdoor Enclosures and Components: Manufacturer's standard finish over corrosion-resistant pretreatment and compatible primer.

2.12 SOURCE QUALITY CONTROL

A. Prototype Testing: Factory test engine generator using same engine model, constructed of identical or equivalent components and equipped with identical or equivalent accessories.

1. Tests: Comply with NFPA 110, Level 1 Energy Converters and with IEEE 115.

B. Project-Specific Equipment Tests: Before shipment, factory test engine generator and other system components and accessories manufactured specifically for this Project. Perform tests at rated load and power factor. Include the following tests:

1. Test components and accessories furnished with installed unit that are not identical to those on tested prototype to demonstrate compatibility and reliability.
2. Test generator, exciter, and voltage regulator as a unit.
3. Full-load run.
4. Maximum power.
5. Voltage regulation.
6. Transient and steady-state governing.
7. Single-step load pickup.
8. Safety shutdown.
9. Provide 14 days' advance notice of tests and opportunity for observation of tests by Owner's representative.
10. Report factory test results within 10 days of completion of test.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas, equipment bases, and conditions, with Installer present, for compliance with requirements for installation and other conditions affecting packaged engine generator performance.

B. Examine roughing-in for piping systems and electrical connections to verify actual locations of connections before packaged engine generator installation.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Comply with NECA 1 and NECA 404.

B. Comply with packaged engine generator manufacturers' written installation and alignment instructions and with NFPA 110.

C. Equipment Mounting:
   1. Install packaged engine generator with restrained spring isolators having a minimum deflection of 1 inch (25 mm) on steel dunnage. Secure enclosure to anchor bolts installed in concrete bases. Concrete base construction as required by manufacturer and construction drawings.

D. Install packaged engine generator to provide access, without removing connections or accessories, for periodic maintenance.

E. Gaseous Fuel Piping:

   1. Natural gas piping, valves, and specialties for gas distribution are specified in the mechanical construction documents.

F. Electrical Wiring: Install electrical devices furnished by equipment manufacturers but not specified to be factory mounted.

3.3 CONNECTIONS

A. Piping installation requirements are specified in other Sections. Drawings indicate general arrangement of piping and specialties.

B. Connect fuel, cooling-system, and exhaust-system piping adjacent to packaged engine generator to allow service and maintenance.

C. Connect cooling-system water piping to engine generator and heat exchanger with flexible connectors.

D. Connect engine exhaust pipe to engine with flexible connector.

E. Gaseous Fuel Connections:

   1. Connect fuel piping to engines with a gate valve and union and flexible connector.
   2. Install manual shutoff valve in a remote location to isolate gaseous fuel supply to the generator.
   3. Vent gas pressure regulators outside building a minimum of 60 inches (1500 mm) from building openings.

F. Ground equipment according to Section 260526 "Grounding and Bonding for Electrical Systems."

G. Connect wiring according to Section 260519 "Low-Voltage Electrical Power Conductors and Cables." Provide a minimum of one 90-degree bend in flexible conduit routed to the engine generator from a stationary element.

H. Balance single-phase loads to obtain a maximum of 10 percent unbalance between any two phases.

3.4 IDENTIFICATION

A. Identify system components according to Section 230553 "Identification for HVAC Piping and Equipment" and Section 260553 "Identification for Electrical Systems."

B. Install a sign indicating the generator neutral is bonded to the main service neutral at the main service location.

3.5 FIELD QUALITY CONTROL

A. Perform tests and inspections with the assistance of a factory-authorized service representative.

B. Tests and Inspections:

1. Perform tests recommended by manufacturer and each visual and mechanical inspection and electrical and mechanical test listed in first two subparagraphs below, as specified in NETA ATS. Certify compliance with test parameters.

    a. Visual and Mechanical Inspection:

        1) Compare equipment nameplate data with Drawings and the Specifications.
        2) Inspect physical and mechanical condition.
        3) Inspect anchorage, alignment, and grounding.
        4) Verify that the unit is clean.

    b. Electrical and Mechanical Tests:

        1) Perform insulation-resistance tests according to IEEE 43.

            a) Machines Larger Than 200 hp (150 kW): Test duration shall be 10 minutes. Calculate polarization index.
            b) Machines 200 hp (150 kW) or Less: Test duration shall be one minute. Calculate the dielectric-absorption ratio.

        2) Test protective relay devices.

3) Verify phase rotation, phasing, and synchronized operation as required by the application.
4) Functionally test engine shutdown for low oil pressure, overtemperature, overspeed, and other protection features as applicable.
5) Perform vibration test for each main bearing cap.
6) Conduct performance test according to NFPA 110.
7) Verify correct functioning of the governor and regulator.

2. NFPA 110 Acceptance Tests: Perform tests required by NFPA 110 that are additional to those specified here including, but not limited to, single-step full-load pickup test.
3. Battery Tests: Equalize charging of battery cells according to manufacturer's written instructions. Record individual cell voltages.

   a. Measure charging voltage and voltages between available battery terminals for full-charging and float-charging conditions. Check electrolyte level and specific gravity under both conditions.
   b. Test for contact integrity of all connectors. Perform an integrity load test and a capacity load test for the battery.
   c. Verify acceptance of charge for each element of the battery after discharge.
   d. Verify that measurements are within manufacturer's specifications.

4. Battery-Charger Tests: Verify specified rates of charge for both equalizing and float-charging conditions.
5. System Integrity Tests: Methodically verify proper installation, connection, and integrity of each element of engine generator system before and during system operation. Check for air, exhaust, and fluid leaks.
6. Voltage and Frequency Transient Stability Tests: Use recording oscilloscope to measure voltage and frequency transients for 50 and 100 percent step-load increases and decreases and verify that performance is as specified. Generator supplied instrumentation may be utilized for this test.
7. Harmonic-Content Tests: Measure harmonic content of output voltage at 25 and 100 percent of rated linear load. Verify that harmonic content is within specified limits.
8. Noise Level Tests: Measure A-weighted level of noise emanating from engine generator installation, including engine exhaust and cooling-air intake and discharge, at four locations 25 feet (8 m) from edge of the generator enclosure, and compare measured levels with required values.

C. Coordinate tests with tests for transfer switches and run them concurrently.

D. Test instruments shall have been calibrated within the past 12 months, traceable to NIST Calibration Services, and adequate for making positive observation of test results. Make calibration records available for examination on request.

E. Leak Test: After installation, charge exhaust, coolant, and fuel systems and test for leaks. Repair leaks and retest until no leaks exist.

F. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation for generator and associated equipment.

G. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

H. Remove and replace malfunctioning units and retest as specified above.

I. Retest: Correct deficiencies identified by tests and observations, and retest until specified requirements are met.

J. Report results of tests and inspections in writing. Record adjustable relay settings and measured insulation resistances, time delays, and other values and observations. Attach a label or tag to each tested component indicating satisfactory completion of tests.

3.6 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain packaged engine generators.

END OF SECTION 263213

Union County Government Complex
For Union County Improvement Authority
Elizabeth, Union County, NJ

Addendum Date:
01-12-24

Project No.: 20.072

Project Dated: 11-08-23

The original specifications and drawings, for the project noted above have been amended as noted in this Addendum. Receipt of this Addendum shall be acknowledged by inserting its number and date in the space provided on the Form of Proposal.

REVISED DRAWINGS LIST

List of revised drawings with description of revisions follows.

SHEET NO.	SHEET NAME	CHANGES MADE		
G-000	Cover Sheet - Volume 1			
G-001	DRAWING LIST VOL. 1 - 1 OF 3	DRAWING NOT ISSUED : S-203 COLUMN SCHEDULE ADDED TO DRAWING LIST		
	CONTINUES ON SHEETS G-002 AND G-003 IN VOLUME 2			
	CIVIL			
VT-101	BOUNDARY, TOPOGRAPHIC & UTILITY SURVEY			
CD-101	DEMOLITION PLAN			
C-101	SITE PLAN			
C-102	FIRE TRUCK CIRCULATION PLAN			
C-103	GARBAGE AND 30-FT BOX TRUCK CIRCULATION PLAN			
CG101	GRADING PLAN			
CG102	DRAINAGE PLAN			
CU-101	UTILITY PLAN			
CE-101	SOIL EROSION AND SEDIMENT CONTROL PLAN			
LP-101	LANDSCAPE PLANTING PLAN			
LP301	SECTION VIEWS			
LP-501	LANDSCAPE NOTES AND DETAILS			
LL-101	LIGHTING PLAN			
LL102	LIGHTING PLAN	**NOT USED**		
LL-501	LIGHTING NOTES AND DETAILS			
C-501	SITE DETAILS			
C-502	SITE DETAILS			
C-503	SITE DETAILS			
	ARCHITECTURE - CORE/SHELL/ENVELOPE			
G-004	ABBREVIATIONS, GRAPHIC SYMBOLS LEGEND, ADA DETAILS AND CLEARANCES			
G-005	ADA MOUNTING DETAILS AND MISCELLANEOUS DETAILS			
G-006	CODE DATA - BUILDING NO. 1 - SHEET 1			
G-007	CODE DATA - BUILDING NO. 1 - SHEET 2			
G-008	CODE DATA - BUILDING NO.2 - SHEET 1			
G-009	CODE DATA - BUILDING NO.2 - SHEET 2			
G-010	TYPICAL FIRESTOPPING DETAILS			
G-011	TYPICAL FIRESTOPPING DETAILS AND PARITION TERMINATING DETAILS			
G-012	TYPICAL FIRESTOPPING DETAILS SHAFT WALLS AND PARTITIONS			
G-013	PARITION TYPES	PARTITION TYPE 3C ADDED		
G-014	PARTITION TYPES			
G-015	SIGNAGE DETAILS AND NOTES			
G1-100	BUILDING NO. 1 - LEVEL 0 - UNDERGROUND EGRESS, OCCUPANCY AND WALL RATINGS PLAN			
G1-101	BUILDING NO. 1 - LEVEL 1 - GROUND FLOOR EGRESS, OCCUPANCY AND WALL RATINGS PLAN			
G1-102	BUILDING NO. 1 - LEVEL 2 - EGRESS, OCCUPANCY AND WALL RATINGS PLAN			
G1-103	BUILDING NO. 1 - LEVEL 3 - EGRESS, OCCUPANCY AND WALL RATINGS PLAN			
G1-104	BUILDING NO. 1 - LEVEL 4 - EGRESS, OCCUPANCY AND WALL RATINGS PLAN			
G1-105	BUILDING NO. 1 - LEVEL 5 - EGRESS, OCCUPANCY AND WALL RATINGS PLAN			
G1-106	BUILDING NO. 1 - LEVEL 6 - EGRESS, OCCUPANCY AND WALL RATINGS PLAN			
G2-110	BUILDING NO. 2 - LEVEL 0 - GROUND FLOOR EGRESS, OCCUPANCY AND WALL RATING			
G2-111	BUILDING NO. 2 - LEVEL 1 - GROUND FLOOR EGRESS, OCCUPANCY AND WALL RATING			
G2-112	BUILDING NO. 2 - LEVEL 2 - GROUND FLOOR EGRESS, OCCUPANCY AND WALL RATING			
G2-113	BUILDING NO. 2 - LEVEL 3 - GROUND FLOOR EGRESS, OCCUPANCY AND WALL RATING			
G2-114	BUILDING NO. 2 - LEVEL 4 - GROUND FLOOR EGRESS, OCCUPANCY AND WALL RATING			
G2-115	BUILDING NO. 2 - LEVEL 5 - GROUND FLOOR EGRESS, OCCUPANCY AND WALL RATING			
G2-116	BUILDING NO. 2 - LEVEL 6 - GROUND FLOOR EGRESS, OCCUPANCY AND WALL RATING			
G2-117	BUILDING NO. 2 - LEVEL 7 - GROUND FLOOR EGRESS, OCCUPANCY AND WALL RATING			
AS-100	ARCHITECTURAL SITE PLAN			
AS-101	OUTDOOR PLAZA PLAN			
CS-100	BUILDING NO. 1 - LEVEL 0 - UNDERGROUND FLOOR PLAN			
CS-101	BUILDING NO. 1 - LEVEL 1 - GROUND FLOOR PLAN			
CS-102	BUILDING NO. 1 - LEVEL 2 - FLOOR PLAN	SHEET NOT ISSUED - Electrical Room - partition type changed to 3C refer to G-013 for partition detail.		
CS-103	BUILDING NO. 1 - LEVEL 3 - FLOOR PLAN			
CS-104	BUILDING NO. 1 - LEVEL 4 - FLOOR PLAN			
CS-105	BUILDING NO. 1 - LEVEL 5 - FLOOR PLAN	SHEET NOT ISSUED - Electrical Room - partition type changed to 3C refer to G-013 for partition detail.		
CS-106	BUILDING NO. 1 - LEVEL 6 - ROOF PLAN AND PENTHOUSE ROOF PLAN			
CS-107	BUILDING NO. 1 - LEVEL 6 - ROOF PLAN AT PAVERS AND EQUIPMENT PLATFORM			
CS-108	BUILDING NO. 1 - ROOF PLAN AT TOP OF TRELLIS AND EQUIPMENT PLATFORM			
CS-110	BUILDING NO. 2 - LEVEL 0 - GROUND FLOOR			
CS-111	BUILDING NO. 2 - LEVEL 1 - FLOOR PLAN			
CS-112	BUILDING NO. 2 - LEVEL 2 - FLOOR PLAN	SHEET NOT ISSUED - Electrical Room - partition type changed to 3C refer to G-013 for partition detail.		
CS-113	BUILDING NO. 2 - LEVEL 3 - FLOOR PLAN	SHEET NOT ISSUED - Electrical Room - partition type changed to 3C refer to G-013 for partition detail.		
CS-114	BUILDING NO. 2 - LEVEL 4 - FLOOR PLAN	SHEET NOT ISSUED - Electrical Room - partition type changed to 3C refer to G-013 for partition detail.		
CS-115	BUILDING NO. 2 - LEVEL 5 - FLOOR PLAN			
CS-116	BUILDING NO. 2 - LEVEL 6 - FLOOR PLAN	SHEET NOT ISSUED - Electrical Room - partition type changed to 3C refer to G-013 for partition detail.		
CS-117	BUILDING NO. 2 - LEVEL 7 - ROOF PLAN AND PENTHOUSE ROOF PLAN			
CS-118	BUILDING NO. 2 -ROOF PLAN AT TOP OF TRELLIS AND EQUIPMENT PLATFORM			
CS-200	BUILDING NO. 1 - UNDERGROUND LEVEL REFLECTED CEILING PLAN			
CS-201	BUILDING NO. 1 - LEVEL 1 - GROUND FLOOR REFLECTED SOFFIT PLAN			
CS-202	BUILDING NO. 1 - LEVEL 2 - REFLECTED CEILING PLAN			
CS-210	BUILDING NO. 2 - LEVEL 1 - GROUND FLOOR REFLECTED SOFFIT PLAN			
CS-211	BUILDING NO. 2 - LEVEL 2 - REFLECTED CEILING PLAN			
CS-301	BUILDING NO.1 SLAB EDGE PLANS			
CS-302	BUILDING NO.1 SLAB EDGE PLANS			
CS-303	BUILDING NO.1 SLAB EDGE PLANS			
CS-304	BUILDING NO.1 SLAB EDGE PLANS			
CS-305	BUILDING NO.1 SLAB EDGE PLANS			
CS-311	BUILDING NO.2 SLAB EDGE PLANS			
CS-312	BUILDING NO.2 SLAB EDGE PLANS			
CS-313	BUILDING NO.2 SLAB EDGE PLANS			
CS-314	BUILDING NO.2 SLAB EDGE PLANS			
CS-315	WATERPROOFING PLANS			
A-301	OVERALL EXTERIOR ELEVATIONS			
A-302	OVERALL EXTERIOR ELEVATIONS			
A-303	BUILDING NO. 1 - SOUTH ELEVATION			
A-304	BUILDING NO. 1 - WEST ELEVATION			
A-305	BUILDING NO. 1 - NORTH ELEVATIONS			
A-306	BUILDING NO. 1 - EAST ELEVATION			
A-307	BUILDING NO.1 - UNDERGROUND PARKING ELEVATIONS			
A-308	BUILDING NO. 2 - SOUTH ELEVATIONS			

A-309	BUILDING NO.2 - WEST ELEVATIONS			
A-310	BUILDING NO. 2 - NORTH ELEVATIONS			
A-311	BUILDING NO. 2 - EAST ELEVATIONS			
A-321A	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.1 SOUTH			
A-321B	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.1 SOUTH			
A322A	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.1 WEST			
A-322B	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.1 WEST			
A-323A	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.1 NORTH			
A-323B	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.1 NORTH			
A-324A	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.1 EAST	DETAIL 9 & 9A CALLOUT AND NOTE ADDED FOR CURTAIN WALL		
A-324B	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.1 EAST			
A-331A	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.2 SOUTH			
A-331B	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.2 SOUTH			
A-331C	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.2 SOUTH			
A-332A	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.2 WEST			
A-332B	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.2 WEST			
A-332C	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.2 WEST			
A-333A	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.2 NORTH			
A-333B	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.2 NORTH			
A-333C	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.2 NORTH			
A-334A	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.2 EAST			
A-334B	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.2 EAST			
A-334C	ENLARGED ELEVATIONS AND WALL PLANS - BUILDING NO.2 EAST			
A-335	ENLARGED PLANS - BUILDING NO. 1 PENTHOUSE ROOF AND EMR			
A-336	ENLARGED PLANS - BUILDING NO. 2 PENTHOUSE ROOF AND EMR			
A-350	EXTERIOR WALL ASSEMBLY TYPICAL PLAN DETAILS	DETAIL 9A ADDED		
A-500	BUILDING CROSS SECTIONS			
A-501	BUILDING SECTION - BUILDING 1			
A-502	BUILDING SECTION - BUILDING 2			
A-503	BUILDING CROSS SECTION - BUILDING 1			
A-504	BUILDING CROSS SECTION - BUILDING 2			
A-505	UNDERGROUND GARAGE CROSS SECTIONS (EAST - WEST)			
A-506	UNDERGROUND GARAGE CROSS SECTIONS (NORTH - SOUTH)			
A-507	UNDERGROUND LEVEL WALL SECTIONS			
A-508	UNDERGROUND LEVEL WALL SECTIONS			
A-510	WALL SECTIONS - BUILDING 1			
A-511	WALL SECTIONS - BUILDING 1			
A-512	WALL SECTIONS - BUILDING 1			
A-513	WALL SECTIONS - BUILDING 1			
A-514	WALL SECTIONS - BUILDING 1			
A-515	WALL SECTIONS - BUILDING 1			
A-516	BUILDING 1 ROOF TRELLIS AND RAILING DETAILS			
A-517	WALL SECTIONS - BUILDING 1 PENTHOUSE			
A-518	WALL SECTIONS - BUILDING 1 PENTHOUSE			
A-520	WALL SECTIONS - BUILDING 2			
A-521	WALL SECTIONS - BUILDING 2			
A-522	WALL SECTIONS - BUILDING 2			
A-523	WALL SECTIONS - BUILDING 2			
A-524	WALL SECTIONS - BUILDING 2			
A-525	BUILDING 2 ROOF TRELLIS AND RAILING DETAILS			
A-526	WALL SECTIONS - BUILDING 2 PENTHOUSE			
A-527	WALL SECTIONS - BUILDING 2 PENTHOUSE			
A-531	EXTERIOR WALL SECTION DETAILS			
A-532	EXTERIOR WALL SECTION DETAILS			
A-533	EXTERIOR WALL SECTION DETAILS			
A-534	ENLARGED EXTERIOR WALL SECTION DETAILS			
A-535	BUILDING 1 - GROUND FLOOR PERIMETER WALL BASE DETAILS			
A-536	BUILDING NO. 1 - LEVEL 1 SITEWORK DETAILS			
A-537	PENTHOUSE WALL SECTION DETAILS			
A-538	OUTDOOR PLAZA DETAILS			
A-539	OUTDOOR PLAZA DETAILS			
A-540	EXTERIOR WALL SECTION DETAILS			
A-541	BLDG. NO. 1 EXTERIOR WALL PLAN DETAILS			
A-542	BLDG. NO. 2 EXTERIOR WALL PLAN DETAILS			
A-550	ROOF DETAILS			
A-551	ROOF DETAILS			
A-552	ROOF DETAILS			
A-601	BUILDING NO. 1 - VERTICAL CIRCULATION	ELEVATOR DETAIL ADDED		
A-602	BUILDING NO. 1 - VERTICAL CIRCULATION	ELEVATOR DETAIL ADDED		
A-603	BUILDING NO. 2 - VERTICAL CIRCULATION			
A-604	BUILDING NO. 2 - VERTICAL CIRCULATION	ELEVATOR DETAIL ADDED		
A-605	BUILDING NO. 1 - VERTICAL CIRCULATION SECTIONS			
A-606	BUILDING NO. 2 - VERTICAL CIRCULATION SECTIONS	ELEVATOR DETAIL ADDED		
A-607	BUILDING NO. 1 & 2 - ELEVATOR SECTIONS	ELEVATOR DETAIL ADDED		
A-608	BUILDING NO. 1 - COMMUNICATING STAIR PLANS AND SECTIONS			
A-609	BUILDING NO. 2 - COMMUNICATING STAIR PLANS AND SECTIONS			
A-610	BUILDING NO. 1 & 2 EXTERIOR METAL STAIRS			
A-611	STAIR DETAILS			
A-612	STAIR DETAILS	STEPPED & RAISED FLOOR SECTION ADDED		
A-613	ELEVATOR DETAILS			
	STRUCTURE			
S-000	COVER SHEET	ADDED S-203 COLUMN SCHEDULE SHEET		
S-001	GROUND IMPROVEMENT PLAN			
S-100	OUTDOOR PLAZA - FOUNDATION & FRAMING PLAN	RESIZED BEAM TO MEET STRENGTH/SERVICEABILITY REQUIREMENTS, ADDED GRIDS FOR MISC COLUMNS		
S-101	BUILDING NO. 1 - LEVEL 0 - FOUNDATION PLAN			
S-102	BUILDING NO. 1 - LEVEL 1 - GROUND FLOOR FRAMING PLAN	ADDED/REVISED FRAMING TO SUPPORT FACADE, ADDED NOTE FOR ELEVATOR RAIL SUPPORT		
S-103	BUILDING NO. 1 - LEVEL 2 - FRAMING PLAN	REVISED SPANDREL STEEL TO MEET DEFLECTION REQUIREMENTS, NOTED EXTERIOR STEEL TO BE GALVANIZED		
S-104	BUILDING NO. 1 - LEVEL 3 - FRAMING PLAN	REMOVED EXTRANEOUS STEEL IN RESPONSE TO LEVEL 2 FOOTPRINT REVISIONS, ADDED CHANNEL EDGE SUPPORT AT COMMISSIONER'S CONFERENCE ROOM		
S-105	BUILDING NO. 1 - LEVEL 4 & 5 FRAMING PLANS			
S-106	BUILDING NO. 1 - ROOF, DUNNAGE, & LOW SCREENWALL FRAMING PLANS	REVISED SPANDREL STEEL TO MEET DEFLECTION REQUIREMENTS, ADDED FRAMING TO SUPPORT EMR ACCESS PLATFORM		
S-107	BUILDING NO. 1 - TRELLIS FRAMING PLAN			
S-108	BUILDING NO. 1 - PARTIAL ROOF FRAMING PLANS			
S-110	BUILDING NO. 2 - LEVEL 0 - FOUNDATION PLAN			
S-111	BUILDING NO. 2 - LEVEL 1 FRAMING PLAN	REVISED SPANDREL STEEL FOR UNIFORMITY, ADDED GRIDS FOR MISC COLUMNS		
S-112	BUILDING NO. 2 - LEVEL 2 FRAMING PLAN	ADDED FRAMING AT OPENING ADJ TO B/11, FREVISED FRAMING SUPPORTING HANGER BELOW		
S-113	BUILDING NO. 2 - LEVEL 3 THRU LEVEL 6 FRAMING PLANS	REVISED FRAMING TO REFLECT CHANGES TO HD STORAGE LAYOUT		
S-114	BUILDING NO. 2 - ROOF & ELEVATOR OVERRUN FRAMING PLANS	REVISED SPANDREL STEEL TO MEET DEFLECTION REQUIREMENTS, ADDED FRAMING TO SUPPORT EMR ACCESS PLATFORM		
S-115	BUILDING NO. 2 - DUNNAGE/LOW SCREENWALL FRAMING PLAN			
S-116	BUILDING NO. 2 - TRELLIS FRAMING PLAN			
S-117	BULIDING NO. 2 - PARTIAL ROOF FRAMING PLANS			
S-200	GENERAL NOTES			
S-201	SCHEDULES	COLUMN SCHEDULE ADDED TO NEW SHEET, PIER SCHEDULE REVISED TO SHOW ADD'L TIES @ T/O PIERS		
S-202	SPECIAL INSPECTIONS TABLES			

S-203	STEEL COLUMN SCHEDULE	SHEET ADDED FOR CLARITY, MISC COLUMN/BASEPLATE/ANCHOR BOLT REVISIONS		
S-300	TYPICAL FOUNDATION DETAILS			
S-301	FOUNDATION SECTIONS			
S-302	FOUNDATION SECTIONS			
S-303	FOUNDATION SECTIONS			
S-400	TYPICAL FRAMING DETAILS			
S-401	TYPICAL FRAMING DETAILS			
S-402	TYPICAL MASONRY DETAILS			
S-403	CAST-IN-PLACE TYPICAL DETAILS			
S-404	FRAMING SECTIONS			
S-405	FRAMING SECTIONS			
S-406	FRAMING SECTIONS			
S-407	FRAMING SECTIONS	REVISED 3/S-407 TO SHOW STIFFENER & KICKER BENEATH CMU SUPPORT, REVISED 11/S-407 TO SHOW C9 AT COMMISSIONER'S CONFERENCE ROOM		
S-408	FRAMING SECTIONS			
S-500	SHEARWALL ELEVATIONS			
S-501	SHEARWALL ELEVATIONS			
S-502	SHEARWALL ELEVATIONS			
S-503	SHEARWALL ELEVATIONS			
S-504	SHEARWALL ELEVATIONS			
	END VOLUME 1			
	INTERIOR FITOUT AND BALANCE OF ENGINEERING SCOPE CONTINUES IN VOLUME 2			

SHEET NO.	SHEET NAME	CHANGES MADE
G-000	Cover Sheet Volume 2	
G-002	DRAWING LIST VOL. 2 - 2 OF 3 (NOTE: SHEET G-001 IS DRAWINGS LIST OF VOL 1)	
G-003	DRAWING LIST VOL. 2 - 3 OF 3	
	ARCHITECTURE - FIT OUT	
A1-100	BUILDING NO. 1 - LEVEL 0 - UNDERGROUND PLAN	
A1-101	BUILDING NO. 1 - LEVEL 1 - GROUND FLOOR PLAN	
A1-102	BUILDING NO. 1 - LEVEL 2 - FLOOR PLAN	
A1-103	BUILDING NO. 1 - LEVEL 3 - FLOOR PLAN	
A1-104	BUILDING NO. 1 - LEVEL 4 - FLOOR PLAN	
A1-105	BUILDING NO. 1 - LEVEL 5 - FLOOR PLAN	
A1-106	BUILDING NO. 1 - LEVEL 6 - PENTHOUSE AND EMR FLOOR PLAN	
A2-110	BUILDING NO. 2 - LEVEL 0 - GROUND FLOOR PLAN	
A2-111	BUILDING NO. 2 - LEVEL 1 - FLOOR PLAN	
A2-112	BUILDING NO. 2 - LEVEL 2 - FLOOR PLAN	
A2-113	BUILDING NO. 2 - LEVEL 3 - FLOOR PLAN	
A2-114	BUILDING NO. 2 - LEVEL 4 - FLOOR PLAN	
A2-115	BUILDING NO. 2 - LEVEL 5 - FLOOR PLAN	
A2-116	BUILDING NO. 2 - LEVEL 6 - FLOOR PLAN	
A2-117	BUILDING NO. 2 - LEVEL 7 -PENTHOUSE AND EMR FLOOR PLAN	
A1-200	BUILDING NO. 1 - LEVEL 0 - UNDERGROUND REFLECTED CEILING PLAN	
A1-201	BUILDING NO. 1 - LEVEL 1 - GROUND FLOOR REFLECTED CEILING PLAN	**Drawing not issued.** Replace (4) fixture type "I" at south wall of Cafe 1110 with (4) "J" fixture type
A1-202	BUILDING NO. 1 - LEVEL 2 - REFLECTED CEILING PLAN	
A1-203	BUILDING NO. 1 - LEVEL 3 - REFLECTED CEILING PLAN	
A1-204	BUILDING NO. 1 - LEVEL 4 - REFLECTED CEILING PLAN	
A1-205	BUILDING NO. 1 - LEVEL 5 - REFLECTED CEILING PLAN	
A1-206	BUILDING NO. 1 - LEVEL 6 - PENTHOUSE AND EMR REFLECTED CEILING PLAN	
A2-210	BULIDING NO. 2 - LEVEL 0 - GROUND LEVEL REFLECTED CEILING PLAN	
A2-211	BUILDING NO. 2 - LEVEL 1 - REFLECTED CEILING PLAN	
A2-212	BUILDING NO. 2 - LEVEL 2 - REFLECTED CEILING PLAN	
A2-213	BUILDING NO. 2 - LEVEL 3 - REFLECTED CEILING PLAN	
A2-214	BUILDING NO. 2 - LEVEL 4 - REFLECTED CEILING PLAN	
A2-215	BUILDING NO. 2 - LEVEL 5 - REFLECTED CEILING PLAN	
A2-216	BUILDING NO. 2 - LEVEL 6 - REFLECTED CEILING PLAN	
A2-217	BUILDING NO. 2 - LEVEL 7 - PENTHOUSE AND EMR REFLECTED CEILING PLAN	
A-220	CEILING DETAILS	
A-221	CEILING DETAILS	
A-222	CEILING DETAILS	
A-223	CEILING DETAILS	
A1-400	BLDG. NO. 1 - ENLARGED CORE RESTROOM PLANS AND ELEVATIONS	
A1-401	BLDG. NO. 1 - ENLARGED CORE RESTROOM PLANS AND ELEVATIONS	
A1-402	BLDG. NO. 1 - ENLARGED CORE RESTROOM PLANS AND ELEVATIONS	
A1-403	BLDG. NO. 1 - ENLARGED CORE RESTROOM PLANS AND ELEVATIONS	
A2-404	BLDG. NO. 2 - ENLARGED CORE RESTROOM PLANS AND ELEVATIONS	
A2-405	BLDG. NO. 2 - ENLARGED CORE RESTROOM PLANS AND ELEVATIONS	
A2-406	BLDG. NO. 2 - ENLARGED CORE RESTROOM PLANS AND ELEVATIONS	
A2-407	BLDG. NO. 2 - ENLARGED CORE RESTROOM PLANS AND ELEVATIONS	
A2-408	BLDG. NO. 2 - ENLARGED CORE RESTROOM PLANS AND ELEVATIONS	
A2-409	BLDG. NO. 2 - ENLARGED CORE RESTROOM PLANS AND ELEVATIONS	
A1-410	BUILDING NO. 1 ENLARGED MAIN LOBBY PLANS	**Drawing not issued.** 2/A1-410: Radius of custom terrazzo logo to be changed from 2'-0" to 3'-0"
A1-411	BUILDING NO. 1 ENLARGED MAIN LOBBY INTERIOR ELEVATIONS	
A1-412	BUILDING NO. 1 ENLARGED CAFÉ PLANS	
A1-413	BUILDING NO. 1 ENLARGED COMMISSIONER'S MEETING ROOM AND DAIS PLAN DETAIL	
A1-414	BUILDING NO. 1 - ENLARGED COMMISSIONER'S MEETING ROOM INTERIOR ELEVATIONS	**Drawing not issued.** 2/A1-414: New AP panels to extend 11" into ceiling pocket. Total height: 10'-3"
A1-415	BUILDING NO. 1 COMMISSIONER'S VESTIBULE INTERIOR ELEVATIONS	**Drawing not issued.** 1/A1-415: (5) eq. plastic laminate panels to be changed to be (5) eq. 3/4" wood veneer panels (WD-6). Each panel to receive artwork/award display cable system. **Basis of Design (each panel)**: Manuf: Nova Display; Mounting: (2) cables with wall to wall fixing (CWW-C113-3). Intermediate supports as required; Cable: 1.5mm; Cable Display Fittings: 4 side panel supprts (CG14), 4 top/bottom supports (CG12), 2 6mm rods with suppors (CS07)
A1-416	BUILDING NO. 1 - COMM. CONF. ROOM & COUNTY MANAGER LOUNGE ENLARGED PLANS AND ELEVATIONS	
A2-420	BUILDING NO. 2 - ENLARGED MAIN LOBBY PLANS AND INTERIOR ELEVATIONS	
A2-421	BUILDING NO. 2 - ENLARGED EMPLOYEE LOBBY AND INTERIOR ELEVATION	
A2-422	BUILDING NO. 2 - SOCIAL SERVICES LOBBY AND INTERIOR ELEVATION	**Drawing not issued.** 2/A2-423: DP-2 panel height to be +/- 10'-5" AFF. CON-1 panel height to be +/- 9'-5" AFF.
A2-423	BUILDING NO. 2 - ENLARGED TRAINING ROOM PLAN AND INTERIOR ELEVATIONS	Elevations updated to include millwork. TV screen added and locations updated.
A2-424	BUILDING NO. 2 - ENLARGED CAFÉ PLAN AND INTERIOR ELEVATIONS	
A2-425	BUILDING NO. 2 - ENLARGED BREAK ROOM (SECOND FLOOR PANTRY) INTERIOR ELEVATIONS	Elevation added of millwork island. Notes added to plan and elevations for clarity.
A-431	INTERIOR LOBBY AND SECURITY DESK DETAILS	
A-432	TYPICAL ELEVATOR LOBBY PLAN AND INTERIOR ELEVATIONS	
A-433	SECURITY DESKS PLANS, ELEVATIONS AND DETAILS	
A-434	SOCIAL SERVICES COUNTER PLANS AND ELEVATIONS	
A-435	INTERIOR MILLWORK DETAILS	**Drawing not issued.** 1/A-435 is typical detail for DP-5 wood slat panels. Slats to be custom stained to match Architect's control sample. Detail 5 & 6/A-435 Cushion specification: Specified vinyl fabric (FB-1) wrapped around 3" thick high density foam and 3/4" plywood backer of same size. All outside edge seams to be self welt/corded type. Cushion sections no longer than 3'-0". Attach to bench substrate with continuous metal z-clips to secure.
A-436	INTERIOR MILLWORK DETAILS	
A-437	INTERIOR MILLWORK DETAILS	Added detail 2. Updated millwork to show p.lam fascias
A-438	TRANSACTION COUNTER PLANS, ELEVATIONS AND DETAILS	
A-543	PLAN DETAILS & SECTIONS	
A-544	PLAN DETAILS	
A-545	FOLDING WALL PARTITIONS PLANS AND DETAILS	
A1-621	BUILDING NO. 1 - ENLARGED SHAFT PLAN	
A1-622	BUILDING NO. 1 - SHAFT SECTIONS	
A2-623	BUILDING NO. 2 - ENLARGED SHAFT PLAN	
A2-624	BUILDING NO. 2 - ENLARGED SHAFT PLAN	
A2-625	BUILDNG NO. 2 - SHAFT SECTIONS	
A-700	BUILDING NO. 1 - DOOR SCHEDULE AND NOTES	
A-701	BUILDING NO. 2 - DOOR SCHEDULE AND NOTES	
A-702	DOOR TYPES, FRAME TYPES AND HEAD, JAMB & SILL DETAILS	
A-703	DOOR & WINDOW - HEAD, JAMB AND SILL DETAILS	
A-704	INTERIOR FLOORING TRANSITIONS AND DETAILS	
A-705	EXTERIOR WINDOW TYPES, STOREFRONT TYPES, DETAILS & NOTES	
A-706	INTERIOR WINDOW TYPES, STOREFRONT TYPES, BORROWED LITE WINDOW, DETAILS AND NOTES	
A1-800	BUILDING NO. 1 LEVEL 0 - UNDERGROUND FINISH PLAN	
A1-801	BUILDING NO. 1 LEVEL 1 - GROUND FLOOR FINISH PLAN	
A1-802	BUILDING NO. 1 LEVEL 2 - FINISH FLOOR PLAN	
A1-803	BUILDING NO. 1 LEVEL 3 - FINISH FLOOR PLAN	
A1-804	BUILDING NO. 1 LEVEL 4 - FINISH FLOOR PLAN	
A1-805	BUILDING NO. 1 LEVEL 5 - FINISH FLOOR PLAN	
A1-806	BUILDING NO. 1 LEVEL 6 - FINISH FLOOR PLAN	
A2-810	FINISH SCHEDULE/PLANS	
A2-811	BUILDING NO. 2 - LEVEL 0 - FINISH PLAN	
A2-812	BUILDING NO. 2 - LEVEL 1 - FINISH PLAN	
A2-813	BUILDING NO. 2 - LEVEL 2 - FINISH PLAN	
A2-814	BUILDING NO. 2 - LEVEL 3 - FINISH PLAN	
A2-815	BUILDING NO. 2 - LEVEL 4 - FINISH PLAN	
A2-816	BUILDING NO. 2 - LEVEL 5 - FINISH PLAN	
A2-817	BUILDING NO. 2 - LEVEL 6 - FINISH PLAN	

A-820	FINISH SPECIFICATIONS	**Drawing not issued.** Update the follow specifications. **(TZ-1A)**: Poured Epoxy Terrazzo Flooring Color: Custom resin color with standard marble aggregate (size 0, 1 or 2) with 20% premium aggregate (mother of pearl or equal) Thickness: 3/8" **(TZ-2A)**: Poured Epoxy Terrazzo Flooring Color: Custom resin color with standard marble aggregate (size 0, 1 or 2) with 20% premium aggregate (mother of pearl or equal) Thickness: 3/8" **(PT-3H and PT-4H)**: Thickness: 10.5mm **(EF-1)**: Thickness: 1/4" **(CON-1)**: Pre-Fab thin concrete panels (Glass Fiber Reinforced Concrete) Manuf: Concrete Works East Panel Style: Ceruse Color: TBD Thickness: 1" Installation: 1/8" joints, Lap joints at corner. Cast-in clips fastened direcly to furred dry wall beyond; Adhesive- Laticreete Latapoxy 310 Rapid Stone Adhesive **(CON-2)**: Board formed exposed structural concrete walls with reveals Note: See elevations for reveal sizes. See structural concrete spec section of level of finish. **(DP-2)**: Decorative Panels Manuf: Fry Reglet System: Acoustical Wall System- Metal Panels Frame: Panels: .032" Thick Perforated Aluminum panels- style: Pattern E **(DP-5)**: Decorative Hardwood Panels Type: Custom millwork hardwood slat panel system Color: Stain to match Architect's control sample Note: See detail 1/A-435 and 2/A-435 **(WD-2 thur WD-5)**: Note: Variation on spacing of wood slats DP-5, See elvations and detail 3/A-414 and 1/A-435 **(WD-2 thru WD-5)**: Note: Variation on spacing of decorative wood slat panel (DP-5) See elevationns and detail 3/A-414 and 1/A-435 **(WD-6)**: 3/4: Wood Veneer panels z-clipped to wall. Edges to receive 1/2" thick maple hardwood edges. Veneer and edges stained to match PL-1
A-821	FINISH SCHEDULE - BLDG 1 AND 2	
A1-900	BLDG NO. 1 - LEVEL 0 -FURNITURE AND EQUIPMENT	
A1-901	BLDG NO.1 - LEVEL 1 -FURNITURE AND EQUIPMENT	
A1-902	BLDG NO.1 - LEVEL 2 -FURNITURE AND EQUIPMENT	
A1-903	BLDG NO.1 - LEVEL 3 -FURNITURE AND EQUIPMENT	
A1-904	BLDG NO.1 - LEVEL 4 -FURNITURE AND EQUIPMENT	
A1-905	BLDG NO.1 - LEVEL 5 -FURNITURE AND EQUIPMENT	
A2-910	BLDG NO.2 - LEVEL 0 -FURNITURE AND EQUIPMENT	
A2-911	BLDG NO.2 - LEVEL 1 -FURNITURE AND EQUIPMENT	
A2-912	BLDG NO.2 - LEVEL 2 -FURNITURE AND EQUIPMENT	
A2-913	BLDG NO.2 - LEVEL 3 -FURNITURE AND EQUIPMENT	
A2-914	BLDG NO.2 - LEVEL 4 -FURNITURE AND EQUIPMENT	
A2-915	BLDG NO.2 - LEVEL 5 -FURNITURE AND EQUIPMENT	
A2-916	BLDG NO.2 - LEVEL 6 -FURNITURE AND EQUIPMENT	
A-1000	ENVRONMENTAL GRAPHICS - PLAZA MURAL WALL	
A-1001	ENVIRONMENTAL GRAPHICS - INTERIOR GRAPHICS	
A-1002	ENVIRONMENTAL GRAPHICS - WAYFINDING GRAPHICS	
A-1003	NOT USED	
	MECHANICAL	
M-001	MECHANICAL LEAD SHEET	
M-002	MECHANICAL DETAILS (1 OF 3)	
M-003	MECHANICAL DETAILS (2 OF 3)	
M-004	MECHANICAL DETAILS (3 OF 3)	
M-101	BUILDING NO. 1 - LEVEL 0 - MECHANICAL DUCTWORK PLAN	Added transfer air ductwork, riser and grilles.
M-102	BUILDING NO. 1 - LEVEL 1 - MECHANICAL DUCTWORK PLAN	Added/Revised transfer air ductwork, and riser. Added electric heater in 1120.1. Noted wall cap for EF-1-9
M-103	BUILDING NO. 1 - LEVEL 2 - MECHANICAL DUCTWORK PLAN - drawing to be issued w/ next Addendum	DRAWING NOT ISSUED: Added RG-1 to Room 1221
M-104	BUILDING NO. 1 - LEVEL 3 - MECHANICAL DUCTWORK PLAN	
M-105	BUILDING NO. 1 - LEVEL 4 - MECHANICAL DUCTWORK PLAN	
M-106	BUILDING NO. 1 - LEVEL 5 - MECHANICAL DUCTWORK PLAN	
M-107	BUILDING NO. 1 - ROOF - MECHANICAL DUCTWORK PLAN	
M-110	BUILDING NO. 2 - LEVEL 0 - MECHANICAL DUCTWORK PLAN	
M-111	BUILDING NO. 2 - LEVEL 1 - MECHANICAL DUCTWORK PLAN	
M-112	BUILDING NO. 2 - LEVEL 2 - MECHANICAL DUCTWORK PLAN	
M-113	BUILDING NO. 2 - LEVEL 3 - MECHANICAL DUCTWORK PLAN	
M-114	BUILDING NO. 2 - LEVEL 4 - MECHANICAL DUCTWORK PLAN	
M-115	BUILDING NO. 2 - LEVEL 5 - MECHANICAL DUCTWORK PLAN	
M-116	BUILDING NO. 2 - LEVEL 6 - MECHANICAL DUCTWORK PLAN	
M-117	BUILDING NO. 2 - ROOF - MECHANICAL DUCTWORK PLAN	
M-201	BUILDING NO. 1 - LEVEL 0 - MECHANICAL PIPING PLAN	
M-202	BUILDING NO. 1 - LEVEL 1 - MECHANICAL PIPING PLAN	
M-203	BUILDING NO. 1 - LEVEL 2 - MECHANICAL PIPING PLAN	
M-204	BUILDING NO. 1 - LEVEL 3 - MECHANICAL PIPING PLAN	
M-205	BUILDING NO. 1 - LEVEL 4 - MECHANICAL PIPING PLAN	
M-206	BUILDING NO. 1 - LEVEL 5 - MECHANICAL PIPING PLAN	
M-207	BUILDING NO. 1 - ROOF - MECHANICAL PIPING PLAN	
M-210	BUILDING NO. 2 - LEVEL 0 - MECHANICAL PIPING PLAN	
M-211	BUILDING NO. 2 - LEVEL 1 - MECHANICAL PIPING PLAN	
M-212	BUILDING NO. 2 - LEVEL 2 - MECHANICAL PIPING PLAN	
M-213	BUILDING NO. 2 - LEVEL 3 - MECHANICAL PIPING PLAN	
M-214	BUILDING NO. 2 - LEVEL 4 - MECHANICAL PIPING PLAN	
M-215	BUILDING NO. 2 - LEVEL 5 - MECHANICAL PIPING PLAN	
M-216	BUILDING NO. 2 - LEVEL 6 - MECHANICAL PIPING PLAN	
M-217	BUILDING NO. 2 - ROOF - MECHANICAL PIPING PLAN	
M-301	BUILDING NO. 1 & 2 - MECHANICAL VRF RISER DIAGRAM	
M-302	BUILDING NO. 1 - MECHANICAL ENLARGED PLANS & SECTIONS	
M-303	BUILDING NO. 1 - MECHANICAL RISER DIAGRAMS	Included transfer ductwork in riser
M-304	BUILDING NO. 1 - MECHANICAL RISER DIAGRAMS	
M-305	BUILDING NO. 2 - MECHANICAL ENLARGED PLANS & SECTIONS	
M-306	BUILDING NO. 2 - MECHANICAL RISER DIAGRAMS	
M-307	BUILDING NO. 2 - MECHANICAL RISER DIAGRAMS	
M-401	BUILDING NO. 1&2 - MECHANICAL SCHEDULES (1 OF 5)	
M-402	BUILDING NO. 1&2 - MECHANICAL SCHEDULES (2 OF 5)	DRAWING NOT ISSUED: Fixed typo of tag of AC-1-7 condenser to read HP 1-7
M-403	BUILDING NO. 1&2 - MECHANICAL SCHEDULES (3 OF 5)	
M-404	BUILDING NO. 1&2 - MECHANICAL SCHEDULES (4 OF 5)	
M-405	BUILDING NO. 1&2 - MECHANICAL SCHEDULES (5 OF 5)	
M-406	BUILDING NO. 1 - MECHANICAL SCHEDULES (1 OF 3)	
M-407	BUILDING NO. 1 - MECHANICAL SCHEDULES (2 OF 3)	
M-408	BUILDING NO. 1 - MECHANICAL SCHEDULES (3 OF 3)	
M-409	BUILDING NO. 2 - MECHANICAL SCHEDULES (1 OF 4)	
M-410	BUILDING NO. 2 - MECHANICAL SCHEDULES (2 OF 4)	
M-411	BUILDING NO. 2 - MECHANICAL SCHEDULES (3 OF 4)	
M-412	BUILDING NO. 2 - MECHANICAL SCHEDULES (4 OF 4)	
M-501	BUILDING NO. 1&2 - MECHANICAL CONTROLS DIAGRAMS (1 OF 4)	
M-502	BUILDING NO. 1&2 - MECHANICAL CONTROLS DIAGRAMS (2 OF 4)	
M-503	BUILDING NO. 1&2 - MECHANICAL CONTROLS DIAGRAMS (3 OF 4)	
M-504	BUILDING NO. 1&2 - MECHANICAL CONTROLS DIAGRAMS (4 OF 4)	
	ELECTRICAL	
E-001	ELECTRICAL LEAD SHEET	
E-002	ELECTRICAL DETAILS	
E-003	ELECTRICAL DETAILS	
E-010	ELECTRICAL SITE PLAN	
E-011	ELECTRICAL UNDERGROUND CONDUIT PLAN	Revisions to underground conduit notes for generator docking station / future load banks.

E-100	OUTDOOR PLAZA - ELECTRICAL POWER & LIGHTING PLANS	Added type "y", "v", & "z" fixtures to floor plan. revised type "n" fixtures to type "u" fixtures.
E-101	BUILDING NO. 1 - LEVEL 0 - ELECTRICAL POWER PLAN	Removal of note depicting conduits / feeders for riser. refer to single line diagram for all distribution conduit / feeder sizing.
E-102	BUILDING NO. 1 - LEVEL 1 - ELECTRICAL POWER PLAN	Added ecuh-1 circuit in maintenance 1120.1
E-103	BUILDING NO. 1 - LEVEL 2 - ELECTRICAL POWER PLAN	Relocated furniture feeds as per furniture layout. added AC-1-7. added circuits for additional vav boxes.
E-104	BUILDING NO. 1 - LEVEL 3 - ELECTRICAL POWER PLAN	Relocated furniture feeds as per furniture layout. revised circuiting.
E-105	BUILDING NO. 1 - LEVEL 4 - ELECTRICAL POWER PLAN	Relocated furniture feeds as per furniture layout. revised circuiting.
E-106	BUILDING NO. 1 - LEVEL 5 - ELECTRICAL POWER PLAN	Added VAV circuit
E-107	BUILDING NO. 1 - ROOF - ELECTRICAL POWER PLAN	Revised RTU feeder designations. added hp-1-7. added generator accessories.
E-110	BUILDING NO. 2 - LEVEL 0 - ELECTRICAL POWER PLAN	Added circuiting to hvac equipment
E-111	BUILDING NO. 2 - LEVEL 1 - ELECTRICAL POWER PLAN	Added VAV circuit
E-112	BUILDING NO. 2 - LEVEL 2 - ELECTRICAL POWER PLAN	
E-113	BUILDING NO. 2 - LEVEL 3 - ELECTRICAL POWER PLAN	
E-114	BUILDING NO. 2 - LEVEL 4 - ELECTRICAL POWER PLAN	Added VAV circuit
E-115	BUILDING NO. 2 - LEVEL 5 - ELECTRICAL POWER PLAN	Added VAV circuit
E-116	BUILDING NO. 2 - LEVEL 6 - ELECTRICAL POWER PLAN	Added VAV circuit
E-117	BUILDING NO. 2 - ROOF - ELECTRICAL POWER PLAN	Revised RTU feeder designations. added generator accessories. added circuits to elevator machine room.
E-201	BUILDING NO. 1 - LEVEL 0 - ELECTRICAL LIGHTING PLAN	
E-202	BUILDING NO. 1 - LEVEL 1 - ELECTRICAL LIGHTING PLAN	Added controls and type "w" fixtures to floor plan. revised type "f1" fixtures to type "f2" fixtures.
E-203	BUILDING NO. 1 - LEVEL 2 - ELECTRICAL LIGHTING PLAN	Added type "w" fixtures to floor plan. revised type "f1" fixtures to type "f2" fixtures. revised type "v" fixtures to type "l2" fixtures to type "l2" fixtures. remove
E-204	BUILDING NO. 1 - LEVEL 3 - ELECTRICAL LIGHTING PLAN	Added tag to type "a" fixture. removed one exit sign.
E-205	BUILDING NO. 1 - LEVEL 4 - ELECTRICAL LIGHTING PLAN	Replaced 2 type "b" fixtures with 2 type "a" fixtures. removed 2 type "c" fixtures.
E-206	BUILDING NO. 1 - LEVEL 5 - ELECTRICAL LIGHTING PLAN	
E-207	BUILDING NO. 1 - ROOF - ELECTRICAL LIGHTING PLAN	Added type "y2" & "r" fixtures to floor plans
E-210	BUILDING NO. 2 - LEVEL 0 - ELECTRICAL LIGHTING PLAN	Revised type "F1" fixtures to type "F2" fixtures. Revised one type "F1" fixtures to type "F" fixture. Relocated exit signs. Removed 2 type "A" fixtures. Added typ
E-211	BUILDING NO. 2 - LEVEL 1 - ELECTRICAL LIGHTING PLAN	Revised type "F1" fixtures to type "F2" fixtures. Added type "W" fixtures. Added exit signs.
E-212	BUILDING NO. 2 - LEVEL 2 - ELECTRICAL LIGHTING PLAN	Revised type "I" fixtures to type "T". Added, relocated, and removed exit signs.
E-213	BUILDING NO. 2 - LEVEL 3 - ELECTRICAL LIGHTING PLAN	Revised type "I" fixtures to type "T". Revised type "V" fixtures to type "L2". Revised type "F1" fixtures to "F2". Added, relocated, and removed exit signs.
E-214	BUILDING NO. 2 - LEVEL 4 - ELECTRICAL LIGHTING PLAN	Added, relocated, and removed exit signs.
E-215	BUILDING NO. 2 - LEVEL 5 - ELECTRICAL LIGHTING PLAN	Removed extra type "C" fixtures. Added, relocated, and removed exit signs.
E-216	BUILDING NO. 2 - LEVEL 6 - ELECTRICAL LIGHTING PLAN	Added, relocated, and removed exit signs.
E-217	BUILDING NO. 2 - ROOF - ELECTRICAL LIGHTING PLAN	Adde type "Y2", "R", & "M" fixtures to floor plans.
E-301	BUILDING NO. 1 - ELECTRICAL ENLARGED PLANS	Replaced panel with breaker to feed transformer TR-1LRPG
E-302	BUILDING NO. 1 - ELECTRICAL ENLARGED PLANS	Added Transformer / Panel for Maintenance Bypass Module Circuits
E-303	BUILDING NO. 2 - ELECTRICAL ENLARGED PLANS	Added Air Compressor Circuit to floor plan
E-304	BUILDING NO. 2 - ELECTRICAL ENLARGED PLANS	
E-401	BUILDING NO. 1 - ELECTRICAL SINGLE LINE DIAGRAM	Revisions to distribution panels, feeders, conduits, breakers, transformer, and misc electrical equipment.
E-402	BUILDING NO. 2 - ELECTRICAL SINGLE LINE DIAGRAM	Revisions to distribution panels, feeders, conduits, breakers, transformer, and misc electrical equipment.
E-501	ELECTRICAL LUMINAIRE SCHEDULE	General revisions to lighting fixture schedule
E-502	BUILDING NO. 1 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-503	BUILDING NO. 1 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-504	BUILDING NO. 1 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-505	BUILDING NO. 1 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-506	BUILDING NO. 1 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-507	BUILDING NO. 1 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-508	BUILDING NO. 1 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-509	BUILDING NO. 1 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-510	BUILDING NO. 1 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-511	BUILDING NO. 2 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-512	BUILDING NO. 2 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-513	BUILDING NO. 2 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-514	BUILDING NO. 2 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-515	BUILDING NO. 2 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-516	BUILDING NO. 2 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-517	BUILDING NO. 2 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-518	BUILDING NO. 2- ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-519	BUILDING NO. 2 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-520	BUILDING NO. 2 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
E-521	BUILDING NO. 2 - ELECTRICAL SCHEDULES	General revisions to panel schedule circuiting
	FIRE ALARM	
FA-001	FIRE ALARM LEGEND, SYMBOLS, NOTES & ABBREVIATIONS	Revisions to general note 26.
FA-002	FIRE ALARM DETAILS	
FA-100	OUTDOOR PLAZA - FIRE ALARM PLAN	
FA-101	BUILDING NO. 1 - LEVEL 0 - FIRE ALARM PLAN	
FA-102	BUILDING NO. 1 - LEVEL 1 - FIRE ALARM PLAN	
FA-103	BUILDING NO. 1 - LEVEL 2 - FIRE ALARM PLAN	
FA-104	BUILDING NO. 1 - LEVEL 3 - FIRE ALARM PLAN	
FA-105	BUILDING NO. 1 - LEVEL 4 - FIRE ALARM PLAN	
FA-106	BUILDING NO. 1 - LEVEL 5 - FIRE ALARM PLAN	
FA-107	BUILDING NO. 1 - ROOF - FIRE ALARM PLAN	
FA-110	BUILDING NO. 2 - LEVEL 0 - FIRE ALARM PLAN	
FA-111	BUILDING NO. 2 - LEVEL 1 - FIRE ALARM PLAN	
FA-112	BUILDING NO. 2 - LEVEL 2 - FIRE ALARM PLAN	
FA-113	BUILDING NO. 2 - LEVEL 3 - FIRE ALARM PLAN	
FA-114	BUILDING NO. 2 - LEVEL 4 - FIRE ALARM PLAN	
FA-115	BUILDING NO. 2 - LEVEL 5 - FIRE ALARM PLAN	
FA-116	BUILDING NO. 2 - LEVEL 6 - FIRE ALARM PLAN	
FA-117	BUILDING NO. 2 - ROOF - FIRE ALARM PLAN	
FA-201	BUILDING NO. 1 FIRE ALARM RISER DIAGRAM	
FA-202	BUILDING NO. 2 FIRE ALARM RISER DIAGRAM	
	PLUMBING	
P-001	PLUMBING LEAD SHEET	
P-002	PLUMBING DETAILS	
P-003	PLUMBING DETAILS	
P-100	BUILDING NO. 1 - UNDERSLAB - SANITARY & STORM PLAN	
P-101	BUILDING NO. 1 - LEVEL 0 - SANITARY & STORM PLAN	
P-102A	BUILDING NO. 1 - LEVEL 1 - SANITARY & STORM PLAN	
P-102B	BUILDING NO. 1 - LEVEL 1 PARKING - SANITARY & STORM PLAN	
P-103	BUILDING NO. 1 - LEVEL 2 - SANITARY & STORM PLAN	
P-104	BUILDING NO. 1 - LEVEL 3 - SANITARY & STORM PLAN	
P-105	BUILDING NO. 1 - LEVEL 4 - SANITARY & STORM PLAN	
P-106	BUILDING NO. 1 - LEVEL 5 - SANITARY & STORM PLAN	
P-107	BUILDING NO. 1 - ROOF - SANITARY & STORM PLAN	
P-108	BUILDING NO. 1 - EMR LEVEL - SANITARY & STORM PLAN	
P-109	BUILDING NO. 2 - UNDERSLAB - SANITARY & STORM PLAN	
P-110	BUILDING NO. 2 - LEVEL 0 - SANITARY & STORM PLAN	
P-111	BUILDING NO. 2 - LEVEL 1 - SANITARY & STORM PLAN	
P-112	BUILDING NO. 2 - LEVEL 2 - SANITARY & STORM PLAN	
P-113	BUILDING NO. 2 - LEVEL 3 - SANITARY & STORM PLAN	
P-114	BUILDING NO. 2 - LEVEL 4 - SANITARY & STORM PLAN	
P-115	BUILDING NO. 2 - LEVEL 5 - SANITARY & STORM PLAN	
P-116	BUILDING NO. 2 - LEVEL 6 - SANITARY & STORM PLAN	
P-117	BUILDING NO. 2 - ROOF - SANITARY & STORM PLAN	
P-118	BUILDING NO. 2 - EMR LEVEL - SANITARY & STORM PLAN	
P-201	BUILDING NO. 1 - LEVEL 0 - DOMESTIC WATER & GAS PLAN	
P-202	BUILDING NO. 1 - LEVEL 1 - DOMESTIC WATER & GAS PLAN	
P-203	BUILDING NO. 1 - LEVEL 2 - DOMESTIC WATER & GAS PLAN	
P-204	BUILDING NO. 1 - LEVEL 3 - DOMESTIC WATER & GAS PLAN	
P-205	BUILDING NO. 1 - LEVEL 4 - DOMESTIC WATER & GAS PLAN	
P-206	BUILDING NO. 1 - LEVEL 5 - DOMESTIC WATER & GAS PLAN	
P-207	BUILDING NO. 1 - ROOF - DOMESTIC WATER & GAS PLAN	
P-208	BUILDING NO. 2 - LEVEL 0 - DOMESTIC WATER & GAS PLAN	
P-209	BUILDING NO. 2 - LEVEL 1 - DOMESTIC WATER & GAS PLAN	
P-210	BUILDING NO. 2 - LEVEL 2 - DOMESTIC WATER & GAS PLAN	
P-211	BUILDING NO. 2 - LEVEL 3 - DOMESTIC WATER & GAS PLAN	
P-212	BUILDING NO. 2 - LEVEL 4 - DOMESTIC WATER & GAS PLAN	
P-213	BUILDING NO. 2 - LEVEL 5 - DOMESTIC WATER & GAS PLAN	
P-214	BUILDING NO. 2 - LEVEL 6 - DOMESTIC WATER & GAS PLAN	
P-215	BUILDING NO. 2 - ROOF - DOMESTIC WATER & GAS PLAN	
P-301	PLUMBING ENLARGED PLANS	
P-401	BUILDING NO. 1 - PLUMBING RISER DIAGRAM - SANITARY	

P-402	BUILDING NO. 2 - PLUMBING RISER DIAGRAM - SANITARY	
P-411	BUILDING NO. 1 - PLUMBING RISER DIAGRAM - STORMWATER	
P-412	BUILDING NO. 2 - PLUMBING RISER DIAGRAM - STORMWATER	
P-421	BUILDING NO. 1 - PLUMBING RISER DIAGRAM - DOMESTIC WATER	
P-422	BUILDING NO. 2 - PLUMBING RISER DIAGRAM - DOMESTIC WATER	
P-431	BUILDING NO. 1 - PLUMBING RISER DIAGRAM - NATURAL GAS	
P-432	BUILDING NO. 2 - PLUMBING RISER DIAGRAM - NATURAL GAS	
P-501	PLUMBING SCHEDULES	UPDATED ROOF DRAIN NOTATION TO INDICATE TO PROVIDE EXTENSION COLLARS AS REQUIRED
	FIRE PROTECTION	
FP-001	FIRE PROTECTION LEAD SHEET	
FP-002	FIRE PROTECTION DETAILS	
FP-101	BUILDING NO. 1 - LEVEL 0 - FIRE PROTECTION PLAN	UPDATED CLEAN AGENT SYSTEM NOTATION TO ACCOUNT FOR PLENUM AND BELOW FLOOR SPACES.
FP-102	BUILDING NO. 1 - LEVEL 1 - FIRE PROTECTION PLAN	UPDATED CLEAN AGENT SYSTEM NOTATION TO ACCOUNT FOR PLENUM AND BELOW FLOOR SPACES.
FP-103	BUILDING NO. 1 - LEVEL 2 - FIRE PROTECTION PLAN	
FP-104	BUILDING NO. 1 - LEVEL 3 - FIRE PROTECTION PLAN	
FP-105	BUILDING NO. 1 - LEVEL 4 - FIRE PROTECTION PLAN	UPDATED CLEAN AGENT SYSTEM NOTATION TO ACCOUNT FOR PLENUM AND BELOW FLOOR SPACES.
FP-106	BUILDING NO. 1 - LEVEL 5 - FIRE PROTECTION PLAN	
FP-107	BUILDING NO. 1 - ROOF - FIRE PROTECTION PLAN	
FP-108	BUILDING NO. 1 - EMR LEVEL - FIRE PROTECTION PLAN	
FP-109	BUILDING NO. 2 - LEVEL 0 - FIRE PROTECTION PLAN	UPDATED CLEAN AGENT SYSTEM NOTATION TO ACCOUNT FOR PLENUM AND BELOW FLOOR SPACES.
FP-110	BUILDING NO. 2 - LEVEL 1 - FIRE PROTECTION PLAN	
FP-111	BUILDING NO. 2 - LEVEL 2 - FIRE PROTECTION PLAN	
FP-112	BUILDING NO. 2 - LEVEL 3 - FIRE PROTECTION PLAN	
FP-113	BUILDING NO. 2 - LEVEL 4 - FIRE PROTECTION PLAN	
FP-114	BUILDING NO. 2 - LEVEL 5 - FIRE PROTECTION PLAN	
FP-115	BUILDING NO. 2 - LEVEL 6 - FIRE PROTECTION PLAN	
FP-116	BUILDING NO. 2 - ROOF - FIRE PROTECTION PLAN	
FP-117	BUILDING NO. 2 - EMR LEVEL - FIRE PROTECTION PLAN	
FP-301	BUILDING NO. 1 - FIRE PROTECTION ENLARGED PLANS	
FP-401	BUILDING NO. 1 - FIRE PROTECTION RISER DIAGRAMS	
FP-501	BUILDING NO. 1 - FIRE PROTECTION SCHEDULES	
	TELECOMMUNICATIONS/INFORMATION TECHNOLOGY	
TC1-001.00	TELECOMMUNICATION NOTES, SYMBOL LIST & DRAWING LIST	
TC1-100.00	LEVEL 0 TELECOMMUNICATIONS FLOOR PLAN	
TC1-101.00	LEVEL 1 TELECOMMUNICATIONS FLOOR PLAN	
TC1-102.00	LEVEL 2 TELECOMMUNICATIONS FLOOR PLAN	
TC1-103.00	LEVEL 3 TELECOMMUNICATIONS FLOOR PLAN	
TC1-104.00	LEVEL 4 TELECOMMUNICATIONS FLOOR PLAN	
TC1-105.00	LEVEL 5 TELECOMMUNICATIONS FLOOR PLAN	
TC1-106.00	LEVEL 6 TELECOMMUNICATIONS FLOOR PLAN	
TC1-107.00	LEVEL 7 TELECOMMUNICATIONS FLOOR PLAN	
TC1-200.00	LEVEL 0 TELECOMMUNICATIONS RCP	
TC1-201.00	LEVEL 1 TELECOMMUNICATIONS RCP	
TC1-202.00	LEVEL 2 TELECOMMUNICATIONS RCP	
TC1-203.00	LEVEL 3 TELECOMMUNICATIONS RCP	
TC1-204.00	LEVEL 4 TELECOMMUNICATIONS RCP	
TC1-205.00	LEVEL 5 TELECOMMUNICATIONS RCP	
TC1-206.00	LEVEL 6 TELECOMMUNICATIONS RCP	
TC1-207.00	LEVEL 7 TELECOMMUNICATIONS RCP	
TC1-401.00	TELECOMMUNICATIONS DEMARC PART PLAN	
TC1-403.00	TELECOMMUNICATIONS LEVEL 3 IT ROOM PART PLAN	
TC1-404A.00	TELECOMMUNICATIONS LEVEL 4 IT ROOM PART PLAN	
TC1-404B.00	TELECOMMUNICATIONS LEVEL 4 DATA CENTER PART PLAN	
TC1-405.00	TELECOMMUNICAIONS LEVEL 5 IT ROOM PART PLAN	
TC1-501.00	TELECOMMUNICATIONS DETAILS	
TC1-601.00	TELECOMMUNICATIONS HORIZONTAL CABLING RISER DIAGRAM	
TC1-602.00	TELECOMMUNICATIONS RISER DIAGRAMS	
TC2-001.00	TELECOMMUNICATION NOTES, SYMBOL LIST & DRAWING LIST	
TC2-100.00	LEVEL 0 TELECOMMUNICATIONS FLOOR PLAN	
TC2-101.00	LEVEL 1 TELECOMMUNICATIONS FLOOR PLAN	
TC2-102.00	LEVEL 2 TELECOMMUNICATIONS FLOOR PLAN	
TC2-103.00	LEVEL 3 TELECOMMUNICATIONS FLOOR PLAN	
TC2-104.00	LEVEL 4 TELECOMMUNICATIONS FLOOR PLAN	
TC2-105.00	LEVEL 5 TELECOMMUNICATIONS FLOOR PLAN	
TC2-106.00	LEVEL 6 TELECOMMUNICATIONS FLOOR PLAN	
TC2-107.00	LEVEL 7 TELECOMMUNICATIONS FLOOR PLAN	
TC2-108.00	EMR TELECOMMUNICATIONS FLOOR PLAN	
TC2-200.00	LEVEL 1 TELECOMMUNICATIONS RCP	
TC2-201.00	LEVEL 2 TELECOMMUNICATIONS RCP	
TC2-202.00	LEVEL 3 TELECOMMUNICATIONS RCP	
TC2-203.00	LEVEL 4 TELECOMMUNICATIONS RCP	
TC2-204.00	LEVEL 5 TELECOMMUNICATIONS RCP	
TC2-205.00	LEVEL 6 TELECOMMUNICATIONS RCP	
TC2-206.00	LEVEL 7 TELECOMMUNICATIONS RCP	
TC2-207.00	LEVEL 7 TELECOMMUNICATIONS RCP	
TC2-208.00	EMR FLOOR TELE COMMUNICATION RCP PLAN	
TC2-400.00	TELECOMMUNICATIONS LEVEL 0 DEMARC ROOM PART PLAN	
TC2-401.00	TELECOMMUNICATIONS LEVEL 1 IT ROOM PART PLAN	
TC2-402.00	TELECOMMUNICATIONS LEVEL 2 IT ROOM PART PLAN	
TC2-403.00	TELECOMMUNICATIONS LEVEL 3 IT ROOM PART PLAN	
TC2-404.00	TELECOMMUNICATIONS LEVEL 4 IT ROOM PART PLAN	
TC2-403.00	TELECOMMUNICATIONS LEVEL 3 IT ROOM PART PLAN	
TC2-404.00	TELECOMMUNICATIONS LEVEL 4 IT ROOM PART PLAN	
TC2-405.00	TELECOMMUNICATIONS LEVEL 5 IT ROOM PART PLAN	
TC2-406.00	TELECOMMUNICATIONS LEVEL 6 IT ROOM PART PLAN	
TC2-501.00	TELECOMMUNICATIONS DETAIL	
TC2-601.00	TELECOMMUNICATIONS RISER DIAGRAMS	
TC2-602.00	TELECOMMUNICATIONS RISER DIAGRAMS	
TC-801.00	TELECOMMUNICATIONS EQUIPMENT LIST	
	AUDIO VISUAL	
AV1-001.00	AUDIO VISUAL SCHEDULES AND NOTES	
AV2-100.00	LEVEL 0 AUDIO VISUAL PLAN	
AV1-101.00	LEVEL 1 AUDIO VISUAL PLAN	
AV1-102.00	LEVEL 2 AUDIO VISUAL PLAN	
AV1-102.10	LEVEL 2 AUDIO VISUAL SECTION & ELEVATION	
AV1-103.00	LEVEL 3 AUDIO VISUAL PLAN	
AV1-104.00	LEVEL 4 AUDIO VISUAL PLAN	
AV1-105.00	LEVEL 5 AUDIO VISUAL PLAN	
AV1-301.00	LEVEL 1 AUDIO VISUAL LOW VOLTAGE PLAN	
AV1-302.00	LEVEL 2 AUDIO VISUAL LOW VOLTAGE PLAN	
AV1-303.00	LEVEL 3 AUDIO VISUAL LOW VOLTAGE PLAN	
AV1-304.00	LEVEL 4 AUDIO VISUAL LOW VOLTAGE PLAN	
AV1-305.00	LEVEL 5 AUDIO VISUAL LOW VOLTAGE PLAN	
AV1-501.00	AUDIO VISUAL DETAILS	
AV1-502.00	AUDIO VISUAL DETAILS	
AV1-503.00	AUDIO VISUAL DETAILS	
AV2-001.00	AUDIO VISUAL SCHEDULES AND NOTES	
AV2-101.00	LEVEL 1 AUDIO VISUAL PLAN	
AV2-102.00	LEVEL 2 AUDIO VISUAL PLAN	
AV2-103.00	LEVEL 3 AUDIO VISUAL PLAN	
AV2-104.00	LEVEL 4 AUDIO VISUAL PLAN	
AV2-105.00	LEVEL 5 AUDIO VISUAL PLAN	
AV2-106.00	LEVEL 6 AUDIO VISUAL PLAN	
AV2-300.00	LEVEL 0 AUDIO VISUAL LOW VOLTAGE PLAN	
AV2-301.00	LEVEL 1 AUDIO VISUAL LOW VOLTAGE PLAN	
AV2-302.00	LEVEL 2 AUDIO VISUAL LOW VOLTAGE PLAN	
AV2-303.00	LEVEL 3 AUDIO VISUAL LOW VOLTAGE PLAN	
AV2-304.00	LEVEL 4 AUDIO VISUAL LOW VOLTAGE PLAN	
AV2-305.00	LEVEL 5 AUDIO VISUAL LOW VOLTAGE PLAN	

AV2-306.00	LEVEL 6 AUDIO VISUAL LOW VOLTAGE PLAN	
AV2-501.00	AUDIO VISUAL DETAILS	
AV2-502.00	AUDIO VISUAL DETAILS	
AV2-503.00	AUDIO VISUAL DETAILS	
AV-001.00	AUDIO VISUAL SCHEDULES AND NOTES	
AV-501.00	AUDIO VISUAL BLOCK DIAGRAMS	
AV-502.00	AUDIO VISUAL BLOCK DIAGRAMS	
AV-503.00	AUDIO VISUAL BLOCK DIAGRAMS	
AV-504.00	AUDIO VISUAL BLOCK DIAGRAMS	
AV-505.00	AUDIO VISUAL BLOCK DIAGRAMS	
AV-506.00	AUDIO VISUAL BLOCK DIAGRAMS	
AV-506.10	AUDIO VISUAL BLOCK DIAGRAMS	
AV-506.20	AUDIO VISUAL BLOCK DIAGRAMS	
AV-507.00	AUDIO VISUAL BLOCK DIAGRAMS	
AV-507.10	AUDIO VISUAL BLOCK DIAGRAMS	
AV-507.20	AUDIO VISUAL BLOCK DIAGRAMS	
AV-508.00	AUDIO VISUAL BLOCK DIAGRAMS	
AV-801.00	AUDIO VISUAL EQUIPMENT LIST	
AV-802.00	AUDIO VISUAL EQUIPMENT LIST	
	SECURITY	
SC1-001.00	SECURITY COVER SHEET	
SC1-100.00	LEVEL 0 SECURITY PLAN	
SC1-101.00	LEVEL 1 SECURITY PLAN	
SC1-102.00	LEVEL 2 SECURITY PLAN	
SC1-103.00	LEVEL 3 SECURITY PLAN	
SC1-104.00	LEVEL 4 SECURITY PLAN	
SC1-105.00	LEVEL 5 SECURITY PLAN	
SC1-106.00	LEVEL 6 SECURITY PLAN	
SC1-107.00	LEVEL 7 SECURITY PLAN	
SC1-200.00	LEVEL 0 SECURITY RCP PLAN	
SC1-201.00	LEVEL 1 SECURITY RCP PLAN	
SC1-202.00	LEVEL 2 SECURITY RCP PLAN	
SC1-203.00	LEVEL 3 SECURITY RCP PLAN	
SC1-204.00	LEVEL 4 SECURITY RCP PLAN	
SC1-205.00	LEVEL 5 SECURITY RCP PLAN	
SC1-206.00	LEVEL 6 SECURITY RCP PLAN	
SC1-207.00	LEVEL 7 SECURITY RCP PLAN	
SC-501.00	SECURITY DETAIL	
SC-601.00	SECURITY RISER DIAGRAM	
SC2-001.00	SECURITY COVER SHEET	
SC2-100.00	LEVEL 0 SECURITY PLAN	
SC2-101.00	LEVEL 1 SECURITY PLAN	
SC2-102.00	LEVEL 2 SECURITY PLAN	
SC2-103.00	LEVEL 3 SECURITY PLAN	
SC2-104.00	LEVEL 4 SECURITY PLAN	
SC2-105.00	LEVEL 5 SECURITY PLAN	
SC2-106.00	LEVEL 6 SECURITY PLAN	
SC2-107.00	LEVEL 7 SECURITY PLAN	
SC2-108.00	EMR FLOOR SECURITY PLAN	
SC2-200.00	LEVEL 0 SECURITY RCP PLAN	
SC2-201.00	LEVEL 1 SECURITY RCP PLAN	
SC2-202.00	LEVEL 2 SECURITY RCP PLAN	
SC2-203.00	LEVEL 3 SECURITY RCP PLAN	
SC2-204.00	LEVEL 4 SECURITY RCP PLAN	
SC2-205.00	LEVEL 5 SECURITY RCP PLAN	
SC2-206.00	LEVEL 6 SECURITY RCP PLAN	
SC2-207.00	LEVEL 7 SECURITY RCP PLAN	
SC2-208.00	EMR FLOOR SECURITY RCP PLAN	
SC2-501.00	SECURITY DETAIL	
SC2-601.00	SECURITY RISER DIAGRAM	
	END VOLUME 2	
	CIVIL, ARCHITECTURAL CORE/SHELL/ENVELOPE AND STRUCTURE FOUND IN VOLUME 1	

DIGroupArchitecture

ADDENDUM NO. 07

Union County Government Complex
For Union County Improvement Authority
Elizabeth, Union County, NJ

Addendum Date:
01-12-24

Project No.: 20.072

Project Dated: 11-08-23

The original specifications and drawings, for the project noted above have been amended as noted in this Addendum. Receipt of this Addendum shall be acknowledged by inserting its number and date in the space provided on the Form of Proposal.

☒ Attachments: as itemized above

Signed by: Jaime Masler Beach, AIA, NCARB

Date: 01-12-24

Copies: ☒ Owner ☐ Consultants ☐ Contractor ☐ Const. Manager ☐ ☒ File

END OF ADDENDUM NO. 07