

- |    |  |     |  |     |  |
|----|--|-----|--|-----|--|
| 1. | THESE PLANS ARE DIAGRAMMATIC IN NATURE. THE CONTRACTOR SHALL BE PREPARED TO MAKE SOME ALTERATIONS TO THE EXACT LOCATION OF DUCTWORK, PIPING AND EQUIPMENT FROM THE LOCATION INDICATED ON THESE DRAWINGS TO FIT ACTUAL JOB CONDITIONS.              | 7.  | WHERE CONTRACTOR IS REQUIRED TO CONCEAL NEW WORK, REMOVE OR MODIFY EXISTING CONSTRUCTION OR EQUIPMENT, OR ATTACH TO EXISTING CONSTRUCTION, THE CONTRACTOR SHALL REPAIR OR REPLACE EXISTING CONSTRUCTION AND EQUIPMENT TO MATCH CON. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE AND REPLACE EXISTING CEILINGS AND WALLS REQUIRED FOR INSTALLATION OF MECHANICAL SYSTEMS. | 13. | THE WORK OF SECTION 230923 SHALL INCLUDE THE FOLLOWING ELECTRICAL WORK, COMPLYING WITH REQUIREMENTS OF DIVISION 26 SECTIONS:   |
| 2. | ALL ELBOWS, FITTINGS, ETC. IN PIPING AND DUCTWORK REQUIRED TO CLEAR ALL JOE OBSTRUCTIONS ARE NOT NECESSARILY INDICATED. ALL NECESSARY TRANSITIONS, FITTINGS AND OFFSETS ARE REQUIRED WHETHER SHOWN OR NOT.   | 8.  | THE OWNER SHALL MAINTAIN ALL SALVAGE RIGHTS OF EQUIPMENT AND MATERIALS REMOVED. ALL EQUIPMENT AND MATERIALS NOT CLAIMED BY THE OWNER SHALL BE REMOVED FROM THE PREMISES BY THIS CONTRACTOR. REFER TO SPECIFICATION SECTION 314000.00 FOR DISPOSAL AND RETENTION.   | A.  | CONTROL WIRING BETWEEN FIELD-INSTALLED CONTROLS, INDICATING DEVICES, AND UNIT CONTROL PANELS.  |
| 3. | BECAUSE OF THE LIMITED SPACE AVAILABLE TO INSTALL ALL OF THE MECHANICAL WORK, COORDINATION BETWEEN THE VARIOUS TRADES IS OF THE UTMOST IMPORTANCE.   | 9.  | CONTRACTOR SHALL PROVIDE SEISMIC BRACING AND MOUNTING OF EQUIPMENT AND MATERIALS IN COMPLIANCE WITH ALL LOCAL CODE REQUIREMENTS AND THE REQUIREMENTS OF SPECIFICATION SECTION 134800.0010.   | B.  | INTERLOCK WIRING BETWEEN ELECTRICALLY OPERATED EQUIPMENT UNITS AND BETWEEN EQUIPMENT AND FIELD-INSTALLED CONTROL DEVICES.  |
| 4. | THE CONTRACTOR SHALL COORDINATE STAGING AND SCHEDULING WITH THE OWNER'S REPRESENTATIVE.  | 10. | ALL WORK SHALL BE INSTALLED PER THE REFERENCE DETAILS, REGARDLESS OF WHETHER OR NOT THE DETAILS ARE CALLED OUT ON THE PLANS.   | C.  | POWER SUPPLY WIRING FOR POWER SOURCE TO POWER CONNECTION ON CONTROLS AND/OR UNIT CONTROL PANELS.   |
| 5. | EXISTING CONDITIONS ARE BASED ON INFORMATION OBTAINED FROM PREVIOUS CONSTRUCTION DOCUMENTS AND INFORMAL FIELD OBSERVATION AND SHALL NOT BE CONSIDERED AS "AS BUILT." THE CONTRACTOR SHALL EXIST FIELD CONDITIONS BEFORE THE ONSET OF CONSTRUCTION. | 11. | ALL EXISTING TEMPERATURE CONTROLS THAT ARE BEING DEMOLISHED OR DISABLED AS WORK OF THIS CONTRACT SHALL BE COMPLETELY REMOVED FROM BUILDING.  | 14. | CONTRACTOR SHALL HAVE THE DOCUMENTS REVIEWED COMPLETELY BY A CERTIFIED BALANCING CONTRACTOR FOR THE INCLUSION OF THE NECESSARY ADDITIONAL AIR AND HYDRONIC SYSTEM BALANCING DEVICES NOT SHOWN IN THESE DOCUMENTS FOR COMPLETE HVAC SYSTEM BALANCING. REFER TO SPECIFICATION SECTION 230939 FOR CONSTRUCTION DOCUMENT EXAMINATION REPORT. |
| 6. | DEMOLISH ALL PIPING, DUCTWORK/EQUIPMENT, ETC., SHOWN TO BE REMOVED, IN ITS ENTIRETY, INCLUDING ALL HANGERS AND SUPPORTS.   | 12. | THE CONTRACTOR SHALL CONNECT THE NEW HVAC SYSTEM TO THE OWNER'S EXISTING BUILDING CONTROL SYSTEM. REFER TO SPECIFICATIONS SECTION 230923 FOR ADDITIONAL REQUIREMENTS.  | 15. | IT SHOULD BE NOTED THAT SOME SYSTEMS (I.E. GENERAL AND ISOLATION EXHAUST) ARE REQUIRED TO BE BALANCED MORE THAN ONCE TO ASSURE DESIGN AIRFLOWS ARE PROVIDED.   |



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

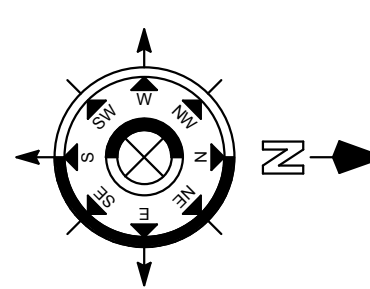
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Revision Schedule	
Comments	Date

CONSULTANTS:



TRUE NORTH



ARCHITECT/ENGINEERS:



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Drawing Title

MECHANICAL DETAILS AND SCHEDULES

Project Title

R.L. Roudebush VA Medical Center Parking Garage

Location

INDIANAPOLIS, IN

Date

10/14/14

Checked

AJM

Drawn

SBS

Project Number

583-330 / 1724-05

Building Number


20

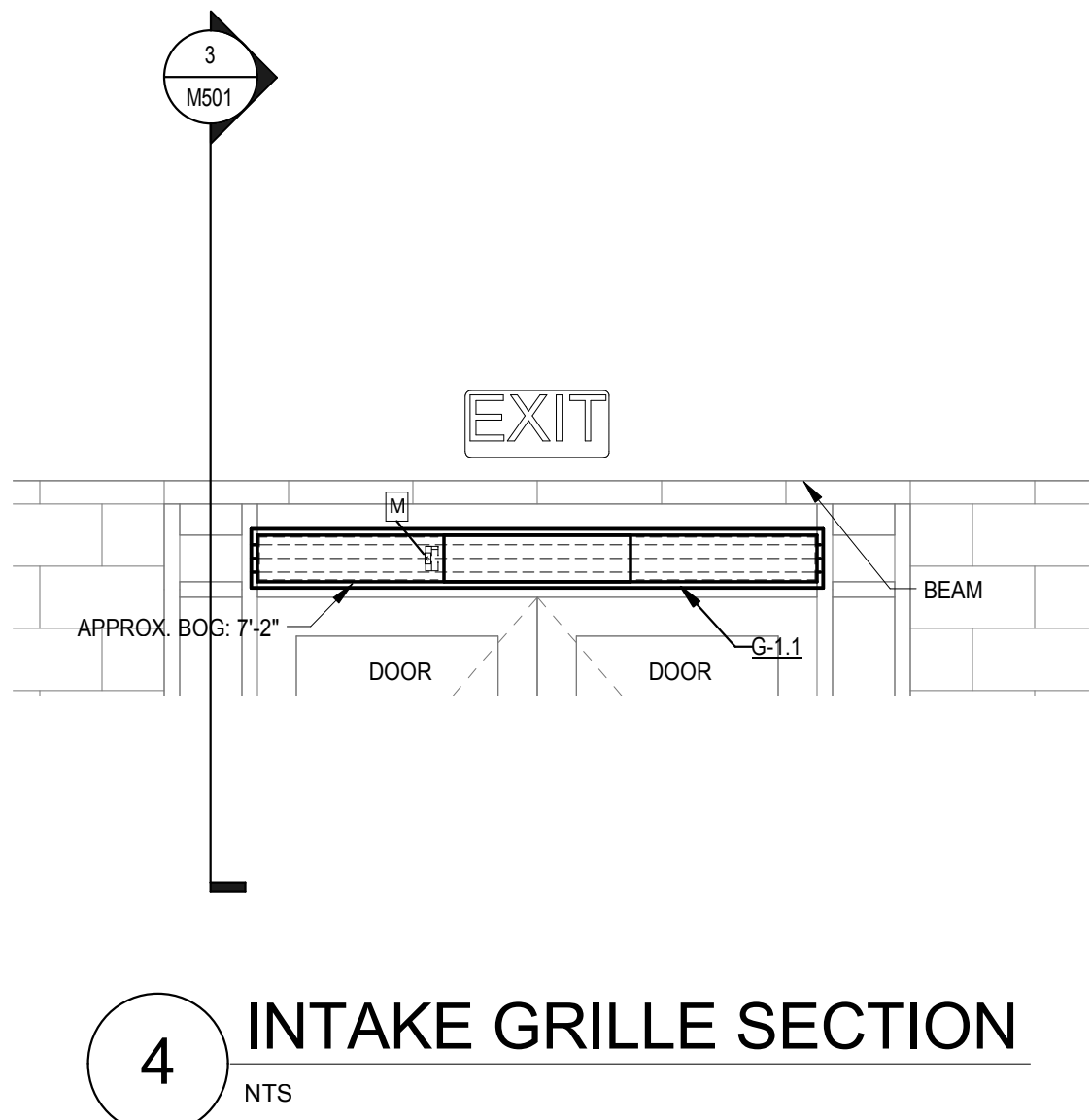
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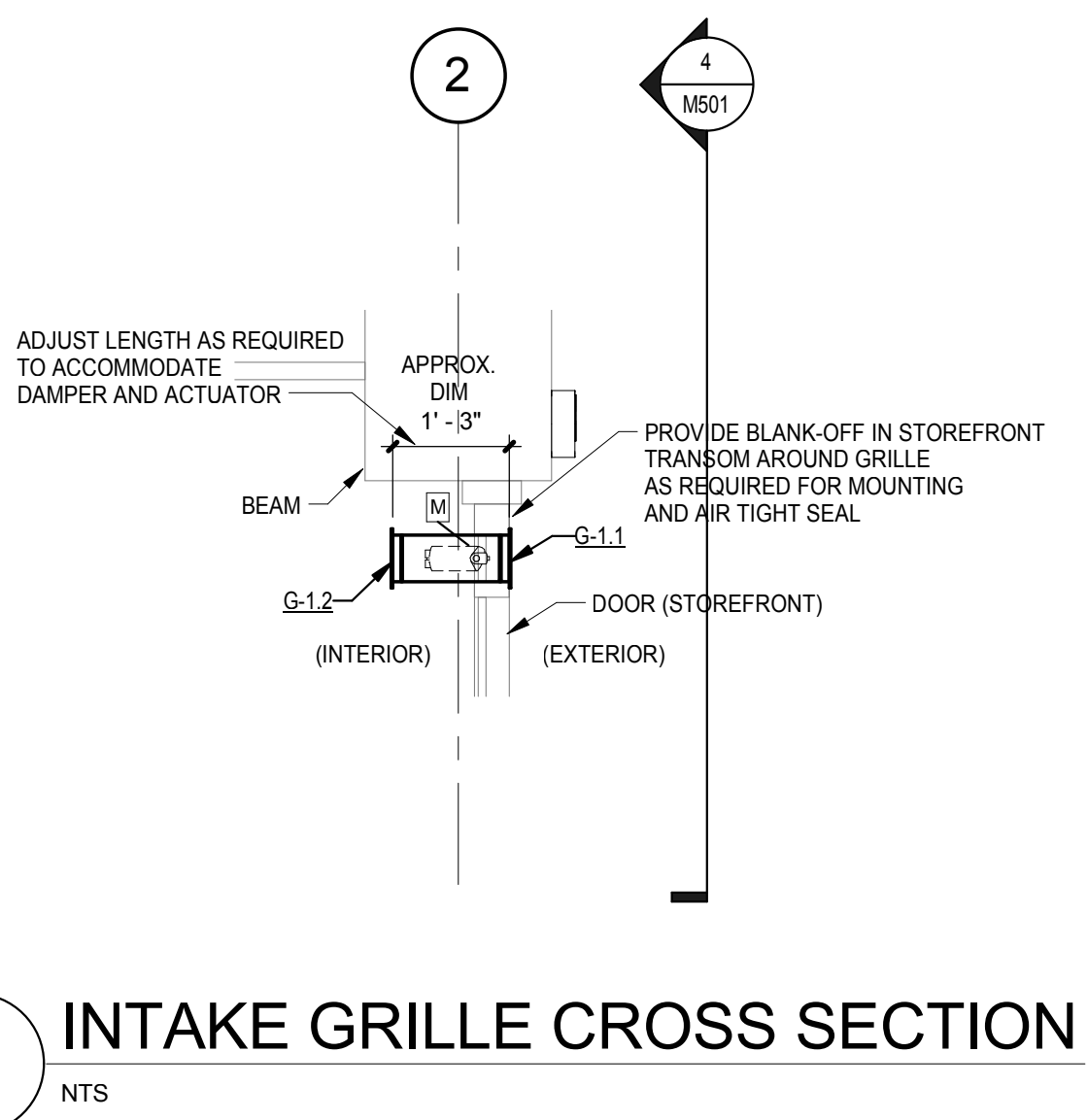
Dwg.66 of 93

Office of Construction and Facilities Management

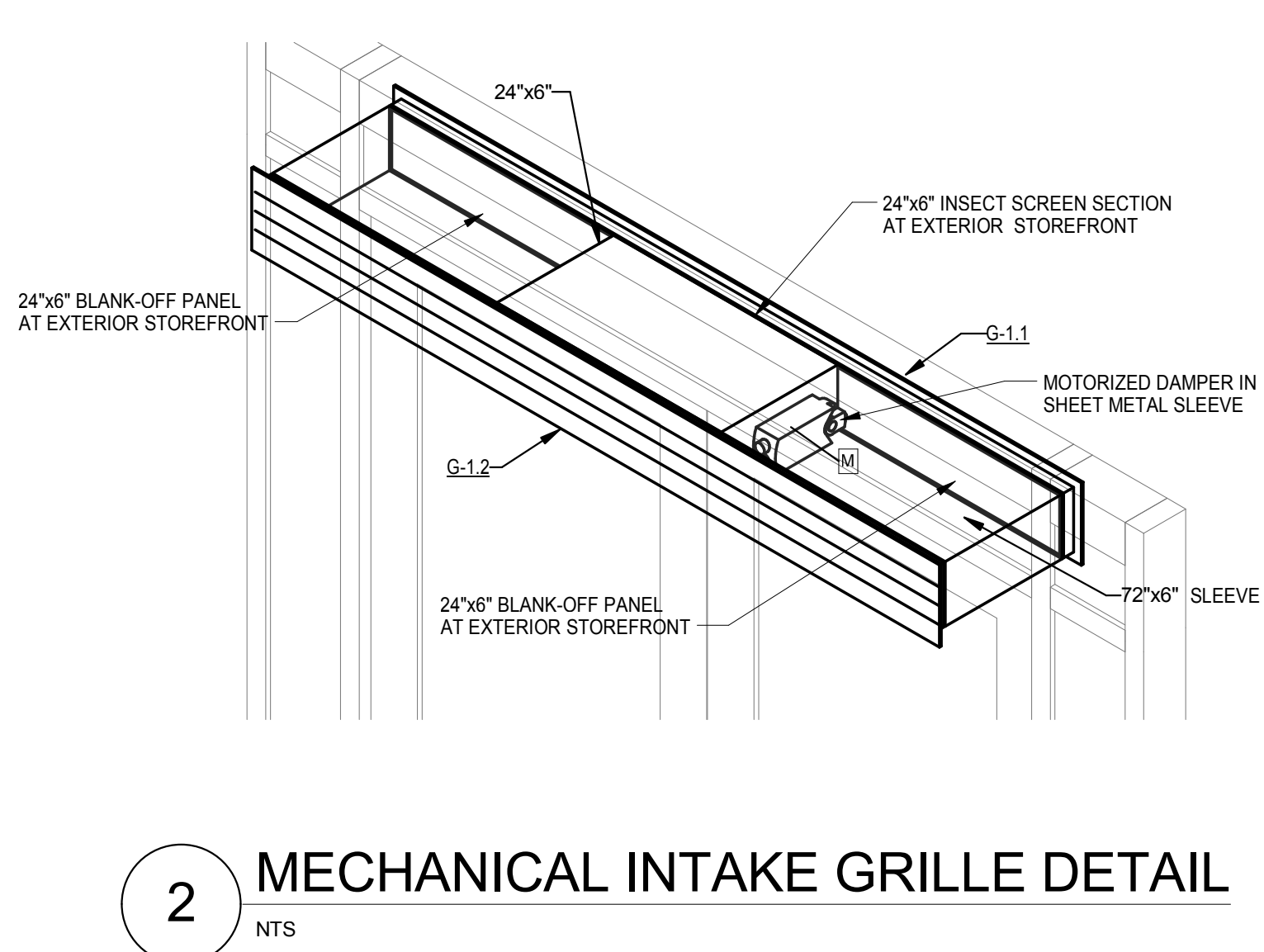




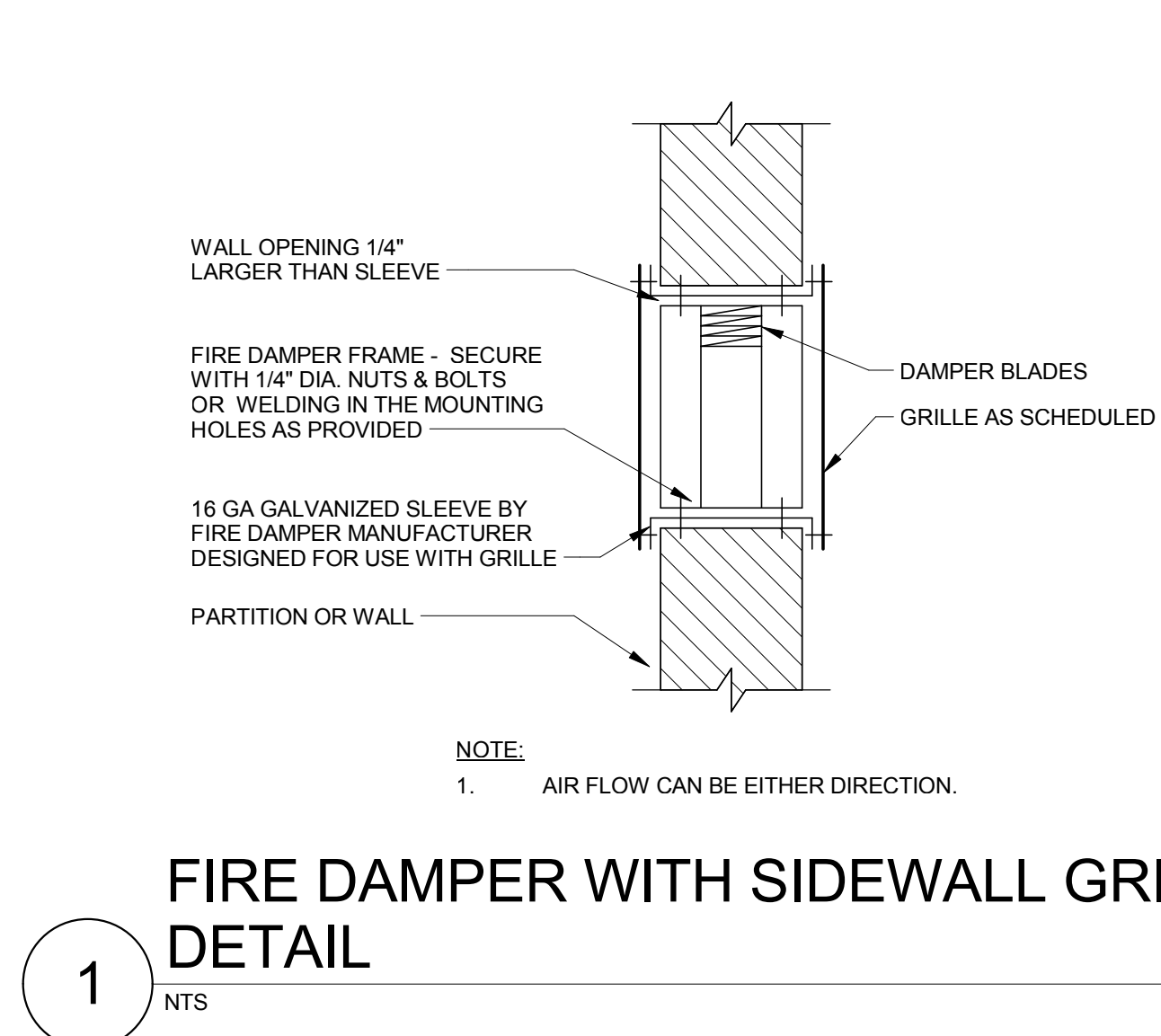
4 INTAKE GRILLE SECTION  
NTS



3 INTAKE GRILLE CROSS SECTION  
NTS



2 MECHANICAL INTAKE GRILLE DETAIL  
NTS



1 FIRE DAMPER WITH SIDEWALL GRILLE DETAIL  
NTS

FAN SCHEDULE																	
MARK	LOCATION	AREA AND/OR BLDG SERVED	DESCRIPTION	SYSTEM AND/OR SERVICE	AIR FLOW (CFM)	TSP (IN)	FAN				MOTOR ELECTRICAL					REMARKS	
							TYPE	WHEEL	DRIVE	FAN MAX (RPM)	BHP	HP	PHASE	VOLT	RPM		
EF-6.1	NORTHWEST STAIR	PARKING GARAGE	VERTICAL PROPELLER	EXHAUST	600	0.33	SIDEWALL	14"	26	DIRECT	1076	0.12	0.5	1	115	1725	1
NOTES:																	
1	FURNISH SOLID STATE SPEED CONTROLLER TO BE INSTALLED ABOVE CEILING BY DIV. 26. VERIFY UNIT DIMENSIONS, MOUNTING REQUIREMENTS AND HARDWARE TO MATCH SIMILAR TO EXISTING UNIT.																

ELECTRIC UNIT HEATER SCHEDULE												
MARK	LOCATION	AREA AND/OR BLDG SERVED	TYPE	AIR FLOW (CFM)	EAT (°F)	MIN CAPACITY (MBH)	KW	POWER			REMARKS	
								AMP	PHASE	VOLT		
CUH-4.1	NORTHWEST LOBBY	PARKING GARAGE	FLOOR MOUNTED VERTICAL CABINET SLOPE TOP	370	45	20.5	6	15.9	3	208	1	
CUH-5.1	NORTHWEST LOBBY	PARKING GARAGE	FLOOR MOUNTED VERTICAL CABINET SLOPE TOP	370	45	20.5	6	15.9	3	208	1	
CUH-6.1	NORTHWEST LOBBY	PARKING GARAGE	FLOOR MOUNTED VERTICAL CABINET SLOPE TOP	370	45	20.5	6	15.9	3	208	1	
UH-5.1	NORTHWEST STAIR	PARKING GARAGE	WALL BRACKET MOUNTED HORIZONTAL DISCHARGE	400	45	17.7	5	13.9	3	208	1	
UH-5.2	SOUTHEAST STAIR	PARKING GARAGE	WALL BRACKET MOUNTED HORIZONTAL DISCHARGE	400	45	17.7	5	13.9	3	208	1	
NOTES:												
1. PROVIDE THERMOSTAT, HEAVY DUTY GUARD AND WIRE. VERIFY UNIT DIMENSIONS, MOUNTING REQUIREMENTS AND HARDWARE TO MATCH SIMILAR TO EXISTING UNITS.												

LOUVER SCHEDULE										
MARK	TYPE	SERVICE	OPENING SIZE		MATERIAL	FINISH	MAX. (CFM)	FREE AREA (% min.)	FREE AREA VELOCITY (FPM)	REMARKS
			WIDTH (IN)	HEIGHT (IN)						
L-1.1	STATIONARY DRAINABLE	INTAKE	32	16	ALUMINUM	BY ARCHITECT	600	50	434	1
L-6.1	STATIONARY DRAINABLE	INTAKE	16	16	ALUMINUM	BY ARCHITECT	100	50	161	1
L-6.2	STATIONARY DRAINABLE	RELIEF	48	18	ALUMINUM	BY ARCHITECT	-	50	-	1
L-6.3	STATIONARY DRAINABLE	RELIEF	48	18	ALUMINUM	BY ARCHITECT	-	50	-	1
NOTES:										
1. PROVIDE INSECT SCREEN.										

AIR DEVICE SCHEDULE							
MARK	TYPE	SERVICE	MOUNTING	PANEL/FRAME SIZE (IN x IN)	CONNECTION SIZE (IN x IN)	FINISH	REMARKS
G-1.1	LINEAR BAR GRILLE, 15° DEFLECTION	INTAKE	SIDEWALL	72x6	72x6	MILL	1
G-1.2	LINEAR BAR GRILLE, 15° DEFLECTION	INTAKE	SIDEWALL	72x6	72x6	MILL	
G-1.3	LINEAR BAR GRILLE, 15° DEFLECTION	TRANSFER	SIDEWALL	16x8	16x8	BY ARCHITECT	
G-1.4	LINEAR BAR GRILLE, 15° DEFLECTION	TRANSFER	SIDEWALL	16x8	16x8	BY ARCHITECT	
G-2.1	LINEAR BAR GRILLE, 15° DEFLECTION	INTAKE	SIDEWALL	72x6	72x6	MILL	1
G-2.2	LINEAR BAR GRILLE, 15° DEFLECTION	INTAKE	SIDEWALL	72x6	72x6	MILL	
G-2.3	LINEAR BAR GRILLE, 15° DEFLECTION	TRANSFER	SIDEWALL	16x8	16x8	BY ARCHITECT	
G-2.4	LINEAR BAR GRILLE, 15° DEFLECTION	TRANSFER	SIDEWALL	16x8	16x8	BY ARCHITECT	
G-3.1	LINEAR BAR GRILLE, 15° DEFLECTION	INTAKE	SIDEWALL	72x6	72x6	MILL	1
G-3.2	LINEAR BAR GRILLE, 15° DEFLECTION	INTAKE	SIDEWALL	72x6	72x6	MILL	
G-3.3	LINEAR BAR GRILLE, 15° DEFLECTION	TRANSFER	SIDEWALL	16x8	16x8	BY ARCHITECT	
G-3.4	LINEAR BAR GRILLE, 15° DEFLECTION	TRANSFER	SIDEWALL	16x8	16x8	BY ARCHITECT	
G-4.1	LINEAR BAR GRILLE, 15° DEFLECTION	INTAKE	SIDEWALL	72x6	72x6	MILL	1
G-4.2	LINEAR BAR GRILLE, 15° DEFLECTION	INTAKE	SIDEWALL	72x6	72x6	MILL	
G-4.3	LINEAR BAR GRILLE, 15° DEFLECTION	TRANSFER	SIDEWALL	16x8	16x8	BY ARCHITECT	
G-4.4	LINEAR BAR GRILLE, 15° DEFLECTION	TRANSFER	SIDEWALL	16x8	16x8	BY ARCHITECT	
G-5.1	LINEAR BAR GRILLE, 15° DEFLECTION	INTAKE	SIDEWALL	72x6	72x6	MILL	1
G-5.2	LINEAR BAR GRILLE, 15° DEFLECTION	INTAKE	SIDEWALL	72x6	72x6	MILL	
G-5.3	LINEAR BAR GRILLE, 15° DEFLECTION	TRANSFER	SIDEWALL	16x8	16x8	BY ARCHITECT	
G-5.4	LINEAR BAR GRILLE, 15° DEFLECTION	TRANSFER	SIDEWALL	16x8	16x8	BY ARCHITECT	
G-6.1	LINEAR BAR GRILLE, 15° DEFLECTION	TRANSFER	SIDEWALL	16x8	16x8	BY ARCHITECT	
G-6.2	LINEAR BAR GRILLE, 15° DEFLECTION	TRANSFER	SIDEWALL	16x8	16x8	BY ARCHITECT	
G-6.3	EGGGRATE	INTAKE	LAY-IN	24x24	24x24	WHITE	
NOTES:							
1. PROVIDE 24"x6" INSECT SCREEN AND PLACE AT MIDDLE THIRD SECTION (CENTERED) FOR ACTIVE AIR FLOW. PROVIDE (TWO) 24"x6" BLANK-OFF STRIPS AND PLACE AT BOTH END LOCATIONS. REFERENCE ARCHITECTURAL DRAWING FOR STOREFRONT INTEGRATION.							

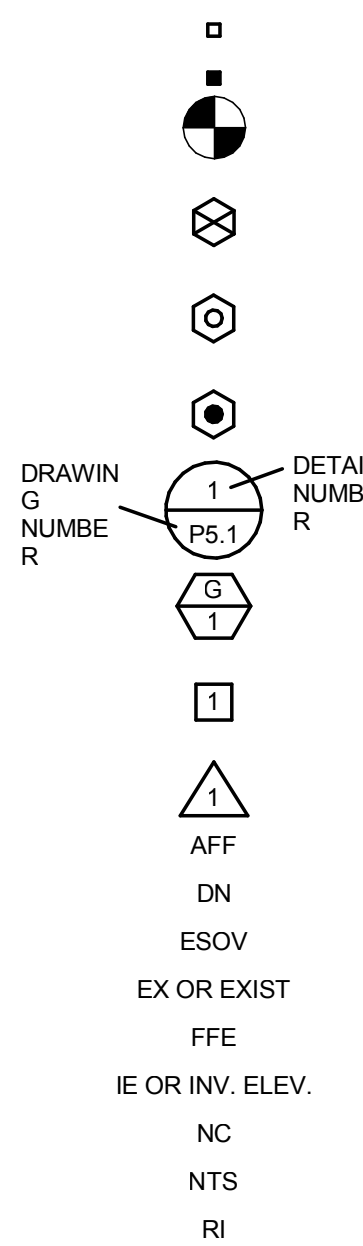


EQUIPMENT SCHEDULE			
MARK	CONNECTION SIZE	STRAINER	REMARKS
HB-1	3/4	100-200-300-400-500-600-700-800-900-1000	HOSE BIBB WITH VACUUM BREAKER, MADE IN USA.

\*THE EQUIPMENT SELECTION MATCHES THE EXISTING DRAINS IN BUILDING.

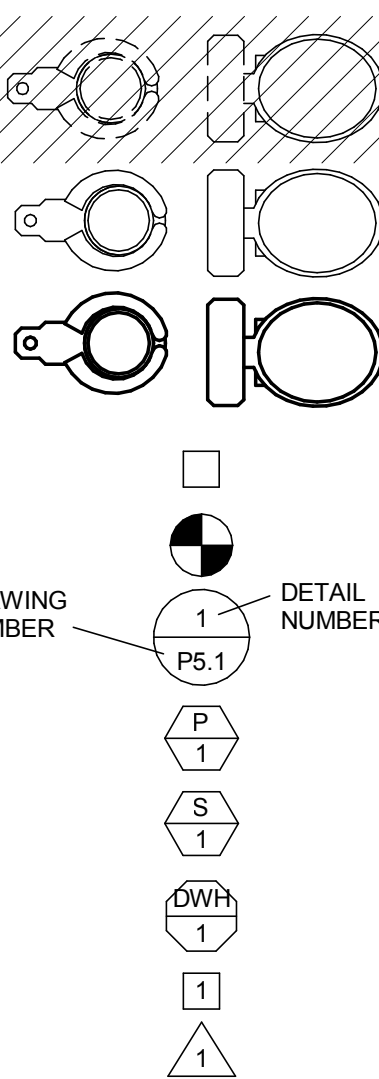
1. BECAUSE OF THE LIMITED SPACE AVAILABLE TO INSTALL ALL OF THE PLUMBING WORK, COORDINATION BETWEEN OTHER TRADES IS OF THE UTMOST IMPORTANCE.
2. DRAWINGS INDICATE THE GENERAL LOCATION AND ARRANGEMENT OF FIXTURES, EQUIPMENT AND PIPING SYSTEMS. LOCATION AND ARRANGEMENT OF PIPING TAKEUP TAKE INTO ACCOUNT MANY DESIGN CONSIDERATIONS, SUCH AS: CONTRACTOR'S PIPING, SLOPE, CLEARANCE, ETC. THE CONTRACTOR SHALL REPORT, IN WRITING, ANY DISCREPANCIES WHICH PREVENT THE INSTALLATION OF WORK AS SHOWN.
3. THIS CONTRACTOR SHALL VISIT THE PROJECT SITE, AND VERIFY LOCATIONS, ELEVATIONS AND SIZES OF ALL UTILITIES AT SITE PRIOR TO PROCEEDING WITH WORK. EXISTING SYSTEMS AND STRUCTURE SHALL BE IDENTIFIED FOR PROTECTION. THE CONTRACTOR SHALL PROVIDE COLD WATER, HOT WATER, SANITARY WASTE AND VENT, STORM AND MEDICAL GAS PIPING.
4. THESE PLANS ARE DIAGRAMATIC IN NATURE SINCE THE ONLY AVAILABLE INFORMATION HAS BEEN OBTAINED FROM EXISTING PLANS, SPECIFICATIONS, AND FIELD SURVEYS. THE EXACT LOCATION OF PIPING, FIXTURES, AND EQUIPMENT MAY DEViate FROM THE LOCATION INDICATED ON THESE DRAWINGS. THE CONTRACTOR SHALL MAINTAIN THE NEAREST AVAILABLE RECORDS. THE CONTRACTOR SHALL ALTERATIONS TO NEW AND/OR EXISTING SERVICES TO FIT JOB CONDITIONS. THIS CONTRACTOR SHALL FURNISH A COMPLETE AND CODE COMPLYING SYSTEM.
5. IF THE CONTRACTOR DOES NOT FULLY UNDERSTAND THESE PLANS OR IS NOT COMPLETELY SURE OF THEIR MEANING, HE/SHE SHOULD OBTAIN THE ENGINEERS WRITTEN EXPLANATION AND/OR INTERPRETATION PRIOR TO COMMENCING WORK. SINCE THE CONTRACTOR WILL BE HELD LIABLE TO THE INTERPRETATION OF THE ENGINEER.
6. CUTTING, REMOVING AND PATCHING OF EXISTING FLOOR(S), WALL(S), ROOF ETC. FOR PLUMBING PIPING INSTALLATION SHALL BE BY THIS CONTRACTOR. EXCAVATION, REMOVAL AND BACKFILL FOR PLUMBING PIPING INSTALLATION BELOW GRADE SHALL BE BY THIS CONTRACTOR.
7. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO REPAIR THE EXISTING SURFACES TO REMAIN WHERE THE WORK HAS BEEN COMPLETED. REPAIRS SHALL BE, BUT NOT LIMITED TO ANY EXISTING WALL, CEILING OR FLOOR THAT IS SCHEDULED TO REMAIN. REPAIR, PAINTING OR PATCHING SHALL BE COMPLETED BY AN APPROPRIATE CONTRACTOR QUALIFIED FOR THIS TYPE OF WORK.
8. THE OWNER SHALL MAINTAIN ALL SALVAGE RIGHTS OF FIXTURES, EQUIPMENT AND MATERIALS REMOVED. AFTER THE FIXTURES, EQUIPMENT AND MATERIALS HAVE BEEN REMOVED, THE CONTRACTOR SHALL BE REMOVED FOR THE PREMISES AND PROPERLY DISPOSED OF BY THE DEMOLITION CONTRACTOR.

NOT ALL SYMBOLS ARE USED FOR THIS PROJECT	
	DIRECTION OF FLOW/SLOPE (EXISTING)
	DIRECTION OF FLOW/SLOPE
	BRANCH CONNECTION, BOTTOM
	BRANCH CONNECTION, TOP
	ELBOW, TURNED DOWN
	ELBOW, TURNED UP
	GAS VALVE
	UNION
	PRESSURE REDUCING VALVE
	PIPING CAP
	ARGON PIPING
	COMPRESSED AIR PIPING
	COMPRESSED AIR INTAKE PIPING
	DENTAL VACUUM
	NATURAL GAS PIPING
	LAB AIR PIPING
	LAB GAS PIPING
	LAB VACUUM PIPING
	MEDICAL AIR PIPING
	MEDICAL VACUUM PIPING
	MEDICAL VACUUM EXHAUST PIPING
	OXYGEN PIPING
	NITROGEN PIPING
	NITROUS OXIDE PIPING
	EXISTING PIPING TO BE REMOVED
	MATCH LINE
	EXISTING GAS WALL OUTLET
	GAS WALL OUTLET
	CONNECTION TO EXISTING



DIRECTION OF FLOW/SLOPE (EXISTING)  
 DIRECTION OF FLOW/SLOPE  
 BRANCH CONNECTION, BOTTOM  
 BRANCH CONNECTION, TOP  
 ELBOW, TURNED DOWN  
 ELBOW, TURNED UP  
 GAS VALVE  
 UNION  
 PRESSURE REDUCING VALVE  
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 LAB AIR PIPING  
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 LAB VACUUM PIPING  
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 MEDICAL VACUUM EXHAUST PIPING  
 OXYGEN PIPING  
 NITROGEN PIPING  
 NITROUS OXIDE PIPING  
 EXISTING PIPING TO BE REMOVED  
 MATCH LINE  
 EXISTING GAS WALL OUTLET  
 GAS WALL OUTLET  
 CONNECTION TO EXISTING  
  
 EXISTING ZONE VALVE DESIGNATION  
  
 EXISTING AREA ALARM DESIGNATION  
  
 AREA ALARM DESIGNATION  
  
 INDICATES DETAIL NUMBER  
  
 INDICATES GAS RISER  
  
 KEYED NOTE  
  
 REVISION NOTE  
 ABOVE FINISHED FLOOR  
 DOWN  
 EMERGENCY SHUT-OFF VALVE  
 EXISTING  
 FINISHED FLOOR ELEVATION  
 INVERT ELEVATION  
 NORMALLY CLOSED  
 NOT TO SCALE  
 ROUGH-IN

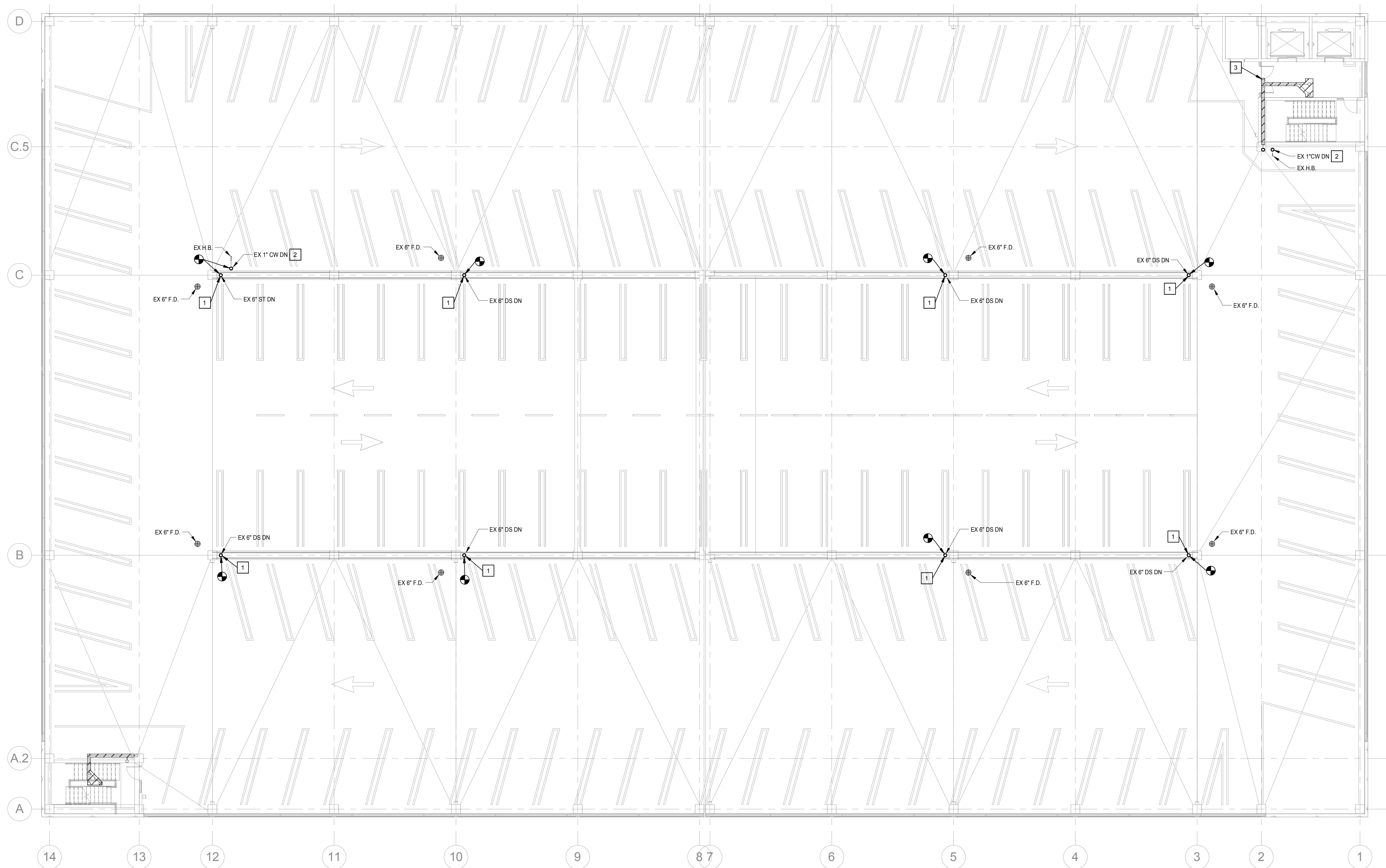
	NOT ALL SYMBOLS ARE USED FOR THIS PROJECT
	DIRECTION OF FLOW/SLOPE (EXISTING)
	DIRECTION OF FLOW/SLOPE
	BRANCH CONNECTION, BOTTOM
	BRANCH CONNECTION, TOP
	ELBOW, TURNED DOWN
	ELBOW, TURNED UP
	TRAPPED CONNECTION
	BALL VALVE
	BUTTERFLY VALVE
	UNION
	CHECK VALVE
	STRAINER
	CALIBRATED BALANCING VALVE
	CLEANOUT (CO)
	OS & Y GATE VALVE
	PRESSURE GAUGE
	TEMPERATURE GAUGE
	THERMOSTATIC MIXING VALVE
	DOUBLE CHECK BACKFLOW PREVENTER
	PRESSURE REDUCING VALVE
	HOSE BIBB
	HOSE END VALVE
	PIPING CAP
	ACID VENT
	ACID WASTE
	DRAIN PIPING
	DEIONIZED WATER PIPING
	DISTILLED WATER
	DOMESTIC COLD WATER (CW)
	DOMESTIC HOT WATER (HW)
	DOMESTIC HOT WATER RETURN (HWR)
	NON-POTABLE COLD WATER
	PUMP DISCHARGE PIPING
	SANITARY SEWER ABOVE GRADE
	SUBSOIL DRAINAGE
	STORM SEWER
	OVERFLOW STORM SEWER
	TEMPERED WATER
	VENT PIPING
	EXISTING PIPING TO BE REMOVED
	MATCH LINE



DIRECTION OF FLOW/SLOPE (EXISTING)  
DIRECTION OF FLOW/SLOPE  
BRANCH CONNECTION, BOTTOM  
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DOMESTIC HOT WATER (HW)  
DOMESTIC HOT WATER RETURN (HWR)  
NON-POTABLE COLD WATER  
PUMP DISCHARGE PIPING  
SANITARY SEWER ABOVE GRADE  
SUBSOIL DRAINAGE  
STORM SEWER  
OVERFLOW STORM SEWER  
TEMPERED WATER  
VENT PIPING  
EXISTING PIPING TO BE REMOVED  
MATCH LINE  
  
EXISTING FIXTURE TO BE REMOVED  
  
EXISTING FIXTURE  
  
NEW PLUMBING FIXTURE  
  
FLOOR DRAIN (FD)  
CONNECTION TO EXISTING  
INDICATES DETAIL NUMBER  
INDICATES PLUMBING RISER  
INDICATES SANITARY RISER  
INDICATES EQUIPMENT  
KEYED NOTE  
REVISION NOTE

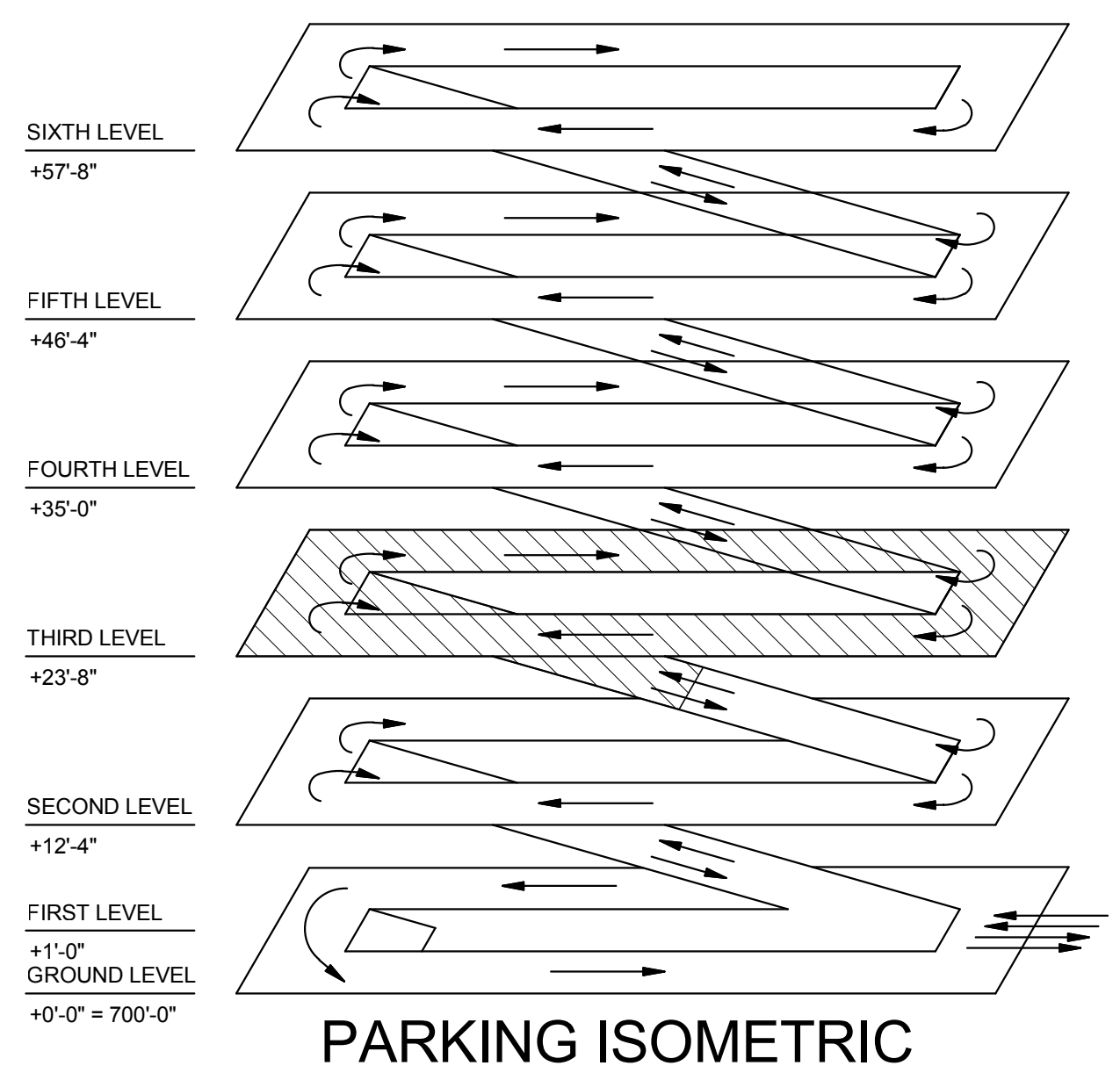
NOT ALL SYMBOLS ARE USED FOR THIS PROJECT	
ADA	AMERICAN DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
BP	BOOSTER PUMP
BT	BATHTUB
BTC	BRANCH TO CONNECTION
CBV	CALIBRATED BALANCING VALVE
CI	CAST IRON
CO	CLEANOUT
CSS	CLINICAL SERVICE SINK
CV	CHEMICAL VENT
CVTR	CHEMICAL VENT THRU ROOF
DN	DOWN
DS	DOWNSPOUT
DW	DISHWASHER
DWH	DOMESTIC WATER HEATER
EEW	EMERGENCY EYE WASH
ET	EXPANSION TANK
EWC	ELECTRIC WATER COOLER
EX OR EXIST	EXISTING
FFE	FINISHED FLOOR ELEVATION
FCO	FLOOR CLEANOUT
GD	GARBAGE DISPOSAL
HB	HOSE BIBB
HWRP	HOT WATER RETURN PUMP
HWST	HOT WATER STORAGE TANK
IE OR INV. ELEV	INVERT ELEVATION
IM	ICE MAKER
IV	INDIRECT WASTE
LA	LAVATORY
MB	MOP BASIN
NC	NORMALLY CLOSED
NTS	NOT TO SCALE
OB	OUTLET BOX
RO	ROOF DRAIN
RI	ROUGH-IN
RPBFP	BACKFLOW PREVENTER (REDUCED PRESSURE)
SH	SHOWER
SK	SINK
SP	SUMP PUMP
S/S	STAINLESS STEEL
SS	SANITARY STACK
SSK	SHOP SINK
TMV	THERMOSTATIC MIXING VALVE
UR	URINAL
VS	VENT STACK
VTR	VENT THRU ROOF
WC	WATER CLOSET
WCO	WALL CLEANOUT
WD	WASHER DRAIN
WH	WALL HYDRANT
WHA	WATER HAMMER ARRESTOR
WM	WATER METER
WS	WASTE STACK
WVS	WASTE VENT STACK
YCO	YARD CLEANOUT

Revision Schedule		CONSULTANTS:		TRUE NORTH		ARCHITECT/ENGINEERS:			Drawing Title			Project Title			Project Number		Office of Construction and Facilities Management								
Comments		Date																	PLUMBING SYMBOLS & ABBREVIATIONS			R.L. Roudebush VA Medical Center Parking Garage			583-330 / 1724-05
														Location INDIANAPOLIS, IN			Drawing Number		VA Department of Veterans Affairs						
															P000			Dwg. 67 of 93							
															Date 10/14/14			Checked JJR			Drawn SBS				



- GENERAL NOTES:**
- A. THE CONTRACTOR SHALL COORDINATE ALL NEW PIPING WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS AND PROVIDE ALL NECESSARY PIPE AND FITTINGS NEEDED TO ACCOMMODATE REQUIRED OFFSETS. ALL PIPING TO BE HELD TIGHT TO STRUCTURE.
- B. ALL PRODUCTS TO BE MADE IN USA. ANY MODEL NUMBERS LISTED IN BID DOCUMENTS IS FOR DESIGN CRITERIA USE ONLY. ONLY PRODUCTS MADE IN USA WILL BE ACCEPTED.

- # KEYED NOTES:**
- 1 THE CONTRACTOR SHALL CONNECT TO THE EXISTING 6\"/>

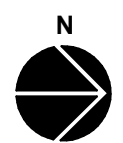
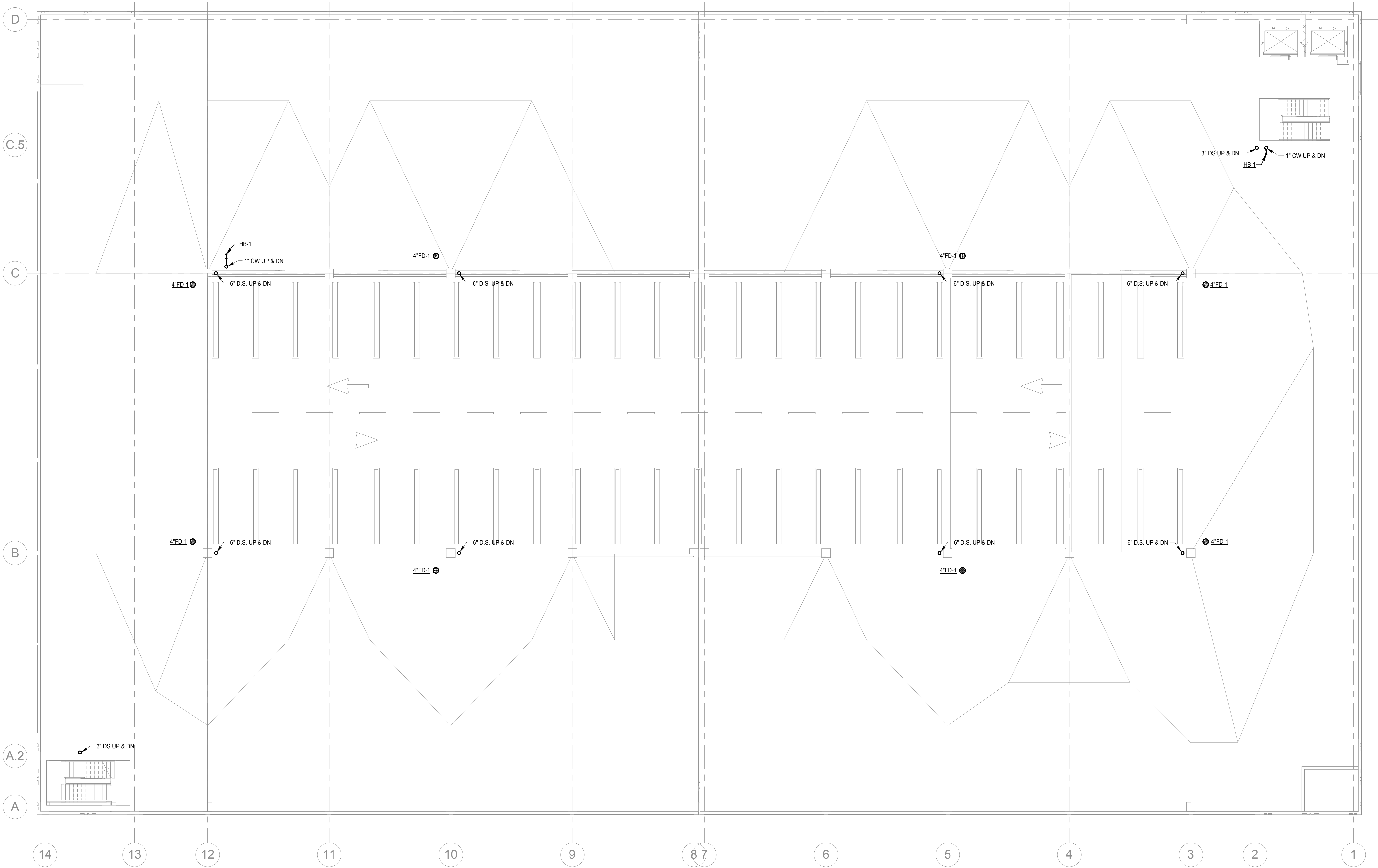


BID DOCUMENTS

Revision Schedule		CONSULTANTS:	TRUE NORTH	ARCHITECT/ENGINEERS:	Drawing Title	Project Title	Project Number	Office of Construction and Facilities Management			
Comments	Date										
				 7260 Shadeland Station   Indianapolis, Indiana 46256 TEL 317.547.5580   FAX 317.543.0270 www.structurepoint.com		 <i>Andre J. Malin</i>	PLUMBING THIRD LEVEL PLAN	R.L. Roudebush VA Medical Center Parking Garage	Building Number 20	Drawing Number  P102  Dwg. 68 of 93	VA Department of Veterans Affairs

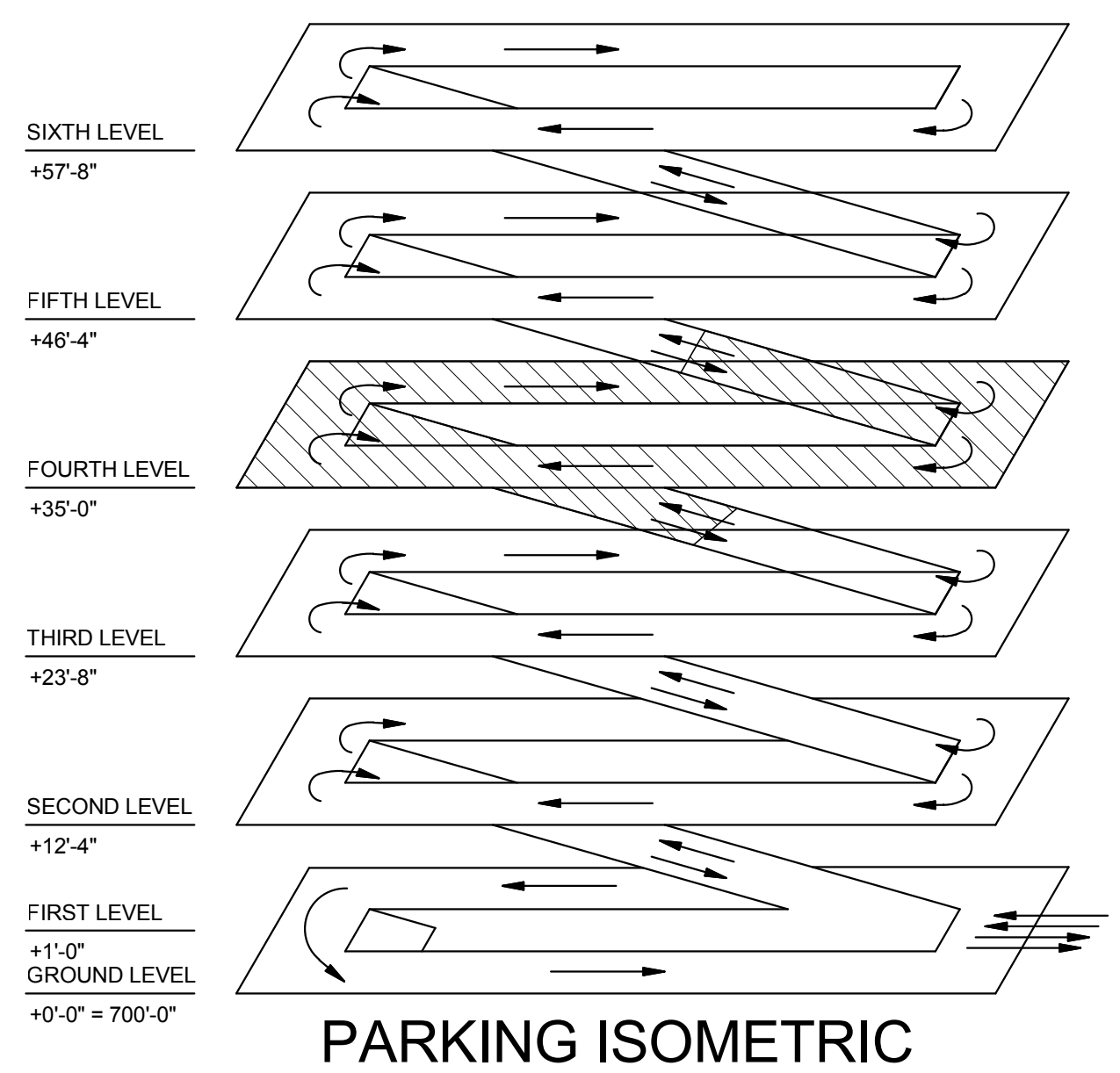
one eighth inch = one foot  
one quarter inch = one foot  
one half inch = one foot  
three eighths inch = one foot  
three quarters inch = one foot  
one inch = one foot  
one and one half inches = one foot  
two inches = one foot  
three inches = one foot

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1  
P103  
PLUMBING FOURTH LEVEL PLAN  
3/32" = 1'-0"

- GENERAL NOTES:**
- THE CONTRACTOR SHALL COORDINATE ALL NEW PIPING WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS AND PROVIDE ALL NECESSARY PIPE AND FITTINGS NEEDED TO ACCOMMODATE REQUIRED OFFSETS. ALL PIPING TO BE HELD TIGHT TO STRUCTURE.
  - ALL PRODUCTS TO BE MADE IN USA. ANY MODEL NUMBERS LISTED IN BID DOCUMENTS IS FOR DESIGN CRITERIA USE ONLY. ONLY PRODUCTS MADE IN USA WILL BE ACCEPTED.



BID DOCUMENTS

Revision Schedule		Comments	Date	CONSULTANTS:	TRUE NORTH	ARCHITECT/ENGINEERS:	Drawing Title	Project Title			Project Number	Building Number	Drawing Number	Office of Construction and Facilities Management
PLUMBING FOURTH LEVEL PLAN								R.L. Roudebush VA Medical Center Parking Garage						
						 7200 Shadeland Station   Indianapolis, Indiana 46256 TEL 317.847.5580   FAX 317.543.0270 www.structurepoint.com		 <i>Andre J. Malin</i>	Location INDIANAPOLIS, IN			P103 Dwg. 69 of 93	VA Department of Veterans Affairs	
Date 10/14/14		Checked JJR	Drawn SMB											

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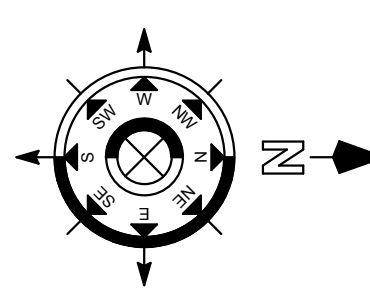
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Revision Schedule	
Comments	Date

CONSULTANTS:



TRUE NORTH




ARCHITECT/ENGINEERS:



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TEL 317.547.5580 / FAX 317.543.0270  
www.structurepoint.com

Ross & Baruzzini



ANDRE J. MALIN  
REGISTERED  
NO. 10001168  
STATE OF INDIANA  
PROFESSIONAL ENGINEER  
6/12/14

Drawing Title

PLUMBING FIFTH LEVEL PLAN

Project Title

R.L. Roudebush VA Medical Center Parking Garage

Location

INDIANAPOLIS, IN

Date

10/14/14

Checked

JJR

Drawn

SMB

Project Number

583-330 / 1724-05

Building Number

20

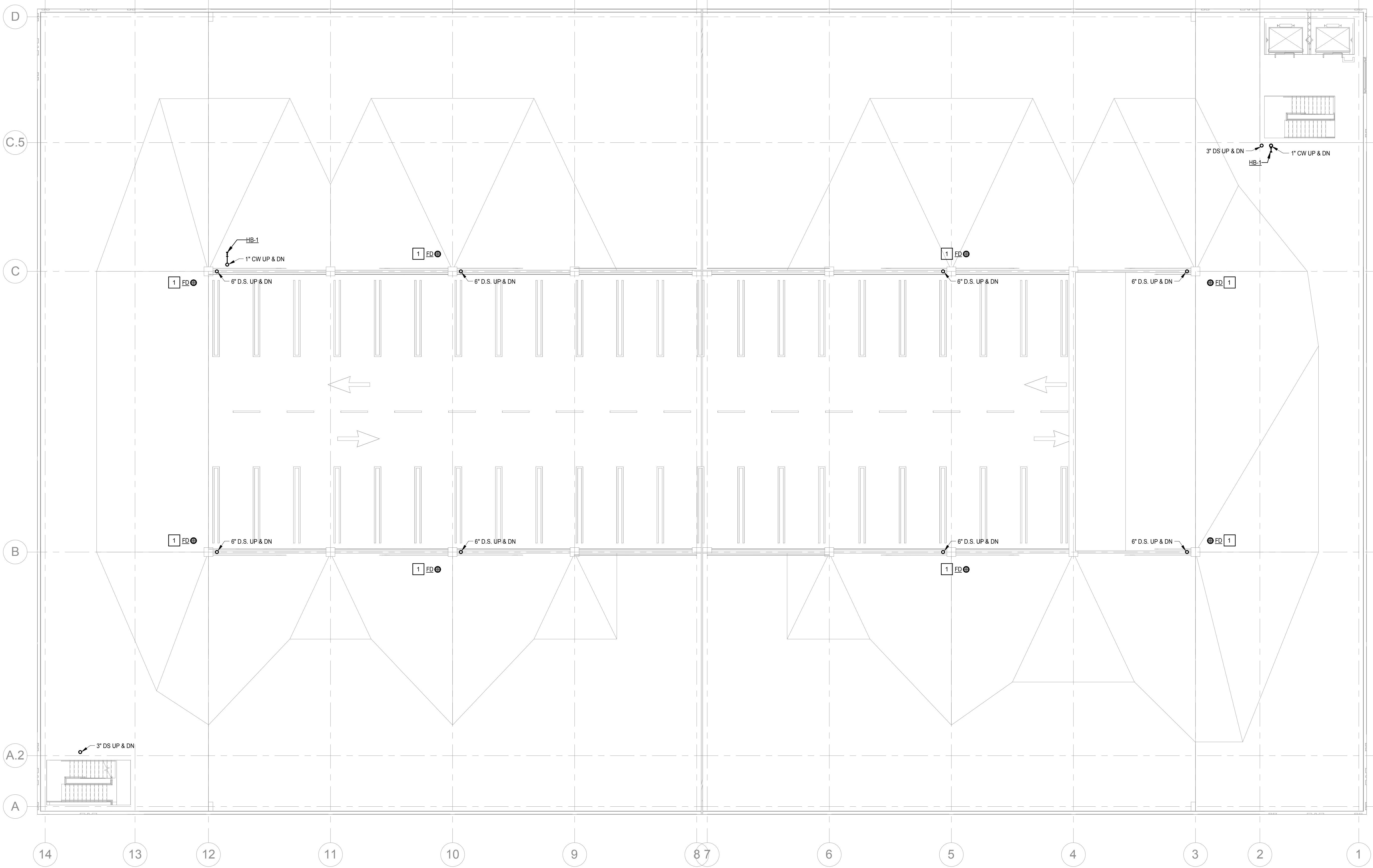
Drawing Number

P104

Dwg.70 of 93

Office of Construction and Facilities Management

VA Department of Veterans Affairs



PLUMBING FIFTH LEVEL PLAN  
P104 3/32" = 1'-0"

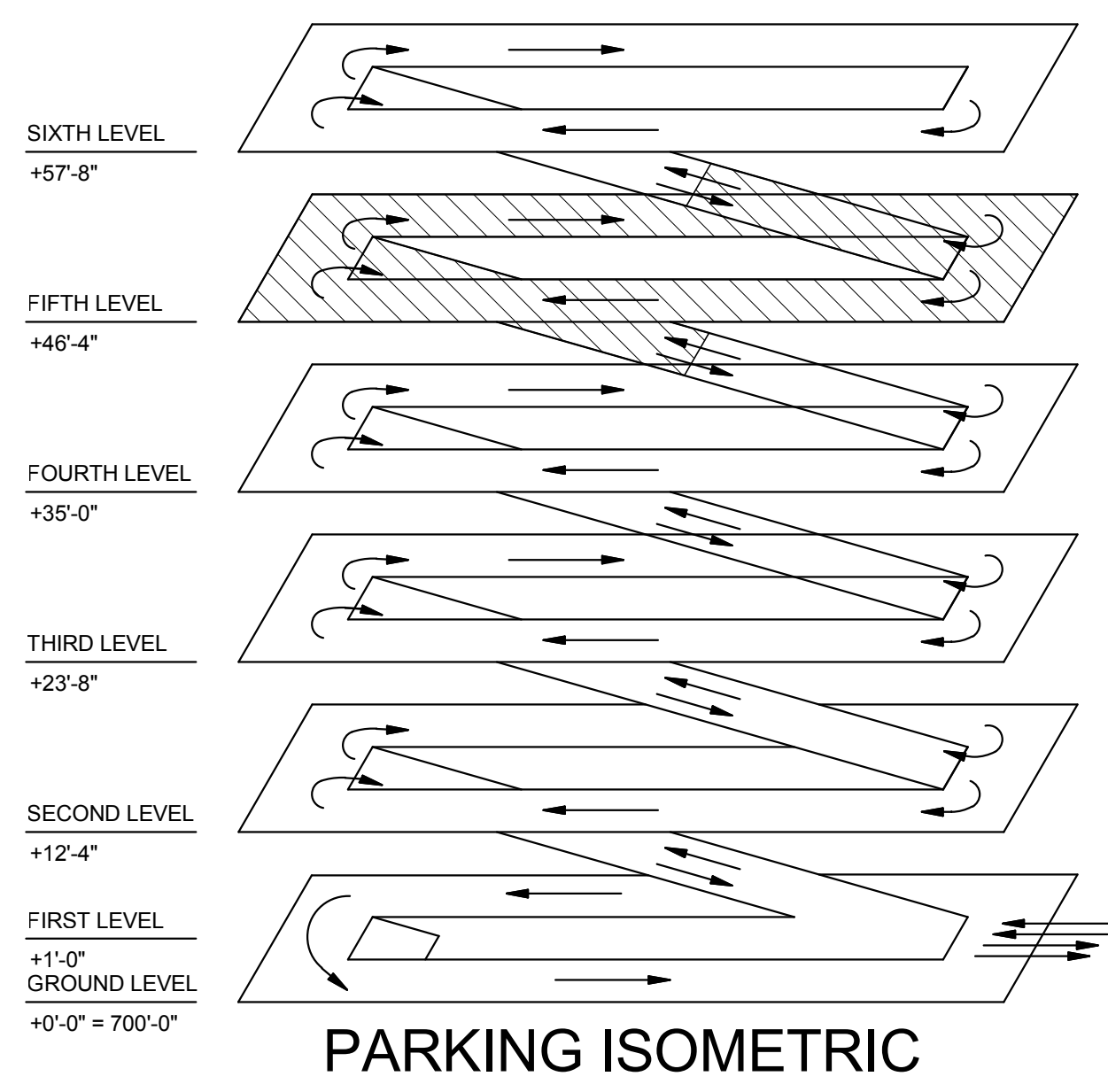
GENERAL NOTES:

A. THE CONTRACTOR SHALL COORDINATE ALL NEW PIPING WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS AND PROVIDE ALL NECESSARY PIPE AND FITTINGS NEEDED TO ACCOMMODATE REQUIRED OFFSETS. ALL PIPING TO BE HELD TIGHT TO STRUCTURE.

B. ALL PRODUCTS TO BE MADE IN USA. ANY MODEL NUMBERS LISTED IN BID DOCUMENTS IS FOR DESIGN CRITERIA USE ONLY. ONLY PRODUCTS MADE IN USA WILL BE ACCEPTED.

KEYED NOTES:

1 UNDER BASE BID THIS FLOOR DRAIN IS A 4"FD-1. IF ALTERNATE DUCT ID #7 IS EXCEPTED, THIS FLOOR DRAIN WILL BE A 6"FD-2.

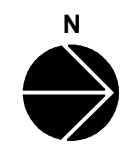
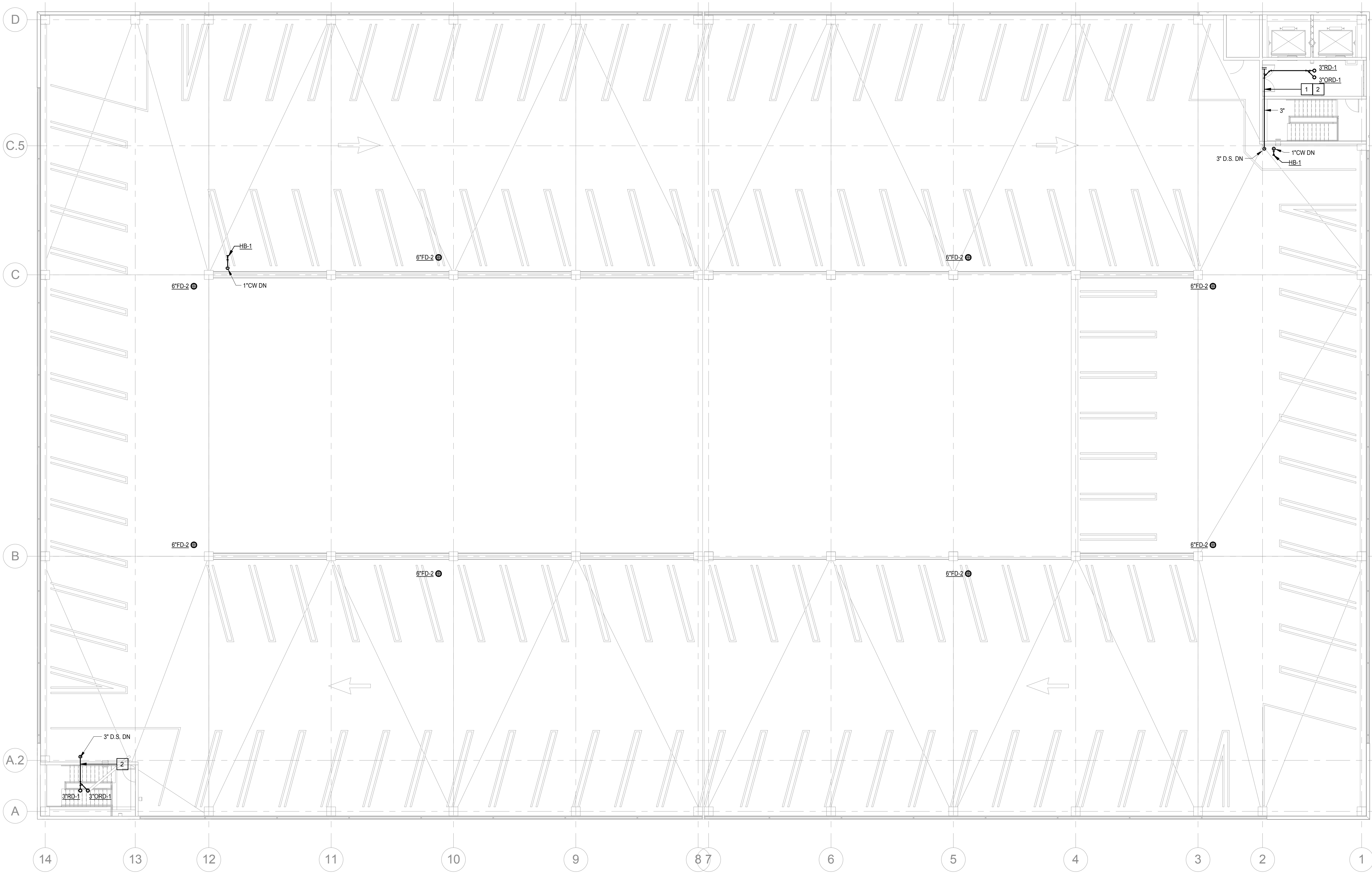


BID DOCUMENTS



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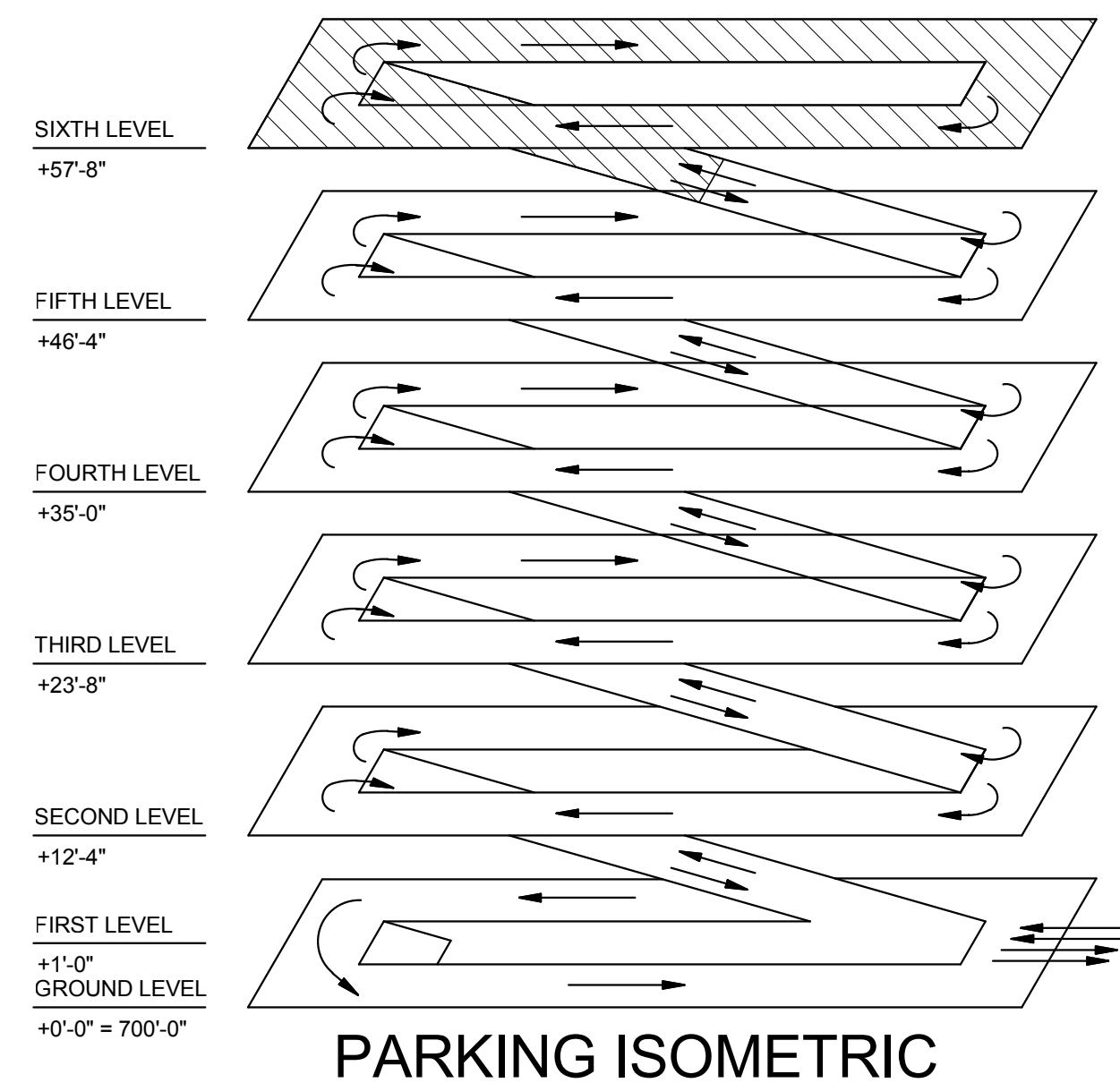
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1 P105 3/32" = 1'-0" PLUMBING SIXTH LEVEL PLAN - ALTERNATE DEDUCT #6

- GENERAL NOTES:**
- A. THE CONTRACTOR SHALL COORDINATE ALL NEW PIPING WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS AND PROVIDE ALL NECESSARY PIPE AND FITTINGS NEEDED TO ACCOMMODATE REQUIRED OFFSETS. ALL PIPING TO BE HELD TIGHT TO STRUCTURE.
  - B. ALL PRODUCTS TO BE MADE IN USA. ANY MODEL NUMBERS LISTED IN BID DOCUMENTS IS FOR DESIGN CRITERIA USE ONLY. ONLY PRODUCTS MADE IN USA WILL BE ACCEPTED.

- KEYED NOTES:**
- 1 IF ALTERNATE DEDUCT BID #7 IS ACCEPTED THIS PIPING WILL BE AT TOP OF STAIRS ON THE FIFTH LEVEL.
  - 2 ALL STORM PIPING WITHIN LOBBY/STAIRWELL TO BE ISOLATED.



PARKING ISOMETRIC

BID DOCUMENTS

Revision Schedule		CONSULTANTS:		TRUE NORTH		ARCHITECT/ENGINEERS:			Drawing Title		Project Title		Project Number		Office of Construction and Facilities Management		
Comments		Date						 7200 Shadeland Station   Indianapolis, Indiana 46256 TEL 317.547.5580   FAX 317.543.0270 www.structurepoint.com		PLUMBING SIXTH LEVEL PLAN		R.L. Roudebush VA Medical Center Parking Garage		583-330 / 1724-05			
												Location INDIANAPOLIS, IN		Building Number 20			
												Drawing Number  P105					
										Date 10/14/14		Checked JJR				Drawn SBS	



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ELECTRICAL LEGEND AND ABBREVIATIONS (SEE SPECIFICATIONS & SCHEDULES)

- NOTES: 1. ALL SYMBOLS AND ABBREVIATIONS ARE NOT NECESSARILY USED ON THESE PLANS.  
2. ALL MOUNTING HEIGHTS ARE TO CENTER LINE OF DEVICES AND EQUIPMENT U.O.N.  
3. IN GENERAL, SYMBOLS SHOWN WITH LIGHT LINES DENOTE EXISTING WORK. SYMBOLS SHOWN WITH HEAVY LINES DENOTE NEW WORK.

ELECTRICAL GENERAL NOTES

- ALL INSTALLATIONS SHALL BE MADE IN ACCORDANCE WITH THE [AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) AND/OR [ARCHITECTURAL BARRIERS ACT (ABA)].
- IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE EXACT EQUIPMENT LOCATIONS WITH OTHER TRADES. EQUIPMENT LOCATIONS SHOWN ON ELECTRICAL PLANS ARE DIAGRAMMATIC ONLY AND MAY NOT BE THE EXACT LOCATION.
- ON PLANS, CIRCUIT IDENTIFICATION NUMBERS BESIDE ELECTRICAL DEVICES AND CONNECTION POINTS CORRESPOND TO AN OVERCURRENT DEVICE IN THE DESIGNATED PANEL.
- EMERGENCY AND EXIT LUMINAIRES SHALL HAVE CIRCUITING PROVIDED IN A SEPARATE RACEWAY FROM THAT OF ANY NORMAL POWER DEVICE.
- ALL CONDUIT SHALL BE CONCEALED IN WALLS, PARTITIONS, ABOVE CEILINGS, AND/OR IN FLOOR SLABS, ETC. UNLESS OTHERWISE INDICATED ON THE PLANS OR IN THE SPECIFICATIONS. CONDUIT ROUTED IN MECHANICAL ROOMS, ELECTRICAL ROOMS, AND STORAGE ROOMS WITHOUT CEILINGS MAY BE ROUTED EXPOSED.
- ELECTRICAL CONNECTIONS FOR ELECTRIC WATER COOLERS (EWC) SHALL BE CONCEALED BEHIND WATER COOLER ACCESS PLATE OR DIRECTLY BELOW AND CENTERED ON WALL.
- ALL ELECTRICAL AND TELECOMMUNICATIONS EQUIPMENT MOUNTING LOCATIONS SHALL BE FIELD COORDINATED TO AVOID ENCROACHMENT OF OPERATION AND/OR ACCESS TO EQUIPMENT FROM OTHER TRADES. WHEN EQUIPMENT IS SPECIFIED TO BE MOUNTED ONTO THE SURFACE OF ANOTHER DISCIPLINE'S EQUIPMENT, IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE APPROPRIATE MOUNTING LOCATION WITH THAT CONTRACTOR.
- ALL OPENINGS MADE IN EXISTING WALLS, PARTITIONS, ETC TO ACCOMMODATE WORK PERFORMED BY THE ELECTRICAL CONTRACTOR SHALL BE REPAIRED TO MATCH EXISTING BY A QUALIFIED CONTRACTOR AT THE EXPENSE OF THE ELECTRICAL CONTRACTOR. ALL CONDUITS THROUGH WALLS SHALL BE APPROPRIATELY GROUTED OR SEALED.
- ALL MATERIALS USED TO SEAL PENETRATIONS OF FIRE RATED WALLS AND FLOORS SHALL BE TESTED AND CERTIFIED AS A SYSTEM PER ASTM E814 STANDARDS FOR FIRE TESTS OF THROUGH-PENETRATION FIRESTOPS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- CONTRACTOR SHALL INSTALL AT EACH SERVICE ENTRANCE A PERMANENT DIRECTORY ACCORDING TO NATIONAL ELECTRIC CODE, ARTICLE 230.
- ALL WELDING SHALL BE ACCORDING TO AMERICAN WELDING SOCIETY STANDARDS. CONTRACTOR SHALL FURNISH TO THE ARCHITECT/ENGINEER CERTIFICATES QUALIFYING EACH WELDER, PRIOR TO START OF WORK. THE ARCHITECT/ENGINEER RESERVES THE RIGHT TO REQUIRE QUALIFYING DEMONSTRATION, AT THE CONTRACTOR'S EXPENSE, OF ANY WELDERS ASSIGNED TO THE JOB.
- ANY PORTION OF BUILDING (CEILING TILES, WALLS, ETC) REMOVED TO ACCOMMODATE THE INSTALLATION OF ANY ELECTRICAL DEVICE, EQUIPMENT, ETC. SHALL BE REPLACED/REINSTALLED BY A QUALIFIED CONTRACTOR OF THE APPROPRIATE TRADE AT THE ELECTRICAL CONTRACTOR'S EXPENSE.
- IN ALL MECHANICAL AND ELECTRICAL EQUIPMENT AREAS, CONTRACTOR IS TO COORDINATE LUMINAIRE LOCATIONS SUCH THAT LUMINAIRES RUN PARALLEL TO THE FACE OF THE EQUIPMENT AND OVER AISLES BETWEEN EQUIPMENT. INSTALL AT EXACT LOCATIONS AND AT EXACT HEIGHT TO ILLUMINATE ALL GAGES, PANELS, CONTROLS, VALVES, ETC. CHAIN HANGING, STEM HANGING, UNISTRUT HANGING, ETC. ARE ACCEPTABLE METHODS.

GENERAL DEMOLITION NOTES

- THE ELECTRICAL CONTRACTOR SHALL REMOVE, CAP AND/OR RELOCATE EQUIPMENT, OUTLETS, CONDUIT, WIRE, ETC., AS SHOWN AND SPECIFIED ON DRAWINGS, AND AS MAY BECOME NECESSARY BECAUSE OF EXISTING FIELD CONDITIONS. IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO VISIBLY EXAMINE ALL EXISTING WALLS DESIGNATED FOR REMOVAL TO DETERMINE THE CONDUIT AND THE WIRING THAT WILL REQUIRE CAPPING AND/OR REMOVAL. WHETHER OR NOT SUCH CONDITIONS ARE INDICATED ON THE DRAWINGS, THE CONTRACTOR SHALL BE HELD TO HAVING VISITED THE SITE AND TAKEN ALL EXISTING CONDITIONS INTO CONSIDERATION.
- MAINTAIN CIRCUIT CONTINUITY TO ALL EXISTING FIXTURES, EQUIPMENT, OUTLETS, ETC., TO REMAIN IN USE WHETHER NOTED ON THE PLANS OR NOT. FIELD VERIFY EXISTING ITEMS TO REMAIN IN USE. WIRING FOR EXISTING CIRCUITS WHICH MUST BE RE-ROUTED OR WHICH ARE PARTIALLY ABANDONED, SHALL BE RECONNECTED TO SERVICE THE REMAINING OUTLETS ON THE CIRCUIT.
- IN THE DEMOLITION WORK, REMOVE ALL UNUSED WIRING AND CABLES BACK TO SOURCE AND UNUSED CONDUIT THAT IS EXPOSED OR WITHIN ACCESSIBLE CEILINGS WHICH IS AFFECTED BY AND IS IN THE AREA OF THE WORK OF THIS CONTRACT.
- THE INTENTION OF THE ELECTRICAL DEMOLITION DRAWINGS IS TO DISCONNECT AND REMOVE ALL ELECTRICAL WORK MADE VOID BY THE SCOPE OF THE CONSTRUCTION AND ALTERATION. FIELD VERIFY EXACT MATERIAL QUANTITIES REQUIRED TO BE REMOVED.
- ALL EXISTING ELECTRICAL WORK AND ASSOCIATED RACEWAY AND WIRING, WHICH HAS BEEN MADE OBSOLETE BY THE WORK AND/OR IS SHOWN DASHED ON THE ELECTRICAL DEMOLITION DRAWINGS SHALL BE DISCONNECTED AND REMOVED, UNLESS OTHERWISE NOTED. ALTHOUGH AN ATTEMPT HAS BEEN MADE TO INDICATE ALL OF THIS WORK, TOTAL ACCURACY IS NOT GUARANTEED. CONTRACTOR SHALL VISIBLY EXAMINE ALL AREAS AND WALLS AND CEILINGS SCHEDULED FOR REMOVAL TO DETERMINE EXISTING ELECTRICAL ITEMS TO REMAIN.
- WHERE ELECTRICAL EQUIPMENT, CONDUIT, BOXES, AND SUPPORTING HARDWARE ARE REMOVED; PATCH AND FINISH THE SURFACE AS REQUIRED TO MATCH THE EXISTING, UNLESS OTHERWISE NOTED.
- WHERE BURIED CONDUITS EXTENDING OUT OF A CONCRETE SLAB BECOME ABANDONED, CUT AND GRIND THE CONDUITS OFF FLUSH WITH TOP OF SLAB AND PLUG WITH NON-SHRINK WATERPROOF GROUT FILL.
- ALL REMOVED MATERIALS, OTHER THAN REMOVED MATERIALS TO BE RELOCATED, OR STORED, OR TURNED OVER TO THE OWNER, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE PROJECT SITE.
- ACCEPTANCE OF CONTRACT MEANS INSTALLER ACCEPTS EXISTING CONDITIONS.
- CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK WITH ALL OTHER TRADES.
- IN WALLS OR FLOORS WHERE A FLUSH DEVICE IS BEING REMOVED, BUT THE WALL OR FLOOR REMAINS OR FOR ANY OUTLET WHICH MUST REMAIN, BUT HAS A DEVICE REMOVED, PROVIDE A BLANK COVER OVER THE OUTLET. MATCH THE COLOR AND MATERIAL OF EXISTING REMAINING COVERS IN THE ROOM OR SPACE.
- LEGALLY DISPOSE OF HAZARDOUS MATERIALS AND BALLASTS OR OTHER EQUIPMENT CONTAINING PCB'S AND LAMPS CONTAINING MERCURY. COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS.
- MODIFY EXISTING PANEL DIRECTORIES (OR REPLACE) FOR PANELS WHICH HAVE HAD ALTERATIONS TO THE CIRCUITS ORIGINATING THEREIN. DESCRIBE THE LOAD AND LOCATION. NEW PANEL DIRECTORIES SHALL BE TYPED.

ONE-LINE DIAGRAM GENERAL NOTES

- AIC RATINGS LISTED FOR ELECTRICAL EQUIPMENT ARE THE MINIMUM REQUIREMENTS FOR THE BUS BRACING AND DEVICE RATINGS. ALL EQUIPMENT SHALL BE FULLY RATED UNLESS SPECIFICALLY NOTED AS SERIES RATED. ELECTRICAL CONTRACTOR IS REQUIRED TO PROVIDE ARC FLASH HAZARD AND PERSONNEL PROTECTIVE EQUIPMENT LABELS FOR EACH INDICATED PIECE OF ELECTRICAL EQUIPMENT. [CONTACT ENGINEER OF RECORD FOR LABEL TEMPLATE AND RATINGS REQUIRED.]
- ALL FUSED SWITCHES AND CIRCUIT BREAKERS SHOWN ON THIS PLAN ARE 3-POLE, UNLESS NOTED OTHERWISE.
- "AF" INDICATES CIRCUIT BREAKER FRAME SIZE.
- "AT" INDICATES CIRCUIT BREAKER TRIP SETTING. (FOR ADJUSTABLE TRIP TYPE CIRCUIT BREAKERS)
- THE VARIABLE FREQUENCY DRIVE AND DISCONNECT SCHEME SHOWN ON THIS PLAN REQUIRES SPECIFIC INTERLOCKING OF EQUIPMENT. IT IS THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO COORDINATE ALL REQUIRED AUXILIARY CONTACTS OF EQUIPMENT AND FURNISH AND INSTALL ALL CABLES, CONDUIT, TERMINATIONS, ETC. FOR A COMPLETE INTERLOCKING SYSTEM.

ABBREVIATIONS

- A.F.F. - ABOVE FINISHED FLOOR  
ATS - AUTOMATIC TRANSFER SWITCH  
B.C. - BELOW CEILING  
C - CONDUIT  
CCTV - CLOSED CIRCUIT TELEVISION  
DP - DISTRIBUTION PANEL  
DWG - DRAWING  
E.C. - ELECTRICAL CONTRACTOR  
ELEC - ELECTRIC OR ELECTRICAL  
EMT - ELECTRICAL METALLIC TUBING  
ER - EXISTING RELOCATED  
ETR - EXISTING TO REMAIN  
EWC - ELECTRIC WATER COOLER  
F/O - FIBER OPTIC  
G.C. - GENERAL CONTRACTOR  
GF - GROUND FAULT  
GFCI - GROUND FAULT CIRCUIT INTERRUPTER  
GRD - GROUND  
GRS - GALVANIZED RIGID STEEL  
IMC - INTERMEDIATE METAL CONDUIT  
LAN - LOCAL AREA NETWORK  
MC - METAL CLAD  
MCC - MOTOR CONTROL CENTER  
MH - MANHOLE  
NC - NURSE CALL  
NL - NIGHT LIGHT  
PA - PUBLIC ADDRESS  
PVC - POLYVINYL CHLORIDE CONDUIT  
RF - RADIO FREQUENCY  
RGS - RIGID GALVANIZED STEEL  
SWBD - SWITCHBOARD  
TYP - TYPICAL  
UPS - UNINTERRUPTIBLE POWER SUPPLY  
U.O.N. - UNLESS OTHERWISE NOTED

SPECIAL SYSTEMS

- [MAG] ELECTRO-MAGNETIC LOCK  
[PS] POWER SUPPLY  
[BMS] BALANCED MAGNETIC SWITCH  
[PIR] PASSIVE INFRA-RED DETECTOR  
[ES] ELECTRIC DOOR STRIKE (FURNISHED BY G.C., INSTALLED BY E.C.)  
[CR] CARD READER - WALL MOUNT AT 48" A.F.F.  
[CRP] CARD READER WITH PIN PAD  
[KS] KEYSWITCH - WALL MOUNT AT 48" A.F.F.  
[V] COMBINATION AUDIO/VISUAL ALARM  
A - AUDIO ALARM ONLY  
V - COMBINATION AUDIO/VIDEO VISUAL ALARM  
[B] BUZZER MOUNT AS NOTED  
[P] BELL MOUNT AS NOTED  
[CH] CHIME MOUNT AS NOTED  
[D] DOOR ALARM JAMB SWITCH MOUNT AS NOTED  
[PUSH] PUSHBUTTON - 48" A.F.F. OR AS NOTED  
[S] SPEAKER - CEILING  
[S] SPEAKER - WALL MOUNTED 7'-0" OR AS NOTED  
[V] FLUSH VOLUME CONTROL - 48" A.F.F.  
[W] WALL MOUNT 2 GANG BOX WITH SINGLE GANG RING MOUNTED VERTICAL AT 1'-6" A.F.F. U.O.N.  
[STUB] STUB 3/4" EMPTY CONDUIT INTO ACCESSIBLE CEILING. OUTLET, PLATE, JACK AND WIRING BY OWNER.

DRAWING REFERENCES

- # PLAN DETAIL REFERENCE TITLE  
# KEYED NOTE DESIGNATION  
PLAN NORTH  
XXXX ROOM NUMBERS  
SECTION REFERENCE  
1 SECTION REFERENCE TITLE  
E-1 DRAWING NUMBER  
AHU-1 PLAN MARK  
EQUIPMENT DESIGNATION REFER TO MEP SCHEDULE FOR CIRCUITING AND DEVICE REQUIREMENTS AND FLOOR PLANS FOR LOCATIONS  
EQUIPMENT NUMBER

LUMINAIRES

- "NL" INDICATES UNSWITCHED LUMINAIRE  
FLUORESCENT LUMINAIRE (2X4)  
(A) - DESIGNATES LUMINAIRE TYPE  
1 - DESIGNATES CIRCUIT NUMBER  
a - DESIGNATES CONTROLLING SWITCH  
FLUORESCENT LUMINAIRE - LIFE SAFETY BRANCH APPLICABLE TO ANY LUMINAIRE TYPE  
FLUORESCENT LUMINAIRE - CRITICAL BRANCH APPLICABLE TO ANY LUMINAIRE TYPE  
FLUORESCENT LUMINAIRE (2X2)  
FLUORESCENT LUMINAIRE (1X1)  
FLUORESCENT LUMINAIRE (1X4)  
FLUORESCENT LUMINAIRE (6'X4)  
CEILING OR WALL MOUNTED. HEIGHT AS NOTED.  
SQUARE DOWNLIGHT  
RECESSED OR SURFACE LUMINAIRE CRITICAL OR LIFE SAFETY IS SHADED AS ABOVE  
WALL MOUNTED LUMINAIRE CRITICAL OR LIFE SAFETY IS SHADED AS ABOVE  
INDUSTRIAL FLUORESCENT STRIP LUMINAIRE  
INDUSTRIAL FLUORESCENT STRIP LUMINAIRE - LIFE SAFETY BRANCH  
BATTERY OPERATED EMERGENCY LIGHTING UNIT  
EXTERIOR LUMINAIRE - POLE MOUNTED TYPES AND DETAILS AS NOTED  
EXIT SIGN LUMINAIRE  
DIRECTIONAL ARROWS AND FACES AS INDICATED  
LIGHTNING PROTECTION SYMBOLS  
AIR TERMINAL  
TAP  
GROUND ROD  
GROUNDING CONDUCTOR  
GC - GROUNDING CONDUCTOR  
GC - GROUNDING CONDUCTOR COUNTERPOISE LOOP

LIGHTNING PROTECTION SYMBOLS

- AIR TERMINAL  
TAP  
GROUND ROD  
GROUNDING CONDUCTOR  
GC - GROUNDING CONDUCTOR  
GC - GROUNDING CONDUCTOR COUNTERPOISE LOOP

ONE-LINE DIAGRAM SYMBOLS

- XXXX FUSIBLE SWITCH (SIZE/FUSE)  
XXXXX DRAW/OUT CIRCUIT BREAKER  
XXXXX CIRCUIT BREAKER (FRAME/TRIP)  
W WATTMETER  
KW KILOWATT DEMAND METER  
KH KILOWATT HOUR METER  
AM AMMETER  
AS AMMETER SWITCH  
GF GROUND FAULT  
VM VOLTMETER  
VS VOLTMETER SWITCH  
MB MICROPROCESSOR BASED DIGITAL MONITOR  
DM  
MOTOR STARTER  
CONTACTOR  
GENERATOR  
CURRENT TRANSFORMER  
VOLTAGE TRANSFORMER  
POWER TRANSFORMER  
GROUND BUS  
NEUTRAL BUS  
GROUND  
CAPACITOR  
KEY-INTERLOCK  
MOTOR OPERATED MEDIUM VOLTAGE LOAD INTERRUPTER SWITCH  
SPD SURGE PROTECTION DEVICE  
M ELECTRICAL SERVICE METER  
LSIGA ANNUNCIATE GROUND FAULT ONLY

TELEPHONE/DATA

- AC DATA OUTLET  
W TELEPHONE OUTLET  
COMBINATION TELEPHONE AND DATA OUTLET  
TELEPHONE CABINET - SURFACE  
BACKBOARD 3/4" THICK FIRE RATED PLYWOOD, 4" WIDE X 8" HIGH U.O.N.  
MOUNT 1'-6" A.F.F. PROVIDE 2 GANG BOX WITH 1 GANG RING (VERTICAL) WITH 3/4" EMPTY CONDUIT STUBBED INTO ACCESSIBLE CEILING SPACE. OWNER TO PROVIDE WIRING, JACKS, PLATES AND INSTRUMENTS. "AC", WHEN USED, DENOTES MOUNTING 6" ABOVE COUNTER. "W", WHEN USED, DENOTES WALL UNIT AT 48" A.F.F.

WIRING DEVICES - SWITCHES

- TYPICAL MOUNTING HEIGHT - 48" AFF TO CENTER U.O.N.  
SWITCHES - SINGLE POLE, 2 POLE, 3-WAY, 4-WAY  
KEY SWITCHES - SINGLE POLE, 3-WAY, ETC.  
SWITCH WITH PILOT LIGHT  
MOMENTARY CONTACT SWITCH  
SWITCH-LOW VOLTAGE-MASTER  
SWITCH-LOW VOLTAGE-SINGLE / PUSH-BUTTON STATION  
DIMMER SWITCH  
MANUAL MOTOR STARTER WITH PILOT LIGHT (4'-0" A.F.F.)

WIRING DEVICES, RECEPTACLES - MISC.

- TYPICAL MOUNTING HEIGHT - 16" AFF TO CENTER U.O.N.  
SHADING INDICATES EMERGENCY POWER  
SPECIAL PURPOSE OUTLET AS NOTED  
SINGLE RECEPTACLE OUTLET  
DUPLEX RECEPTACLE WITH WHILE-IN-USE WEATHERPROOF COVER  
ABOVE COUNTER (4" ABOVE COUNTER)  
DUPLEX RECEPTACLE OUTLET  
DUPLEX RECEPTACLE OUTLET - GROUND FAULT TYPE  
DOUBLE DUPLEX RECEPTACLE OUTLET  
DUPLEX RECEPTACLE OUTLET WITH ISOLATED GROUND  
DUPLEX RECEPTACLE WITH ONE OUTLET SWITCHED  
FLOOR BOX - SYMBOL DESIGNATES TYPE OF SERVICE  
FLOOR BOX - ROUGH IN ONLY WITH BLANK COVER  
COMBINATION DUPLEX RECEPTACLE AND TV OUTLET (SEE TV SYMBOL UNDER "SPECIAL SYSTEMS")  
MOUNT 1'-6" A.F.F. U.O.N.  
ELECTRICAL CONNECTION

WIRING PLANS

- DEMOLITION  
EXISTING TO REMAIN  
CONDUIT RUN CONCEALED IN CEILING OR WALL CONSTRUCTION  
CONDUIT RUN IN FLOOR CONSTRUCTION OR UNDERGROUND  
CONDUIT RUN EXPOSED  
CONDUIT TURNING UP  
CONDUIT TURNING DOWN  
CONDUIT CAPPED FOR FUTURE.  
CABLE TRAY - TYPE AS NOTED  
BUSWAY  
HOMERUN TO PANEL OR DESTINATION NOTED  
HACHURES INDICATE NUMBER OF CONDUCTORS IN CONDUIT  
NOTE: LONG HACHURE - NEUTRAL CONDUCTOR  
ISOLATED GROUND  
GROUND  
NEUTRAL  
PHASE CONDUCTOR

- NOTES:  
1. PROVIDE WIRING REQUIRED BY THE CIRCUITING AND SWITCHING REQUIREMENTS FOR THE PARTICULAR CIRCUITS INVOLVED. TYPICAL 120V HOMERUNS SHALL CONSIST OF #12 AWG CONDUCTORS IN 3/4" CONDUIT MINIMUM UNLESS INDICATED OTHERWISE. NO SHARED NEUTRALS SHALL BE ALLOWED. A MAXIMUM OF THREE CIRCUITS ARE ALLOWED PER HOMERUN CIRCUIT. FOR CIRCUITS EXCEEDING 75'-0" IN LENGTH, PROVIDE THE NEXT LARGER WIRE SIZE FOR THE CIRCUIT AMPACITY.  
2. WHERE NUMBER OF CURRENT-CARRYING CONDUCTORS IN A RACEWAY EXCEEDS THREE, THE ALLOWABLE AMPACITY OF EACH CONDUCTOR SHALL BE REDUCED AS SHOWN IN THE ADJUSTMENT FACTOR TABLE IN THE NATIONAL ELECTRIC CODE. LOAD DIVERSITY FACTORS SHALL NOT BE USED IN SIZING CONDUCTORS. NEUTRAL CONDUCTORS SHALL BE COUNTED AS CURRENT-CARRYING CONDUCTORS.

POWER EQUIPMENT

- MOTOR - SEE EQUIPMENT DATA SCHEDULE FOR HORSEPOWER  
STARTERS (MAGNETIC & COMB. MAGNETIC WITH DISC.)  
DISCONNECT SWITCH, FUSED OR UNFUSED AS NOTED.  
MOTOR CONTROL CENTER  
SWITCHBOARD  
PANELBOARD (SURFACE)  
PANELBOARD (FLUSH)  
PIPE WITH ELECTRIC HEAT TRACING  
ELECTRIC HEATING EQUIPMENT  
TRANSFORMER  
UNINTERRUPTIBLE POWER SUPPLY SYSTEM  
HANDHOLE  
MANHOLE  
ELECTRICAL SERVICE METER  
VARIABLE FREQUENCY DRIVE

NURSE CALL SYSTEM SYMBOLS

- [N1] SINGLE BED STATION - 48" A.F.F. U.O.N.  
[N2] DOUBLE BED STATION - 48" A.F.F. U.O.N.  
[NS] STAFF STATION - 48" A.F.F. U.O.N.  
[ND] DUTY STATION - 48" A.F.F. U.O.N.  
[N4] EMERGENCY PULL CORD STATION - 48" A.F.F. PROVIDE CORD TO WITHIN 6" OF FLOOR. FOR SHOWER STATIONS, MOUNT AT 6'-6" A.F.F.  
[N6] EMERGENCY PUSHBUTTON STATION - 48" A.F.F. U.O.N.  
[C6] CODE BLUE STATION - 48" A.F.F. U.O.N.  
[D4] WALL MOUNTED DOME LIGHT WITH NO. & COLORS AS REQUIRED. MOUNT OVER DOOR CENTERED BETWEEN TOP OF DOOR FRAME AND CEILING U.O.N.  
[C4] CEILING MOUNTED DOME LIGHT WITH NO. & COLORS AS REQUIRED. MOUNT OVER DOOR CENTERED BETWEEN TOP OF DOOR FRAME AND CEILING U.O.N.  
[C2] CEILING MOUNTED ZONE LIGHT.  
[MAS] NURSE CALL MASTER STATION - DESK MOUNTED  
[NCEO] NURSE CALL WALL MOUNTED EQUIPMENT CABINET AND POWER SURFACE  
[NCSQ] NURSE CALL WALL MOUNTED EQUIPMENT CABINET AND POWER SURFACE

OCCUPANCY SENSORS AND TIMERS

- (SEE SPECIFICATION SECTION 16140 FOR ADDITIONAL INFORMATION)  
[C5] CEILING OCCUPANCY DETECTOR. INFRARED SENSOR TYPE.  
[C4] CEILING OCCUPANCY DETECTOR TYPE A. ULTRASONIC TYPE.  
[C3] CEILING OCCUPANCY DETECTOR TYPE B. DUAL TECHNOLOGY TYPE.  
[S0] SINGLE SWITCH OCC SENSOR - WALL MOUNT  
[DT] DIGITAL TIMER WALL MOUNT 48" AFF.  
[S02] DUAL SWITCH OCC SENSOR - WALL MOUNT

FIRE ALARM SYMBOLS

- [F] FIRE ALARM MANUAL STATION. MOUNT 48 INCHES A.F.F. TO CENTER LINE.  
[F4] WALL MOUNTED [HORN/BELL/SPEAKER/CHIME] MOUNT WITH BOTTOM OF DEVICE AT THE LOWER OF 80" A.F.F. OR 6" BELOW CEILING.  
[F4] WALL MOUNTED [HORN/BELL/SPEAKER/CHIME] WITH STROBE. MOUNT WITH BOTTOM OF STROBE LENS AT THE LOWER OF 80" A.F.F. OR 6" BELOW CEILING.  
[F4] WALL MOUNTED STROBE. MOUNT WITH BOTTOM OF STROBE LENS AT THE LOWER OF 80" A.F.F. OR 6" BELOW CEILING.  
[F4] CEILING MOUNTED [HORN/BELL/SPEAKER/CHIME] WITH STROBE.  
[F4] CEILING MOUNTED WITH STROBE.  
[F4] CEILING MOUNTED [HORN/BELL/SPEAKER/CHIME] WITH STROBE.  
[HF] HEAT DETECTOR - FIXED TEMPERATURE  
[HR] HEAT DETECTOR - RATE OF RISE  
[SD] SMOKE DETECTOR - PHOTOELECTRIC TYPE.  
[DS] DUCT MOUNTED SMOKE DETECTOR - PHOTOELECTRIC TYPE  
[FW] SPRINKLER SYSTEM WATER FLOW SWITCH  
[F1] SPRINKLER SYSTEM TAMPER (SUPERVISORY) SWITCH  
[FV] SPRINKLER SYSTEM ELECTRICAL SOLENOID VALVE  
[FP] EXTINGUISHING SYSTEM PRESSURE SWITCH  
[SD4] SINGLE STATION SMOKE DETECTOR WITH SOUNDER BASE  
[F4] FIRE ALARM ELECTROMAGNETIC DOOR HOLDER  
[F4] CONTACT IN KITCHEN EXTINGUISHING SYSTEM PANEL FOR CONNECTION INTO FIRE ALARM SYSTEM  
[F4] END OF LINE RESISTOR  
[FR] ADDRESSABLE CONTROL RELAY  
[FM] ADDRESSABLE MONITOR MODULE  
[SD] SMOKE DAMPER

CLOCK SYSTEMS

- [MC] MASTER CLOCK  
[C1] INDICATING CLOCK SEMI-FLUSH MOUNTED, SINGLE FACE  
[C2] INDICATING CLOCK WALL BRACKET MOUNTED, DOUBLE FACE  
[C3] INDICATING CLOCK CEILING BRACKET MOUNTED, DOUBLE FACE  
[TC] INTERVAL TIMER, SEMI-FLUSH MOUNTED WITH SEPARATE SWITCH CONTROL UNIT

JUNCTION AND PULL BOXES

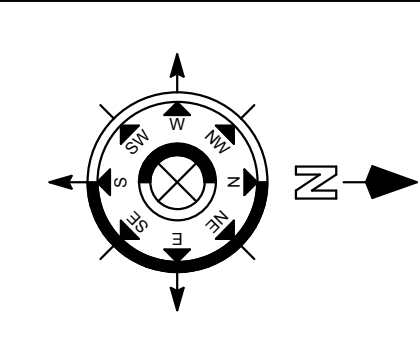
- SHADING INDICATES EMERGENCY POWER  
JUNCTION BOX - SHADING INDICATES EMERGENCY POWER  
PULL BOX

Revision Schedule	
Comments	Date

CONSULTANTS:



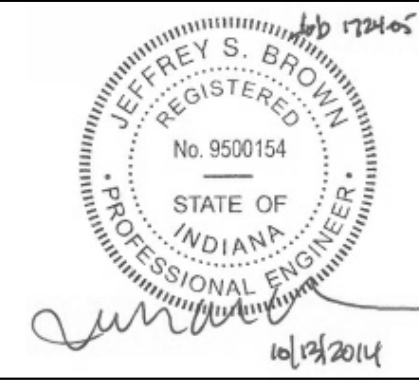
TRUE NORTH



ARCHITECT/ENGINEERS:



Ross & Baruzzini



Drawing Title  
ELECTRICAL LEGEND & ABBREVIATIONS

Project Title  
R.L. Roubesh VA Medical Center Parking Garage

Location  
INDIANAPOLIS, IN

Date  
10/14/14

Checked  
USB

Drawn  
bsa

Project Number  
583-330 / 1724-05

Building Number  
20

Drawing Number  
E000

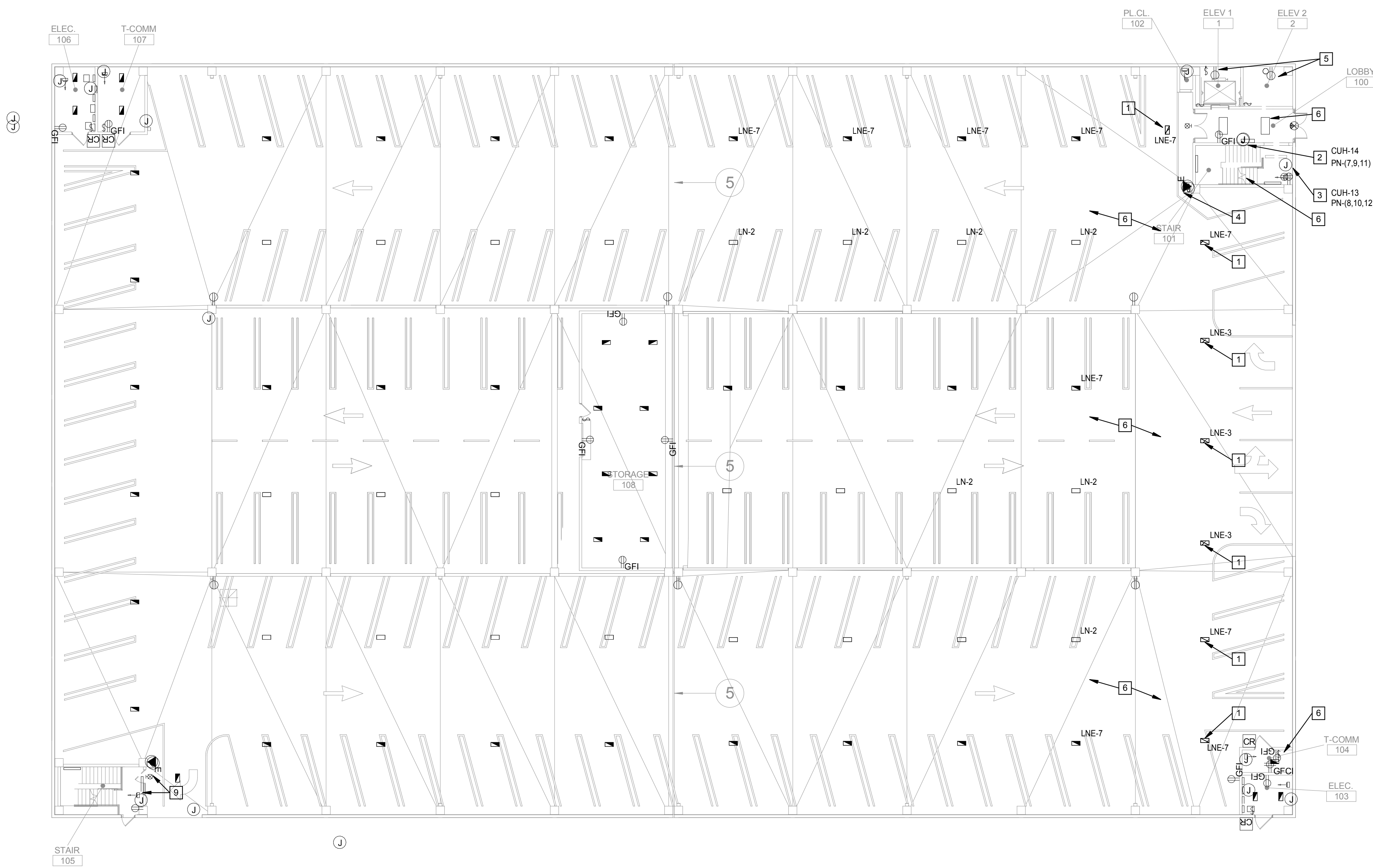
Dwg.72 of 93

Office of Construction and Facilities Management

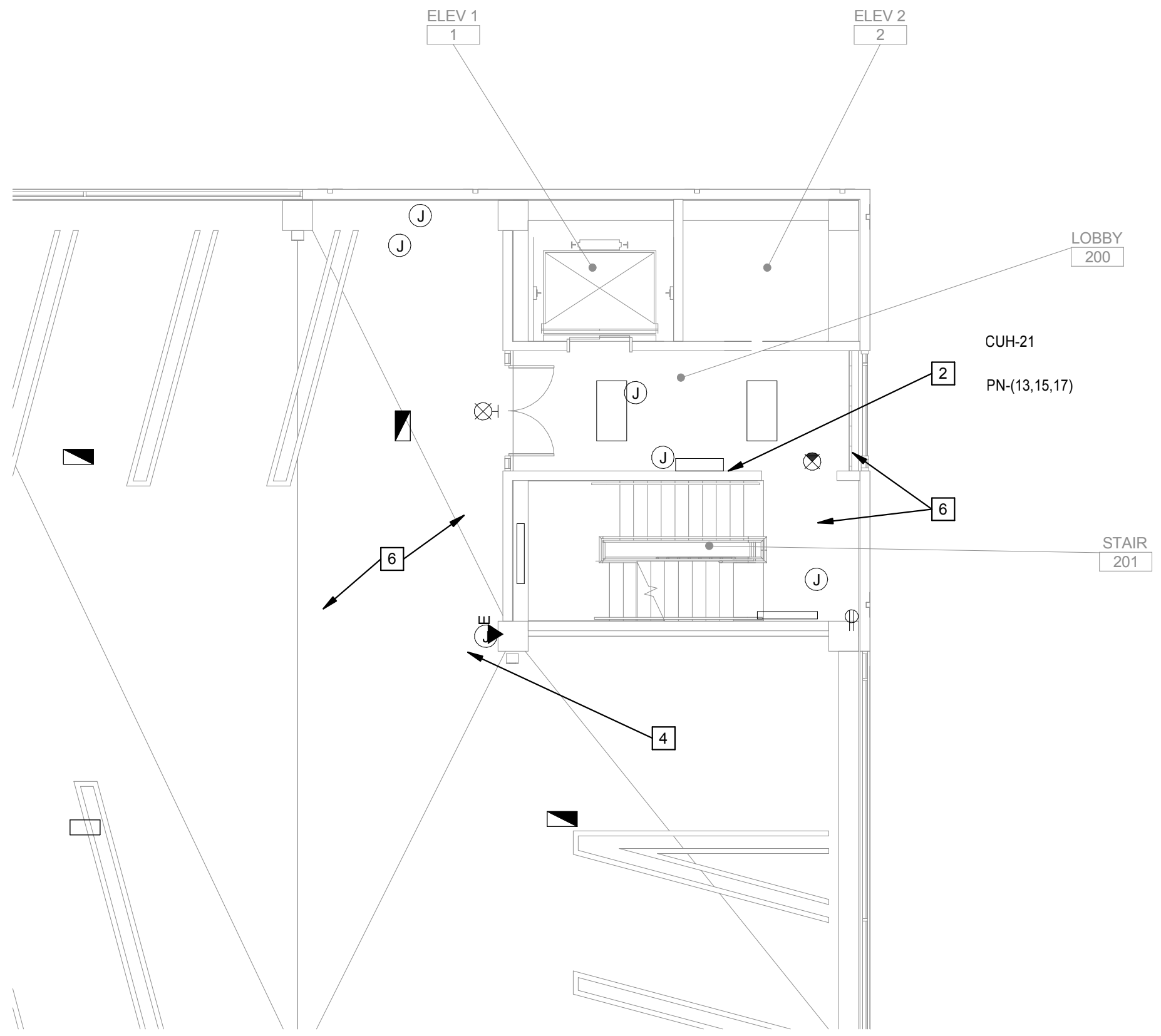
VA Department of Veterans Affairs

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 inches = one foot  
two inches = one foot  
three inches = one foot

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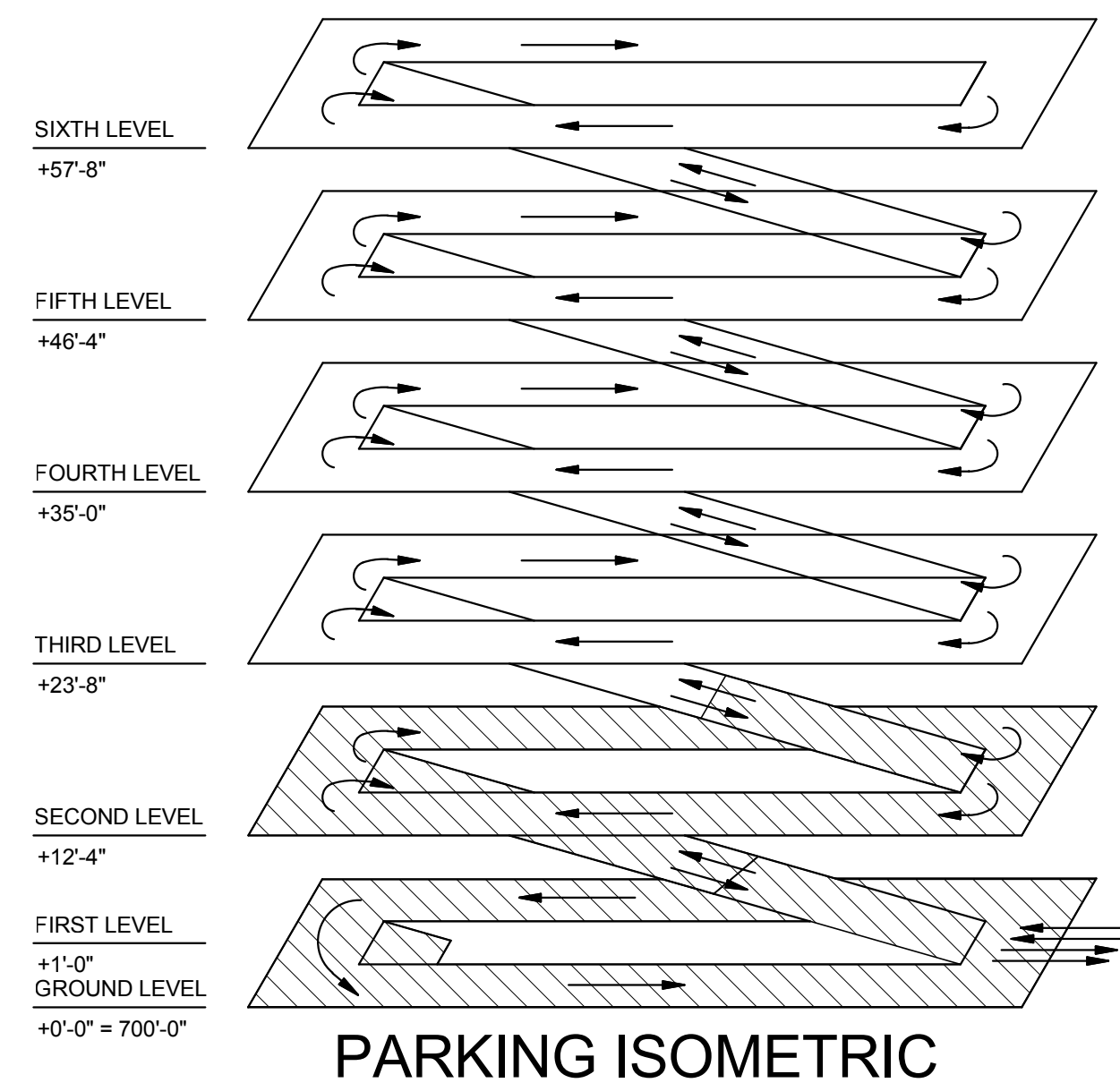


1 ELECTRICAL FIRST LEVEL DEMOLITION PLAN  
1/16" = 1'-0"



2 PARTIAL ELECTRICAL SECOND LEVEL DEMOLITION PLAN  
1/8" = 1'-0"

- GENERAL NOTES:**
  - A. EXISTING DEVICES, CIRCUITS, ETC INDICATED ON THIS PLAN ARE FOR REFERENCE ONLY AND ARE BASED ON 2012 AS BUILT DRAWINGS AND VISUAL SURVEY. E.C. SHALL FIELD VERIFY CONDITIONS PRIOR TO BID.
  - B. EXISTING SYSTEMS, SUCH AS FIRE ALARM, CCTV, DOOR ACCESS, ETC, LOCATED IN THE EXISTING FACILITY SHALL REMAIN OPERATIONAL.
- KEYED NOTES:**
  - 1. EXISTING LED LUMINAIRE TO BE REMOVED. EXISTING CIRCUIT TO REMAIN FOR REUSE. REFER TO ALTERNATE DEDUCT #2.
  - 2. EXISTING FLOOR MOUNTED HVAC UNIT TO REMAIN.
  - 3. EXISTING ELEC HEATING UNIT TO REMAIN.
  - 4. EXISTING EMERG CALL STATION TO REMAIN.
  - 5. EXISTING ELEV PIT DEVICES SHALL REMAIN. COORDINATE EXACT LOCATION WITH ELEV SUPPLIER/INSTALLER. RELOCATE AS REQUIRED.
  - 6. EXISTING DEVICES IN THIS AREA TO REMAIN, UNLESS NOTED OTHERWISE.
  - 7. EXISTING POLE LUMINAIRE AND CCTV TO BE RELOCATED TO THE NEW ROOF LEVEL. EXISTING CIRCUIT TO BE EXTENDED TO NEW LOCATION.
  - 8. EXISTING RECEPTACLE TO REMAIN.
  - 9. RELOCATE EXISTING ELECTRICAL DEVICES TO ACCOMMODATE NEW LOUVER. COORDINATE WITH DIV. 23 CONTRACTOR.



Revision Schedule		CONSULTANTS:	TRUE NORTH	ARCHITECT/ENGINEERS:			Drawing Title	Project Title			Project Number	Office of Construction and Facilities Management		
Comments	Date													
							ELECTRICAL FIRST AND SECOND LEVEL DEMOLITION PLANS	R.L. Roudebush VA Medical Center Parking Garage			583-330 / 1724-05	Office of Construction and Facilities Management		
								Location INDIANAPOLIS, IN						
							Date 10/14/14	Checked JSB	Drawn bsa	Drawing Number  ED101  Dwg. 73 of 93	VA Department of Veterans Affairs			



three inches = one foot

one and one half inches = one foot

one inch = one foot

three quarters inch = one foot

one half inch = one foot

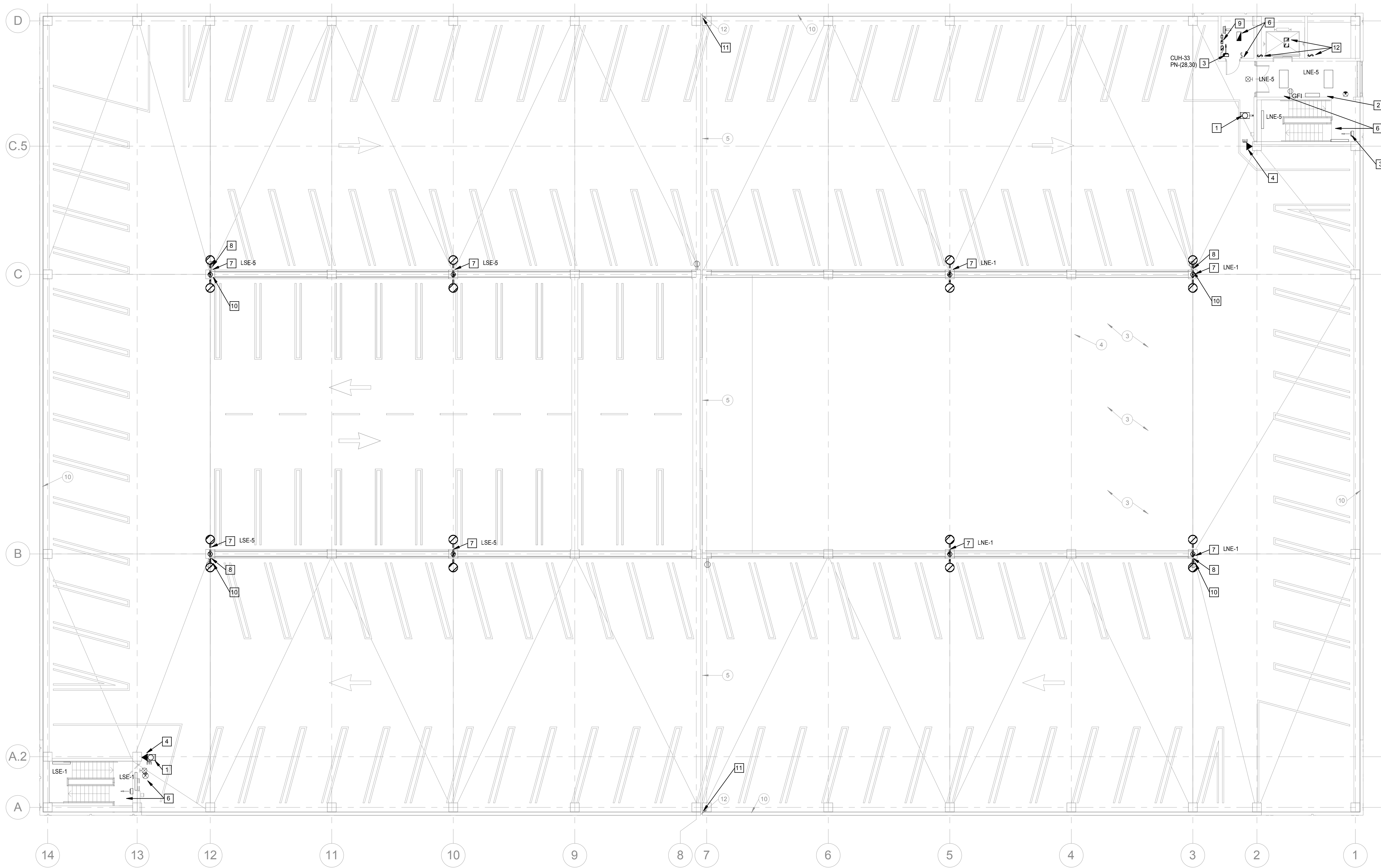
three eighths inch = one foot

one quarter inch = one foot

one eighth inch = one foot

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VA FORM 08-6231



#### GENERAL NOTES:

- EXISTING DEVICES, CIRCUITS, ETC INDICATED ON THIS PLAN ARE FOR REFERENCE ONLY AND ARE BASED ON 2012 AS BUILT DRAWINGS AND VISUAL SURVEY. E.C. SHALL FIELD VERIFY CONDITIONS PRIOR TO BID.
- EXISTING SYSTEMS, SUCH AS FIRE ALARM, CCTV, DOOR ACCESS, ETC. LOCATED IN THE EXISTING FACILITY SHALL REMAIN OPERATIONAL.

#### KEYED NOTES:

- EXISTING LED LUMINAIRE TO REMAIN.
- EXISTING FLOOR MOUNTED HVAC UNIT TO REMAIN.
- EXISTING WALL MOUNTED ELEC HEATER TO REMAIN.
- EXISTING EMERG CALL STATION TO REMAIN.
- EXISTING DEVICES IN THIS AREA TO REMAIN, UNLESS NOTED OTHERWISE.
- EXISTING POLE, LUMINAIRE AND CCTV TO BE RELOCATED TO THE NEW TOP LEVEL. EXISTING LIGHTING CIRCUIT TO BE EXTENDED TO NEW LOCATION.
- EXISTING RECEPTACLE TO REMAIN.
- EXISTING ELEVATOR CIRCUITS, CAB LIGHTS, DISCONNECT SWITCHES AND ASSOCIATED DEVICES TO BE RELOCATED TO THE NEW ELEV EQUIPMENT ROOM. EXISTING RACEWAY MAY REMAIN FOR REUSE.
- EXISTING POLE MOUNTED SECURITY CAMERA TO BE REMOVED AND RELOCATED TO THE TOP LEVEL.
- EXISTING EXTERIOR SECURITY CAMERA TO REMAIN.
- EXISTING ELEV SHAFT LIGHTING AND CONTROLS TO BE REMOVED. EXTEND EXISTING CIRCUIT TO NEW LOCATION.

SIXTH LEVEL

+57'-8"

FIFTH LEVEL

+46'-4"

FOURTH LEVEL

+35'-0"

THIRD LEVEL

+23'-8"

SECOND LEVEL

+12'-4"

FIRST LEVEL

+1'-0"

GROUND LEVEL

+0'-0" = 700'-0"

PARKING ISOMETRIC

BID DOCUMENTS

### 1 ELECTRICAL THIRD LEVEL DEMOLITION PLAN

3/32" = 1'-0"

Revision Schedule		CONSULTANTS:		TRUE NORTH		ARCHITECT/ENGINEERS:			Drawing Title		Project Title		Project Number		Office of Construction and Facilities Management						
Comments		Date				  7260 Shadeland Station   Indianapolis, Indiana 46256 TEL 317.847.5580 / FAX 317.543.0270 www.structurepoint.com						ELECTRICAL THIRD LEVEL DEMOLITION PLAN		R.L. Roudebush VA Medical Center Parking Garage			583-330 / 1724-05				
																		Location INDIANAPOLIS, IN		Building Number 20	
												Date 10/14/14		Checked JSB		Drawn bsa		Drawing Number  ED102		VA Department of Veterans Affairs	
																		Dwg.74 of 93			



three inches = one foot

one and one half inches = one foot

one inch = one foot

three quarters inch = one foot

one half inch = one foot

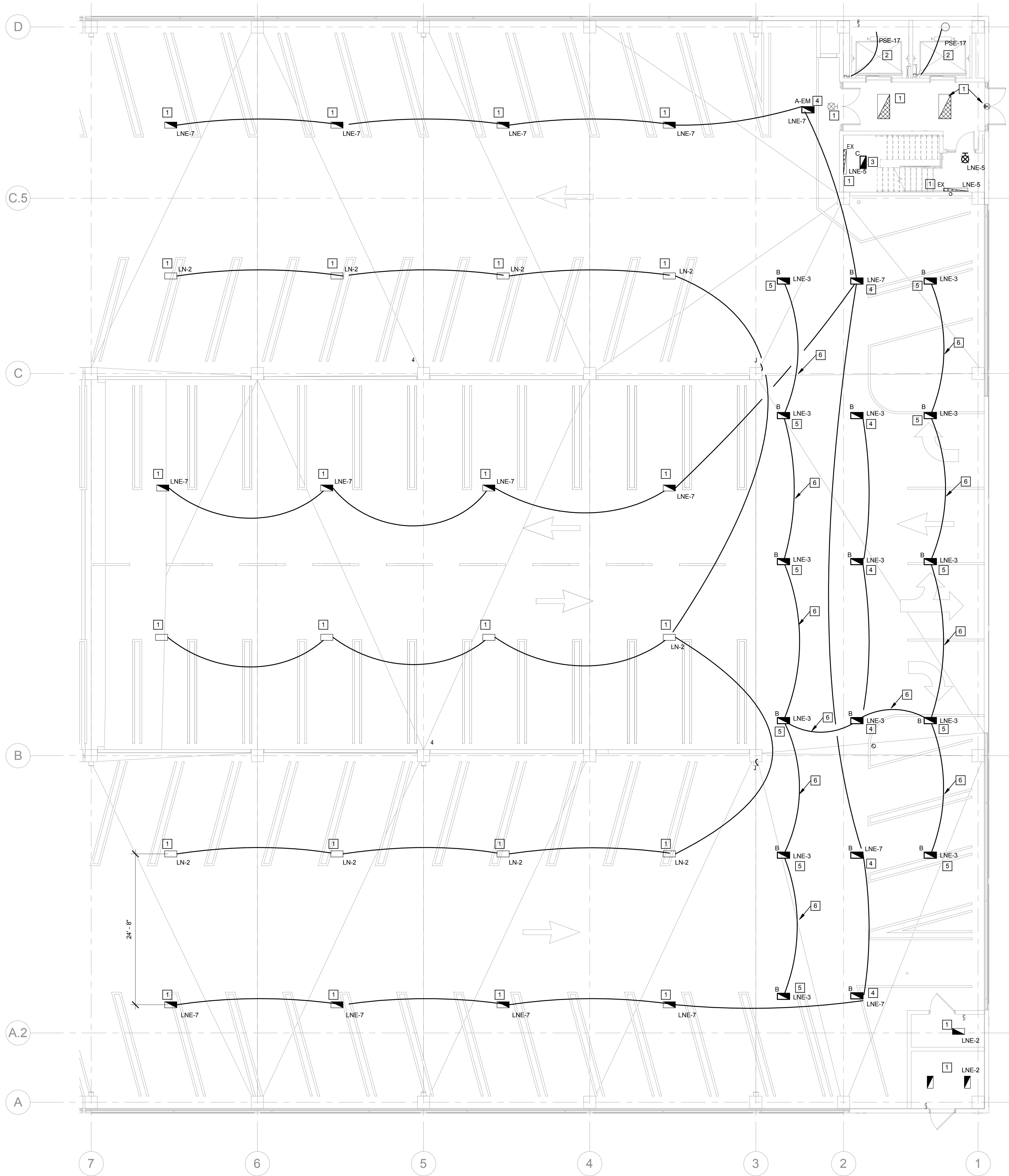
three eighths inch = one foot

one quarter inch = one foot

one eighth inch = one foot

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VA FORM 08-6231



1 PARTIAL ELECTRICAL FIRST LEVEL LIGHTING PLAN  
1/8" = 1'-0"

#### GENERAL NOTES:

- A. UTILIZE EXISTING LEVITON GREENMAX LIGHTING CONTROL SYSTEM. PROVIDE ALL LABOR, MATERIAL AND PROGRAMMING REQUIRED TO ACCOMMODATE NEW DEVICES AT ENTRANCE TRANSITION.

#### KEYED NOTES:

- 1 EXISTING DEVICE TO REMAIN.
- 2 RELOCATE EXISTING ELEV PIT DEVICES AS REQUIRED TO ACCOMMODATE NEW EQUIPMENT. COORDINATE LOCATION WITH ELEVATOR SUPPLIER/INSTALLER.
- 3 INSTALL NEW DEVICE UNDER LANDING AND CONNECT TO EXISTING STAIRWELL CIRCUIT.
- 4 INSTALL NEW CEILING MOUNTED LUMINAIRE AT EXISTING JUNCTION BOX AND CONNECT TO EXISTING CIRCUIT. REFER TO ALTERNATE DEDUCT #2.
- 5 INSTALL NEW CEILING MOUNTED LUMINAIRE AND CONNECT TO EXISTING ENTRANCE LIGHTING CIRCUIT INDICATED. DEVICE TO BE CONTROLLED VIA PHOTOCELL AND OCC SENSOR. ENTRANCE LIGHTING DURING DAYTIME HOURS SHALL BE 50 FC AND 5 FC AT DUSK. COORDINATE LOCATION OF SENSOR AND CONTROL PROGRAMMING WITH LEVITON. REFER TO ALTERNATE DEDUCT #2.
- 6 UTILIZE SURFACE MOUNTED RIGID ALUMINUM CONDUIT.

SIXTH LEVEL

+57'-8"

FIFTH LEVEL

+46'-4"

FOURTH LEVEL

+35'-0"

THIRD LEVEL

+23'-8"

SECOND LEVEL

+12'-4"

FIRST LEVEL

+1'-0"

GROUND LEVEL

+0'-0" = 700'-0"

PARKING ISOMETRIC

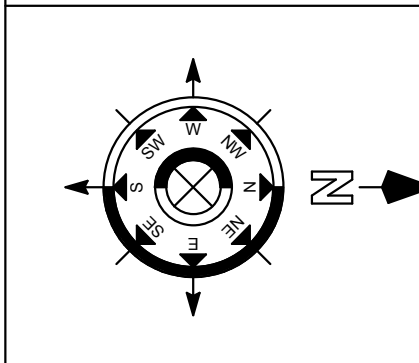
BID DOCUMENTS

Revision Schedule	
Comments	Date

CONSULTANTS:



TRUE NORTH



ARCHITECT/ENGINEERS:



Ross & Baruzzini



Drawing Title  
ELECTRICAL FIRST LEVEL LIGHTING PLAN

Project Title  
R.L. Roudebush VA Medical Center Parking Garage

Location  
INDIANAPOLIS, IN  
Date  
10/14/14

Checked  
JSB  
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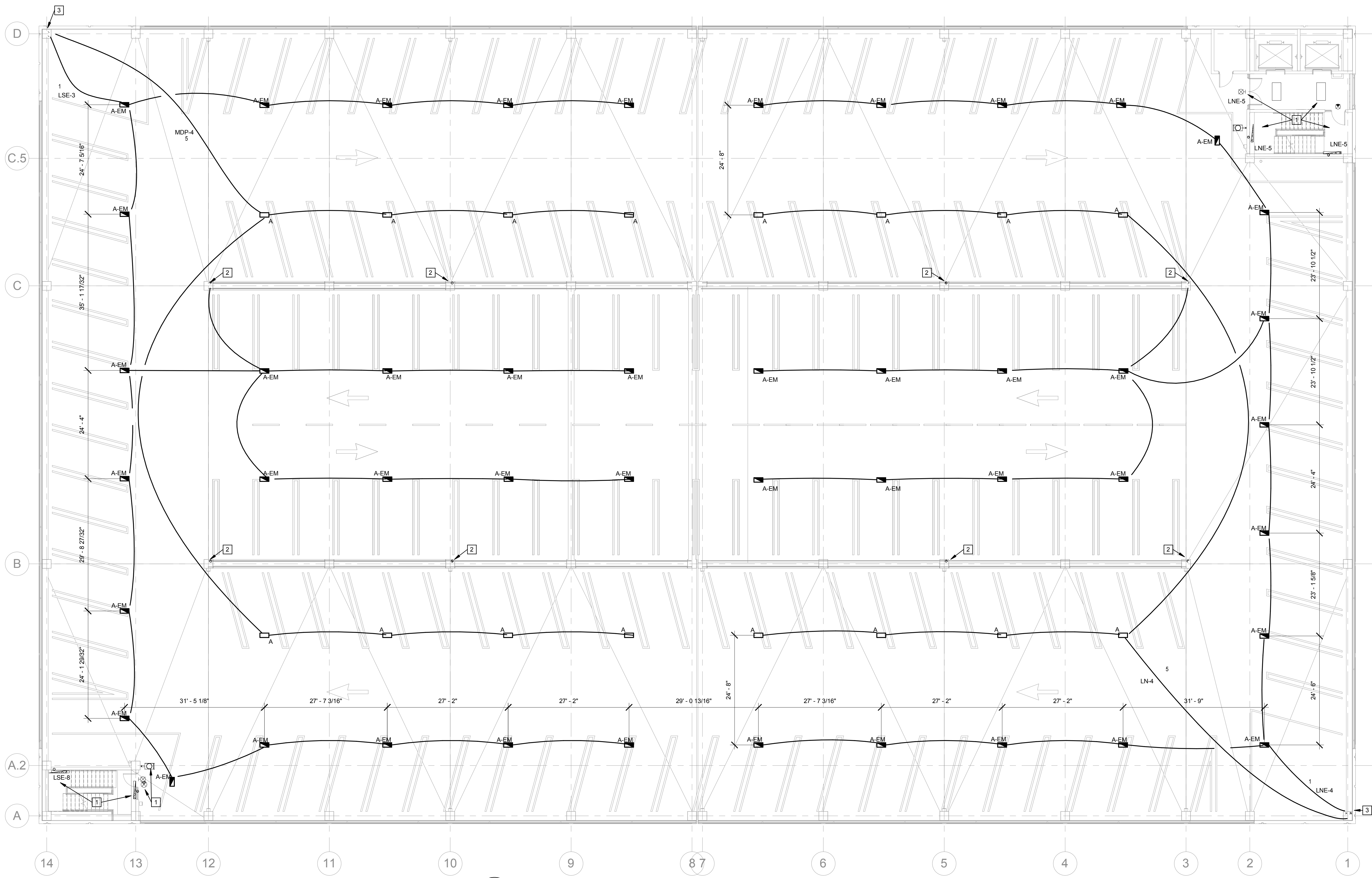
Project Number  
583-330 / 1724-05  
Building Number  
20  
Drawing Number  
EL101  
Dwg.75 of 93

Office of Construction and Facilities Management  
VA Department of Veterans Affairs

one eighth inch = one foot  
one quarter inch = one foot  
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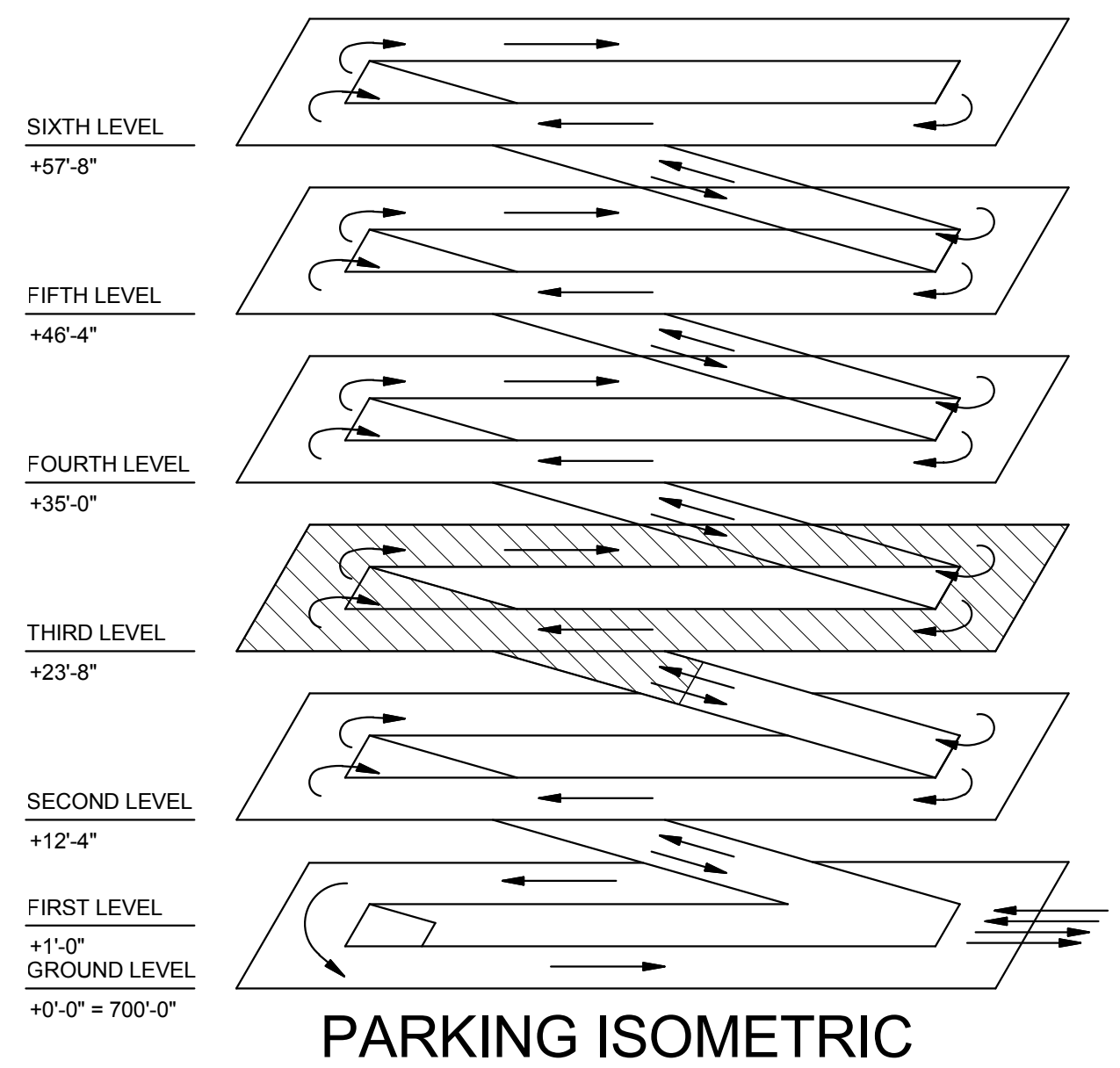
VA FORM 08-6231



1 ELECTRICAL THIRD LEVEL LIGHTING PLAN  
3/32" = 1'-0"

- GENERAL NOTES:**
- ALL NEW POWER, LIGHTING AND SYSTEMS RACEWAY, IN THE PARKING AREA, SHALL BE SURFACE MOUNTED VIA RIGID ALUMINUM CONDUIT. UTILIZE JUNCTION BOXES AND CHASE AS NECESSARY TO TRANSITION TO FIRST FLOOR TELECOM/LEC ROOMS. RACEWAY IN THE ELEV AND PEDESTRIAN LOBBY SHALL BE CONCEALED.
  - COORDINATE INSTALLATION OF LUMINAIRES WITH ARCHITECTURAL AND STRUCTURAL PLANS.
  - UTILIZE EXISTING PANELS AND LEVITON GREENMAX LIGHTING CONTROL SYSTEM. PROVIDE ALL LABOR, MATERIAL AND PROGRAMMING REQUIRED TO ACCOMMODATE NEW SENSORS AND LUMINAIRES.

- KEYED NOTES:**
- EXISTING DEVICE(S) TO REMAIN.
  - EXISTING ROOF TOP LIGHT POLE CONDUIT, WIRE AND GROUND TO EXTEND UP THROUGH THIS COLUMN TO NEW LOCATION.
  - LIGHTING CIRCUIT HOMERUNS TO ROUTE THROUGH EXISTING LIGHTING CONTROL PANEL.

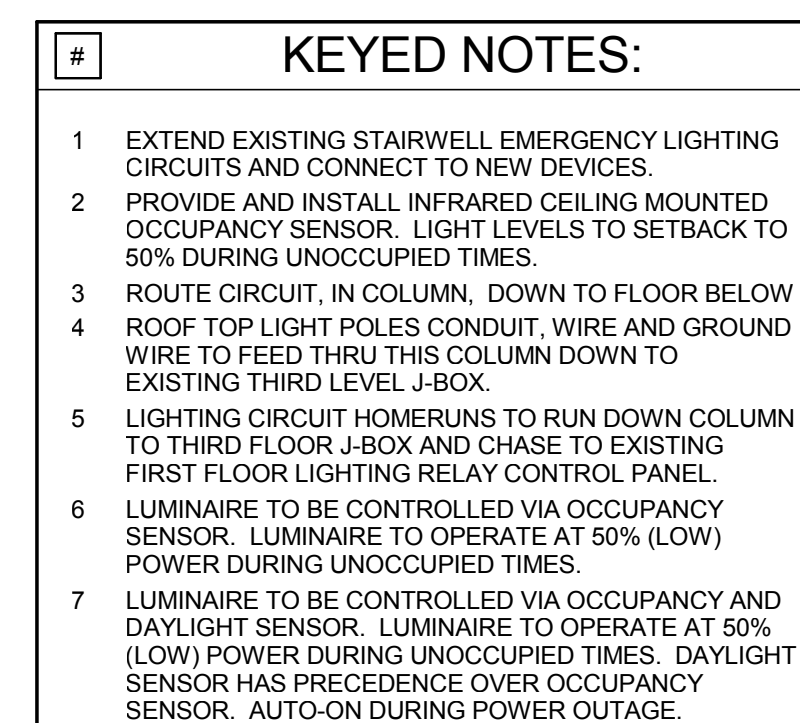


PARKING ISOMETRIC

BID DOCUMENTS

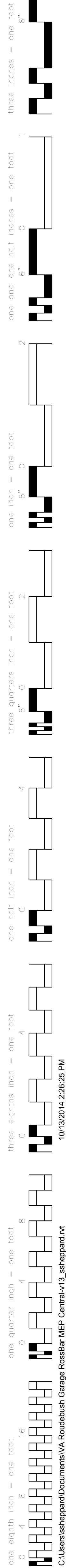
Revision Schedule		CONSULTANTS:	TRUE NORTH	ARCHITECT/ENGINEERS:	Drawing Title	Project Title	Project Number	Office of Construction and Facilities Management	
Comments							Date		583-330 / 1724-05
							ELECTRICAL THIRD LEVEL LIGHTING PLAN	VA Department of Veterans Affairs	
							R.L. Roudebush VA Medical Center Parking Garage		
							Building Number 20		
						Location INDIANAPOLIS, IN	Drawing Number  EL 102		
						Date 10/14/14	Checked JSB	Drawn bsa	Dwg. 76 of 93





Revision Schedule		CONSULTANTS:		TRUE NORTH		ARCHITECT/ENGINEERS:		Drawing Title		Project Title		Project Number		Office of Construction and Facilities Management	
Comments						 <b>Ross &amp; Baruzzini</b> 		ELECTRICAL FOURTH LEVEL LIGHTING PLAN		R.L. Roudebush VA Medical Center Parking Garage		583-330 / 1724-05			
												Building Number			
												20			
												Drawing Number			
												EL103			
										Dwg.77 of 93		VA Department of Veterans Affairs			





- A. ALL NEW CONDUIT TO BE INSTALLED IN THE PARKING AREA OF THE FOURTH, FIFTH AND SIXTH FLOORS SHALL BE SURFACE MOUNTED VIA RIGID ALUMINUM RACEWAY, UNLESS NOTED OTHERWISE. UTILIZE JUNCTION BOXES AND CHASE, AS REQUIRED, FOR CONDUIT TRANSITION TO EXISTING FIRST FLOOR TELECOM/CELECOM ROOMS. RACEWAY SHALL BE ROUTED CONCEALED IN THE LOBBY.
- B. COORDINATE INSTALLATION OF LUMINAIRES WITH ARCHITECTURAL PLANS AND ELEVATIONS.
- C. UTILIZE EXISTING PANELS AND LEVITON GREENMOUNT LIGHTING CONTROL SYSTEM LOCATED IN BOTH FIRST FLOOR ELECTRICAL ROOMS.

- 1 EXTEND EXISTING STARWELL EMERGENCY LIGHTING CIRCUITS AND CONNECT TO NEW DEVICES.
- 2 PROVIDE AND INSTALL INFURRED CEILING MOUNTED OCCUPANCY SENSOR. LIGHT LEVELS TO SETBACK TO 50% DURING UNOCCUPIED TIMES.
- 3 ROUTE CIRCUIT, IN CULMINS, DOWN TO FLOOR BELOW.
- 4 PROVIDE LIGHT PIGTAILS TO NEW WIRE AND GROUND WIRE TO FEED THRU THIS CULMINS DOWN TO EXISTING THIRD LEVEL J-BOX.
- 5 LIGHTING CIRCUIT HOMERUNS TO RUN DOWN CULMINS TO THIRD FLOOR J-BOX AND CHANGE TO EXISTING FIRST FLOOR LIGHTING RELAY CONTROL PANEL.
- 6 LUMINAIRE TO BE CONTROLLED VIA OCCUPANCY SENSOR. LUMINAIRE TO OPERATE AT 50% (LOW) LIGHT DURING UNOCCUPIED TIMES.
- 7 LUMINAIRE TO BE CONTROLLED VIA OCCUPANCY AND DAYLIGHT SENSOR. LUMINAIRE TO OPERATE AT 50% (LOW) POWER DURING UNOCCUPIED TIMES. DAYLIGHT IS PRECEDENCE OVER OCCUPANCY SENSOR. AUTO-ON DURING POWER OUTAGE.

BID DOCUMENTS

VA FORM 06-6231