

PROJECT # 583-15-102  
INSTALL PRIMARY AND EMERGENCY POWER SYSTEMS

1481 WEST 10TH STREET, BUILDING 22  
INDIANAPOLIS, INDIANA 46202

100% BID DOCUMENTS FOR CONSTRUCTION 09/23/2016

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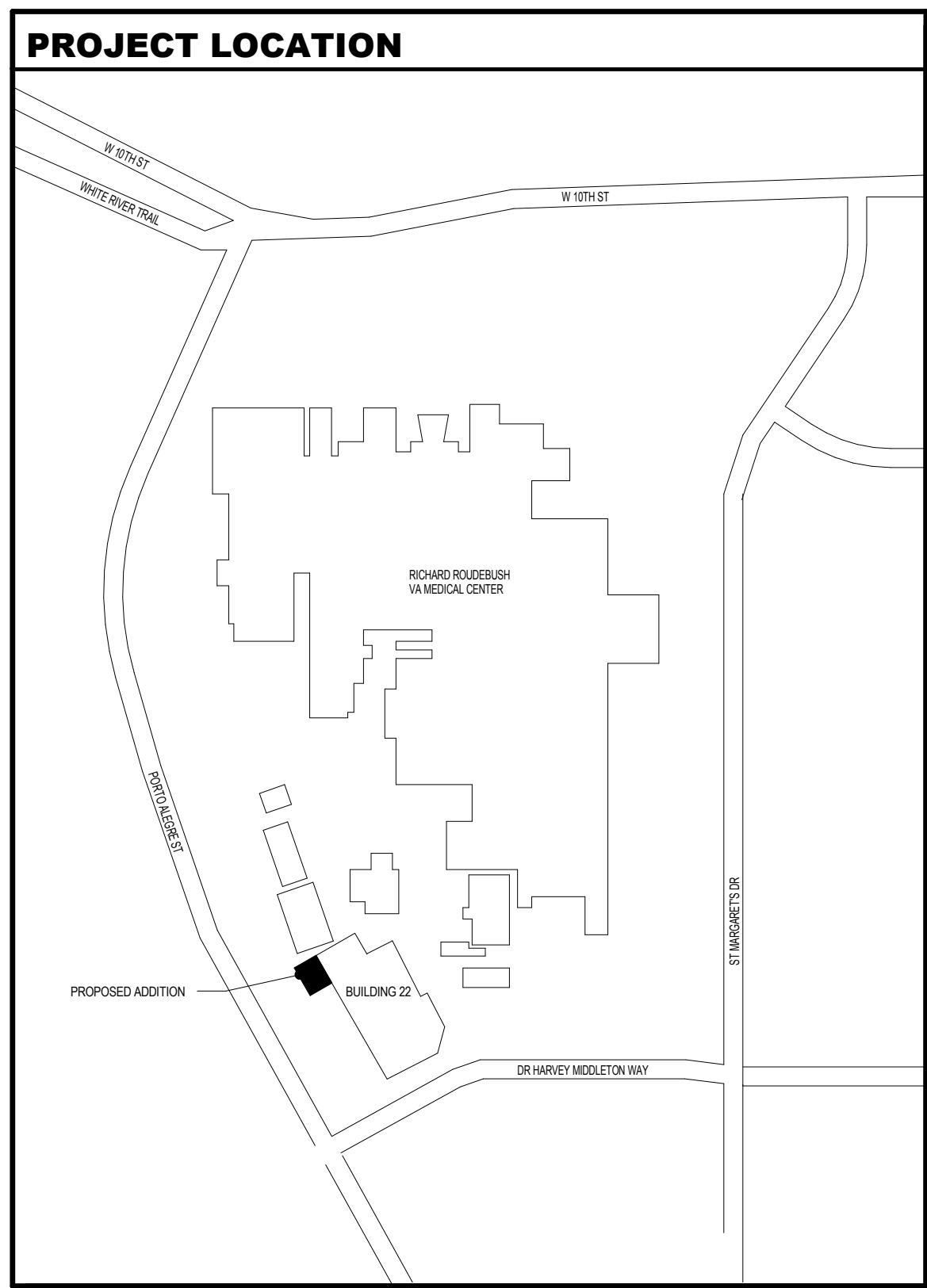
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SHEET INDEX		
Drawing Category	Sheet Number	Sheet Name
Index	TS 1.1	PROJECT COVER SHEET
Civil	CC001	GENERAL NOTES
Civil	CD101	DEMOLITION PLAN
Civil	CS101	SITE PLAN
Civil	CS501	SITE AND EROSION CONTROL DETAILS
Civil	CG101	GRADING PLAN
Civil	CU101	UTILITY PLAN
Civil	CU102	UTILITY PLAN
Civil	CU501	UTILITY DETAILS
Structure	S001	STRUCTURAL NOTES
Structure	S101	STRUCTURAL FOUNDATION PLAN
Structure	S102	STRUCTURAL FRAMING PLAN
Architectural	AS001	GENERAL PROJECT NOTES / DOOR SCHEDULE / DETAILS
Architectural	AS002	CODE SUMMARY FOR VA INDIANAPOLIS
Architectural	AS101	FIRST FLOOR & ROOF DEMOLITION PLAN
Architectural	AS121	FIRST FLOOR PLAN
Architectural	AS122	REFLECTED CEILING PLAN
Architectural	AS123	ROOF PLAN
Architectural	AS221	EXTERIOR ELEVATIONS
Architectural	AS321	BUILDING SECTIONS
Architectural	AS501	WALL SECTIONS
Architectural	AS502	DETAILS
Mechanical	MD101	FIRST FLOOR PLAN - MECHANICAL DEMOLITION
Mechanical	ME101	MECHANICAL / ELECTRICAL SCHEDULES
Mechanical	MH000	MECHANICAL SYMBOLS & ABBREVIATIONS
Mechanical	MH101	FIRST FLOOR PLAN - MECHANICAL
Mechanical	MH201	MECHANICAL DETAILS
Mechanical	MP101	FIRST FLOOR PLAN - MECHANICAL PIPING
Mechanical	MS101	SITE PLAN - MECHANICAL
Mechanical	PS101	FIRST FLOOR PLAN - PLUMBING
Electrical	E001	ELECTRICAL LEGENDS AND NOTES
Electrical	E002	ELECTRICAL LEGENDS AND NOTES
Electrical	E003	ELECTRICAL ABBREVIATIONS
Electrical	ED101	MAIN LEVEL ELECTRICAL DEMOLITION PLAN
Electrical	EL101	MAIN LEVEL LIGHTING PLAN
Electrical	EP101	MAIN LEVEL POWER PLAN
Electrical	ES101	SITE ELECTRICAL PLAN
Electrical	E601	BUILDING 22 ELECTRICAL ONE-LINE DIAGRAM
Electrical	E602	BUILDING 22 ELECTRICAL SCHEDULES AND DETAILS
Fire Suppression	FS001	FIRE SUPPRESSION GENERAL NOTES AND DETAILS
Fire Suppression	FS100	FIRST FLOOR FIRE SUPPRESSION PLAN
Grand total: 41		



**DO NOT SCALE DRAWINGS**

DO NOT SCALE DRAWINGS; ALWAYS REFER TO PROVIDED DIMENSIONS. PROJECT MEASUREMENTS NOT TAKEN DIRECTLY FROM PROVIDED DIMENSIONS SUBJECT CONTRACTOR TO LIABILITY FOR ANY RESULTANT ERRORS.

IT IS THE INTENT OF THE ARCHITECTURAL DRAWINGS TO INCLUDE INFORMATION NECESSARY FOR THE COMPLETION OF THE PROJECT. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO INQUIRE AS TO THE INTENT OF THE DRAWINGS IN AREAS IN QUESTION OF MEANING AND INTENT.

GENERAL CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS OF CONSTRUCTION AND SHALL CONSTRUCT WORK IN COMPLIANCE TO ALL APPLICABLE BUILDING CODES AND ORDINANCES.

**APPROVALS AND SIGNATURES**

**CLIENT APPROVAL**

\_\_\_\_\_  
I approve these drawings for 100% Bid Documents.

<div>100% BID DOCUMENTS FOR CONSTRUCTION 09/23/2016</div> <div>Revisions: _____ Date: _____</div>		<div>DEVELOPER/CONTRACTOR:</div> <div>_____</div>		<div>ARCHITECT/ENGINEERS:</div> <div><b>URS</b> One Indiana Square, Suite 2100 Indianapolis, IN 46204 United States P: 317 532 5400 F: 317 532 5499 www.URScorp.com</div> <div>PROJECT PRINCIPAL: STEVE ROBINSON PROJECT MANAGER: MELISSA COX PROJECT ARCHITECT: TONY ELLIOTT LANDSCAPE ARCHITECT: STACEY PAUL STRUCTURAL ENGINEER: DAVE STEK MECHANICAL ENGINEER: CASSANDRA DALLER PLUMBING ENGINEER: CASSANDRA DALLER ELECTRICAL ENGINEER: MARK FIFER</div> <div>URS PROJECT NO. 25628031</div>		<div>Drawing Title</div> <div>PROJECT COVER SHEET</div> <div>Approved: _____</div>		<div>Project Title</div> <div>INSTALL PRIMARY AND EMERGENCY POWER SYSTEMS</div> <div>Location</div> <div>INDIANAPOLIS, INDIANA</div> <div>Date</div> <div>09/23/2016</div> <div>Checked</div> <div>TE</div> <div>Drawn</div> <div>KDH</div>		<div>Project Number</div> <div>583-15-102 2FY15</div> <div>Building Number</div> <div>22</div> <div>Drawing Number</div> <div>TS 1.1</div>		<div></div> <div>Department of Veterans Affairs</div>	
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CODE SUMMARY FOR VA INDIANAPOLIS  
BUILDING 22 PRIMARY AND EMERGENCY POWER SYSTEMS PROJECT

- A. Project Name: Building 22 Primary and Emergency Power Systems Project  
B. Project Location: Indianapolis, Indiana  
C. Applicable Codes and Standards  
1. VA Physical Security Design Manual for Mission Critical Facilities (July 2007)  
2. 2011 VA Fire Protection Design Manual (FPDM)  
3. 2015 International Building Code  
4. 2013 NFPA 13 - Installation of Sprinkler Systems  
5. 2013 NFPA 14 - Installation of Standpipe and Hose Systems  
6. 2012 NFPA 30 - Flammable and Combustible Liquids Code  
7. 2010 NFPA 37 - Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines  
8. 2014 NFPA 70 - National Electric Code  
9. 2013 NFPA 72 - National Fire Alarm and Signaling Code  
10. 2015 NFPA 101 - Life Safety Code  
11. 2013 NFPA 110 - Standard for Emergency and Standby Power Systems  
12. 2015 NFPA 220 - Standard on Types of Building Construction  
13. ABA Accessibility Standard for Federal Facilities (effective May 8, 2006)

\*Design features not addressed by NFPA codes and standards or the VA Fire Protection Design Manual must be designed to comply with the 2015 International Building Code (IBC).

OCCUPANCY CLASSIFICATION (SEPARATED)

	NFPA 101 2015	IBC 2015
Generator Room (new):	Special-Purpose Industrial	Group S-1
Electrical Room (existing):	Special-Purpose Industrial	Group F-1

Each separated portion of the building shall comply with the requirements of that specific occupancy (2015 NFPA 101 6.1.14.4.5).

For a non-sprinklered building, Group F-1 and S-1 occupancies have no separation requirements (2015 IBC 508.4.4 and Table 508.4).

CONSTRUCTION TYPE

- NFPA 101 does not provide minimum construction requirements for a Special-Purpose Industrial building (2015 NFPA 101 40.1.6).
- For buildings where NFPA 101 does not provide construction requirements, the construction type as well as the height and area limitations, shall comply with IBC, (VA FPDM Section 2.2.1 B(2)).
- Construction Type IIB, Noncombustible construction (Per IBC)

FIRE RESISTANCE RATINGS FOR TYPE IIB CONSTRUCTION

BUILDING ELEMENT	FIRE RESISTANCE RATING
Primary structural frame	0 hr*
Bearing walls (exterior and interior)	0 hr*
Nonbearing walls and partitions	0 hr*
Floor construction and secondary members	0 hr*
Roof construction and secondary members	0 hr*

\*Emergency and/or Stand-by Generators and related switchgear: Surrounded by 1-hour fire resistive construction in Mission Critical Facilities (VA Physical Security Design Manual for Mission Critical Facilities 5.7.3).

FIRE RESISTANCE RATINGS OF FIRE BARRIERS

- A. Shaft: minimum 1-hour fire resistance rating when connecting three or fewer stories (2015 NFPA 101 8.6.5)  
B. Exit access stairway enclosure: minimum 1-hour fire resistance rating where the exit connects three or fewer stories (2015 NFPA 101 7.1.3.2.1)  
C. Mixed occupancy separation: See occupancy classification section.  
D. Hazards: Protection from any area having a degree of hazard greater than that normal to the general occupancy of the building must be provided by one of the following means (NFPA 101 8.7.1):  
1. Enclosing the area with a 1-hour fire barrier  
2. Protecting the area with an automatic extinguishing system.  
E. Emergency and/or stand-by generators and related switchgear: surrounded by 1-hour fire resistive construction (VA Physical Security Design Manual for Mission Critical Facilities 5.7.3).

BUILDING SEPARATION

A. No vehicle shall be parked or be permitted to travel closer than 50 feet to any mission critical VA facility (VA Physical Security Design Manual for Mission Critical Facilities 3.1.1).

ALLOWABLE HEIGHT AND AREA

- A. The construction type and height and area limitations for the building must comply with the requirements of the IBC because NFPA 101 does not have minimum construction requirements for the occupancies (VA FPDM Section 2.1 B(2)).  
B. For separated occupancies, the building area shall be such that in each story, the sum of the ratios of the actual building area of each separated occupancy divided by the allowable building area of each separated occupancy shall not exceed 1 (2015 IBC 508.4.2). Each separated occupancy shall comply with the building height limitations based on the type of construction of the building in accordance with Section 503.1 (2015 IBC 508.4.3).

C. Area Limitations for Type IIB Construction		
OCCUPANCY/AREA	(NONSPRINKLERED)	AREA (SPRINKLERED)
Group F-1	15,500 sf	46,500 sf*
Group S-1	17,500 sf	52,500 sf*

\* 300% increase for a fully sprinklered building single story building (2015 IBC 506.3)

A building area increase for frontage is permitted where a building has more than 25% of its perimeter on a public way or open space having a width of not less than 20 feet (2015 IBC 506.2).

D. Height Limitations for Type IIB Construction		
OCCUPANCY	HEIGHT (NONSPRINKLERED)	HEIGHT (SPRINKLERED)
Group F-1	55 ft	75*
Group S-1	55 ft	75*

\* 20 ft increase for a fully sprinklered building (2015 IBC 504.2).

EGRESS

- A. The VA has adopted NFPA 101 for life safety requirements (VA Fire Protection Design Manual 1.3).  
B. Occupant Load

The occupant load must not be less than the number of persons determined by dividing the floor area assigned to that use by the occupant load factors specified below (2015 NFPA 101 7.3.1.2):  
Special-Purpose Industrial: 100 sf/person (gross area - based on General Industrial Occupancy)

C. Egress Capacity

The egress capacity for approved components of means of egress must be based on the following capacity factors for Special-Purpose Industrial Occupancies (2015 NFPA 101 Table 7.3.3.1):  
Level Components/Ramps: 0.2 in/p

D. Travel Distance, Common Path, and Dead End Corridor

Each separated portion of the building shall comply with the requirements for the occupancy therein (2015 NFPA 101 6.1.14.4.5). The following requirements are for a non-sprinklered building:

OCCUPANCY	TRAVEL DISTANCE	COMMON PATH	DEAD END
Special-Purpose Industrial	300 ft	50 ft	50 ft

- E. Exits shall terminate directly, at a public way or at an exterior exit discharge (2015 NFPA 101 7.7.1). Exits discharge is permitted through interior building areas on the level of discharge for not more than 50% of the required number of exits and not more than 50% of the required egress capacity when additional criteria is met (2015 NFPA 101 7.7.2). When an interior exit discharge area is permitted, the interior exit discharge must be protected by either a sprinkler system or a vestibule/foyer that meets the criteria in 2015 NFPA 101 7.7.2(4).  
F. Exit access from rooms or spaces shall be permitted to be through adjoining or intervening rooms or areas, provided that such rooms or areas are accessory to the area served (2015 NFPA 7.5.1.6).

G. Door shall swing in the direction of egress travel under any of the following conditions (2015 NFPA 101 7.2.1.4.2):

- Where serving a room or area with an occupant load of 50 or more
- Where the door assembly is used in an exit enclosure
- Exit signs with tritium are not permitted in VA facilities (VA Fire Protection Design manual 2.13B).

I. Egress requirements for electrical equipment rooms:

Nominal voltage to ground	Condition 1	Condition 2	Condition 3
0-150	3 ft	3 ft	3 ft
151-600	3 ft	3.5 ft	4 ft

Where the conditions are as follows:

- Condition 1: Exposed live parts on one side of the working space and no live or grounded parts on the other side of the working space, or exposed live parts on both sides of the working space that are effectively guarded by insulating materials.  
Condition 2: Exposed live parts on one side of the working space and grounded parts on the other side of the working space. Concrete, brick, or tile walls shall be considered as grounded.  
Condition 3: Exposed live parts on both sides of the working space.

Exceptions:

\*Working space shall not be required in the back or sides of assemblies, such as deadfront switchboards, switchgear, or motor control centers, where all connections and all renewable or adjustable parts, such as fuses or switches, are accessible from locations other than the back or sides. Where rear access is required to work on nonelectrical parts on the back of enclosed equipment, a minimum horizontal working space of 30 in. shall be provided.

- \*By special permission, smaller working spaces shall be permitted where all exposed live parts operate at not greater than 30 volts rms, 42 volts peak, or 60 volts dc.  
ii. Width of working space: The width of the working space in front of the electrical equipment shall be the width of the equipment or 30 inches, whichever is greater. In all cases, the work space shall permit at least a 90 degree opening of equipment doors or hinged panels (2014 NFPA 70 110.26).  
iii. Height of working space: The work space shall be clear and extend from the grade, floor, or platform to a height of 6 1/2 ft. or the height of the equipment, whichever is greater. Within the height requirements of this section, other equipment that is associated with the electrical installation and is located above or below the electrical equipment shall be permitted to extend not more than 6 in. beyond the front of the electrical equipment. (2014 NFPA 70 110.26)  
iv. Entrance to working space: For equipment rated 1200 amperes or more and over 6 ft. wide that contains overcurrent devices, switching devices, or control devices, there shall be one entrance to and egress from the required working space not less than 24 in. wide and 6 1/2 ft. high at each end of the working space (2014 NFPA 70 110.26). A single entrance is permitted where the location permits a continuous and unobstructed way of egress travel OR where the depth of the working space is twice that required by 110.26(A)(1).  
v. Personnel Doors: Where equipment rated 800 A or more that contains overcurrent devices, switching devices, or control devices is installed and there is a personnel door(s) intended for entrance to and egress from the working space less than 25 ft. from the nearest edge of the working space, the door(s) shall open in the direction of egress and be equipped with listed panic hardware. (2014 NFPA 70 110.26)  
vi. Dedicated Space: All switchboards, switchgear, panelboards, and motor control centers shall be located in dedicated spaces and protected from damage. (2014 NFPA 70 110.26E)

2. Rooms over 600 Volts, nominal

i. Depth of working space: Equipment likely to require examination, adjustment, servicing, or maintenance while energized shall have clear working space in the direction of access to live parts of the electrical equipment and shall be not less than the following (2014 NFPA 70 110.34A):

Nominal voltage to ground	Condition 1	Condition 2	Condition 3
601-2500 V	3 ft	4 ft	5 ft
2501-9000 V	4 ft	5 ft	6 ft
9001-25,000 V	5 ft	6 ft	9 ft
25,001 V-75 kV	6 ft	8 ft	10 ft
Above 75 kV	8 ft	10 ft	12 ft

Where the conditions are as follows:

- Condition 1 - Exposed live parts on one side of the working space and no live or grounded parts on the other side of the working space, or exposed live parts on both sides of the working space that are effectively guarded by insulating materials.  
Condition 2 - Exposed live parts on one side of the working space and grounded parts on the other side of the working space. Concrete, brick, or tile walls shall be considered as grounded.  
Condition 3 - Exposed live parts on both sides of the working space.

Exception:

Working space shall not be required in back of equipment such as switchgear or control assemblies where there are no renewable or adjustable parts (such as fuses or switches) on the back and where all connections are accessible from locations other than the back. Where rear access is required to work on nonelectrical parts on the back of enclosed equipment, a minimum working space of 30 in. horizontally shall be provided.  
ii. Work space about equipment: Sufficient space shall be provided and maintained about electrical equipment to permit ready and safe operation and maintenance of such equipment. Where energized parts are exposed, the minimum clear work space shall be not less than 6 1/2 ft. high (measured vertically from the floor or platform) or not less than 3 ft. wide (measured parallel to the equipment). The depth shall be as required in 110.34(A). In all cases, the work space shall permit at least a 90 degree opening of doors or hinged panels. (2014 NFPA 70 110.32)  
iii. Entrance to working space: On switchgear and control panels exceeding 6 ft. in width, there shall be one entrance at each end of the equipment. (2014 NFPA 70 110.33A(1)). A single entrance is permitted where the location permits a continuous and unobstructed way of exit travel OR where the depth of the working space is twice that required by 110.34(A).  
iv. Where there is a personnel door(s) intended for entrance to and egress from the working space less than 25 ft. from the nearest edge of the working space, the door(s) shall open in the direction of egress and be equipped with listed panic hardware. (2014 NFPA 70 110.33A(3))

SPECIAL HAZARDS

- A. Flammable and Combustible Liquid Storage must comply with NFPA 30 (VA Fire Protection Design Manual 3.2.A).  
B. Fuel Oil is generally classified as a Class IIIA Combustible Liquid per IBC and NFPA.  
C. Installations in accordance with NFPA 37 are deemed to be in compliance with NFPA 30 (2012 NFPA 30 1.5.3).  
D. Fuel tanks inside structures (other than Class I fuels) per NFPA 37  
1. Fuel tanks not in a room by themselves must not exceed 660 gallon capacity (2010 NFPA 37 6.3.2.2).  
2. Fuel tanks larger than 660 gallons must be enclosed in a room housing only fuel tanks in accordance with NFPA 37 Sections 6.3.5 or 6.3.6 (2010 NFPA 37 6.3.2.2).  
3. Not more than one 660 gallon capacity tank, or two or more tanks with an aggregate capacity of not more than 660 gallons, may be connected to any one engine (2010 NFPA 37 6.3.2.2).  
4. The aggregate capacity of all fuel tanks in a structure shall not exceed 1320 gallons unless that portion exceeding 1320 gallons is enclosed in a room in accordance with NFPA 37 Sections 6.3.5 or 6.3.6 (2010 NFPA 37 6.3.2.3).  
5. Exception: Fuel tanks of any size shall be permitted within engine rooms or mechanical spaces, provided the engine or mechanical room is designed using recognized engineering practices with suitable fire detection, fire suppression, and containment means to prevent the spread of fire beyond the room of origin (2010 NFPA 37 6.3.2.2 and 6.3.2.3).  
6. Fuel tanks within structures shall be provided with spill containment consisting of either a wall, a curb, or a dike having a capacity at least equal to that of the largest tank enclosed (2010 NFPA 37 6.3.2.4).  
7. Piping must be in accordance with Chapter 27 of NFPA 30 (2010 NFPA 37 6.8.1).  
E. Underground fuel tanks per NFPA 30  
1. Location: The distance from any part of a tank storing Class III liquids to the nearest wall of any basement, pit, or property line shall be not less than 1 ft (2012 NFPA 30 23.4.3).

BUILDING SERVICE EQUIPMENT

- A. Electrical wiring and equipment must be in accordance with NFPA 70 (2015 NFPA 101 9.1.2).  
B. Emergency generators and standby power systems must be installed in accordance with NFPA 110 (2015 NFPA 101 9.1.3.1).  
C. Air-conditioning, heating, ventilating ductwork, and related equipment must be in accordance with NFPA 90A or NFPA 90B (2015 NFPA 101 9.2.1).  
D. Ventilating or heat-producing equipment shall be in accordance with NFPA 91, NFPA 211, NFPA 31, NFPA 54, or NFPA 70, as applicable (2015 NFPA 101 9.2.2).  
E. Elevation: The emergency and/or stand-by generators and switchgear, and engineering control center, and access to fuel tanks must not be located at an elevation subject to flooding at any time (VA Physical Security Design Manual for Mission Critical Facilities 5.7.1 and 5.8.1).  
F. Steam, chilled water, water, and fuel system distribution: Distribution systems must be underground and must be looped systems, such that an interruption at any one point can be isolated and service maintained to the facility. Piped utility systems, in particular fuel systems, must include enhanced capability to resist external forces. (VA Physical Security Design Manual for Mission Critical Facilities 8.2.1.1)

FIRE ALARM SYSTEM

- A. The fire alarm system must be installed where required by NFPA 101 (VA Fire Protection Design Manual 7.2).  
1. Industrial: A fire alarm system is not required when the total occupancy load of the building is under 100 people and unless, of these, fewer than 25 people are above or below the level of exit discharge (2015 NFPA 101 40.3.4.1).  
B. Notification of staff for response must be by digital voice (speaker) system (VA Fire Protection Design Manual 7.3B).  
C. All smoke detectors must be photoelectric type only (VA Fire Protection Design Manual 7.4D).  
D. Duct detectors must be provided with a remote indicating lamp and a test key switch on a nearby wall at 7 ft AFF to facilitate testing (VA Fire Protection Design Manual 7.4F).  
E. New generator controllers must be monitored by the fire alarm system, where provided, or at an attended location, for the following conditions (2015 NFPA 101 9.1.3.2):  
1. Generator running  
2. Generator fault  
3. Generator switch in nonautomatic position  
F. All fire alarm wiring must be installed in a raceway separate from all other systems (VA Fire Protection Design Manual 7.2D).  
G. Wiring for local building fire alarm systems must be specified as follows (VA Fire Protection Design Manual 7.2F):  
1. Initiating Device Circuits: Class B  
2. Signaling Line Circuits: Class B  
3. Notification Appliance Circuits: Class B  
4. Communications Between Building Fire Alarm Control Units: Class X



SPRINKLER SYSTEM

- A. In VA occupied buildings, sprinkler protection is required to protect VA property or for compliance with the Life Safety Code or the Federal Fire Safety Act PL 102-522 (VA Fire Protection Design Manual 1.1A).  
B. Sprinkler systems must comply with NFPA 13 (VA Fire Protection Design Manual 6.1B).  
C. The VA does not permit omission of sprinkler protection in electrical rooms (VA Fire Protection Design Manual 6.1B).  
D. Design wet pipe sprinkler systems, unless installed in areas subject to freezing (VA Fire Protection Design Manual 6.1C).  
E. Include a 10% safety factor when calculating the sprinkler system demand (VA Fire Protection Design Manual 6.1D).  
F. Install Factory Mutual approved quick response sprinklers, except for areas requiring high temperature heads where no quick response sprinklers are listed and electrical switchgear rooms (VA Fire Protection Design Manual 6.1J and 6.1K).  
G. Route the drain pipes for each sprinkler riser and test connection to the building exterior to facilitate testing (VA Fire Protection Design Manual 6.1P).  
H. Automatic sprinkler systems for stationary combustion engine rooms must be designed to provide a density of 0.3 gpm/sq ft over the most remote 2,500 sf (2010 NFPA 37 11.4.5.1). Sprinklers and spray nozzles shall be spaced at a 100 sf maximum area of coverage per sprinkler or spray Nozzle (2010 NFPA 37 11.4.5.1.1).  
I. Portable Fire Extinguishers  
1. Locate fire extinguisher cabinets to comply with NFPA 10 (VA Fire Protection Design Manual 6.4A). The VA will provide the fire extinguishers.  
2. Fire extinguisher cabinets should be sized to accommodate a 2.5 gallon pressurized water extinguisher (VA Fire Protection Design Manual 6.4B).

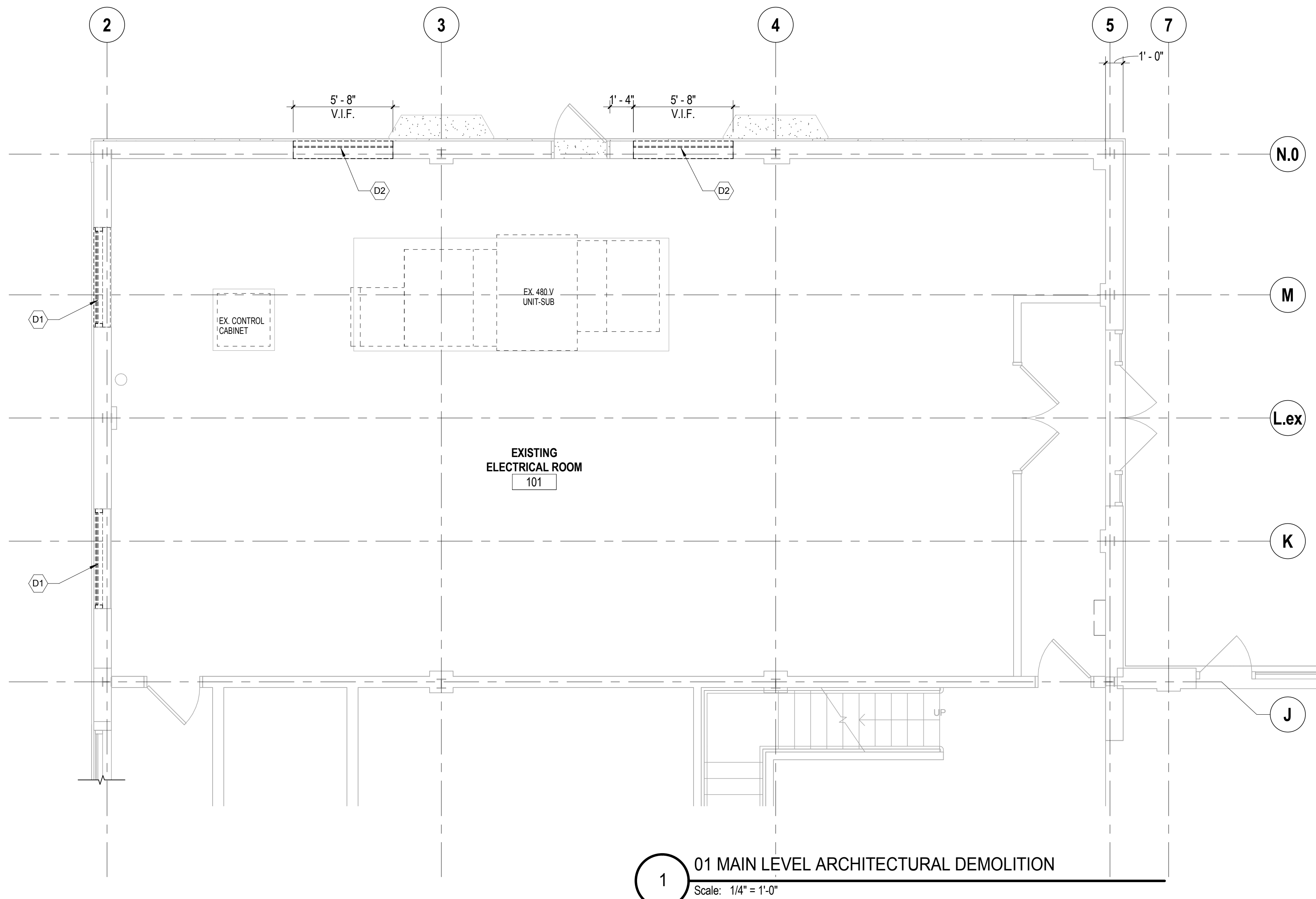
PROJECT AREA

101 SF EXIST. VESTIBULE  
1547 SF EXIST. SWITCHGEAR ROOM  
870 SF NEW GENERATOR ROOM  
2518 SF TOTAL PROJECT AREA

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal.

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										Approved:		Location INDIANAPOLIS, INDIANA		Drawing Number AS002					
												Date 09/23/2016		Checked TE		Drawn KDH			
100% BID DOCUMENTS FOR CONSTRUCTION		09/23/2016																	
Revisions:		Date																	





15. DEMOLITION INCLUDES REMOVAL OF EXISTING PAINTED STEEL (SEE STRUCTURAL DWGS). CONTRACTOR IS TO TEST PAINT FOR LEAD TO DETERMINE IF THERE ARE ANY LEAD BASED MATERIALS PRESENT. CONTRACTOR IS TO ABATE LEAD BASED MATERIALS AS REQUIRED.

D2 REMOVE PORTION OF WALL AS REQ'D FOR NEW LAYOUT.  
PREPARE ADJACENT WALL FOR NEW CONSTRUCTION. RELOCATE  
ATTACHED AND EMBEDDED ITEMS (CONDUIT, PIPING, ETC.)

## NEW WALL



Department of



GENERAL NOTES

1. All dimensions shown are to face of partition GWB or masonry, unless noted otherwise.
2. Dimensions designated as "CLR" or "clear" indicate a clear dimension from face to finish to face of finish. Dimensions of exterior walls are to outside edge of exterior masonry finish.
3. Seal all joints between dissimilar materials.
4. All gypsum wallboard is 5/8" Type "X", unless noted otherwise.
5. All existing interior slab holes as a result of equipment removal shall be infilled.
6. Exact layout of pipe trenches is to be determined after model of generator is determined after bidding. Verify final configuration of pipe trenches with generator supplier.
7. All existing holes in walls as a result of equipment removal shall be infilled with like material.
8. Provide paint finish on all new and existing wall surfaces in new generator room including existing brick wall and metal panel. Color to be chosen by COR.
9. Provide paint finish on all exposed structural elements in new generator room. Color to be chosen by COR.
10. Provide paint finish on all exposed piping and conduit in new generator room. Color to be chosen by COR.
11. Floor finish in new GENERATOR ROOM 103 to duplicate finish in existing ELECTRICAL ROOM 101

PROJECT AREA

101 SF VESTIBULE  
1385 SF ELECTRICAL ROOM  
152 SF SWITCHGEAR ROOM  
857 SF GENERATOR ROOM  
2495 SF TOTAL PROJECT AREA

01 MAIN LEVEL ARCHITECTURAL Upper Openings

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

01 MAIN LEVEL ARCHITECTURAL

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

DEVELOPER/CONTRACTOR:

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LANDSCAPE ARCHITECT STACEY PAUL  
STRUCTURAL ENGINEER DAVE STEK  
MECHANICAL ENGINEER CASSANDRA DALLER  
PLUMBING ENGINEER CASSANDRA DALLER  
ELECTRICAL ENGINEER MARK FIFER

Drawing Title  
FIRST FLOOR PLAN

Approved:

Project Title  
INSTALL PRIMARY AND EMERGENCY  
POWER SYSTEMS

Location  
INDIANAPOLIS, INDIANA

Date  
09/23/2016

Checked  
TE

Drawn  
KDH

Project Number  
583-15-102 2FY15

Building Number  
22

Drawing Number  
AS121



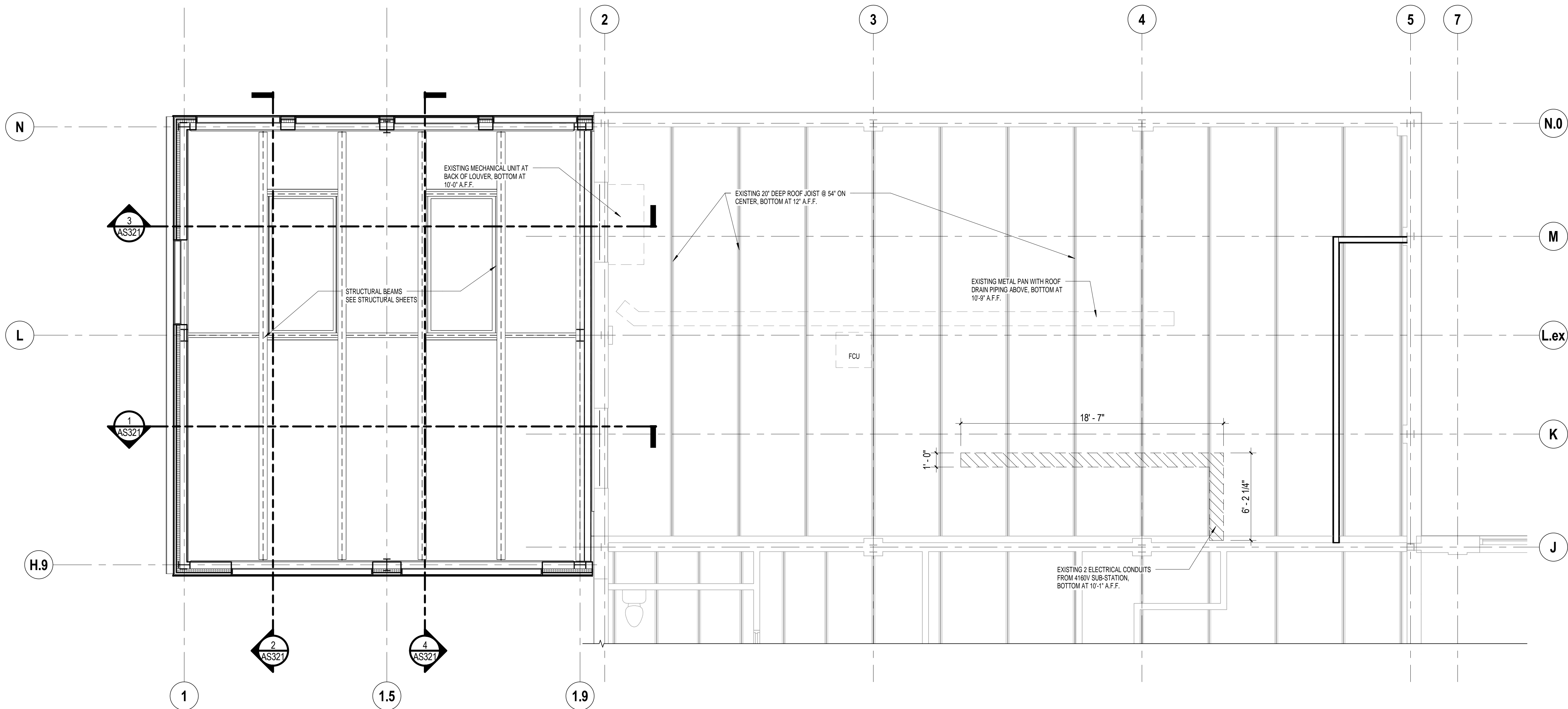
PROJECT NORTH

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URS PROJECT NO. 25628031

GENERAL CEILING PLAN NOTES



1. Contractor to VIF all finish ceiling heights not listed.
2. All exposed deck, structure, ductwork, piping etc. shall be painted. Color selected by COR.
3. Sprinkler Contractor shall review layout with A/E prior to installation.
4. All new walls closed to deck or existing ceiling unless noted otherwise.
5. Refer to electrical drawings for all light fixture layouts and locations.



1 01 MAIN LEVEL RCP  
Scale: 1/4" = 1'-0"



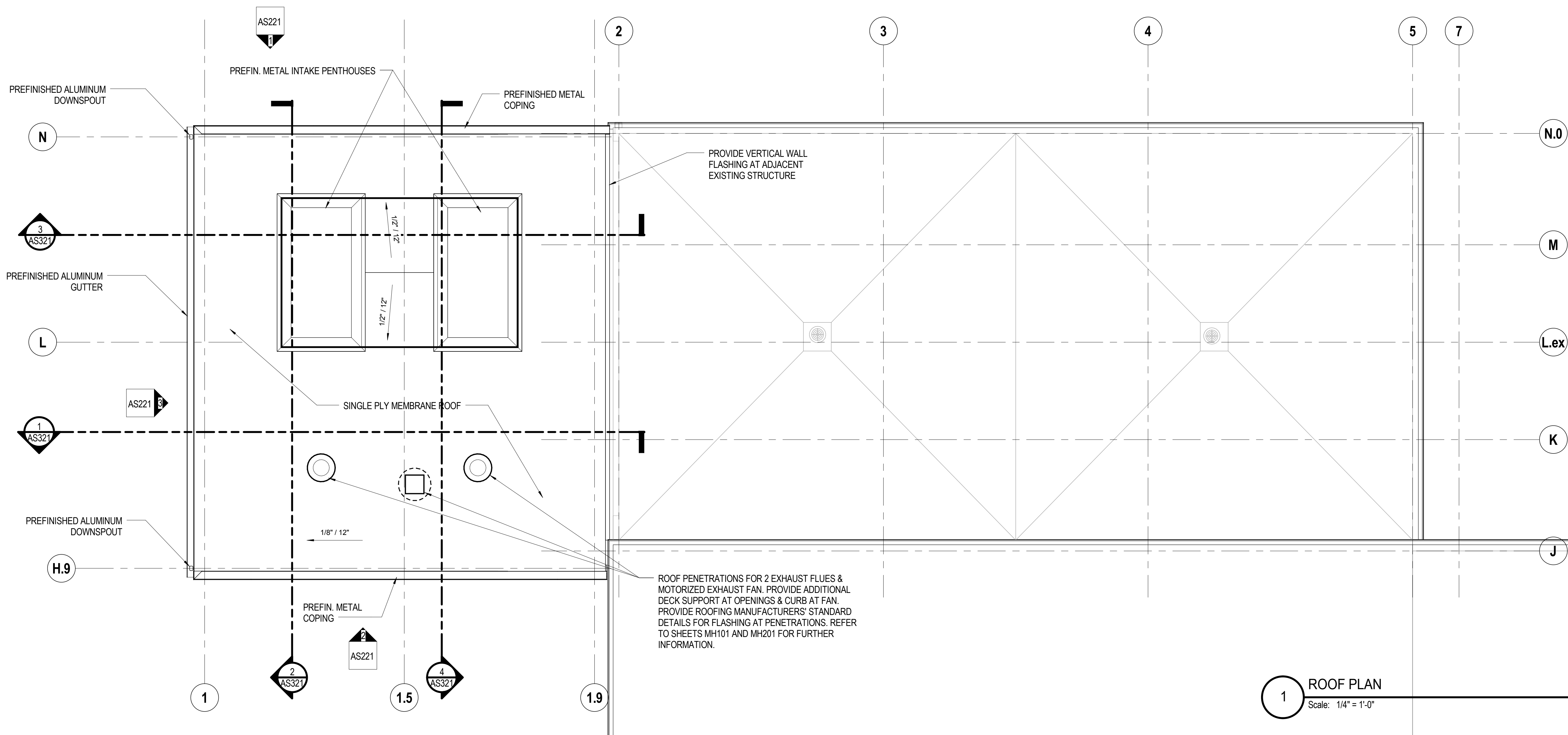
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<div>100% BID DOCUMENTS FOR CONSTRUCTION 09/23/2016</div> <div>Revisions: Date</div>		<div>DEVELOPER/CONTRACTOR:</div>		<div></div>		<div>ARCHITECT/ENGINEERS:</div> <div><b>URS</b></div> <div>One Indiana Square, Suite 2100 Indianapolis, IN 46204 United States P: 317 532 5400 F: 317 532 5499 www.URScorp.com</div> <div>URS PROJECT NO. 25628031</div>		<div>Drawing Title</div> <div>REFLECTED CEILING PLAN</div>		<div>Project Title</div> <div>INSTALL PRIMARY AND EMERGENCY POWER SYSTEMS</div>		<div>Project Number</div> <div>583-15-102 2FY15</div>	
								<div>Approved:</div>		<div>Location</div> <div>INDIANAPOLIS, INDIANA</div>		<div>Building Number</div> <div>22</div>	
								<div>Date</div> <div>09/23/2016</div>		<div>Checked</div> <div>TE</div>		<div>Drawn</div> <div>KDH</div>	
										<div>Drawing Number</div> <div>AS122</div>		<div></div>	



GENERAL ROOF PLAN NOTES

- COORDINATE MECHANICAL, STRUCTURAL, AND ARCHITECTURAL DRAWINGS FOR ROOF PENETRATION LOCATIONS AND CONSTRUCTION. REFER ANY DISCREPANCIES TO THE DESIGN TEAM.
- REFER TO SECTION AND DETAIL DRAWINGS FOR ADDITIONAL INFORMATION.
- ALL ROOF MEMBRANE TERMINATIONS AND FLASHING CONDITIONS SHALL CONFORM WITH MANUFACTURER'S RECOMMENDED DETAILS.
- MINIMUM SLOPE FOR ROOF AREAS IS 1/8" = 1' - 0".



1 ROOF PLAN  
Scale: 1/4" = 1'-0"



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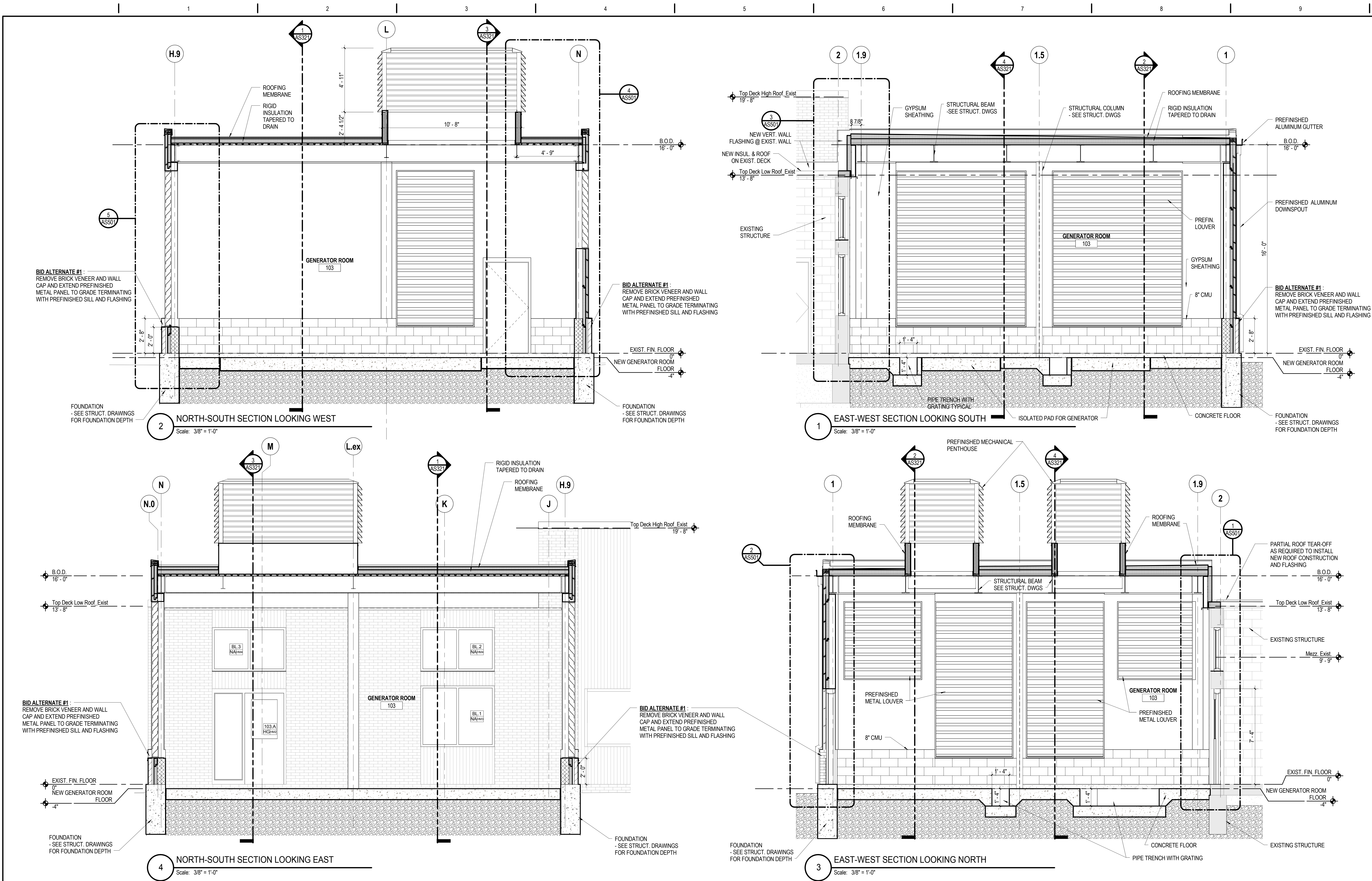
<div>5/11/2017 1:21:39 PM C:\Bids\Local\25628031_VA_Indy_Generators - Bldg 22 NEW_eric_slaughter@urscorp.com.pdf one-eighth inch = one foot one-quarter inch = one foot one-half inch = one foot three-eighths inch = one foot one inch = one foot one and one-half inch = one foot two inches = one foot three inches = one foot</div>	100% BID DOCUMENTS FOR CONSTRUCTION   09/23/2016	DEVELOPER/CONTRACTOR:			ARCHITECT/ENGINEERS:		Drawing Title	Project Title	Project Number	
	Revisions:	Date			One Indiana Square, Suite 2100 Indianapolis, IN 46204 United States P: 317 532 5400 F: 317 532 5499 www.URScorp.com		ROOF PLAN	INSTALL PRIMARY AND EMERGENCY POWER SYSTEMS	583-15-102 2FY15	
							Approved:	Location	Building Number	
								INDIANAPOLIS, INDIANA	22	
							Date	Checked	Drawn	Drawing Number
							09/23/2016	TE	KDH	AS123
				URS PROJECT NO. 25628031						







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one-eighth inch = one foot  
one-quarter inch = one foot  
one-half inch = one foot  
one inch = one foot  
three-quarters inch = one foot  
one and one-half inch = one foot  
two inches = one foot  
three inches = one foot

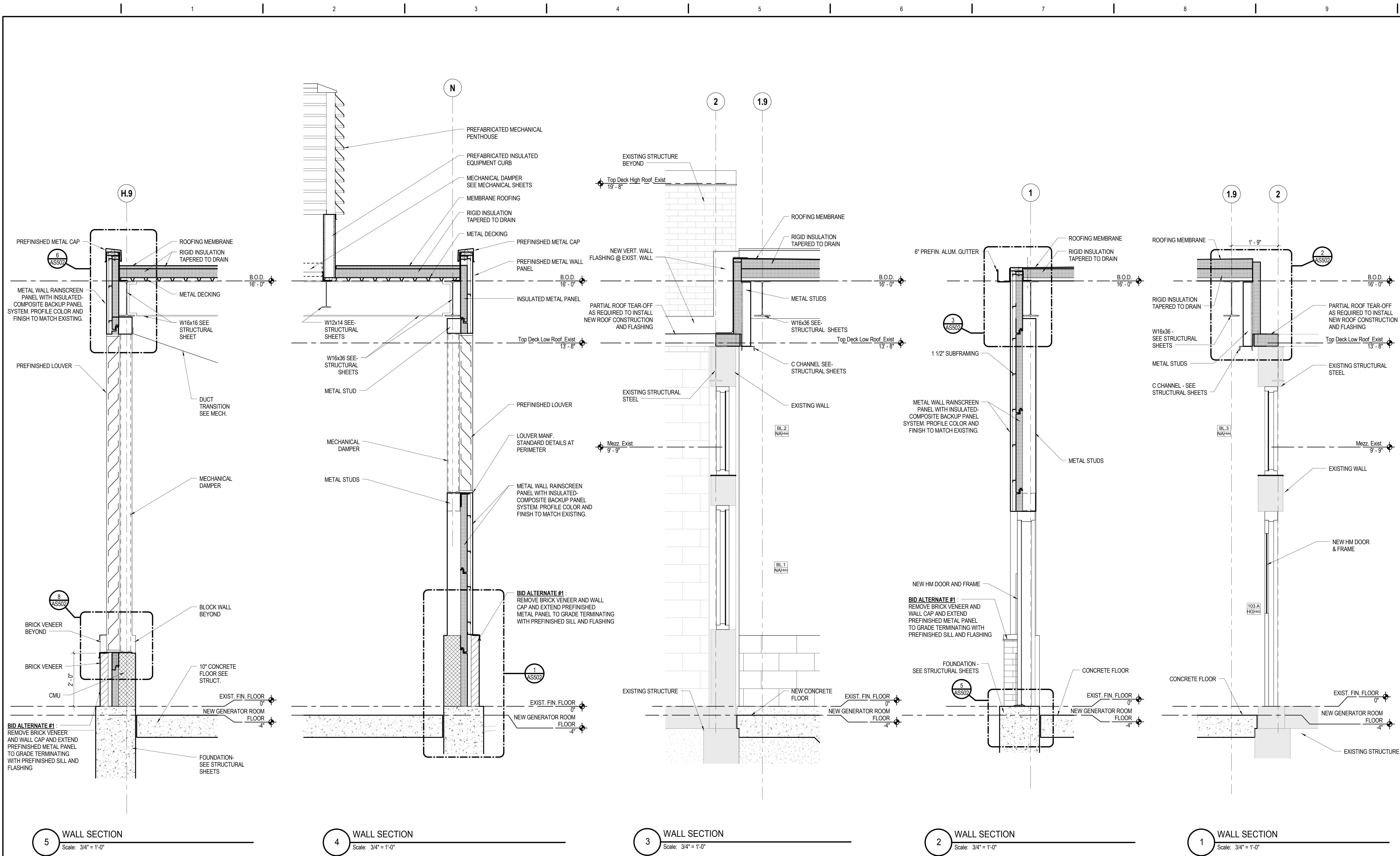


DEVELOPER/CONTRACTOR:		ARCHITECT/ENGINEERS:		Drawing Title		Project Title		Project Number	
		URS		BUILDING SECTIONS		INSTALL PRIMARY AND EMERGENCY POWER SYSTEMS		583-15-102 2FY15	
100% BID DOCUMENTS FOR CONSTRUCTION 09/23/2016		One Indiana Square, Suite 2100 Indianapolis, IN 46204		Approved:		Location		Building Number	
Revisions: Date		P: 317 532 5400 F: 317 532 5499 www.URScorp.com				INDIANAPOLIS, INDIANA		22	
		PROJECT PRINCIPAL STEVE ROBINSON PROJECT MANAGER MELISSA COX PROJECT ARCHITECT TONY ELLIOTT LANDSCAPE ARCHITECT STACEY PAUL STRUCTURAL ENGINEER DAVE STEK MECHANICAL ENGINEER CASSANDRA DALLER PLUMBING ENGINEER CASSANDRA DALLER ELECTRICAL ENGINEER MARK FIFER				Date		Drawing Number	
		UR PROJECT NO. 25628031				09/23/2016		AS321	
						Checked		Drawn	
						TE		KDH	





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one-eighth inch = one foot  
one-quarter inch = one foot  
one-half inch = one foot  
three-eighths inch = one foot  
one inch = one foot  
one and one-half inch = one foot  
two inches = one foot  
three inches = one foot



<b>DEVELOPER/CONTRACTOR:</b>		<b>ARCHITECT/ENGINEERS:</b>		<b>Drawing Title</b>		<b>Project Title</b>		<b>Project Number</b>	
		<b>URS</b>		WALL SECTIONS		INSTALL PRIMARY AND EMERGENCY POWER SYSTEMS		583-15-102 2FY15	
		One Indiana Square, Suite 2100 Indianapolis, IN 46204 United States P: 317 532 5400 F: 317 532 5499 www.URScorp.com		Approved:		Location INDIANAPOLIS, INDIANA		Building Number 22	
100% BID DOCUMENTS FOR CONSTRUCTION 09/23/2016		URS PROJECT NO. 25628031		Date 09/23/2016		Checked TE		Drawing Number AS501	
Revisions:				Drawn KDH					

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three-eighths inch = one foot



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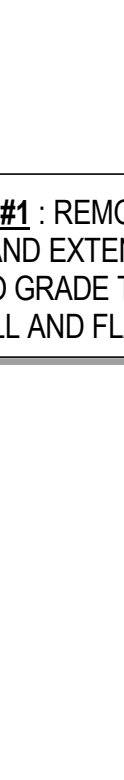


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