SCOPE OF WORK

THE BASE SCOPE OF WORK FOR THIS PROJECT SHALL CONSIST OF THE DEMOLITION AND REPLACEMENT OF THE EXISTING WIRELESS FIRE ALARM MONITORING NETWORK AT THE MARYLAND ZOO IN BALTIMORE (MZB) WITH A FIBER OPTIC-BASED NETWORK. ADDITIONALLY, A COMPLETE NOTIFIER ONYX SERIES FIRE ALARM MONITORING NETWORK THAT INCLUDES FIRE ALARM CONTROL UNITS (FACUs, OR FIRE ALARM NODES) AND GRAPHIC USER INTERFACES (GUIs) SHALL BE INSTALLED AT MZB.

UPON COMMISSIONING AND FINAL ACCEPTANCE OF THE NEW NOTIFIER SYSTEM, THE CONTRACTOR SHALL REMOVE ALL EXISTING KELTRON HEAD-END EQUIPMENT LOCATED AT THE MANSION HOUSE AND ALL KELTRON TRANSMITTERS SPECIFIED IN TABLE 1 ON SHEET FA002. OUT OF SERVICE KELTRON EQUIPMENT SHALL BE TURNED OVER TO THE MZB.

IF BID OPTION 1 IN SPECIFICATION SECTION 00400 IS EXERCISED, THE CONTRACTOR SHALL REPLACE ALL EXISTING ADDRESSABLE INITIATING DEVICES, MODULES AND NOTIFICATION APPLIANCES ONE FOR ONE WITH NOTIFIER NFS-320 / NFS2-640 COMPATIBLE DEVICES/APPLIANCES.

IF BID OPTION 2 IN SPECIFICATION SECTION 00400 IS EXERCISED, THE CONTRACTOR SHALL PROVIDE AN ENTERPRISE-WIDE LICENSE OF DRMNS SERVER SOFTWARE AND INSTALL ON THE FIRE ALARM GRAPHIC USER INTERFACE.

IF BID OPTION 3 IN SPECIFICATION SECTION 00400 IS EXERCISED, THE CONTRACTOR SHALL PROVIDE DRMNS FIRE ALARM CONTROL PANEL INTEGRATION WITH THE NOTIFIER SYSTEM.

IF BID OPTION 4 IN SPECIFICATION SECTION 00400 IS EXERCISED, THE CONTRACTOR SHALL PROVIDE DRMNS TWO-WAY RADIO TEXT-TO-SPEECH (TTS) INTEGRATION AND CONFIGURATION WITH THE MOTOROLA CM300 RADIO SYSTEM.

IF BID OPTION 5 IN SPECIFICATION SECTION 00400 IS EXERCISED, THE CONTRACTOR SHALL PROVIDE NOTIFIER DVC'S, HYPERSPIKE OUTDOOR HIGH-POWER SPEAKER ARRAYS AND WIDE AREA MASS NOTIFICATION SYSTEM.

APPLICABLE CODES

1. BUILDING, FIRE AND RELATED CODES OF BALTIMORE CITY, 2020 EDITION.
2. INTERNATIONAL BUILDING CODE (IBC), 2018 EDITION.
3. INTERNATIONAL FIRE CODE (IFC), 2018 EDITION.
4. NFPA 70, NATIONAL ELECTRICAL CODE, 2017 EDITION.
5. NFPA 72, NATIONAL FIRE ALARM AND SIGNALING CODE, 2016 EDITION.
6. NFPA 110, STANDARD FOR EMERGENCY AND STANDBY POWER SYSTEMS, 2016 EDITION.
7. NFPA 150, FIRE AND LIFE SAFETY IN ANIMAL HOUSING FACILITIES, 2016 EDITION.
8. NFPA 731, STANDARED FOR THE INSTALLATION OF ELECTRONIC PREMISES SECURITY SYSTEMS, 2017 EDITION.
9. THE LATEST PUBLISHED EDITION OF THE EQUIPMENT MANUFACTURERS' PRODUCT DATASHEETS, TECHNICAL SPECIFICATIONS, INSTALLATION INSTRUCTIONS AND WIRING GUIDELINES.

GENERAL NOTES

1. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE NOT INTENDED TO BE USED FOR EXACT MEASURE OR FABRICATION. ALL FIRE ALARM CIRCUIT ROUTING SHOWN IS CONCEPTUAL. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A LAYOUT AND INSTALLING THE NEW FIRE ALARM SYSTEM IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS AND APPLICABLE CODES.

2. FINAL DEVICE LOCATIONS MUST MEET THE REQUIREMENTS OF THE APPLICABLE CODES, SPECIFICATION SECTION 283111 AND BE DOCUMENTED ON AS-BUILT DRAWINGS.

3. NOT ALL DEVICES NEEDED FOR A COMPLETE AND WORKING FIRE ALARM SYSTEM ARE SHOWN ON THESE CONCEPT DRAWINGS. PROVIDE EQUIPMENT AS NECESSARY FOR A FULLY OPERATIONAL SYSTEM.

4. EXISTING FIRE ALARM DEVICE COUNTS INDICATED IN TABLE 2 ON SHEET FA002 ARE ESTIMATES ONLY. EXACT NUMBER OF DEVICES TO BE REPLACED SHALL BE CONFIRMED BY THE CONTRACTOR. THE CONTRACTOR BID SHALL INCLUDE A COMPLETE PER UNIT COST FOR EACH SPECIFIC DEVICE IN THE EVENT MORE OR LESS DEVICES ARE REQUIRED.

5. PROVIDE ALL SOFTWARE, SUBSCRIPTIONS, LICENSES, COMPONENTS, EQUIPMENT AND WIRING NEEDED FOR A COMPLETE AND WORKING DRMNS SYSTEM IN ACCORDANCE WITH THE APPLICABLE BID OPTION IN SPECIFICATION SECTION 00400 THAT IS EXERCISED.

DEMOLITION NOTES

1. ALL EXISTING SYSTEMS AND EQUIPMENT BEING REPLACED OR THEIR OPERATION ABANDONED SHALL BE REMOVED IMMEDIATELY AFTER THE NEW FIRE ALARM SYSTEM IS ACCEPTED BY THE OWNER.

2. ALL RESTORATION, PATCHING, PAINTING AND FIRESTOPPING OF CEILINGS, WALLS, AND FLOORS DAMAGED BY THE INSTALLATION OR DEMOLITION OF THIS FIRE ALARM SYSTEM SHALL BE COVERED IN THE SCOPE OF THIS WORK.

3. EXISTING CONDUIT EMBEDDED IN MASONRY WALLS SHALL HAVE ALL CONDUCTORS REMOVED AND BE ABANDONED IN PLACE. EXISTING EXPOSED CONDUIT AND CONDUIT ABOVE ACCESSIBLE CEILINGS SHALL BE REMOVED.

4. EXISTING DEVICE BACK BOXES INSTALLED RECESSED IN MASONRY WALLS SHALL BE ABANDONED IN PLACE AND PROVIDED WITH STAINLESS STEEL BLANK COVER PLATES.

5. WHERE EXISTING DUCT SMOKE DETECTORS ARE REMOVED, PATCH AND RE-INSULATE DUCTWORK TO MATCH EXISTING. COORDINATE THE REMOVAL OF ALL DUCT SMOKE DETECTORS WITH OWNERS FACILITIES SERVICE PERSONNEL.

6. CONTRACTOR SHALL REPLACE ALL CEILING TILES IN WHICH AN EXISTING FIRE ALARM DEVICE WAS REMOVED. THE NEW CEILING TILES SHALL MATCH THE EXISTING.

7. ALL MATERIALS, DEVICES AND EQUIPMENT REMOVED SHALL BE PROPERLY DISPOSED OF FOLLOWING DEMOLITION.

8. EXISTING DEVICE BACK BOXES INSTALLED RECESSED IN GYPSUM WALLBOARD OR PLASTER COVERED WALLS SHALL BE REMOVED. PATCH AND FINISH HOLE TO MATCH SURROUNDING SURFACES.

9. EXISTING DEVICE BACK BOXES INSTALLED RECESSED IN WALLS WITH DECORATIVE WALL COVERINGS SHALL BE ABANDONED IN PLACE AND PROVIDED WITH A STAINLESS STEEL COVER PLATE.

SHEET NOTES

1	PROVIDE A NEW NOTIFIER ONYX WORKS GRAPHIC USER INTERFACE.
2	PROVIDE A NEW NOTIFIER NFS2-640 FIRE ALARM CONTROL UNIT AT THIS LOCATION. CONNECT THE FACU TO THE FIBER OPTIC NETWORK.
3	EXISTING NOTIFIER NFS-320 FIRE ALARM CONTROL UNIT TO REMAIN. CONNECT THE FACU TO THE FIBER OPTIC NETWORK.
4	EXISTING NOTIFIER NFS2-640 FIRE ALARM CONTROL UNIT TO REMAIN. CONNECT THE FACU TO THE FIBER OPTIC NETWORK.
5	EXISTING NOTIFIER NFS2-640 FIRE ALARM CONTROL UNIT TO BE RE-LOCATED TO THE MECHANICAL SHED. CONNECT THE FACU TO THE FIBER OPTIC NETWORK.
6	EXISTING NOTIFIER NFW2-100 FIRE ALARM CONTROL UNIT TO BE DEMOLISHED.
7	EXISTING NOTIFIER NFS-320 FIRE ALARM CONTROL UNIT TO BE DEMOLISHED.
8	EXISTING NOTIFIER NFS2-640 FIRE ALARM CONTROL UNIT TO BE DEMOLISHED.
9	EXISTING FIRE-LITE MS-9600 UDLS(E) FIRE ALARM CONTROL UNIT TO BE DEMOLISHED.
10	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN BUILDING.
11	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN MAINTENANCE AND COMMISSARY.
12	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN MECHANICAL SHED.
13	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN MEETING BARN.
14	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN POLAR BEAR HOLDING.
15	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN POLAR BEAR TRAILER.
16	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN RHINO/ZEBRA BARN.
17	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN RESTROOMS & FORMERLY SIDETRACK CAFÉ.
18	PROVIDE NEW SMOKE DETECTION THROUGHOUT THE BUILDING. DESIGN AND LAYOUT OF THE SYSTEM TO BE REVIEWED AND COMPLETED BY THE CONTRACTOR.
19	PROVIDE NEW HEAT DETECTION THROUGHOUT THE BUILDING. DESIGN AND LAYOUT OF THE SYSTEM TO BE REVIEWED AND COMPLETED BY THE CONTRACTOR.
20	PROVIDE NEW DUCT SMOKE DETECTION THROUGHOUT THE BUILDING. DESIGN AND LAYOUT OF THE SYSTEM TO BE REVIEWED AND COMPLETED BY THE CONTRACTOR.
21	EXISTING FIRE ALARM SYSTEM COMPONENTS (DEVICES, APPLIANCES, ETC.) TO REMAIN IN THIS BUILDING. INTERFACE WITH FACU IN THE BUILDING.
22	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN BUILDING.
23	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN AFRICA BARN.
24	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES TO BE FED FROM FACU IN BIRD BARN/OLD SITATUNGA.
25	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES TO BE FED FROM FACU IN CHIMPANZEE FOREST.
26	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN CONSTRUCTION TRAILER.
27	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN CRANE BARN.
28	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES TO BE FED FROM FACU IN ELEPHANT HOUSE.
29	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN MAINTENANCE AND COMMISSARY.
30	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES TO BE FED FROM FACU IN MANSION HOUSE.
31	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN MECHANICAL SHED.
32	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN MEETING BARN.
33	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES TO BE FED FROM FACU IN OTTER/BOBCAT HOLDING.
34	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN PENGUIN COAST INTERPRETIVE CENTER.
35	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN POLAR BEAR HOLDING.
36	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES TO BE FED FROM FACU IN POLAR BEAR TRAILER.
37	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN RHINO/ZEBRA BARN.
38	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN RESTROOMS & FORMERLY SIDETRACK CAFÉ.
39	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN WILD THINGS GIFT SHOP.
40	DEMOLISH THE EXISTING BEAM DETECTION IN THE BUILDING.
41	DEMOLISH THE EXISTING YELLOW COLORED STROBE(S) FOR SNAKE BITE NOTIFICATION IN THIS LOCATION.
42	DEMOLISH THE EXISTING GREEN COLORED STROBE(S) FOR ANIMAL ESCAPE NOTIFICATION IN THIS LOCATION.
43	DEMOLISH THE EXISTING BLUE COLORED STROBE(S) FOR ANIMAL HABITAT OZONE LEVEL NOTIFICATION IN THIS LOCATION.
44	PROVIDE A NEW VERY EARLY WARNING AIR ASPIRATING SMOKE DETECTION SYSTEM IN THE BUILDING. PROVIDE ALL COMPONENTS (HEAD-END, SAMPLING POINTS, PIPING, ETC.) NECESSARY FOR A FULLY FUNTIONAL SYSTEM. DESIGN AND LAYOUT OF THE SYSTEM TO BE REVIEWED AND COMPLETED BY THE CONTRACTOR.
45	EXISTING VERY EARLY WARNING SMOKE DETECTION SYSTEM (VESDA) TO REMAIN. INTERFACE VESDA SYSTEM WITH FACU.
46	EXISTING VERY EARLY WARNING SMOKE DETECTION SYSTEM (VESDA) TO REMAIN IN ZEBRA HOLDING. INTERFACE VESDA WITH FACU.
47	EXISTING VERY EARLY WARNING SMOKE DETECTION SYSTEM (FAAST) TO BE DEMOLISHED IN RHINO HOLDING. PROVIDE A NEW VERY EARLY WARNING AIR ASPIRATING SMOKE DETECTION SYSTEM (VESDA) IN THIS AREA. PROVIDE ALL COMPONENTS (HEAD-END, SAMPLING POINTS, PIPING, ETC.) NECESSARY FOR A FULLY FUNTIONAL SYSTEM. DESIGN AND LAYOUT OF THE SYSTEM TO BE REVIEWED AND COMPLETED BY THE CONTRACTOR. INTERFACE VESDA WITH FACU.
48	PROVIDE AN ENTERPIRSE-WIDE LICENSE OF DRMNS SERVER SOFTWARE AND INSTALL ON THE FIRE ALARM GRAPHIC USER INTERFACE, IF BID OPTION 2 IN SPECIFICATION SECTION 00400 IS EXERCISED.
49	PROVIDE DRMNS FIRE ALARM CONTROL PANEL INTEGRATION WITH THE NOTIFIER SYSTEM, IF BID OPTION 3 IN SPECIFICATION SECTION 00400 IS EXERCISED.
50	PROVIDE DRMNS TWO-WAY RADIO TEXT-TO-SPEECH (TTS) INTEGRATION AND CONFIGURATION WITH THE MOTOROLA CM300 RADIO SYSTEM, IF BID OPTION 4 IN SPECIFICATION SECTION 00400 IS EXERCISED.
51	DEMOLISH THE EXISTING FIRE ALARM SYSTEM IN THE BUILDING. BUILDING TO NO LONGER BE INCLUDED ON THE FIRE ALARM NETWORK.
52	PROVIDE A STI STOPPER BUTTON AT THIS LOCATION FOR SNAKE BITE NOTIFICATION. MONITOR ACTIVATION OF THE BUTTON VIA FIRE ALARM MONITOR MODULE AND REPORT AS AN EMERGENCY/NON-FIRE ALARM INPUT.
53	PROVIDE A HYPERSPIKE OUTDOOR HIGH-POWER SPEAKER ARRAY SYSTEM AT THIS LOCATION, IF BID OPTION 5 IN SPECIFICATION SECTION 00400 IS EXERCISED. HIGH-POWER SPEAKER ARRAY TO BE MOUNTED ADJACENT TO SPECIFIED BUILDING VIA NEW POLE SIZED PER THE MANUFACTURERS REQUIREMENTS/RECOMMENDATIONS. PROVIDE NEMA 3R RATED JUNCTION BOX AND RACEWAY TO AMPLIFIER AND SUPERVISORY CIRCUIT IN THE BUILDING. INSTALL IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
54	PROVIDE A NOTIFIER DIGITAL VOICE COMMAND (DVC) FOR INTEGRATION WITH WIDE AREA MASS NOTIFICATION SYSTEM AND NETWORK WITH NOTIFIER NETWORK, IF BID OPTION 5 IN SPECIFICATION SECTION 00400 IS EXERCISED.
55	PROVIDE A NOTIFIER DVC AND HYPERSPIKE AMPLIFIER TO SUPPLY AUDIO SIGNAL TO THE HIGH-POWER SPEAKER ARRAY ADJACENT TO THE BUILDING, IF BID OPTION 5 IN SPECIFICATION SECTION 00400 IS EXERCISED.
56	EXISTING SINGLE MODE FIBER IN BULDING.
57	PROVIDE NEW SINGLE MODE FIBER IN BUILDING.
58	PULL SPECIFIED CABLES/CIRCUITS THROUGH EXISTING UNDERGROUND INFRASTRUCTURE. SPARE CAPACITY WITHIN EXISTING UNDERGROUND INFRASTRUCTURE HAS NOT BEEN FULLY VERIFIED. PROVIDE BID ALTERNATE PRICE FOR TRENCHING AND RUNNING UNDERGROUND IN SCHEDULE 80 RIGID PVC SHOULD IT BE DETERMINED THAT SPARE CAPACITY IS NOT AVAILABLE.
59	RUN CABLES/CIRCUITS SPECIFIED UNDERGROUND IN SCHEDULE 80 RIGID PVC CONDUIT.
60	RUN CABLES/CIRCUITS SPECIFIED ALONG FENCELINE IN SCHEDULE 80 RIGID PVC CONDUIT.
61	TRENCHING THROUGH ASPHALT REQUIRED AT THIS LOCATION.
62	TRENCHING THROUGH CONCRETE REQUIRED AT THIS LOCATION.
63	TRENCHING THROUGH GRAVEL REQUIRED AT THIS LOCATION.
64	TRENCHING THROUGH SOIL/LANDSCAPE REQUIRED AT THIS LOCATION.
65	EXTEND CABLES/CIRCUITS SPECIFIED BY TRENCHING AND RUNNING UNDERGROUND IN SCHEDULE 80 RIGID PVC CONDUIT. COORDINATE INSTALLATION OF THE APPROVED OPTION WITH THE MZB.

LEGEND

- FACU — FIRE ALARM CONTROL UNIT
- GUI — GRAPHIC USER INTERFACE
- DVC — DIGITAL VOICE COMMAND
- HYPERSPIKE OUTDOOR HIGH POWER SPEAKER ARRAY
- HH — FIBER HANDHOLE
- P — FIBER POLE
- FIBER OPTIC CABLE
- LINETYPE INDICATES NEW
- LINETYPE INDICATES EXISTING TO REMAIN
- FACU — SLASH INDICATES TO BE DEMOLISHED

CIRCUIT TAG LEGEND

- s — ADDRESSABLE SLC - CLASS B/STYLE 4 (NO. 18 AWG)
- n — NOTIFICATION APPLIANCE CIRCUIT - CLASS B (NO. 14 AWG)
- f — SINGLE MODE FIBER OPTIC CABLE

SHEET NOTES LEGEND

Building/Exhibit	Sheet Notes	Sheet
Africa Barn	3, 22, 42, 56	Sheet FA104/113
Africa Watering Hole LSS Building	37	Sheet FA108/117
Animal Medical Building	4, 10, 41, 42, 52, 53, 55, 56	Sheet FA102/111
Animal Trailer	26, 56	Sheet FA108/117
Antelope/Warthog Barn	8, 16, 37, 42, 56	Sheet FA108/117
Bait Shack	34, 56	Sheet FA103/112
Bat Cave/Maryland Wilderness	6, 33, 41, 42, 52	Sheet FA103/112
Bird Barn/Old Statunga	4, 10, 22, 42, 57	Sheet FA103/112
Block Garage and Greenhouse	19, 29	Sheet FA109/118
Box Turtle Exhibit	6, 32	Sheet FA103/112
Cheetah Holding	6, 23	Sheet FA104/113
Chimpanzee Forest	2, 9, 10, 42, 45, 56	Sheet FA104/113
Chimpanzee Forest Restrooms	9, 25, 56	Sheet FA104/113
Construction Trailer	4, 22, 42, 53, 55, 56	Sheet FA108/117
Cow Barn	8, 13, 32, 42	Sheet FA103/112
Crane Barn	4, 10, 22, 42, 56	Sheet FA107/116
Donkey Barn	8, 32, 42, 56	Sheet FA103/112
Eagle Exhibit (Old Artic Fox Holding)	6, 35, 42	Sheet FA103/112
Elephant House	4, 21, 42, 56	Sheet FA108/117
Embassy Penguin	34, 56	Sheet FA103/112
Flamingo Holding	18, 34	Sheet FA103/112
Frog Trailer	36, 56	Sheet FA108/117
Giraffe Feeding Station	6, 25, 42, 56	Sheet FA104/113
Giraffe House	5, 12, 31, 40, 42, 44, 56	Sheet FA104/113
Goat Barn	8, 13, 32, 42	Sheet FA103/112
Grain Barn	8, 39, 56	Sheet FA109/118
Hay Barn	6, 19, 28, 42 (DEMOLISH EXISTING VESDA)	Sheet FA108/117
Herp Holding	8, 38, 41, 42, 52, 56	Sheet FA103/112
Keeper/HR Trailer (Polar/Food Service)	8, 15, 36, 42, 56	Sheet FA108/117
Leopard Holding	8, 20, 23, 42	Sheet FA104/113
Lion Holding	8, 12, 31, 42, 56	Sheet FA104/113
Lower Barn	8, 17, 38, 42	Sheet FA103/112
Maintenance and Comissary	1, 4, 11, 22, 42, 48, 54, 56	Sheet FA109/118
Maintenance Barn (Warehouse, Blue Storage Barn)	6, 29	Sheet FA109/118
Mammal House	6, 51	Sheet FA107/116
Mansion House	1, 4, 10, 22, 48, 49, 50, 54, 56	Sheet FA107/116
Maryland Building	4, 22, 56	Sheet FA107/116
Maryland Wilderness Sewage Lift Station	6, 38	Sheet FA103/112
Marsh Aviary LSS	6, 33	Sheet FA103/112
Meeting Barn	4, 10, 22, 42, 57	Sheet FA103/112
Membership Building	6, 27, 42, 56	Sheet FA107/116
Oasis Restrooms	6, 31, 56	Sheet FA108/117
Oasis Restaurant	31, 56	Sheet FA108/117
Old Elephant Building	8, 30, 42	Sheet FA107/116
Otter/Bobcat Holding	4, 10, 22, 42, 43, 56	Sheet FA103/112
Penguin Coast Interpretive Center	3, 22, 42, 56	Sheet FA103/112
Penguin Holding	7, 34, 42, 56	Sheet FA103/112
Formerly Pizza Depot (Sidetrack Café)	24	Sheet FA103/112
Polar Bear Holding	4, 10, 22, 42, 43, 56	Sheet FA103/112
Polar Bear LSS #1	8, 14, 35, 56	Sheet FA103/112
Polar Bear LSS #2	8, 14, 35, 56	Sheet FA103/112
Polar Bear Trailer	4, 22, 56	Sheet FA108/117
Records Trailer	26, 56	Sheet FA108/117
Restroom Trailer (adjacent to Keeper/HR)	36	Sheet FA108/117
Restroom Trailer (adjacent to Construction Trailer)	26	Sheet FA108/117
Rhino/Zebra Barn	4, 10, 22, 42, 46, 47, 56	Sheet FA108/117
Schaefer Restrooms	6, 39, 42	Sheet FA106/115
Formerly Sidetrack Café and Restrooms	4, 10, 22, 52, 53, 55, 56	Sheet FA103/112
Stone Shed	6, 51	Sheet FA107/116
Ticket Booths	6, 39, 56	Sheet FA106/115
Train Station	24, 56	Sheet FA103/112
Tree & Slide	6, 38, 52	Sheet FA103/112
Tundra Buggy	8, 14, 35, 42	Sheet FA103/112
Wading Bird Building	6, 30	Sheet FA103/112
Whistle Stop	8, 38, 42, 56	Sheet FA103/112
Wild Things Gift Shop Building	4, 10, 20, 22, 53, 55, 56	Sheet FA106/115

ISSUE FOR BID

MARYLAND ZOO

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No.	Revision	Date

Graphics — Scale: N.T.S.

Project Description — **FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN**

Location: 1876 Mansion House Drive, Baltimore, MD 21217

Design — Design: GM; Drawn: DG; Review: WW; Date: FEBRUARY 15, 2022

Drawing Title — **GENERAL NOTES AND LEGEND**

Drawing No. — FA001

Sheet: 1 of 21

GENERAL NOTES

1. IF BID OPTION 1 IN SPECIFICATION SECTION 00400 IS EXERCISED, THE CONTRACTOR SHALL REPLACE ALL EXISTING ADDRESSABLE INITIATING DEVICES, MODULES AND NOTIFICATION APPLIANCES ONE FOR ONE WITH NOTIFIER NFS-320 / NFS2-640 COMPATIBLE DEVICES/APPLIANCES. ALL MODULES SPECIFIED IN DETAIL 3 SHALL BE MONITORED BY THE NEW FIRE ALARM NETWORK.
2. APPROXIMATE LENGTH OF CIRCUITS BETWEEN BUILDINGS INDICATED IN DETAIL 2 ARE ESTIMATES ONLY. EXACT LENGTH OF CIRCUITS AND CONDUIT SHALL BE CONFIRMED BY THE CONTRACTOR.
3. EXISTING FIRE ALARM DEVICE COUNTS INDICATED IN DETAIL 3 ARE ESTIMATES ONLY. EXACT NUMBER OF DEVICES TO BE REPLACED SHALL BE CONFIRMED BY THE CONTRACTOR. THE CONTRACTOR BID SHALL INCLUDE A COMPLETE PER UNIT COST FOR EACH SPECIFIC DEVICE IN THE EVENT MORE OR LESS DEVICES ARE REQUIRED.
4. TBP SPECIFIED IN DETAIL INDICATES DEVICES THAT ARE "TO BE PROVIDED".
5. FIRE ALARM CONTROL UNITS TO MONITOR EXISTING DRY CONTACT ANCILLARY SIGNALS SPECIFIED IN DETAIL 2, WITH THE EXCEPTION OF THE BURGLAR/SECURITY SIGNALS, VIA EXISTING SENSORS. CONTRACTOR SHALL REPLACE FAULTY SENSORS, WHERE APPLICABLE. THE CONTRACTOR IS NOT RESPONSIBLE FOR ANY SENSOR PROGRAMING. PROGRAMING NEW SENSORS FOR THE ASSOCIATED SYSTEMS IS THE RESPONSIBILITY OF THE MZB. THE LIFE SAFETY ANCILLARY SIGNALS SHALL NOT BE REPORTED TO THE CENTRAL STATION.
6. THE CONTRACTOR SHALL TEST EVERY EXISTING AND NEW BUILDING FIRE ALARM DEVICE, APPLIANCE, VOICE EVACUATION ALARM PANEL, VESDA SYSTEM, ETC. IN ACCORDANCE WITH THE MANUFACTURER'S LATEST PUBLISHED INFORMATION AND APPLICABLE NFPA STANDARDS AS REQUIRED BY THE CONTRACT DOCUMENTS.

Building/Exhibit	Fire Alarm Control Unit			Voice Panel	Keltron Transmitter	Existing Fiber to Building
	Panel	Status	Devices/Appliances Fed From			
Africa Barn	NFS-320	Existing to Remain	N/A	None	Keltron #5	Yes
Africa Watering Hole LSS Building	None	N/A	Rhino/Zebra Barn	None	None	No
Animal Medical Building	CPU2-640	Existing to Remain	N/A	Safepath (SPS40S)	Keltron #41	Yes
Animal Trailer	None	N/A	Construction Trailer	None	None	Yes
Antelope/Warthog Barn	CPU2-640	To Be Demolished	Rhino/Zebra Barn	Safepath (SPS40S)	Keltron #17	Yes
Bait Shack	None	N/A	Penguin Coast Inerpretive Center	None	None	Yes
Bat Cave/Maryland Wilderness	NFW2-100	To Be Demolished	Otter/Bobcat Holding	None	Keltron #42	No
Bird Barn/Old Sitatunga	CPU2-640	Existing to Remain	N/A	Safepath (SPS40S)	Keltron #49	Provide New
Block Garage and Greenhouse	None	N/A	Maintenance and Commissary	None	None	No
Box Turtle Exhibit	Panel Out of Service (CPU2-640)	To Be Demolished	Meeting Barn	None	Keltron (# unknown)	No
Cheetah Holding	NFW2-100	To Be Demolished	Africa Barn	None	Keltron #25	No
Chimpanzee Forest	MS-9600UDLS	To Be Demolished (New CPU2-640 To Be Provided)	N/A	ACC-25/50	Keltron #43	Yes
Chimpanzee Forest Restrooms	NFW2-100	To Be Demolished	Chimpanzee Forest	None	Keltron #11	Yes
Construction Trailer	CPU2-640	Existing to Remain	N/A	None	Keltron #26	Provide New
Cow Barn	CPU2-640	To Be Demolished	Meeting Barn	Safepath (SPS40S)	Keltron #22	No
Crane Barn	CPU2-640	Existing to Remain	N/A	Safepath (SPS40S)	Keltron #5	Yes
Donkey Barn	CPU2-640	To Be Demolished	Meeting Barn	None	Keltron #20	Yes
Eagle Exhibit (Old Artic Fox Holding)	NFW2-100	To Be Demolished	Polar Bear Holding	None	Keltron #15	No
Elephant House	CPU2-640	Existing to Remain	N/A	Yes	Keltron (# unknown)	Yes
Embassy Penguin	None	N/A	Penguin Coast Inerpretive Center	None	None	Yes
Flamingo Holding	None	N/A	Penguin Coast Inerpretive Center	None	None	No
Frog Trailer	None	N/A	Polar Bear Trailer	None	None	Yes
Giraffe Feeding Station	NFW2-100	To Be Demolished	Chimpanzee Forest	None	Keltron #40	Yes
Giraffe House	CPU2-640	Re-locate to Mechanical Shed	Mechanical Shed	Safepath (SPS40S)	Keltron #18	Yes
Goat Barn	CPU2-640	To Be Demolished	Meeting Barn	Safepath (SPS40S)	Keltron #21	No
Grain Barn	CPU2-640	To Be Demolished	Maintenance and Commissary	None	Keltron #9	Yes
Hay Barn	NFW2-100	To Be Demolished	Elephant House	None	Keltron #24	No
Herp Holding	CPU2-640	To Be Demolished	Formerly Sidetrack Café and Restrooms	None	Keltron (# unknown)	Yes
Keeper/HR Trailer (Polar/Food Service)	CPU2-640	To Be Demolished	Polar Bear Trailer	Safepath (SPS40S)	Keltron #27	Yes
Leopard Holding	CPU2-640	To Be Demolished	Africa Barn	None	Keltron (# unknown)	No
Lion Holding	CPU2-640	To Be Demolished	Mechanical Shed	Safepath (SPS40S)	Keltron #45	Yes
Lower Barn	CPU2-640	To Be Demolished	Formerly Sidetrack Café and Restrooms	Safepath (SPS40S)	Keltron #46	No
Maintenance and Commissary	CPU2-640	Existing to Remain	N/A	Safepath (SPS40S)	Keltron #10	Yes
Maintenance Barn (Warehouse, Blue Storage Barn)	NFW2-100	To Be Demolished	Maintenance and Commissary	None	Keltron #28	No
Mammal House	Panel Out of Service (CPU2-640)	To Be Demolished	N/A	None	Keltron (# unknown)	No
Mansion House	CPU2-640	Existing to Remain	N/A	Notifier	Keltron #1	Yes
Maryland Building	CPU2-640	Existing to Remain	N/A	None	Keltron #4	Yes
Maryland Wilderness Sewage Lift Station	NFW2-100	To Be Demolished	Formerly Sidetrack Café and Restrooms	None	Keltron #51	No
Marsh Aviary LSS	NFW2-100	To Be Demolished	Otter/Bobcat Holding	None	Keltron #37	No
Meeting Barn	CPU2-640	Existing to Remain	N/A	Safepath (SPS40S)	Keltron #30	Provide New
Membership Building	NFW2-100	To Be Demolished	Crane Barn	None	Keltron #31	Yes
Oasis Restrooms	NFW2-100	To Be Demolished	Mechanical Shed	None	Keltron #34	Yes
Oasis Restaurant	None	N/A	Mechanical Shed	None	None	Yes
Old Elephant Building	CPU2-640	To Be Demolished	Mansion House	None	Keltron #3	No
Otter/Bobcat Holding	CPU2-640	Existing to Remain	N/A	Safepath (SPS40S)	Keltron #29	Yes
Penguin Coast Interpretive Center	NFS-320	Existing to Remain	N/A	None	Keltron #61	Yes
Penguin Holding	NFS-320	To Be Demolished	Penguin Coast Inerpretive Center	None	Keltron #60	Yes
Formerly Pizza Depot (Sidetrack Café)	None	N/A	Bird Barn/Old Sitatunga	None	None	Yes
Polar Bear Holding	CPU2-640	Existing to Remain	N/A	Safepath (SPS40S)	Keltron #39	Yes
Polar Bear LSS #1	Panel Out of Service (CPU2-640)	To Be Demolished	Polar Bear Holding	Safepath (SPS40S)	Keltron (# unknown)	Yes
Polar Bear LSS #2	Panel Out of Service (CPU2-640)	To Be Demolished	Polar Bear Holding	Safepath (SPS40S)	Keltron (# unknown)	Yes
Polar Bear Trailer	CPU2-640	Existing to Remain	N/A	None	Keltron (# unknown)	Yes
Records Trailer	None	N/A	Construction Trailer	None	None	No
Restroom Trailer (adjacent to Keeper/HR)	None	N/A	Polar Bear Trailer	None	None	No
Restroom Trailer (adjacent to Construction Trailer)	None	N/A	Construction Trailer	None	None	No
Rhino/Zebra Barn	CPU2-640	Existing to Remain	N/A	Safepath (SPS40S)	Keltron (# unknown)	Yes
Schaefer Restrooms	NFW2-100	To Be Demolished	Wild Things Gift Shop	None	Keltron #48	No
Formerly Sidetrack Café and Restrooms	CPU2-640	Existing to Remain	N/A	Safepath (SPS40S)	Keltron (# unknown)	Yes
Stone Shed	NFW2-100	To Be Demolished	N/A	None	Keltron #5	No
Ticket Booths	NFW2-100	To Be Demolished	Wild Things Gift Shop	None	Keltron #33	Yes
Train Station	None	N/A	Bird Barn/Old Sitatunga	None	None	Yes
Tree & Slide	NFW2-100	To Be Demolished	Formerly Sidetrack Café and Restrooms	None	Keltron #36	No
Tundra Buggy	CPU2-640	To Be Demolished	Polar Bear Holding	Safepath (SPS40S)	Keltron #12	No
Wading Bird Building	NFW2-100	To Be Demolished	Mansion House	None	Keltron #50	No
Whistle Stop	CPU2-640	To Be Demolished	Formerly Sidetrack Café and Restrooms	None	Keltron #7	Yes
Wild Things Gift Shop Building	CPU2-640	Existing to Remain	N/A	Safepath (SPS40S)	Keltron #32	Yes

1 EXISTING FIRE ALARM NETWORK ARRANGEMENT
SCALE: N.T.S.

Main Building	Existing FACU	Buildings Served By FACU	Estimated Number of Devices	Modules	Approximate Length of Circuits Between Buildings	Corresponding Drawing
1 Animal Medical Building	NFS2-640	N/A	101	24	N/A	Sheet FA102/FA111
2 Otter/Bobcat Holding	NFS2-640		5	4		
		Bat Cave	3	4	630 ft	Sheet FA103/112
		Marsh Aviary LSS	1	2		
		Total	9	10		
3 Formerly Sidetrack Café and Restrooms	NFS2-640		2	0		
		Lower Barn	10	2		
		Herp Holding	20	2		
		Maryland Wilderness Sewage Lift Station	2	2	600 ft	Sheet FA103/112
		Tree and Slide	2	0		
		Whistle Stop	23	6		
		Total	59	12		
4 Meeting Barn	NFS2-640		2	2		
		Box Turtle Exhibit	3	0		
		Donkey Barn	7	2		
		Goat Barn	4	4	725 ft	Sheet FA103/112
		Cow Barn	10	4		
		Total	31	12		
5 Bird Barn (Old Sitatunga)	NFS2-640		5	4		
		Formerly Pizza Depot (Sidetrack Café)	Unknown	Unknown	335 ft	Sheet FA103/112
		Train Station	Unknown	Unknown		
		Total	Atleast 5	Atleast 4		
6 Penguin Coast Inteprretive Center	NFS-320		28	4		
		Bait Shack	2	0		
		Penguin Holding	23	10	270 ft	Sheet FA103/112
		Embassy Penguin	4	0		
		Flamingo Holding	Smoke Detection TBP	0		
		Total	Atleast 57	14		
7 Polar Bear Holding	NFS2-640		11	10		
		Polar Bear LSS #1	6	0		
		Polar Bear LSS #2	6	0	580 ft	Sheet FA103/112
		Tundra Buggy	3	0		
		Eagle Exhibit (Old Artic Fox)	2	0		
		Total	28	10		
8 Africa Barn	NFS-320		17	0		
		Leopard Holding	Atleast 4 (Duct Detection TBP)	0	600 ft	Sheet FA104/113
		Cheetah Holding		0		
		Total	Atleast 24	0		
9 Chimpanzee Forest	NFS2-3030 (NEW)		18 (+ Existing to Remain VESDA System)	0		
		Chimpanzee Forest Restrooms	6	0	500 ft	Sheet FA104/113
		Giraffe Feeding Station	3	0		
		Total	27 (+ Existing to Remain VESDA System)	0		
10 Giraffe House (Mechanical Shed)	NFS2-640		6 (+ New VESDA System)	8		
		Lion Holding	7	14		
		Oasis Restrooms	4	0	1100 ft	Sheet FA104/113
		Oasis Restaurant	6	0		
		Total	23 (+ New VESDA System)	22		
11 Wild Things Gift Shop	NFS2-640		Atleast 8 (Duct Detection TBP)	4		
		Ticket Booths	6	0	290 ft	Sheet FA106/115
		Shaefer Restrooms	9	4		
		Total	Atleast 23	8		
12 Crane Barn	NFS2-640		18	2		
		Membership Building	2	0	180 ft	Sheet FA107/116
		Total	20	2		
13 Mansion House	NFS2-640		99	10		
		Old Elephant Building	7	4	775 ft	Sheet FA107/116
		Wading Bird	4	6		
		Total	110	20		
14 Maryland Building	NFS2-640	N/A	25	0	N/A	Sheet FA107/116
15 Rhino/Zebra Barn	NFS2-640		5 (+ 2 VESDA Systems)	12		
		Africa Watering Hole LSS	3	0	700 ft	Sheet FA108/117
		Antelope Barn	22	4		
		Warthog Barn				
		Total	30 (+2 VESDA Systems)	16		
16 Polar Bear Trailer	NFS2-640		8	0		
		Frog Trailer	6	0		
		Restroom Trailer	4	0	550 ft	Sheet FA108/117
		Keeper/HR Trailer	27	0		
		Total	45	0		
17 Construction Trailer			28	0		
		Animal Trailer	14	0		
		Records Trailer	3	0	350 ft	Sheet FA108/117
		Restroom Trailer	4	0		
		Total	49	0		
18 Elephant House	NFS2-640		Unknown (Existing Devices to Remain)	Unknown (Existing Modules to Remain)		
		Hay Barn	Atleast 2	8	650 ft	Sheet FA108/117
		Total	Atleast 2	8		
19 Maintenance and Commissary	NFS2-640		36	0		
		Grain Barn	22	2		
		Maintenance Barn	13	0	610 ft	Sheet FA109/118
		Block Garage and Greenhouse	Heat Detection TBP	0		
		Total	Atleast 71	2		

2 FIRE ALARM NETWORK CONSOLIDATION STRATEGY
SCALE: N.T.S.

Building/Exhibit	Smoke Detector	Heat Detector	Duct Detector	Beam Detector	Manual Pull Station	Monitor Module	MM - Temperature Sensor (HI/Lo)	MM - Staff Panic	MM - Voice Trouble	MM - Burglar Panel	MM - Freezer/Fridge	MM - Snake Bite	MM - Sewage Pump Fail	MM - Heat Detection	MM - Animal Escape Power	MM - Kitchen Hood	MM - AHSUL Suppression	MM - Ozone	MM - Booster Panel	MM - VESDA	RM - Audio Shut Down	Wall Speaker/Strobe	Ceiling Speaker/Strobe	Wall Horn/Strobe	Ceiling Horn/Strobe	Weatherproof Wall Speaker/Strobe	Wall Strobe	Ceiling Strobe	Wall Horn	Wall Speaker	Ceiling Speaker	Weatherproof Wall Speaker	Snake Bite	Animal Escape	Burglar	Temperature	Freezer	Ozone	Pump Fail	Panic	VESDA System
	Existing Initiating Devices					Modules																Existing Notification Appliances										Ancillary Signals								Early Warning Detection
Africa Barn	11				6																																				
Africa Watering Hole LSS Building		2			1																	2																			
Animal Medical Building	82	6	4		9	12	2	2			5	2	1									7	19				2	4		1	4		Yes	Yes	Yes	Yes	Yes			Yes	
Animal Trailer	12				2																			1																	
Antelope/Warthog Barn	19				3	2	1	1														2					1							Yes	Yes	Yes				Yes	
Bait Shack		1			1																																				
Bat Cave/Maryland Wilderness	2				1	2	1			1														2									Yes	Yes	Yes	Yes					
Bird Barn/Old Sitatunga	4				1	2	1	1														5												Yes		Yes				Yes	
Block Garage and Greenhouse		TBP																																							
Box Turtle Exhibit	2				1																																				
Cheetah Holding	2				1																													Yes	Yes	Yes				Yes	
Chimpanzee Forest	7	1	6		4	15																11					2			1				Yes	Yes	Yes					Existing To Remain
Chimpanzee Forest Restrooms	2	1			3																			2																	
Construction Trailer	21				7																			3			2							Yes	Yes						
Cow Barn	2	4			4	2	1		1													4												Yes		Yes					
Crane Barn	14				4	1	1															5												Yes		Yes					
Donkey Barn	1	5			1	1	1																	3										Yes	Yes	Yes					
Eagle Exhibit (Old Artic Fox Holding)	1				1																													Yes	Yes						
Elephant House	Initiating Devices Existing to Remain					Modules Existing to Remain															8																				Existing To Remain
Embassy Penguin	2				2																																				
Flamingo Holding	TBP																																								
Frog Trailer	4				2																	1																			
Giraffe Feeding Station	2				1																			1										Yes		Yes				Yes	
Giraffe House		1		3	2	4	1	1	1	1												7	1				1							Yes	Yes	Yes				Yes	Provide New
Goat Barn	3				1	2	1		1													2												Yes		Yes					
Grain Barn	15	1			6	1					1													5											Yes	Yes					
Hay Barn		TBP			2	4															4			1										Yes							Demolish Existing VESDA Laser Plus
Herp Holding	14				6	1			1																								Yes	Yes	Yes	Yes					
Keeper/HR Trailer (Polar/Food Service)	17				10																	1												Yes	Yes					Yes	
Leopard Holding	2	1	TBP		1																																				
Lion Holding	4				3	7	1	3	1	1					1							4					1							Yes	Yes	Yes				Yes	
Lower Barn	8				2	1			1													2					1			2				Yes							
Maintenance and Comissary	21	9			6																	8	5				2							Yes	Yes		Yes				
Maintenance Barn (Warehouse, Blue Storage Barn)		12			1																			2																	
Mammal House	Building to be Removed From Network					Building to be Removed From Network																																			
Mansion House	88	2			9	5				3				2								13	23			1	5	6													
Maryland Building	20	2			3																			6			3							Yes							
Maryland Wilderness Sewage Lift Station	1				1	1							1																					Yes					Yes		
Marsh Aviary LSS		1				1	1																												Yes						
Meeting Barn	4	1			2	1			1																					3				Yes							
Membership Building	1				1																													Yes	Yes						
Oasis Restrooms	2				2																			2																	
Oasis Restaurant	4	1			1																																				
Old Elephant Building	6				1	2				1					1									3										Yes	Yes						
Otter/Bobcat Holding	3				2	2												2				3												Yes				Yes			
Penguin Coast Interpretive Center	24				4	2												1			1													Yes	Yes	Yes		Yes		Yes	
Penguin Holding	15	1			7	5	2	1											2																Yes	Yes	Yes				Yes	
Pizza Depot																																									
Polar Bear Holding	8				3	5	2	1	1	1												5					2							Yes	Yes	Yes				Yes	
Polar Bear LSS #1	4				2																			1																	
Polar Bear LSS #2	4				2																								1												
Polar Bear Trailer	6				2																			1																	
Records Trailer	2				1																			1																	
Restroom Trailer (adjacent to Keeper/HR)	2	2																						1																	
Restroom Trailer (adjacent to Construction Trailer)	2	2																						1																	
Rhino/Zebra Barn	2				3	6	2	2		1					1							8												Yes	Yes	Yes				Yes	Zebra Holding VESDA Existing To Remain. Rhino Holding FAAST Detection System To Be Demolished And Replaced With VESDA System.
Schaefer Restrooms	6	1			2	2	1						1											2										Yes					Yes		
Sidetrack Café and Restrooms		1			1																																				
Stone Shed	Building to be Removed From Network					Building to be Removed From Network																		1										Yes	Yes						
Ticket Booths	3				3																			3																	
Train Station																								3																	
Tree & Slide	2																							1				1													
Tundra Buggy	2				1																	1												Yes							
Wading Bird Building	2				2	3	2								1																			Yes		Yes					
Whistle Stop	6	11	1		5	3		1									1	1						2	7		2							Yes	Yes					Yes	
Wild Things Gift Shop Building	3	2	TBP		3	2		1	1													1	4											Yes	Yes					Yes	
	496	71	11	3	158	97	21	14	9	9	6	2	3	2	4	1	1	3	2	4	1	92	52	47	7	1	25	10	1	7	4	8									

3 EXISTING FIRE ALARM DEVICE AND APPLIANCE INFORMATION
SCALE: N.T.S.

Building/Exhibit	Existing Fiber to Building
Africa Barn	Yes
Africa Watering Hole LSS Building	No
Animal Medical Building	Yes
Animal Trailer	Yes
Antelope/Warthog Barn	Yes
Bait Shack	Yes
Bat Cave/Maryland Wilderness	No
Bird Barn/Old Situanga	Provide New
Block Garage and Greenhouse	No
Box Turtle Exhibit	No
Cheetah Holding	No
Chimpanzee Forest	Yes
Chimpanzee Forest Restrooms	Yes
Construction Trailer	Provide New
Cow Barn	No
Crane Barn	Yes
Donkey Barn	Yes
Eagle Exhibit (Old Artic Fox Holding)	No
Elephant House	Yes
Embassy Penguin	Yes
Flamingo Holding	No
Frog Trailer	Yes
Giraffe Feeding Station	Yes
Giraffe House	Yes
Goat Barn	No
Grain Barn	Yes
Hay Barn	No
Herp Holding	Yes
Keeper/HR Trailer (Polar/Food Service)	Yes
Leopard Holding	No
Lion Holding	Yes
Lower Barn	No
Maintenance and Comissary	Yes
Maintenance Barn (Warehouse, Blue Storage Barn)	No
Mammal House	No
Mansion House	Yes
Maryland House	Yes
Maryland Wilderness Sewage Lift Station	No
Marsh Aviary LSS	No
Meeting Barn	Provide New
Membership Building	Yes
Oasis Restrooms	Yes
Oasis Restaurant	Yes
Old Elephant Building	No
Otter/Bobcat Holding	Yes
Penguin Coast Interpretive Center	Yes
Penguin Holding	Yes
Pizza Depot	No
Polar Bear Holding	Yes
Polar Bear LSS #1	Yes
Polar Bear LSS #2	Yes
Polar Bear Trailer	Yes
Records Trailer	No
Restroom Trailer (adjacent to Keeper/HR)	No
Restroom Trailer (adjacent to Construction Trailer)	No
Rhino/Zebra Barn	Yes
Schaefer Restrooms	No
Sidetrack Café and Restrooms	Yes
Stone Shed	No
Ticket Booths	Yes
Train Station	Yes
Tree & Slide	No
Tundra Buggy	No
Wading Bird Building	No
Whistle Stop	Yes
Wild Things Gift Shop Building	Yes

4 BUILDING FIBER LEGEND
SCALE: N.T.S.

ISSUE FOR BID

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No.	Revision	Date

Graphics — Scale: N.T.S.

Project Description — **FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN**

Location: 1876 Mansion House Drive, Baltimore, MD 21217

Design — Design: GM; Drawn: DG; Review: WW; Date: FEBRUARY 15, 2022

Drawing Title — **FIRE ALARM NETWORK OVERVIEW**

Drawing No. — **FA002**

Sheet: 2 of 21

1 OVERALL NETWORK SITE PLAN

SCALE: 1" = 150'

ISSUE FOR BID

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A B C D E F G H

No.	Revision	Date

Graphics

Scale: Scale

0 150' 300'
1"=150'

Project Description

FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN

Location: 1876 Mansion House Drive Baltimore, MD 21217

Design

Design: GM
Drawn: DG
Review: WW
Date: FEBRUARY 15, 2022

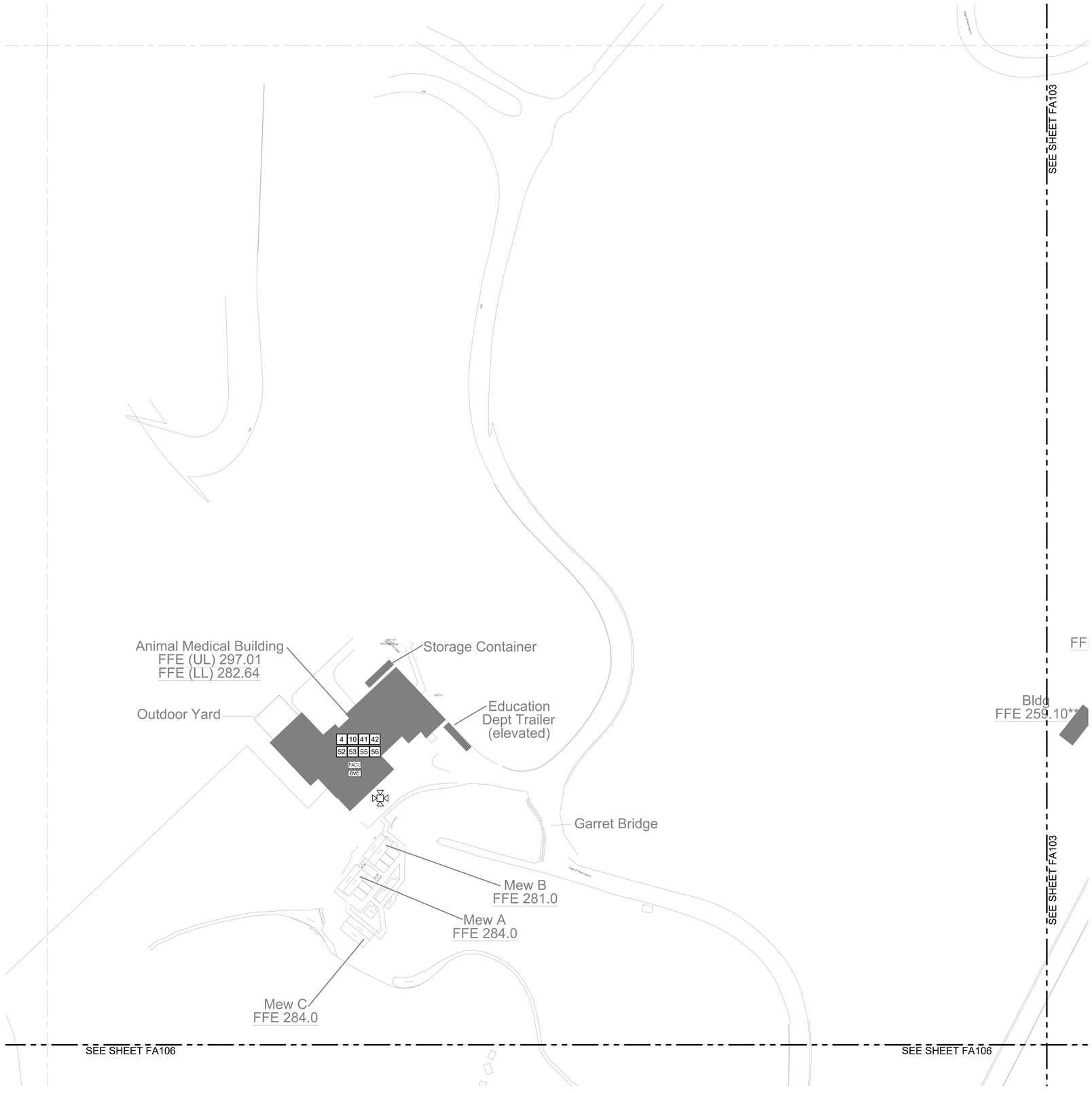
Drawing Title

OVERALL NETWORK SITE PLAN

Drawing No.

FA101

Sheet: 3 of 21



1 NETWORK SITE PLAN - AREA A
SCALE: 1" = 50'

GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND LEGEND.
2. REFER TO SHEET FA002 FOR FIRE ALARM NETWORK OVERVIEW.

SHEET NOTES X

4	EXISTING NOTIFIER NFS2-640 FIRE ALARM CONTROL UNIT TO REMAIN. CONNECT THE FACU TO THE FIBER OPTIC NETWORK.
10	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN BUILDING.
41	DEMOLISH THE EXISTING YELLOW COLORED STROBE(S) FOR SNAKE BITE NOTIFICATION IN THIS LOCATION.
42	DEMOLISH THE EXISTING GREEN COLORED STROBE(S) FOR ANIMAL ESCAPE NOTIFICATION IN THIS LOCATION.
52	PROVIDE A STI STOPPER BUTTON AT THIS LOCATION FOR SNAKE BITE NOTIFICATION. MONITOR ACTIVATION OF THE BUTTON VIA FIRE ALARM MONITOR MODULE AND REPORT AS AN EMERGENCY/NON-FIRE ALARM INPUT.
53	PROVIDE A HYPERSPIKE OUTDOOR HIGH-POWER SPEAKER ARRAY SYSTEM AT THIS LOCATION, IF BID OPTION 5 IN SPECIFICATION SECTION 00400 IS EXERCISED. HIGH-POWER SPEAKER ARRAY TO BE MOUNTED ADJACENT TO SPECIFIED BUILDING VIA NEW POLE SIZED PER THE MANUFACTURERS REQUIREMENTS/RECOMMENDATIONS. PROVIDE NEMA 3R RATED JUNCTION BOX AND RACEWAY TO AMPLIFIER AND SUPERVISORY CIRCUIT IN THE BUILDING. INSTALL IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
55	PROVIDE A NOTIFIER DVC AND HYPERSPIKE AMPLIFIER TO SUPPLY AUDIO SIGNAL TO THE HIGH-POWER SPEAKER ARRAY ADJACENT TO THE BUILDING, IF BID OPTION 5 IN SPECIFICATION SECTION 00400 IS EXERCISED.
56	EXISTING SINGLE MODE FIBER IN BULDING.

ISSUE FOR BID

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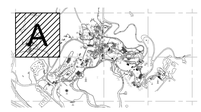


No.	Revision	Date

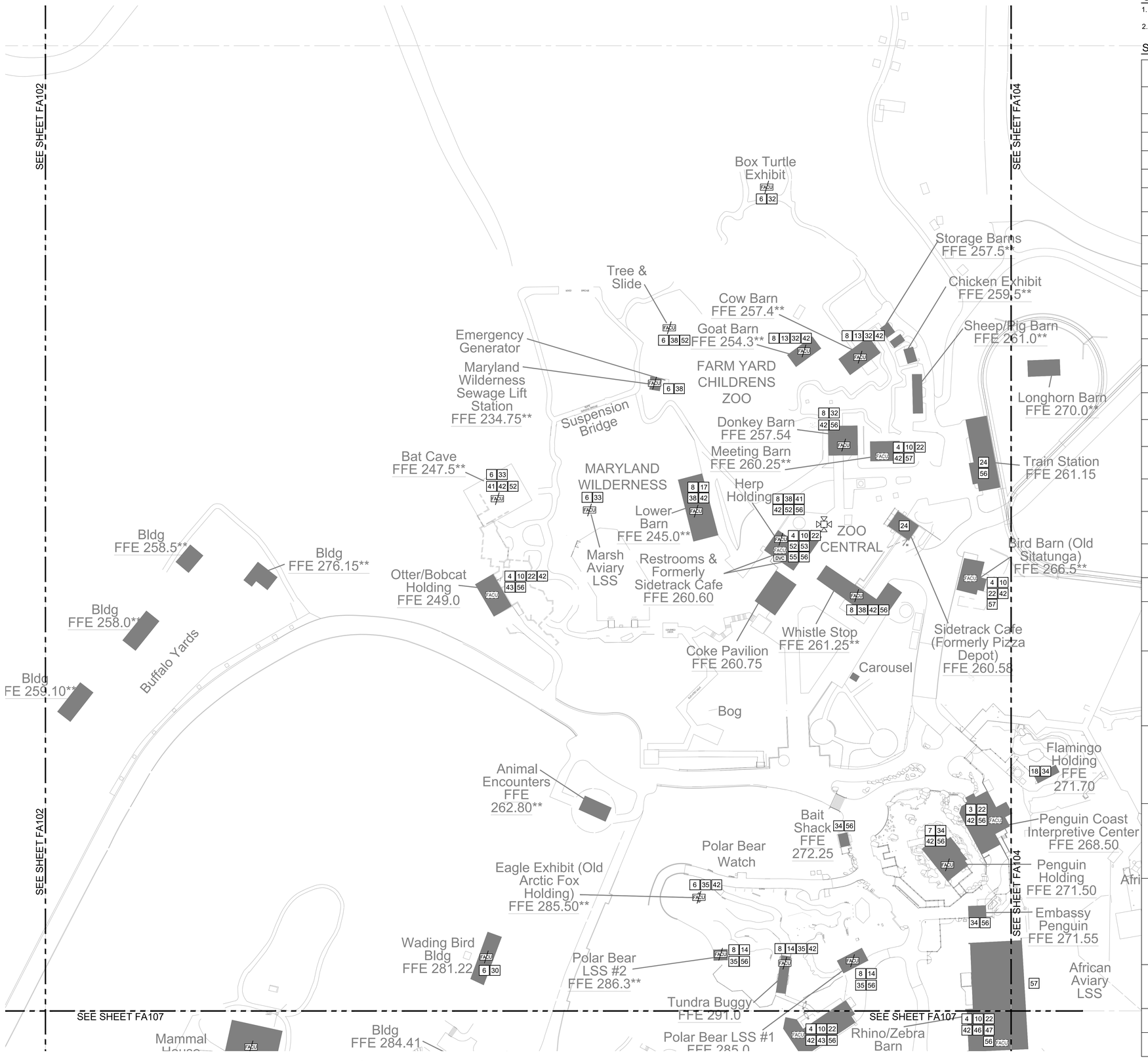
Graphics
Scale: Scale
0 50' 100'
1"=50'

Project Description
FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN
Location: 1876 Mansion House Drive Baltimore, MD 21217

Design
Design: GM
Drawn: DG
Review: WW
Date: FEBRUARY 15, 2022

Drawing Title
NETWORK SITE PLAN - AREA A

Drawing No.
FA102
Sheet: 4 of 21



1 NETWORK SITE PLAN - AREA B

SCALE: 1" = 50'

GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND LEGEND.
2. REFER TO SHEET FA002 FOR FIRE ALARM NETWORK OVERVIEW.

SHEET NOTES X

3	EXISTING NOTIFIER NFS-320 FIRE ALARM CONTROL UNIT TO REMAIN. CONNECT THE FACU TO THE FIBER OPTIC NETWORK.
4	EXISTING NOTIFIER NFS2-640 FIRE ALARM CONTROL UNIT TO REMAIN. CONNECT THE FACU TO THE FIBER OPTIC NETWORK.
6	EXISTING NOTIFIER NFW2-100 FIRE ALARM CONTROL UNIT TO BE DEMOLISHED.
7	EXISTING NOTIFIER NFS-320 FIRE ALARM CONTROL UNIT TO BE DEMOLISHED.
8	EXISTING NOTIFIER NFS2-640 FIRE ALARM CONTROL UNIT TO BE DEMOLISHED.
10	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN BUILDING.
13	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN MEETING BARN.
14	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN POLAR BEAR HOLDING.
17	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN RESTROOMS & FORMERLY SIDETRACK CAFÉ.
18	PROVIDE NEW SMOKE DETECTION THROUGHOUT THE BUILDING. DESIGN AND LAYOUT OF THE SYSTEM TO BE REVIEWED AND COMPLETED BY THE CONTRACTOR.
22	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN BUILDING.
23	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN AFRICA BARN.
24	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES TO BE FED FROM FACU IN BIRD BARN/OLD SITATUNGA.
30	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES TO BE FED FROM FACU IN MANSION HOUSE.
32	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN MEETING BARN.
33	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES TO BE FED FROM FACU IN OTTER/BOBCAT HOLDING.
34	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN PENGUIN COAST INTERPRETIVE CENTER.
35	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN POLAR BEAR HOLDING.
38	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN RESTROOMS & FORMERLY SIDETRACK CAFÉ.
41	DEMOLISH THE EXISTING YELLOW COLORED STROBE(S) FOR SNAKE BITE NOTIFICATION IN THIS LOCATION.
42	DEMOLISH THE EXISTING GREEN COLORED STROBE(S) FOR ANIMAL ESCAPE NOTIFICATION IN THIS LOCATION.
43	DEMOLISH THE EXISTING BLUE COLORED STROBE(S) FOR ANIMAL HABITAT OZONE LEVEL NOTIFICATION IN THIS LOCATION.
46	EXISTING VERY EARLY WARNING SMOKE DETECTION SYSTEM (VESDA) TO REMAIN IN ZEBRA HOLDING. INTERFACE VESDA WITH FACU.
47	EXISTING VERY EARLY WARNING SMOKE DETECTION SYSTEM (FAAST) TO BE DEMOLISHED IN RHINO HOLDING. PROVIDE A NEW VERY EARLY WARNING AIR ASPIRATING SMOKE DETECTION SYSTEM (VESDA) IN THIS AREA. PROVIDE ALL COMPONENTS (HEAD-END, SAMPLING POINTS, PIPING, ETC.) NECESSARY FOR A FULLY FUNTIONAL SYSTEM. DESIGN AND LAYOUT OF THE SYSTEM TO BE REVIEWED AND COMPLETED BY THE CONTRACTOR. INTERFACE VESDA WITH FACU.
52	PROVIDE A STI STOPPER BUTTON AT THIS LOCATION FOR SNAKE BITE NOTIFICATION. MONITOR ACTIVATION OF THE BUTTON VIA FIRE ALARM MONITOR MODULE AND REPORT AS AN EMERGENCY/NON-FIRE ALARM INPUT.
53	PROVIDE A HYPERSPIKE OUTDOOR HIGH-POWER SPEAKER ARRAY SYSTEM AT THIS LOCATION, IF BID OPTION 5 IN SPECIFICATION SECTION 00400 IS EXERCISED. HIGH-POWER SPEAKER ARRAY TO BE MOUNTED ADJACENT TO SPECIFIED BUILDING VIA NEW POLE SIZED PER THE MANUFACTURERS REQUIREMENTS/RECOMMENDATIONS. PROVIDE NEMA 3R RATED JUNCTION BOX AND RACEWAY TO AMPLIFIER AND SUPERVISORY CIRCUIT IN THE BUILDING. INSTALL IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
55	PROVIDE A NOTIFIER DVC AND HYPERSPIKE AMPLIFIER TO SUPPLY AUDIO SIGNAL TO THE HIGH-POWER SPEAKER ARRAY ADJACENT TO THE BUILDING, IF BID OPTION 5 IN SPECIFICATION SECTION 00400 IS EXERCISED.
56	EXISTING SINGLE MODE FIBER IN BULDING.
57	PROVIDE NEW SINGLE MODE FIBER IN BUILDING.

ISSUE FOR BID

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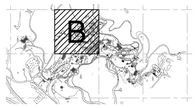


No.	Revision	Date

Graphics — Scale: Scale

0 50' 100'
1"=50'

Project Description — **FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN**

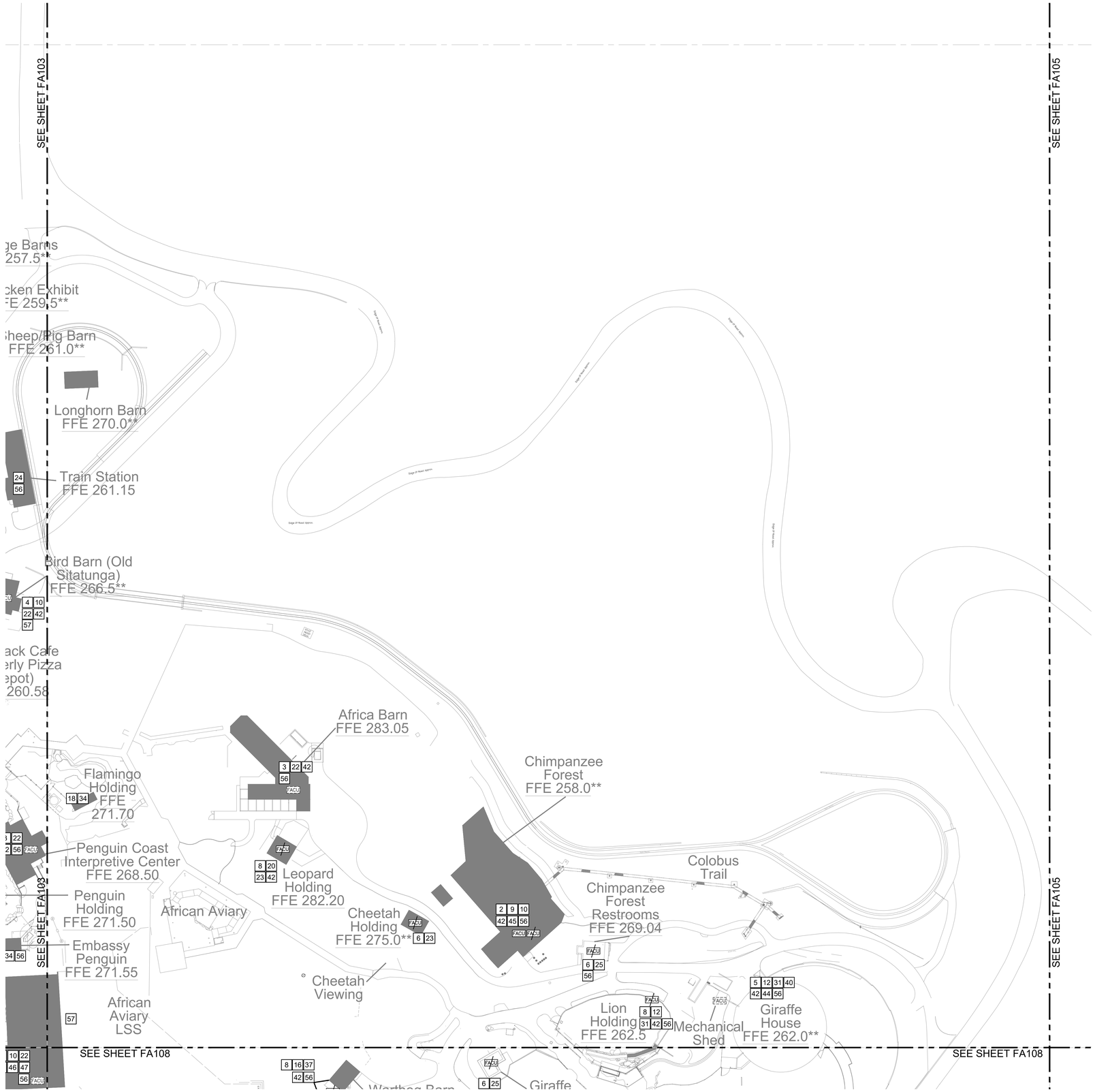
Location: 1876 Mansion House Drive Baltimore, MD 21217

Design — Design: GM; Drawn: DG; Review: WW; Date: FEBRUARY 15, 2022

Drawing Title — **NETWORK SITE PLAN - AREA B**

Drawing No. — **FA103**

Sheet: 5 of 21



1 NETWORK SITE PLAN - AREA C

SCALE: 1" = 50'

GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND LEGEND.
2. REFER TO SHEET FA002 FOR FIRE ALARM NETWORK OVERVIEW.

SHEET NOTES X

2	PROVIDE A NEW NOTIFIER NFS2-640 FIRE ALARM CONTROL UNIT AT THIS LOCATION. CONNECT THE FACU TO THE FIBER OPTIC NETWORK.
3	EXISTING NOTIFIER NFS-320 FIRE ALARM CONTROL UNIT TO REMAIN. CONNECT THE FACU TO THE FIBER OPTIC NETWORK.
5	EXISTING NOTIFIER NFS2-640 FIRE ALARM CONTROL UNIT TO BE RE-LOCATED TO THE MECHANICAL SHED.
6	EXISTING NOTIFIER NFW2-100 FIRE ALARM CONTROL UNIT TO BE DEMOLISHED.
8	EXISTING NOTIFIER NFS2-640 FIRE ALARM CONTROL UNIT TO BE DEMOLISHED.
9	EXISTING FIRE-LITE MS-9600 UDLS(E) FIRE ALARM CONTROL UNIT TO BE DEMOLISHED.
10	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN BUILDING.
12	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN MECHANICAL SHED.
18	PROVIDE NEW SMOKE DETECTION THROUGHOUT THE BUILDING. DESIGN AND LAYOUT OF THE SYSTEM TO BE REVIEWED AND COMPLETED BY THE CONTRACTOR.
20	PROVIDE NEW DUCT SMOKE DETECTION THROUGHOUT THE BUILDING. DESIGN AND LAYOUT OF THE SYSTEM TO BE REVIEWED AND COMPLETED BY THE CONTRACTOR.
22	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN BUILDING.
23	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN AFRICA BARN.
25	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES TO BE FED FROM FACU IN CHIMPANZEE FOREST.
31	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN MECHANICAL SHED.
34	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN PENGUIN COAST INTERPRETIVE CENTER.
40	DEMOLISH THE EXISTING BEAM DETECTION IN THE BUILDING.
42	DEMOLISH THE EXISTING GREEN COLORED STROBE(S) FOR ANIMAL ESCAPE NOTIFICATION IN THIS LOCATION.
44	PROVIDE A NEW VERY EARLY WARNING AIR ASPIRATING SMOKE DETECTION SYSTEM IN THE BUILDING. PROVIDE ALL COMPONENTS (HEAD-END, SAMPLING POINTS, PIPING, ETC.) NECESSARY FOR A FULLY FUNTIONAL SYSTEM. DESIGN AND LAYOUT OF THE SYSTEM TO BE REVIEWED AND COMPLETED BY THE CONTRACTOR.
45	EXISTING VERY EARLY WARNING SMOKE DETECTION SYSTEM (VESDA) TO REMAIN. INTERFACE VESDA SYSTEM WITH FACU.
56	EXISTING SINGLE MODE FIBER IN BULDING.

ISSUE FOR BID

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No.	Revision	Date

Graphics

Scale: Scale

0 50' 100'
1"=50'

Project Description

FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN

Location: 1876 Mansion House Drive Baltimore, MD 21217

Design

Design: GM
Drawn: DG
Review: WW
Date: FEBRUARY 15, 2022

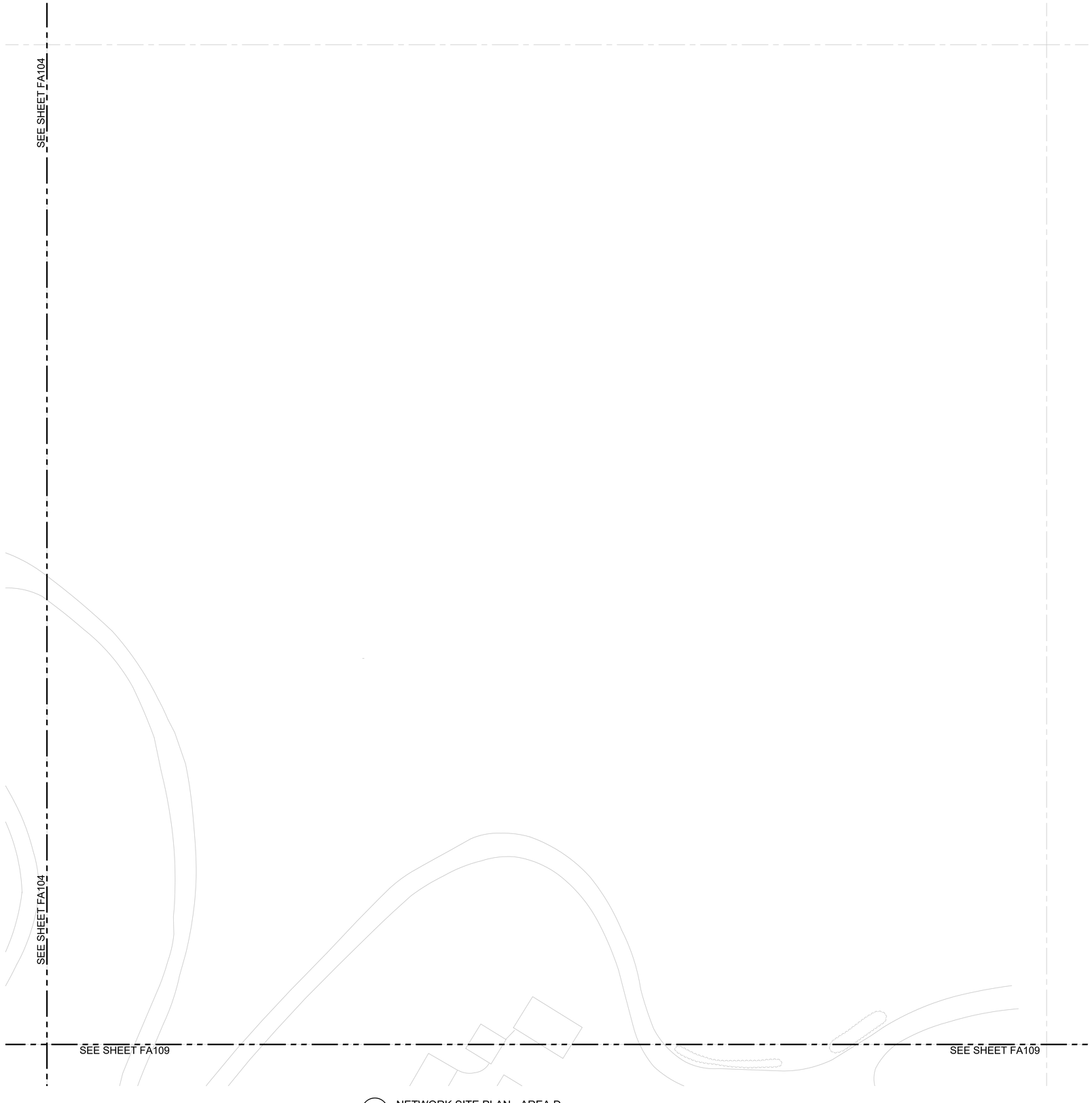
Drawing Title

NETWORK SITE PLAN - AREA C

Drawing No.

FA104

Sheet: 6 of 21



1 NETWORK SITE PLAN - AREA D
SCALE: 1" = 50'

GENERAL NOTES

1. NO NEW WORK IN THE SCOPE OF THE PROJECT IN THIS AREA.

ISSUE FOR BID

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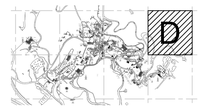

No.	Revision	Date

Graphics

Scale: Scale

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1"=50'

Project Description

FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN

Location: 1876 Mansion House Drive Baltimore, MD 21217

Design

Design: GM
Drawn: DG
Review: WW
Date: FEBRUARY 15, 2022

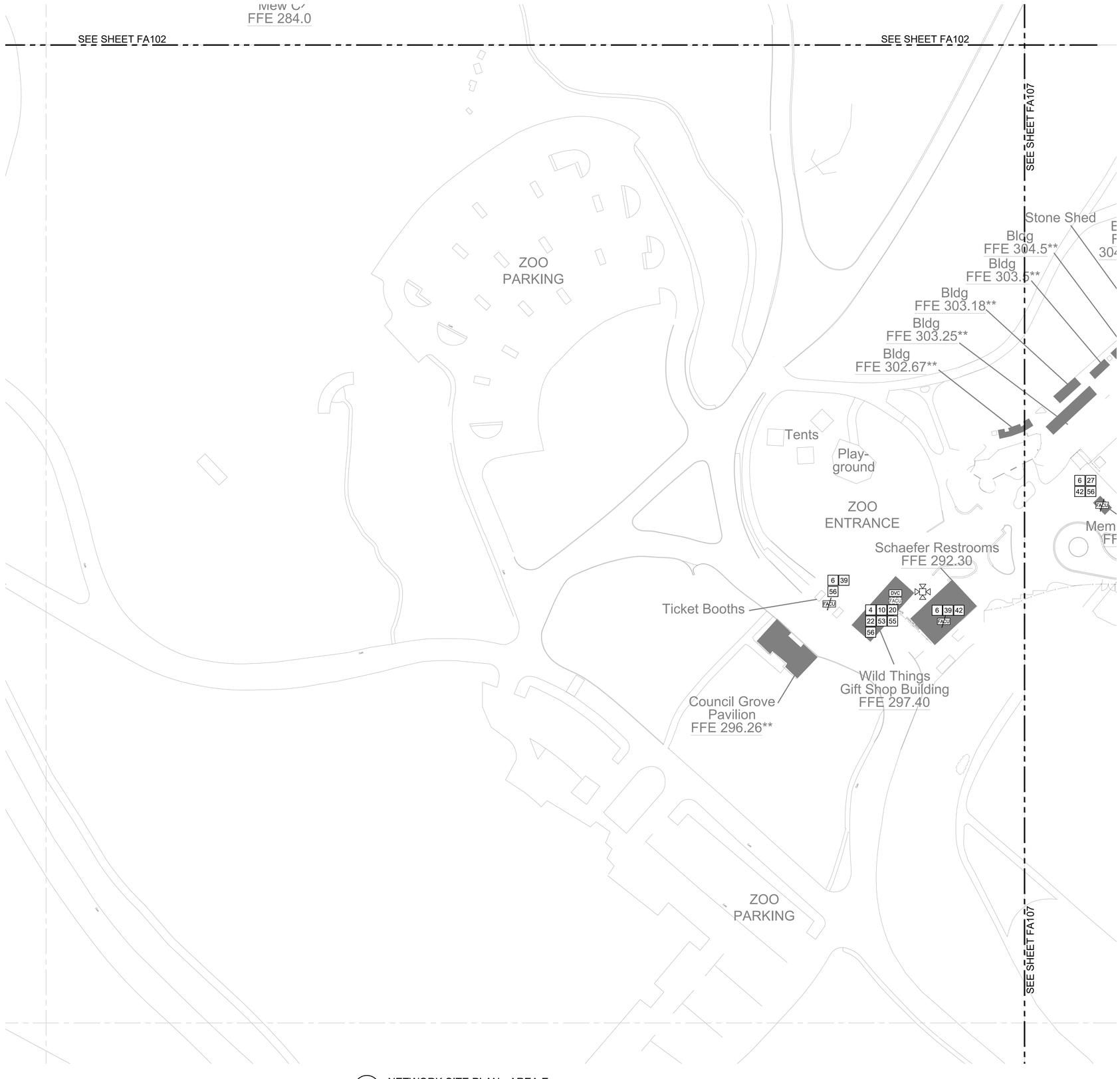
Drawing Title

NETWORK SITE PLAN - AREA D

Drawing No.

FA105

Sheet: 7 of 21



1 NETWORK SITE PLAN - AREA E
SCALE: 1" = 50'

GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND LEGEND.
2. REFER TO SHEET FA002 FOR FIRE ALARM NETWORK OVERVIEW.

SHEET NOTES X

4	EXISTING NOTIFIER NFS2-640 FIRE ALARM CONTROL UNIT TO REMAIN. CONNECT THE FACU TO THE FIBER OPTIC NETWORK.
6	EXISTING NOTIFIER NFW2-100 FIRE ALARM CONTROL UNIT TO BE DEMOLISHED.
10	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN BUILDING.
20	PROVIDE NEW DUCT SMOKE DETECTION THROUGHOUT THE BUILDING. DESIGN AND LAYOUT OF THE SYSTEM TO BE REVIEWED AND COMPLETED BY THE CONTRACTOR.
22	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN BUILDING.
39	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN WILD THINGS GIFT SHOP.
42	DEMOLISH THE EXISTING GREEN COLORED STROBE(S) FOR ANIMAL ESCAPE NOTIFICATION IN THIS LOCATION.
53	PROVIDE A HYPERSPIKE OUTDOOR HIGH-POWER SPEAKER ARRAY SYSTEM AT THIS LOCATION, IF BID OPTION 5 IN SPECIFICATION SECTION 00400 IS EXERCISED. HIGH-POWER SPEAKER ARRAY TO BE MOUNTED ADJACENT TO SPECIFIED BUILDING VIA NEW POLE SIZED PER THE MANUFACTURERS REQUIREMENTS/RECOMMENDATIONS. PROVIDE NEMA 3R RATED JUNCTION BOX AND RACEWAY TO AMPLIFIER AND SUPERVISORY CIRCUIT IN THE BUILDING. INSTALL IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
55	PROVIDE A NOTIFIER DVC AND HYPERSPIKE AMPLIFIER TO SUPPLY AUDIO SIGNAL TO THE HIGH-POWER SPEAKER ARRAY ADJACENT TO THE BUILDING, IF BID OPTION 5 IN SPECIFICATION SECTION 00400 IS EXERCISED.
56	EXISTING SINGLE MODE FIBER IN BULDING.

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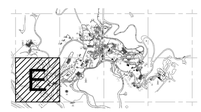


No.	Revision	Date

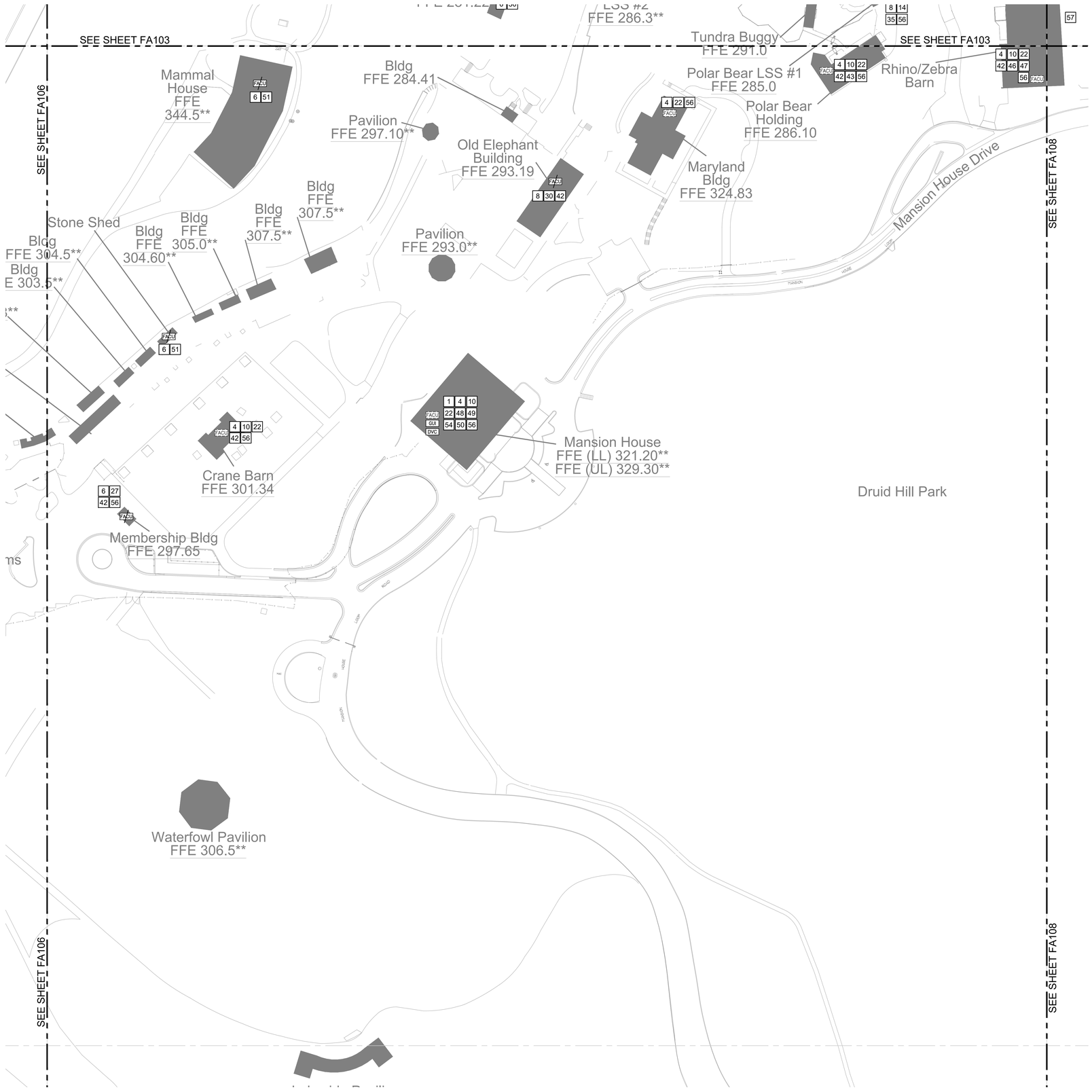
Graphics
Scale: Scale
0 50' 100'
1"=50'

Project Description
FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN
Location: 1876 Mansion House Drive Baltimore, MD 21217

Design
Design: GM
Drawn: DG
Review: WW
Date: FEBRUARY 15, 2022

Drawing Title
NETWORK SITE PLAN - AREA E

Drawing No.
FA106
Sheet: 8 of 21



1 NETWORK SITE PLAN - AREA F
SCALE: 1" = 50'

GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND LEGEND.
2. REFER TO SHEET FA002 FOR FIRE ALARM NETWORK OVERVIEW.

SHEET NOTES X

1	PROVIDE A NEW NOTIFIER ONYX WORKS GRAPHIC USER INTERFACE.
4	EXISTING NOTIFIER NFS2-640 FIRE ALARM CONTROL UNIT TO REMAIN. CONNECT THE FACU TO THE FIBER OPTIC NETWORK.
6	EXISTING NOTIFIER NFW2-100 FIRE ALARM CONTROL UNIT TO BE DEMOLISHED.
8	EXISTING NOTIFIER NFS2-640 FIRE ALARM CONTROL UNIT TO BE DEMOLISHED.
10	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN BUILDING.
22	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN BUILDING.
27	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN CRANE BARN.
30	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES TO BE FED FROM FACU IN MANSION HOUSE.
42	DEMOLISH THE EXISTING GREEN COLORED STROBE(S) FOR ANIMAL ESCAPE NOTIFICATION IN THIS LOCATION.
43	DEMOLISH THE EXISTING BLUE COLORED STROBE(S) FOR ANIMAL HABITAT OZONE LEVEL NOTIFICATION IN THIS LOCATION.
48	PROVIDE AN ENTERPIRSE-WIDE LICENSE OF DRMNS SERVER SOFTWARE AND INSTALL ON THE FIRE ALARM GRAPHIC USER INTERFACE, IF BID OPTION 2 IN SPECIFICATION SECTION 00400 IS EXERCISED.
49	PROVIDE DRMNS FIRE ALARM CONTROL PANEL INTEGRATION WITH THE NOTIFIER SYSTEM, IF BID OPTION 3 IN SPECIFICATION SECTION 00400 IS EXERCISED.
50	PROVIDE DRMNS TWO-WAY RADIO TEXT-TO-SPEECH (TTS) INTEGRATION AND CONFIGURATION WITH THE MOTOROLA CM300 RADIO SYSTEM, IF BID OPTION 4 IN SPECIFICATION SECTION 00400 IS EXERCISED.
51	DEMOLISH THE EXISTING FIRE ALARM SYSTEM IN THE BUILDING. BUILDING TO NO LONGER BE INCLUDED ON THE FIRE ALARM NETWORK.
54	PROVIDE A NOTIFIER DIGITAL VOICE COMMAND (DVC) FOR INTEGRATION WITH WIDE AREA MASS NOTIFICATION SYSTEM AND NETWORK WITH NOTIFIER NETWORK, IF BID OPTION 5 IN SPECIFICATION SECTION 00400 IS EXERCISED.
56	EXISTING SINGLE MODE FIBER IN BULDING.

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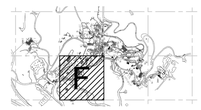


No.	Revision	Date

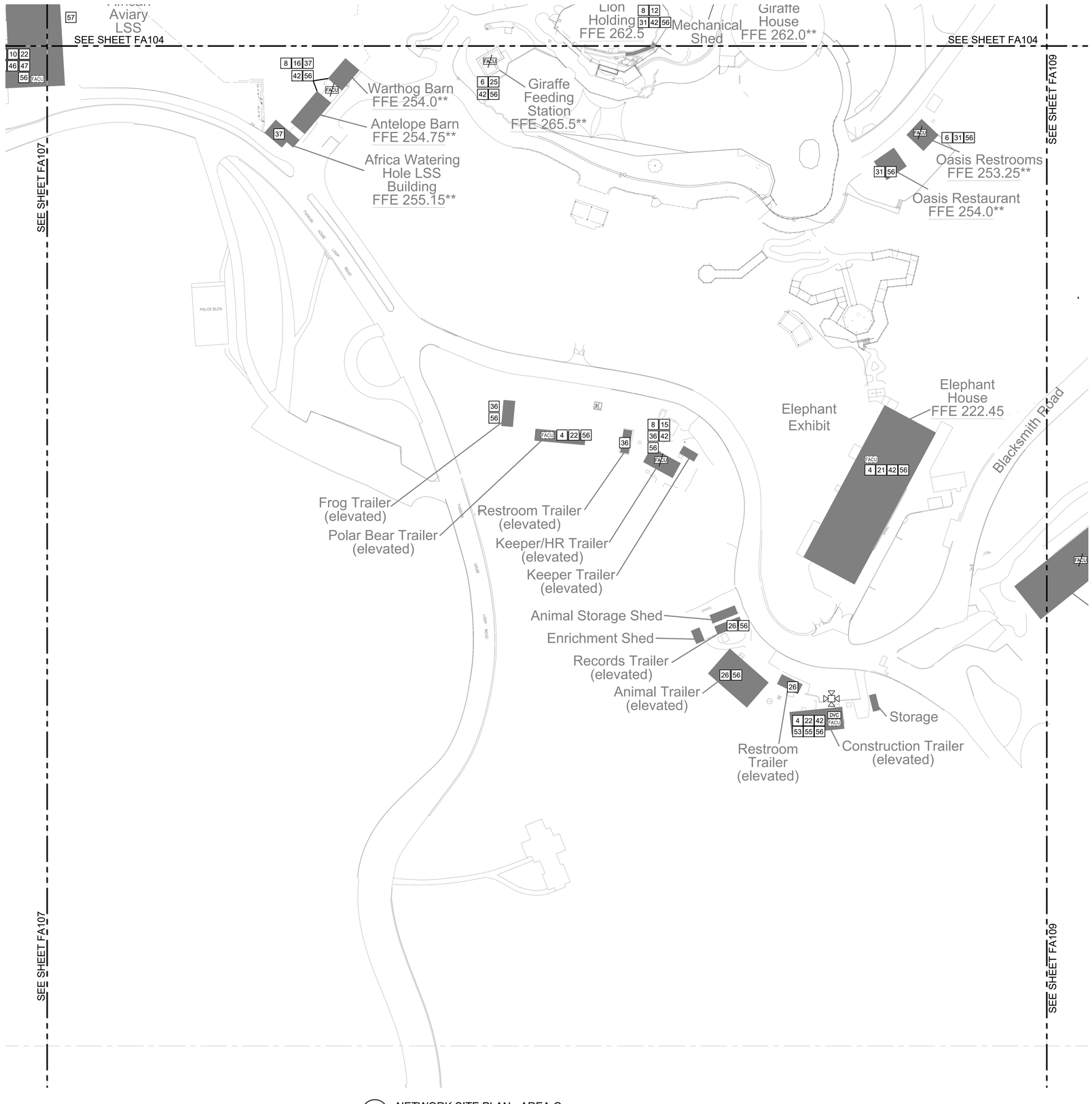
Graphics
Scale: Scale
0 50' 100'
1"=50'

Project Description
FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN
Location: 1876 Mansion House Drive Baltimore, MD 21217

Design
Design: GM
Drawn: DG
Review: WW
Date: FEBRUARY 15, 2022

Drawing Title
NETWORK SITE PLAN - AREA F

Drawing No.
FA107
Sheet: 9 of 21



1 NETWORK SITE PLAN - AREA G
SCALE: 1" = 50'

GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND LEGEND.
2. REFER TO SHEET FA002 FOR FIRE ALARM NETWORK OVERVIEW.

SHEET NOTES X

4	EXISTING NOTIFIER NFS2-640 FIRE ALARM CONTROL UNIT TO REMAIN. CONNECT THE FACU TO THE FIBER OPTIC NETWORK.
6	EXISTING NOTIFIER NFW2-100 FIRE ALARM CONTROL UNIT TO BE DEMOLISHED.
8	EXISTING NOTIFIER NFS2-640 FIRE ALARM CONTROL UNIT TO BE DEMOLISHED.
10	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN BUILDING.
15	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN POLAR BEAR TRAILER.
16	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN RHINO/ZEBRA BARN.
19	PROVIDE NEW HEAT DETECTION THROUGHOUT THE BUILDING. DESIGN AND LAYOUT OF THE SYSTEM TO BE REVIEWED AND COMPLETED BY THE CONTRACTOR.
21	EXISTING FIRE ALARM SYSTEM COMPONENTS (DEVICES, APPLIANCES, ETC.) TO REMAIN IN THIS BUILDING. INTERFACE WITH FACU IN THE BUILDING.
22	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN BUILDING.
25	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES TO BE FED FROM FACU IN CHIMPANZEE FOREST.
26	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN CONSTRUCTION TRAILER.
28	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES TO BE FED FROM FACU IN ELEPHANT HOUSE.
31	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN MECHANICAL SHED.
36	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES TO BE FED FROM FACU IN POLAR BEAR TRAILER.
37	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN RHINO/ZEBRA BARN.
42	DEMOLISH THE EXISTING GREEN COLORED STROBE(S) FOR ANIMAL ESCAPE NOTIFICATION IN THIS LOCATION.
46	EXISTING VERY EARLY WARNING SMOKE DETECTION SYSTEM (VESDA) TO REMAIN IN ZEBRA HOLDING. INTERFACE VESDA WITH FACU.
47	EXISTING VERY EARLY WARNING SMOKE DETECTION SYSTEM (FAAST) TO BE DEMOLISHED IN RHINO HOLDING. PROVIDE A NEW VERY EARLY WARNING AIR ASPIRATING SMOKE DETECTION SYSTEM (VESDA) IN THIS AREA. PROVIDE ALL COMPONENTS (HEAD-END, SAMPLING POINTS, PIPING, ETC.) NECESSARY FOR A FULLY FUNTIONAL SYSTEM. DESIGN AND LAYOUT OF THE SYSTEM TO BE REVIEWED AND COMPLETED BY THE CONTRACTOR. INTERFACE VESDA WITH FACU.
53	PROVIDE A HYPERSPIKE OUTDOOR HIGH-POWER SPEAKER ARRAY SYSTEM AT THIS LOCATION, IF BID OPTION 5 IN SPECIFICATION SECTION 00400 IS EXERCISED. HIGH-POWER SPEAKER ARRAY TO BE MOUNTED ADJACENT TO SPECIFIED BUILDING VIA NEW POLE SIZED PER THE MANUFACTURERS REQUIREMENTS/RECOMMENDATIONS. PROVIDE NEMA 3R RATED JUNCTION BOX AND RACEWAY TO AMPLIFIER AND SUPERVISORY CIRCUIT IN THE BUILDING. INSTALL IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
55	PROVIDE A NOTIFIER DVC AND HYPERSPIKE AMPLIFIER TO SUPPLY AUDIO SIGNAL TO THE HIGH-POWER SPEAKER ARRAY ADJACENT TO THE BUILDING, IF BID OPTION 5 IN SPECIFICATION SECTION 00400 IS EXERCISED.
56	EXISTING SINGLE MODE FIBER IN BULDING.

ISSUE FOR BID

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No.	Revision	Date

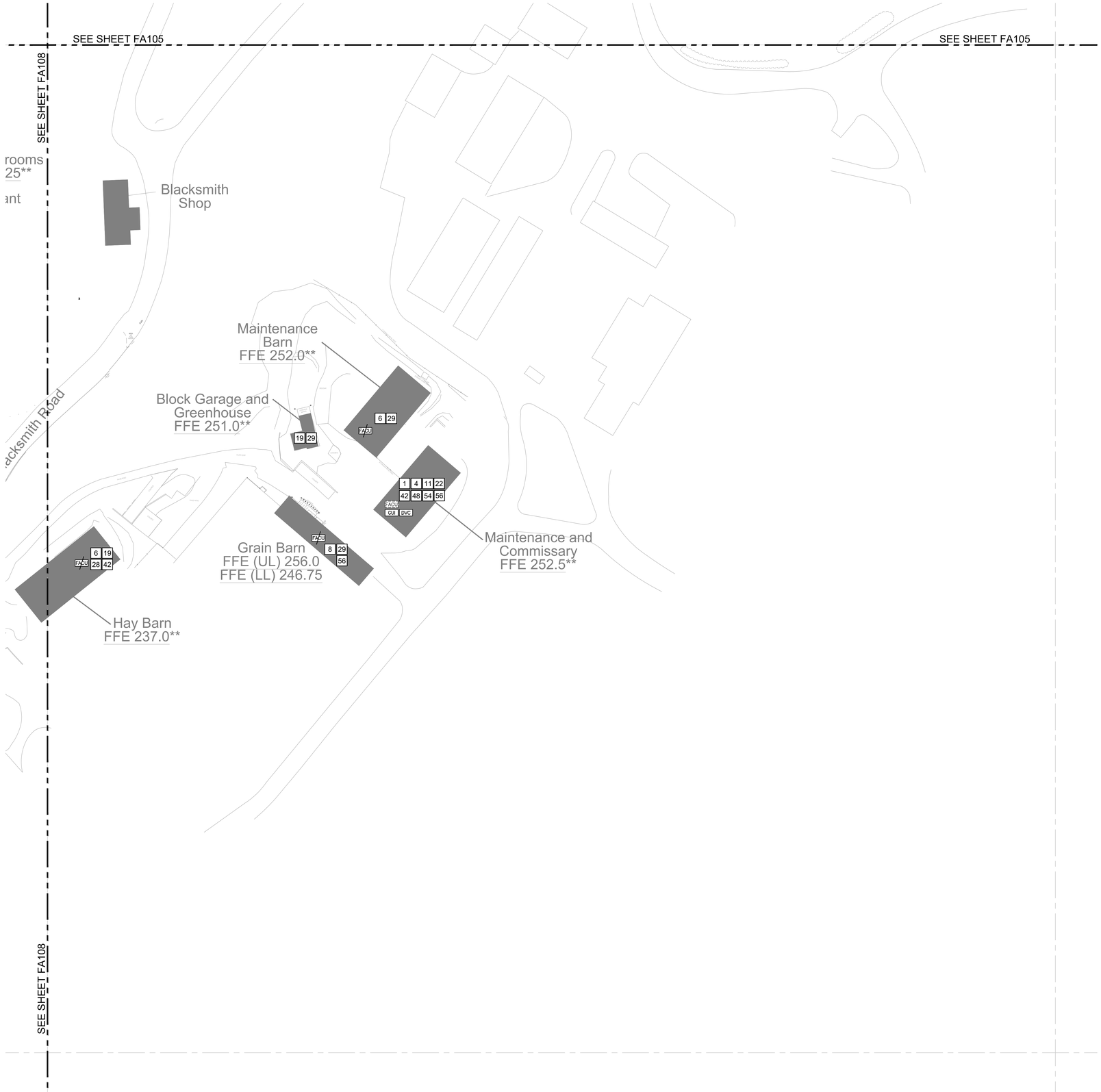
Graphics
Scale: Scale
0 50' 100'
1"=50'

Project Description
FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN
Location: 1876 Mansion House Drive Baltimore, MD 21217

Design
Design: GM
Drawn: DG
Review: WW
Date: FEBRUARY 15, 2022

Drawing Title
NETWORK SITE PLAN - AREA G

Drawing No.
FA108
Sheet: 10 of 21



1 NETWORK SITE PLAN - AREA H
SCALE: 1" = 50'

GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND LEGEND.
2. REFER TO SHEET FA002 FOR FIRE ALARM NETWORK OVERVIEW.
3. DEMOLISH EXISTING VESDA LASER PLUS SYSTEM IN THE HAY BARN.

SHEET NOTES X

1	PROVIDE A NEW NOTIFIER ONYX WORKS GRAPHIC USER INTERFACE.
4	EXISTING NOTIFIER NFS2-640 FIRE ALARM CONTROL UNIT TO REMAIN. CONNECT THE FACU TO THE FIBER OPTIC NETWORK.
6	EXISTING NOTIFIER NFW2-100 FIRE ALARM CONTROL UNIT TO BE DEMOLISHED.
8	EXISTING NOTIFIER NFS2-640 FIRE ALARM CONTROL UNIT TO BE DEMOLISHED.
11	EXISTING VOICE EVACUATION ALARM PANEL TO REMAIN. INTERFACE WITH FACU IN MAINTENANCE AND COMMISSARY.
19	PROVIDE NEW HEAT DETECTION THROUGHOUT THE BUILDING. DESIGN AND LAYOUT OF THE SYSTEM TO BE REVIEWED AND COMPLETED BY THE CONTRACTOR.
22	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN BUILDING.
28	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES TO BE FED FROM FACU IN ELEPHANT HOUSE.
29	EXISTING DEVICES TO BE DEMOLISHED AND REPLACED IN KIND. NEW DEVICES FED FROM FACU IN MAINTENANCE AND COMMISSARY.
42	DEMOLISH THE EXISTING GREEN COLORED STROBE(S) FOR ANIMAL ESCAPE NOTIFICATION IN THIS LOCATION.
48	PROVIDE AN ENTERPIRSE-WIDE LICENSE OF DRMNS SERVER SOFTWARE AND INSTALL ON THE FIRE ALARM GRAPHIC USER INTERFACE, IF BID OPTION 2 IN SPECIFICATION SECTION 00400 IS EXERCISED.
54	PROVIDE A NOTIFIER DIGITAL VOICE COMMAND (DVC) FOR INTEGRATION WITH WIDE AREA MASS NOTIFICATION SYSTEM AND NETWORK WITH NOTIFIER NETWORK, IF BID OPTION 5 IN SPECIFICATION SECTION 00400 IS EXERCISED.
56	EXISTING SINGLE MODE FIBER IN BULDING.

ISSUE FOR BID

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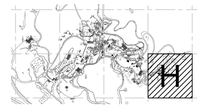

No.	Revision	Date

Graphics
Scale: Scale
0 50' 100'
1"=50'

Project Description
FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN
Location: 1876 Mansion House Drive Baltimore, MD 21217

Design
Design: GM
Drawn: DG
Review: WW
Date: FEBRUARY 15, 2022

Drawing Title
NETWORK SITE PLAN - AREA H

Drawing No.
FA109
Sheet: 11 of 21

1 OVERALL NETWORK SITE PLAN

SCALE: 1" = 150'

ISSUE FOR BID

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A B C D E F G H

No.	Revision	Date

Graphics

Scale: Scale

0 150' 300'
1"=150'

Project Description

FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN

Location: 1876 Mansion House Drive Baltimore, MD 21217

Design

Design: GM
Drawn: DG
Review: WW
Date: FEBRUARY 15, 2022

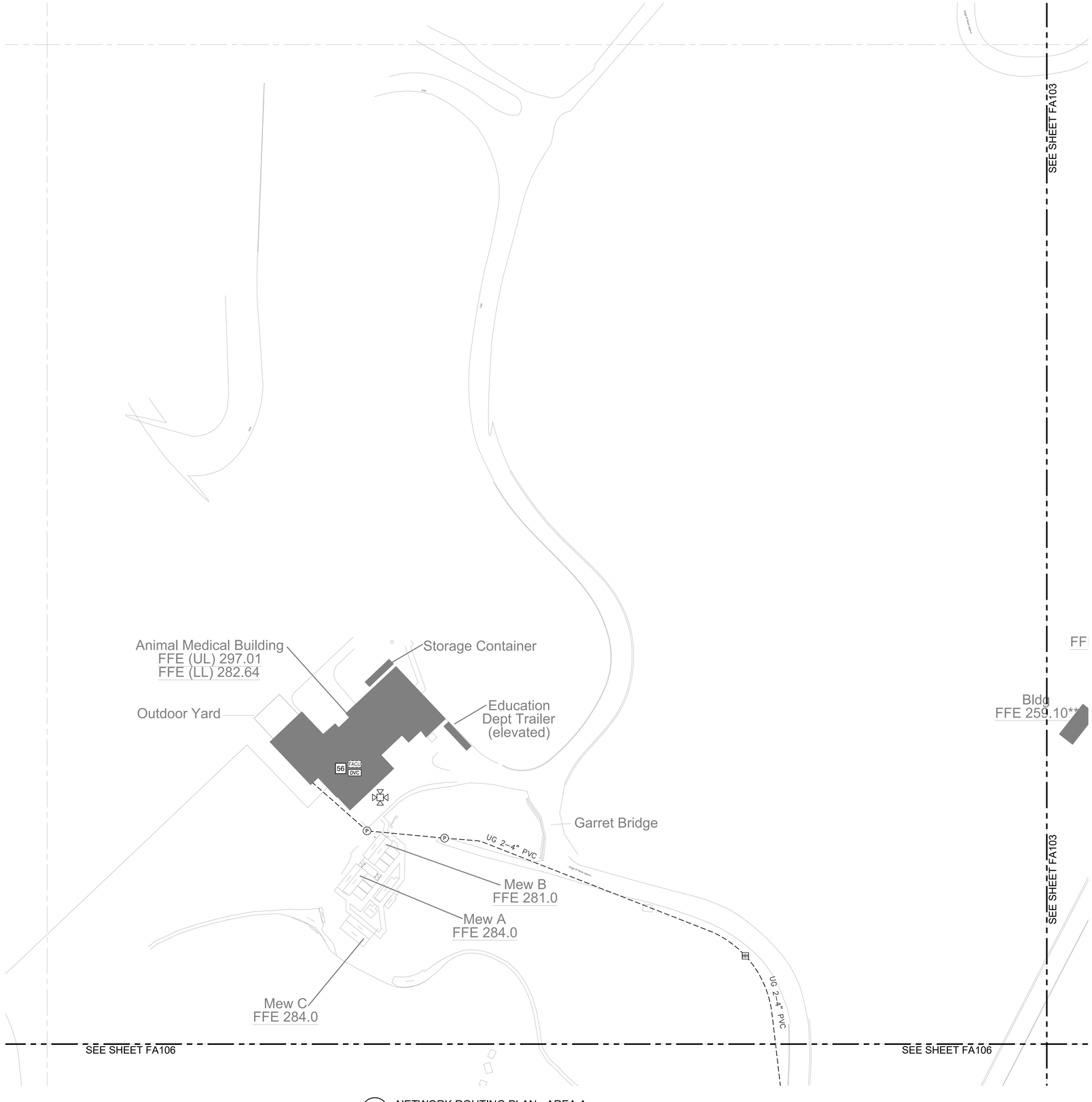
Drawing Title

OVERALL NETWORK SITE PLAN

Drawing No.

FA110

Sheet: 12 of 21



1 NETWORK ROUTING PLAN - AREA A
SCALE: 1" = 50'

GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND LEGEND.
2. REFER TO SHEET FA002 FOR FIRE ALARM NETWORK OVERVIEW.

SHEET NOTES X

56	EXISTING SINGLE MODE FIBER IN BULDING.

ISSUE FOR BID

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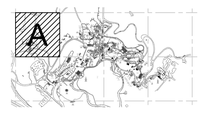


No.	Revision	Date

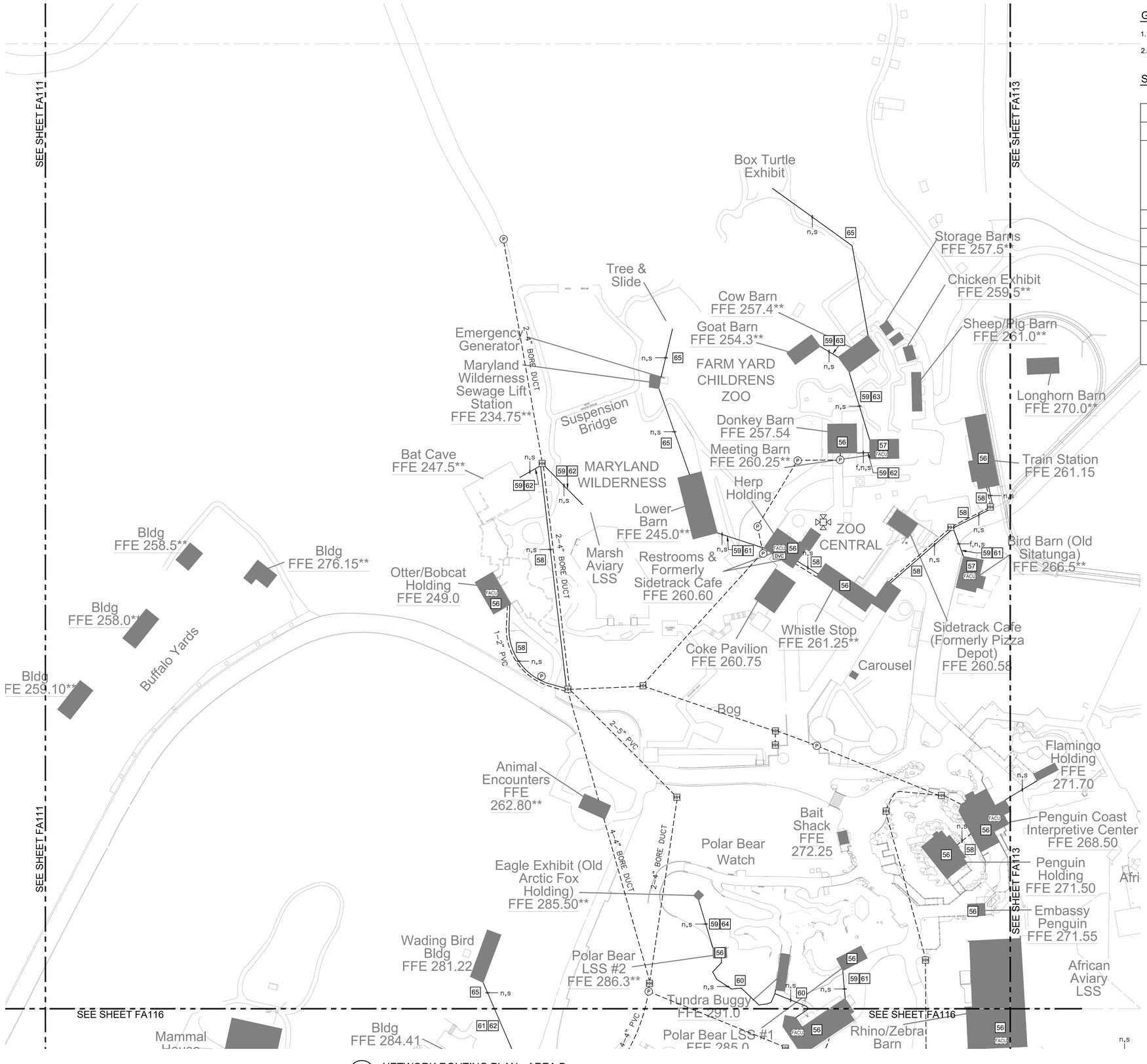
Graphics
Scale: Scale
0 50' 100'
1"=50'

Project Description
FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN
Location: 1876 Mansion House Drive Baltimore, MD 21217

Design
Design: GM
Drawn: DG
Review: WW
Date: FEBRUARY 15, 2022

Drawing Title
NETWORK ROUTING PLAN - AREA A

Drawing No.
FA111
Sheet: 13 of 21



1 NETWORK ROUTING PLAN - AREA B

SCALE: 1" = 50'

GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND LEGEND.
2. REFER TO SHEET FA002 FOR FIRE ALARM NETWORK OVERVIEW.

SHEET NOTES X

56	EXISTING SINGLE MODE FIBER IN BULDING.
57	PROVIDE NEW SINGLE MODE FIBER IN BUILDING.
58	PULL SPECIFIED CABLES/CIRCUITS THROUGH EXISTING UNDERGROUND INFRASTRUCTURE. SPARE CAPACITY WITHIN EXISTING UNDERGROUND INFRASTRUCTURE HAS NOT BEEN FULLY VERIFIED. PROVIDE BID ALTERNATE PRICE FOR TRENCHING AND RUNNING UNDERGROUND IN SCHEDULE 80 RIGID PVC SHOULD IT BE DETERMINED THAT SPARE CAPACITY IS NOT AVAILABLE.
59	RUN CABLES/CIRCUITS SPECIFIED UNDERGROUND IN SCHEDULE 80 RIGID PVC CONDUIT.
60	RUN CABLES/CIRCUITS SPECIFIED ALONG FENCELINE IN SCHEDULE 80 RIGID PVC CONDUIT.
61	TRENCHING THROUGH ASPHALT REQUIRED AT THIS LOCATION.
62	TRENCHING THROUGH CONCRETE REQUIRED AT THIS LOCATION.
63	TRENCHING THROUGH GRAVEL REQUIRED AT THIS LOCATION.
64	TRENCHING THROUGH SOIL/LANDSCAPE REQUIRED AT THIS LOCATION.
65	EXTEND CABLES/CIRCUITS SPECIFIED VIA TRENCHING AND RUNNING UNDERGROUND IN SCHEDULE 80 RIGID PVC CONDUIT. COORDINATE INSTALLATION OF THE APPROVED OPTION WITH THE MZB.

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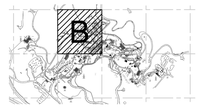

No.	Revision	Date

Graphics — Scale: Scale (0, 50', 100'; 1"=50')

Project Description — FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN

Location: 1876 Mansion House Drive, Baltimore, MD 21217

Design — Design: GM; Drawn: DG; Review: WW; Date: FEBRUARY 15, 2022

Drawing Title — NETWORK ROUTING PLAN - AREA B

Drawing No. — FA112

Sheet: 14 of 21

1 NETWORK ROUTING PLAN - AREA C

SCALE: 1" = 50'

GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND LEGEND.
2. REFER TO SHEET FA002 FOR FIRE ALARM NETWORK OVERVIEW.

SHEET NOTES X

56	EXISTING SINGLE MODE FIBER IN BULDING.
58	PULL SPECIFIED CABLES/CIRCUITS THROUGH EXISTING UNDERGROUND INFRASTRUCTURE. SPARE CAPACITY WITHIN EXISTING UNDERGROUND INFRASTRUCTURE HAS NOT BEEN FULLY VERIFIED. PROVIDE BID ALTERNATE PRICE FOR TRENCHING AND RUNNING UNDERGROUND IN SCHEDULE 80 RIGID PVC SHOULD IT BE DETERMINED THAT SPARE CAPACITY IS NOT AVAILABLE.
59	RUN CABLES/CIRCUITS SPECIFIED UNDERGROUND IN SCHEDULE 80 RIGID PVC CONDUIT.
62	TRENCHING THROUGH CONCRETE REQUIRED AT THIS LOCATION.
64	TRENCHING THROUGH SOIL/LANDSCAPE REQUIRED AT THIS LOCATION.

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No.	Revision	Date

Graphics

Scale: Scale

0 50' 100'
1"=50'

Project Description

FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN

Location: 1876 Mansion House Drive Baltimore, MD 21217

Design

Design: GM
Drawn: DG
Review: WW
Date: FEBRUARY 15, 2022

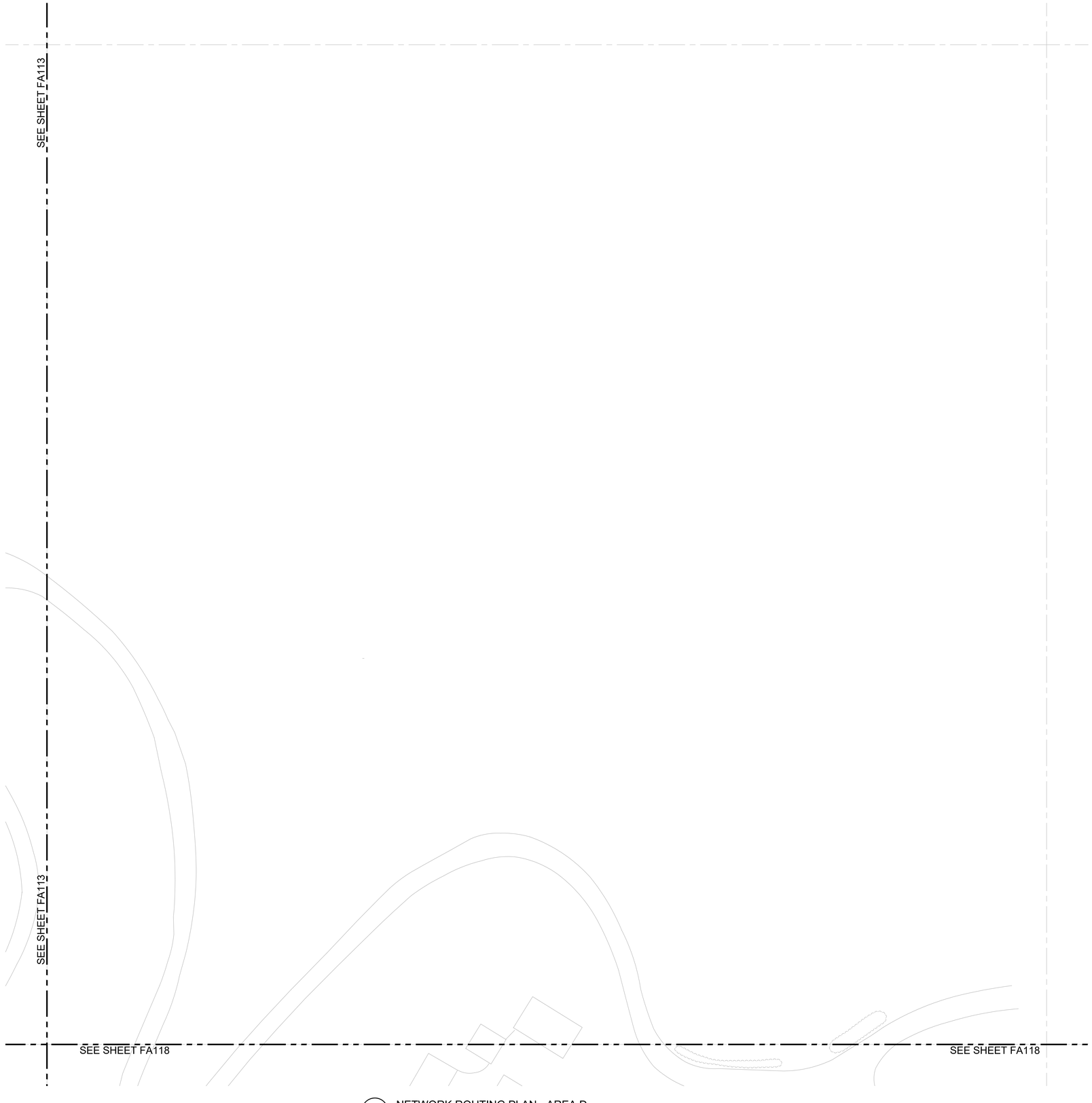
Drawing Title

NETWORK ROUTING PLAN - AREA C

Drawing No.

FA113

Sheet: 15 of 21



1 NETWORK ROUTING PLAN - AREA D
SCALE: 1" = 50'

GENERAL NOTES

1. NO NEW WORK IN THE SCOPE OF THE PROJECT IN THIS AREA.

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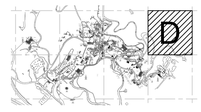

No.	Revision	Date

Graphics

Scale: Scale

0 50' 100'
1"=50'

Project Description

FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN

Location: 1876 Mansion House Drive Baltimore, MD 21217

Design

Design: GM
Drawn: DG
Review: WW
Date: FEBRUARY 15, 2022

Drawing Title

NETWORK ROUTING PLAN - AREA D

Drawing No.

FA114

Sheet: 16 of 21

1 NETWORK ROUTING PLAN - AREA E
SCALE: 1" = 50'

GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND LEGEND.
2. REFER TO SHEET FA002 FOR FIRE ALARM NETWORK OVERVIEW.

SHEET NOTES X

56	EXISTING SINGLE MODE FIBER IN BULDING.
58	PULL SPECIFIED CABLES/CIRCUITS THROUGH EXISTING UNDERGROUND INFRASTRUCTURE. SPARE CAPACITY WITHIN EXISTING UNDERGROUND INFRASTRUCTURE HAS NOT BEEN FULLY VERIFIED. PROVIDE BID ALTERNATE PRICE FOR TRENCHING AND RUNNING UNDERGROUND IN SCHEDULE 80 RIGID PVC SHOULD IT BE DETERMINED THAT SPARE CAPACITY IS NOT AVAILABLE.
59	RUN CABLES/CIRCUITS SPECIFIED UNDERGROUND IN SCHEDULE 80 RIGID PVC CONDUIT.
62	TRENCHING THROUGH CONCRETE REQUIRED AT THIS LOCATION.

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No.	Revision	Date

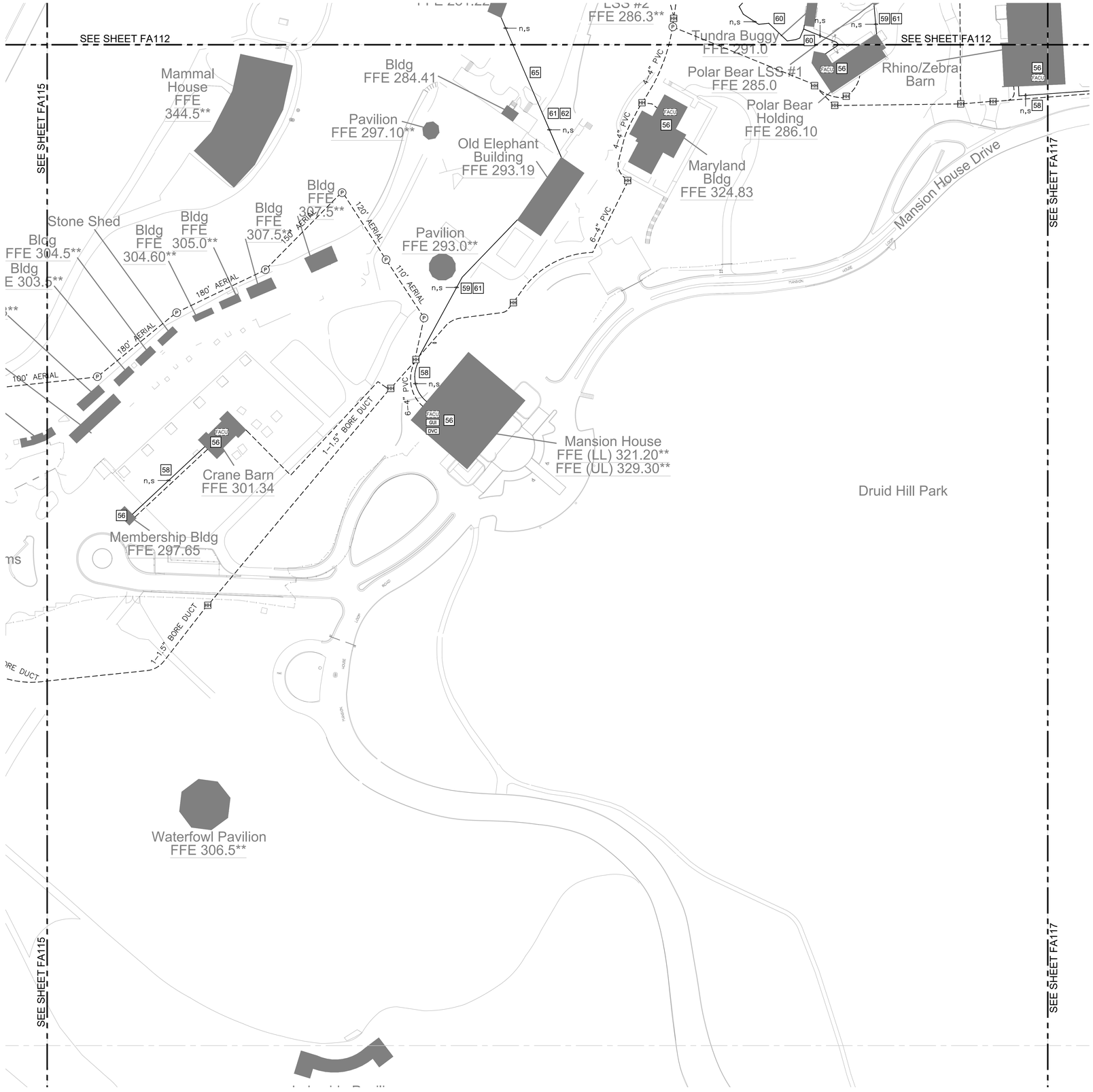
Graphics
Scale: Scale
0 50' 100'
1"=50'

Project Description
FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN
Location: 1876 Mansion House Drive Baltimore, MD 21217

Design
Design: GM
Drawn: DG
Review: WW
Date: FEBRUARY 15, 2022

Drawing Title
NETWORK ROUTING PLAN - AREA E

Drawing No.
FA115
Sheet: 17 of 21



1 NETWORK ROUTING PLAN - AREA F

SCALE: 1" = 50'

GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND LEGEND.
2. REFER TO SHEET FA002 FOR FIRE ALARM NETWORK OVERVIEW.

SHEET NOTES X

56	EXISTING SINGLE MODE FIBER IN BULDING.
58	PULL SPECIFIED CABLES/CIRCUITS THROUGH EXISTING UNDERGROUND INFRASTRUCTURE. SPARE CAPACITY WITHIN EXISTING UNDERGROUND INFRASTRUCTURE HAS NOT BEEN FULLY VERIFIED. PROVIDE BID ALTERNATE PRICE FOR TRENCHING AND RUNNING UNDERGROUND IN SCHEDULE 80 RIGID PVC SHOULD IT BE DETERMINED THAT SPARE CAPACITY IS NOT AVAILABLE.
59	RUN CABLES/CIRCUITS SPECIFIED UNDERGROUND IN SCHEDULE 80 RIGID PVC CONDUIT.
60	RUN CABLES/CIRCUITS SPECIFIED ALONG FENCELINE IN SCHEDULE 80 RIGID PVC CONDUIT.
61	TRENCHING THROUGH ASPHALT REQUIRED AT THIS LOCATION.
62	TRENCHING THROUGH CONCRETE REQUIRED AT THIS LOCATION.
65	EXTEND CABLES/CIRCUITS SPECIFIED VIA TRENCHING AND RUNNING UNDERGROUND IN SCHEDULE 80 RIGID PVC CONDUIT. COORDINATE INSTALLATION OF THE APPROVED OPTION WITH THE MZB.

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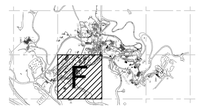

No.	Revision	Date

Graphics

Scale: Scale

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1"=50'

Project Description

FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN

Location: 1876 Mansion House Drive Baltimore, MD 21217

Design

Design: GM
Drawn: DG
Review: WW
Date: FEBRUARY 15, 2022

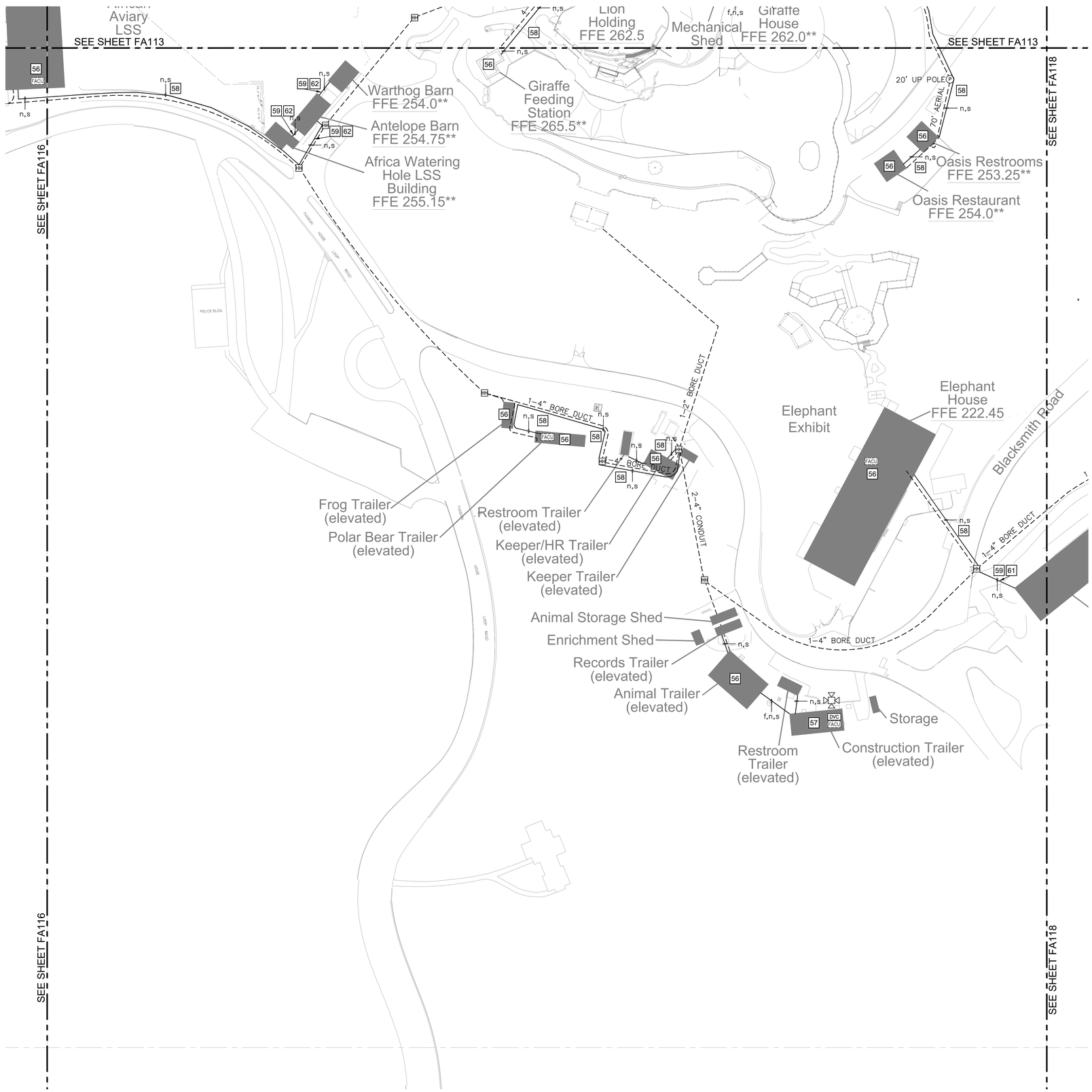
Drawing Title

NETWORK ROUTING PLAN - AREA F

Drawing No.

FA116

Sheet: 18 of 21



1 NETWORK ROUTING PLAN - AREA G
SCALE: 1" = 50'

GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND LEGEND.
2. REFER TO SHEET FA002 FOR FIRE ALARM NETWORK OVERVIEW.

SHEET NOTES X

56	EXISTING SINGLE MODE FIBER IN BULDING.
57	PROVIDE NEW SINGLE MODE FIBER IN BUILDING.
58	PULL SPECIFIED CABLES/CIRCUITS THROUGH EXISTING UNDERGROUND INFRASTRUCTURE. SPARE CAPACITY WITHIN EXISTING UNDERGROUND INFRASTRUCTURE HAS NOT BEEN FULLY VERIFIED. PROVIDE BID ALTERNATE PRICE FOR TRENCHING AND RUNNING UNDERGROUND IN SCHEDULE 80 RIGID PVC SHOULD IT BE DETERMINED THAT SPARE CAPACITY IS NOT AVAILABLE.
59	RUN CABLES/CIRCUITS SPECIFIED UNDERGROUND IN SCHEDULE 80 RIGID PVC CONDUIT.
61	TRENCHING THROUGH ASPHALT REQUIRED AT THIS LOCATION.
62	TRENCHING THROUGH CONCRETE REQUIRED AT THIS LOCATION.

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No.	Revision	Date

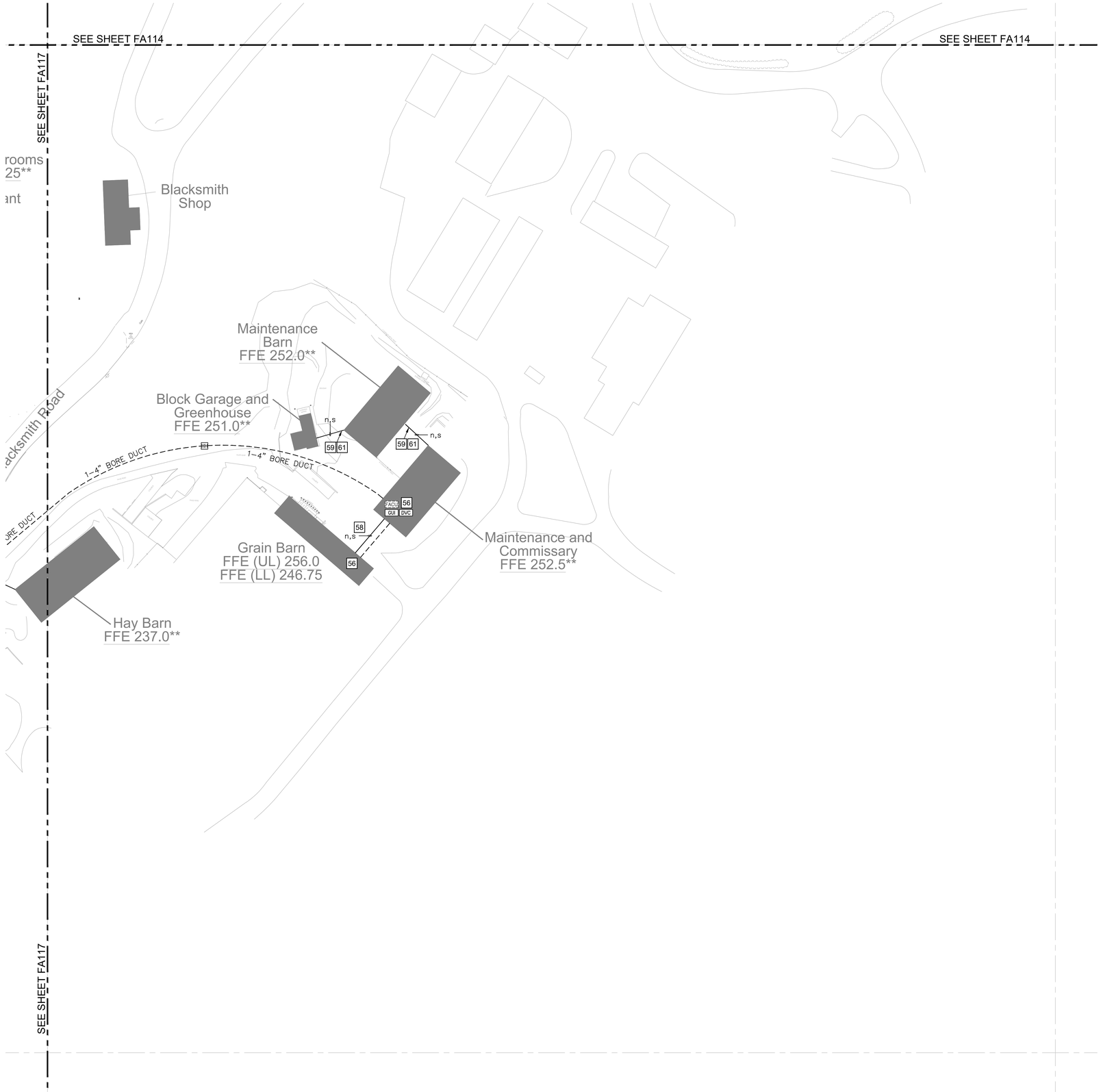
Graphics
Scale: Scale
0 50' 100'
1"=50'

Project Description
FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN
Location: 1876 Mansion House Drive Baltimore, MD 21217

Design
Design: GM
Drawn: DG
Review: WW
Date: FEBRUARY 15, 2022

Drawing Title
NETWORK ROUTING PLAN - AREA G

Drawing No.
FA117
Sheet: 19 of 21



1 NETWORK ROUTING PLAN - AREA H

SCALE: 1" = 50'

GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND LEGEND.
2. REFER TO SHEET FA002 FOR FIRE ALARM NETWORK OVERVIEW.

SHEET NOTES X

56	EXISTING SINGLE MODE FIBER IN BULDING.
58	PULL SPECIFIED CABLES/CIRCUITS THROUGH EXISTING UNDERGROUND INFRASTRUCTURE. SPARE CAPACITY WITHIN EXISTING UNDERGROUND INFRASTRUCTURE HAS NOT BEEN FULLY VERIFIED. PROVIDE BID ALTERNATE PRICE FOR TRENCHING AND RUNNING UNDERGROUND IN SCHEDULE 80 RIGID PVC SHOULD IT BE DETERMINED THAT SPARE CAPACITY IS NOT AVAILABLE.
59	RUN CABLES/CIRCUITS SPECIFIED UNDERGROUND IN SCHEDULE 80 RIGID PVC CONDUIT.
61	TRENCHING THROUGH ASPHALT REQUIRED AT THIS LOCATION.

ISSUE FOR BID

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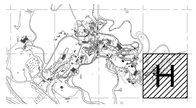

No.	Revision	Date

Graphics

Scale: Scale

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1"=50'

Project Description

FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN

Location: 1876 Mansion House Drive Baltimore, MD 21217

Design

Design: GM
Drawn: DG
Review: WW
Date: FEBRUARY 15, 2022

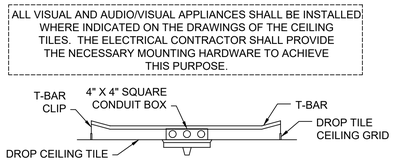
Drawing Title

NETWORK ROUTING PLAN - AREA H

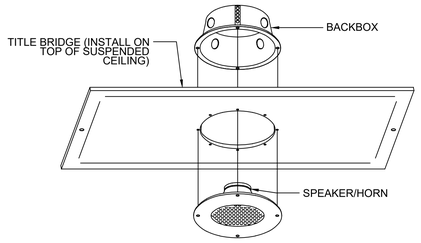
Drawing No.

FA118

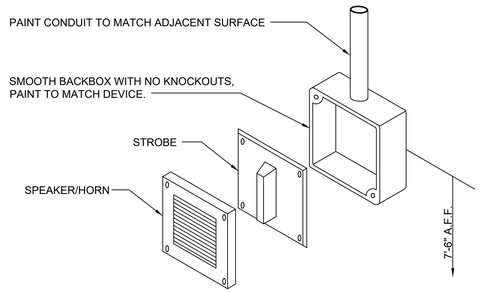
Sheet: 20 of 21



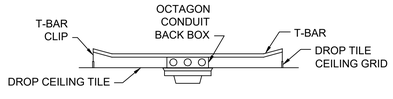
1 FA500 CEILING VISUAL AND AUDIO/VISUAL APPLIANCE MOUNTING DETAIL
N.T.S.



2 FA500 CEILING AUDIO APPLIANCE MOUNTING DETAIL
N.T.S.



3 FA500 WALL VISUAL AND AUDIO/VISUAL APPLIANCE SURFACE MOUNTING DETAIL
N.T.S.



4 FA500 SMOKE AND HEAT DETECTOR FLUSH MOUNT DETAIL
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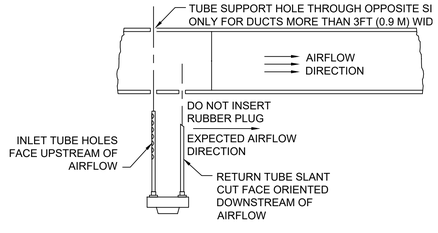

5 FA500 DUCT SMOKE DETECTOR INSTALLATION DETAIL
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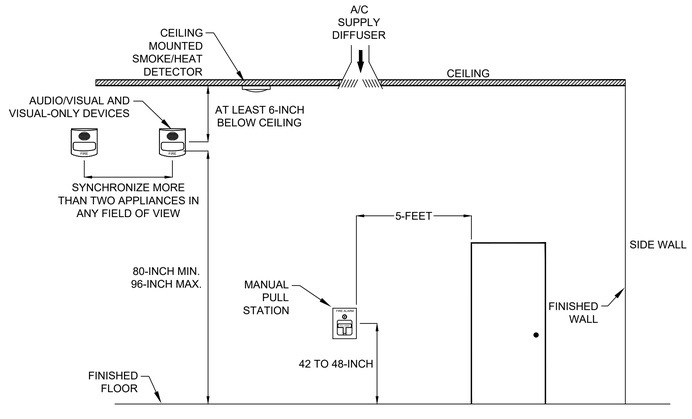

6 FA500 TYPICAL DEVICE MOUNTING DETAIL
N.T.S.

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No.	Revision	Date

Graphics — Scale: AS NOTED

Project Description — **FIRE ALARM MONITORING NETWORK REPLACEMENT CONCEPTUAL DESIGN**

Location: 1876 Mansion House Drive, Baltimore, MD 21217

Design — Design: GM; Drawn: DG; Review: WW; Date: FEBRUARY 15, 2022

Drawing Title — **DETAILS**

Drawing No. — FA500

Sheet: 12 of 21