

SYMBOL AND ABBREVIATION SCHEDULE		
SYMBOL	ABBR.	DESCRIPTION
	PNLBD	PANELBOARD 120/208V OR 240V (SURFACE MOUNTED)
	PNLBD	PANELBOARD 120/208V OR 240V (RECESSED MOUNTED)
	PNLBD	PANELBOARD 277/480V OR 480V (SURFACE MOUNTED)
	PNLBD	PANELBOARD 277/480V OR 480V (RECESSED MOUNTED)
		CONDUIT AND/OR WIRING: CONCEALED IN WALL/CEILING OR EXPOSED
		CONDUIT AND/OR WIRING CONCEALED IN FLOOR OR UNDERGROUND
		HOMERUN TO PANELBOARD, NUMBER OF CIRCUITS INDICATED BY QUANTITY OF ARROWS
		EQUIPMENT ON SAME CIRCUIT BUT SEPARATELY CONTROLLED
		OVERHEAD ELECTRIC (SITE PLAN)
		UNDERGROUND ELECTRICAL LINE (SITE PLAN)
		OVERHEAD TELEPHONE (SITE PLAN)
		UNDERGROUND TELEPHONE (SITE PLAN)
		CABLE TELEVISION CONDUIT AND/OR WIRING
		EMERGENCY SYSTEM CONDUIT AND/OR WIRING (277V)
		EMERGENCY SYSTEM CONDUIT AND/OR WIRING (120V)
		NORMAL EMERGENCY SYSTEM CONDUIT AND/OR WIRING (277V)
		NORMAL EMERGENCY SYSTEM CONDUIT AND/OR WIRING (120V)
		4" x 4" JUNCTION BOX WITH 3/4" TO ABOVE CEILING FOR OWNER PROVIDED EQUIPMENT (18" ABOVE FINISHED FLOOR)
		DISCONNECT SWITCH (OPERATING HANDLE SHOWN ON RIGHT SIDE WHEN FACING SWITCH)
		CONTACTOR - MAGNETIC
		MAGNETIC MOTOR STARTER
		COMBINATION DISCONNECT SWITCH AND STARTER (OPERATING HANDLE SHOWN ON RIGHT WHEN FACING COMBINATION CONTROLLER)
		MOTOR
		PUSH BUTTON CONTROL STATION
		OVERLOADS (THERMAL TYPE)
	NC	NORMALLY CLOSED CONTACTS
	NO	NORMALLY OPEN CONTACTS
		DISCONNECT SWITCH
		FUSE OR LIMITER
	CB	CIRCUIT BREAKER
	G, GND, OR GRD	GROUND
		GROUND ROD LOCATION
		SPEAKER, CEILING MOUNTED
		SPEAKER, WALL MOUNTED
		SPEAKER HORN, WALL MOUNTED
		VOLUME CONTROL
		SINGLE MICROPHONE JACK - NUMBER DENOTES QUANTITY
		MAIN DATA FRAME
		INTERMEDIATE DATA FRAME
		CLOCK SINGLE FACE OR CLOCK RECEPTACLE
		TELEVISION OUTLET - SINGLE GANG DEVICE BOX AND 3/4" CONDUIT TO ABOVE CEILING
		TIME CLOCK
		FIRE ALARM - MANUAL PULL STATION
		FIRE ALARM - HORN
		FIRE ALARM HORN, WEATHERPROOF, EXTERIOR, FLUSH MOUNTED
		FIRE ALARM - VISUAL DEVICE ALL DEVICES MUST HAVE ADJUSTABLE CANDELA RATINGS
		FIRE ALARM - COMBINATION AUDIBLE/VISUAL DEVICE. ALL DEVICES MUST HAVE ADJUSTABLE CANDELA RATINGS
		FIRE ALARM - CEILING MOUNTED COMBINATION AUDIBLE/VISUAL/SMOKE DETECTOR DEVICE. ALL DEVICES MUST HAVE ADJUSTABLE CANDELA RATINGS
		SMOKE DETECTOR
		SINGLE-STATION SMOKE ALARM
		HEAT DETECTOR
		SUPPLY DUCT SMOKE DETECTOR (SUPPLY DUCT)
		RETURN DUCT SMOKE DETECTOR (SUPPLY DUCT)
		MAGNETIC DOOR HOLD OPEN DEVICE
	TS	TAMPER SWITCH
	FS	FLOW SWITCH
		FIRE ALARM CONTROL PANEL
		AREA OF RESCUE ASSISTANCE RESCUE STATION

SYMBOL AND ABBREVIATION SCHEDULE		
SYMBOL	ABBR.	DESCRIPTION
		FLUORESCENT LIGHT FIXTURE, CEILING MOUNTED
		2' X 4' FLUORESCENT CEILING MOUNTED LIGHT FIXTURE - NORMAL/EMERGENCY OPERATION
		2' X 2' FLUORESCENT CEILING MOUNTED LIGHT FIXTURE - NORMAL/EMERGENCY OPERATION
		FLUORESCENT LIGHT FIXTURE, CEILING OR PENDANT/SUSPENDED MOUNTED
		FLUORESCENT LIGHT FIXTURE, CEILING OR PENDANT/SUSPENDED MOUNTED, NORMAL EMERGENCY OPERATION (ONE CIRCUIT) OR NORMAL AND EMERGENCY OPERATION (TWO CIRCUITS)
		FLUORESCENT LIGHT FIXTURE, WALL MOUNTED
		FLUORESCENT LIGHT FIXTURE, WALL MOUNTED - NORMAL/EMERGENCY OPERATION
		LIGHT FIXTURE, CEILING OR PENDANT/SUSPENDED MOUNTED
		LIGHT FIXTURE, CEILING OR PENDANT/SUSPENDED MOUNTED - NORMAL EMERGENCY
		LIGHT FIXTURE, WALL MOUNTED
		LIGHT FIXTURE, WALL MOUNTED - NORMAL EMERGENCY
		WALL SPOTLIGHT OR FLOODLIGHT
		COMBINATION EXIT SIGN/EMERGENCY BATTERY PACK
		CEILING MOUNTED EXIT LIGHT FIXTURE. UNIT TO HAVE DIRECTIONAL ARROWS AND NUMBER OF FACES AS INDICATED. SHADED QUADRANT INDICATES FACE(S).
		DUPLEX RECEPTACLE, 20A/125V/2P/3W, NEMA 5-20R
		DUPLEX RECEPTACLE INSTALLED AT COUNTER HEIGHT
		DUPLEX RECEPTACLE WITH WEATHERPROOF COVER
		DUPLEX RECEPTACLE, GROUND FAULT INTERRUPTING
		DUPLEX RECEPTACLE, BOTTOM RECEPTACLE SWITCHED SEPARATELY FROM TOP RECEPTACLE
		SINGLE RECEPTACLE, 20A/125V/2P/3W, NEMA 5-20R
		SPECIAL RECEPTACLE, XXA/XXXV/1P/1XW, NEMA X-XXR
		SPECIAL RECEPTACLE, XXA/XXXV/3P/1XW, NEMA X-XXR
		DUPLEX RECEPTACLE INSTALLED IN RECESSED FLOOR BOX
		FLUSH MOUNTED FLOOR BOX WITH DUPLEX RECEPTACLE AND PROVISIONS FOR VOICE/DATA JACKS AND CABLING. PROVIDE (2) 1" CONDUIT WITH PULL STRING TO ABOVE ACCESSIBLE CEILING.
		SINGLE GANG DEVICE BOX FOR DATA WITH 3/4" WITH PULL STRING TO ABOVE ACCESSIBLE CEILING
		4" X 4" DEVICE BOX FOR VOICE/DATA WITH 3/4" WITH PULL STRING TO ABOVE ACCESSIBLE CEILING
		SINGLE GANG DEVICE BOX FOR VOICE/DATA WITH 3/4" WITH PULL STRING TO ABOVE ACCESSIBLE CEILING
		4" X 4" DEVICE BOX WITH 3/4" WITH PULL STRING TO ABOVE ACCESSIBLE CEILING
		TOGGLE SWITCH - SINGLE POLE
		TOGGLE SWITCH - THREE WAY
		TOGGLE SWITCH - FOUR WAY
		DIMMER SWITCH - SINGLE POLE
		SINGLE POLE TOGGLE SWITCH WITH PILOT LIGHT
		MANUAL MOTOR STARTER, SINGLE POLE WITH OVERLOADS, HANDLE GUARD LOCKOFF, AND RED PILOT LIGHT, NEMA 1, SURFACE MOUNTED, UNLESS NOTED OTHERWISE, TOGGLE TYPE, SQUARE D CLASS 2510 TYPE F OR EQUAL.
		MANUAL MOTOR STARTER, (TWO OR THREE POLE) WITHOUT OVERLOADS, WITH HANDLE GUARD LOCKOFF, AND RED PILOT LIGHT, NEMA 1, SURFACE MOUNTED, UNLESS NOTED OTHERWISE TOGGLE TYPE, SQUARE D CLASS 2510 TYPE K OR EQUAL.
		DUAL TECHNOLOGY WALL MOUNTED OCCUPANCY SENSOR/SWITCH
		DUAL TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR
		DUAL TECHNOLOGY WALL MOUNTED OCCUPANCY SENSOR
		PHOTOELECTRIC CELL
		CARD READER
		KEYPAD
		360 DEGREE MOTION DETECTOR
		DOOR HOLD OPEN DEVICE (SECURITY)
		CCTV CAMERA
		POKE THRU DEVICE

SYMBOL AND ABBREVIATION SCHEDULE		
SYMBOL	ABBR.	DESCRIPTION
	A	AMPERE
	A/C	ABOVE COUNTER
	AF	AMPERE FRAME
	AFF	ABOVE FINISHED FLOOR
	AFG	ABOVE FINISHED GRADE
	AIC	AMPERE INTERRUPTING CAPACITY
	ALT	ALTERNATE
	APP	AREA PROTECTION PANEL
	AT	AMPERE TRIP
	ATS	AUTOMATIC TRANSFER SWITCH
	AWG	AMERICAN WIRE GAUGE
	BFC	BELOW FINISHED CEILING
	BFG	BELOW FINISHED GRADE
	C	CONDUIT
	CT	CURRENT TRANSFORMER
	DIA	DIAMETER
	DS#	DISCONNECT SWITCH
	DWG	DRAWINGS
	<E>	EXISTING
	E.C.	ELECTRICAL CONTRACTOR
	ELEC	ELECTRICAL
	ELEV	ELEVATION
	<ER>	EXISTING RELOCATED, REINSTALLED AND RECONNECTED
	FACP	FIRE ALARM CONTROL PANEL
	FLA	FULL LOAD AMPS
	FS	FLOW SWITCH
	FU	FUSE
	FV	FLUSH VALVE
	FVNR	FULL VOLTAGE NON-REVERSING
	G, GND, GRD	GROUND
	G.C.	GENERAL CONTRACTOR
	GFI	GROUND FAULT INTERRUPTING
	HP	HORSEPOWER
	IDF	INTERMEDIATE DISTRIBUTION FRAME
	KOMIL	THOUSAND CIRCULAR MILS
	KV	KILOVOLT
	KVA	KILOVOLT AMPERE
	KW	KILOWATT
	KWHM	KILOWATT HOUR METER
	LAN	LOCAL AREA NETWORK
	LRA	LOCKED ROTOR AMPS
	LS	LEVEL SWITCH
	M.C.	MECHANICAL CONTRACTOR
	MCA	MINIMUM CIRCUIT AMPACITY
	MCB	MAIN CIRCUIT BREAKER
	MCC	MOTOR CONTROL CENTER
	MDF	MAIN DISTRIBUTION FRAME
	MOPD	MAXIMUM OVERCURRENT PROTECTIVE DEVICE
	MTD	MOUNTED
	MS	MOTOR STARTER
	NEC	NATIONAL ELECTRICAL CODE (LATEST EDITION, INCLUDING ALL AMENDMENTS/ERRATA)
	NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
	OL	OVERLOAD RELAY
	P	POLE
	PC	PLUMBING CONTRACTOR
	PH OR Ø	PHASE
	PRI	PRIMARY
	SEC	SECONDARY
	SN	SOLID NEUTRAL
	SOL	SOLENOID
	SS	SELECTOR SWITCH
	SWBD	SWITCHBOARD
	TB	TERMINAL BLOCK
	TDR	TIME DELAY RELAY
	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
	U.L.	UNDERWRITER'S LABORATORIES
	UTP	UNSHIELDED TWISTED PAIR
	UV	UNIT VENTILATOR
	V	VOLTS
	VA	VOLTAMPERES
	VFD	VARIABLE FREQUENCY DRIVE (CONTROLLER)
	W	WIRE
	WAN	WIDE AREA NETWORK
	WG	WIRE GUARD
	WP	WEATHERPROOF

- GENERAL NOTES (TYPICAL FOR ALL DRAWINGS):**
- VERIFY ALL CONDITIONS AND MEASUREMENTS ON SITE PRIOR TO THE INSTALLATION OF ANY EQUIPMENT.
  - INSTALL WORK IN ACCORDANCE WITH THE LATEST NATIONAL ELECTRICAL CODE AND EQUIPMENT, UFC GUIDELINES, LATEST VERSION OF THE NFPA, AND MANUFACTURER'S RECOMMENDED INSTRUCTIONS.
  - PROVIDE MATERIALS THAT ARE NEW, OF THE BEST OF THEIR RESPECTIVE KINDS, WITHOUT IMPERFECTIONS OR BLEMISHES, AND PROTECTED FROM THE ELEMENTS PRIOR TO CONSTRUCTION.
  - COMPLY WITH OWNER'S USE OF PREMISES AND SAFETY REGULATIONS.
  - SECURE ALL PERMITS REQUIRED FOR ELECTRICAL WORK. SCHEDULE INSPECTIONS OF THE ELECTRICAL SYSTEMS. ELECTRICAL INSPECTIONS WILL BE PERFORMED BY THE AUTHORITIES HAVING JURISDICTION.
  - FIELD VERIFY DEMOLITION REQUIREMENTS AND EXISTING CONDITIONS.
  - THE DRAWINGS DO NOT INDICATE PULL/SPLICE BOXES. INSTALL BOXES TO MEET JOB CONDITIONS AND NEC REQUIREMENTS.
  - UNLESS INDICATED OTHERWISE, PROVIDE ALL REQUIRED EQUIPMENT CONNECTIONS.
  - PROVIDE LIGHTING FIXTURES WITH ALL NECESSARY ACCESSORIES FOR A COMPLETE INSTALLATION INCLUDING MOUNTING DEVICES, ETC.

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  
 one quarter inch = one foot  
 one eighth inch = one foot  
 M:\2013\213336314\Drawings\electrical\213336314\_01\_Symbols, Abbreviation and general notes.dwg 5-17-16 04:08:39 PM william.hoffield

Revisions	Date

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**Drawing Title**  
**SYMBOLS, ABBREVIATIONS AND GENERAL NOTES**

**Approved: Project Director**

**Project Title**  
 Construct Columbarium, InGround Cremains & Misc. Site Improvements

**Location** Baltimore National Cemetery  
 5501 Frederick Ave. Catonsville, MD 21228

**Date** MAY 20, 2016

**Checked** SK

**Drawn** BT

**Project Number** 802-CM3-021

**Building Number** -

**Drawing Number** E-0.1

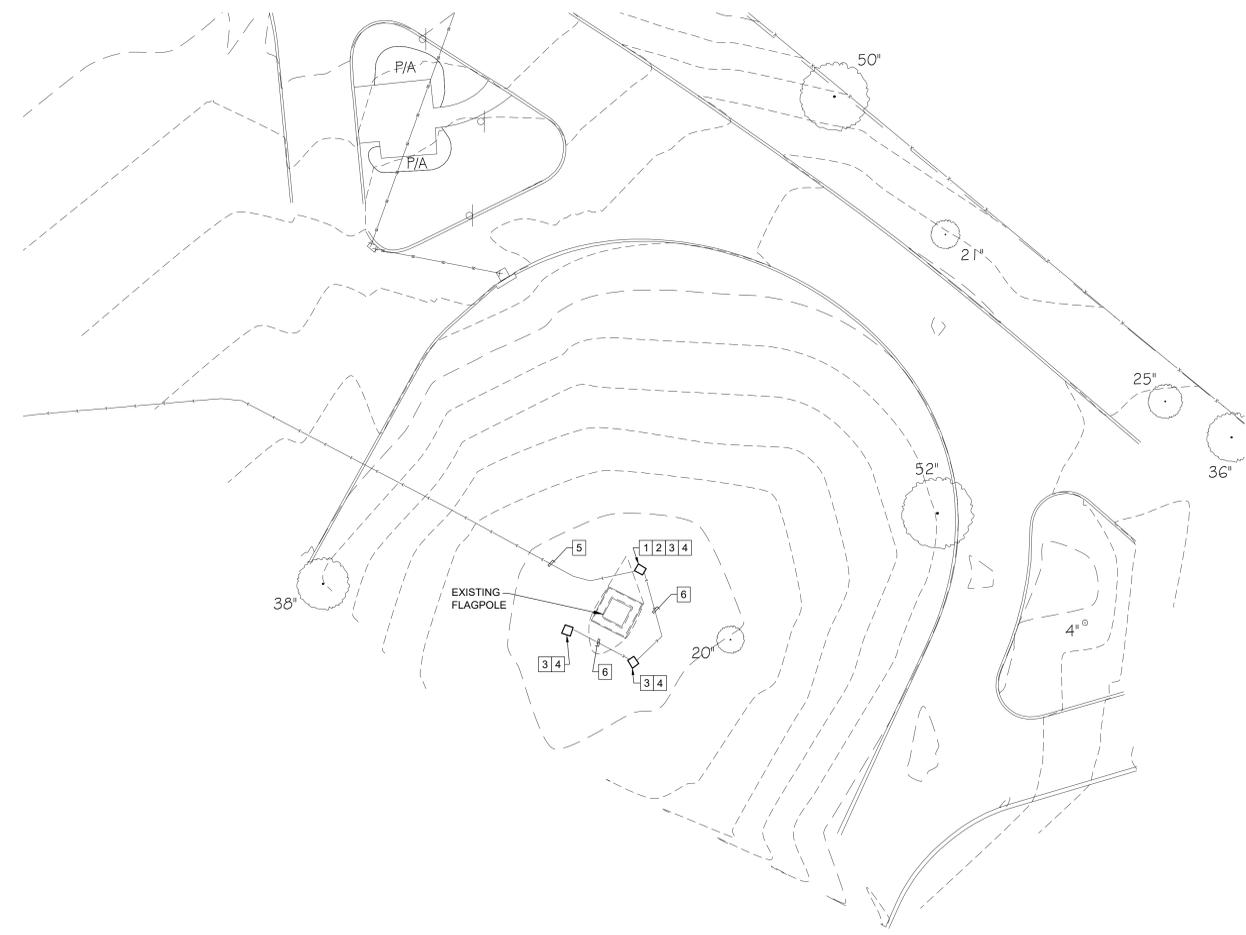
**Dwg. 35 of 37**

**NATIONAL CEMETERY ADMINISTRATION OFFICE OF DESIGN AND CONSTRUCTION**

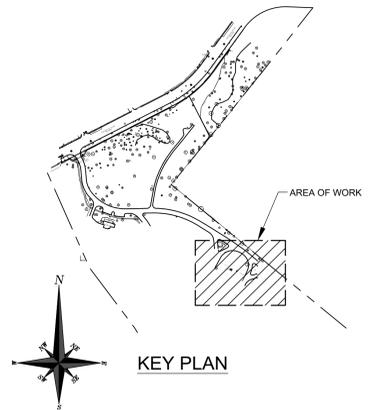
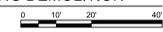
A  
B  
C  
D  
E  
F

**DEMOLITION NOTES:**

- 1 DISCONNECT AND REMOVE GFI RECEPTACLE AND DEVICE BOX.
- 2 DISCONNECT AND REMOVE PHOTOCELL AND ALL ASSOCIATED ACCESSORIES.
- 3 DISCONNECT AND REMOVE FLAGPOLE LIGHT FIXTURE.
- 4 DISCONNECT AND REMOVE GREEN HOUSING STRUCTURE AND FIXTURE MOUNTING BASE.
- 5 WIRING AND CONDUIT FEED TO LIGHT FIXTURES TO BE SALVAGED DURING DEMOLITION FOR REUSE WITH NEW FIXTURES.
- 6 WIRING AND CONDUIT BETWEEN FIXTURES TO REMAIN.



1 FLAGPOLE - LIGHTING DEMOLITION  
SCALE: 1"=20'-0"



three inches = one foot  
 one and one half inches = one foot  
 one inch = one foot  
 three quarters inch = one foot  
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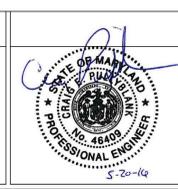
**BID SET - FOR CONSTRUCTION**

Revisions:	Date:

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<b>Drawing Title</b>	<b>FLAGPOLE - LIGHTING DEMOLITION</b>
<b>Approved Project Director</b>	

<b>Project Title</b>	Construct Columbarium, InGround Remains & Misc. Site Improvements
<b>Location</b>	Baltimore National Cemetery 5501 Frederick Ave. Catonsville, MD 21228
<b>Date</b>	MAY 20, 2016
<b>Checked</b>	SK
<b>Drawn</b>	BT

<b>Project Number</b>	802-CM3-021
<b>Building Number</b>	-
<b>Drawing Number</b>	<b>E-1.1</b>
<b>Dwg.</b>	36 of 37

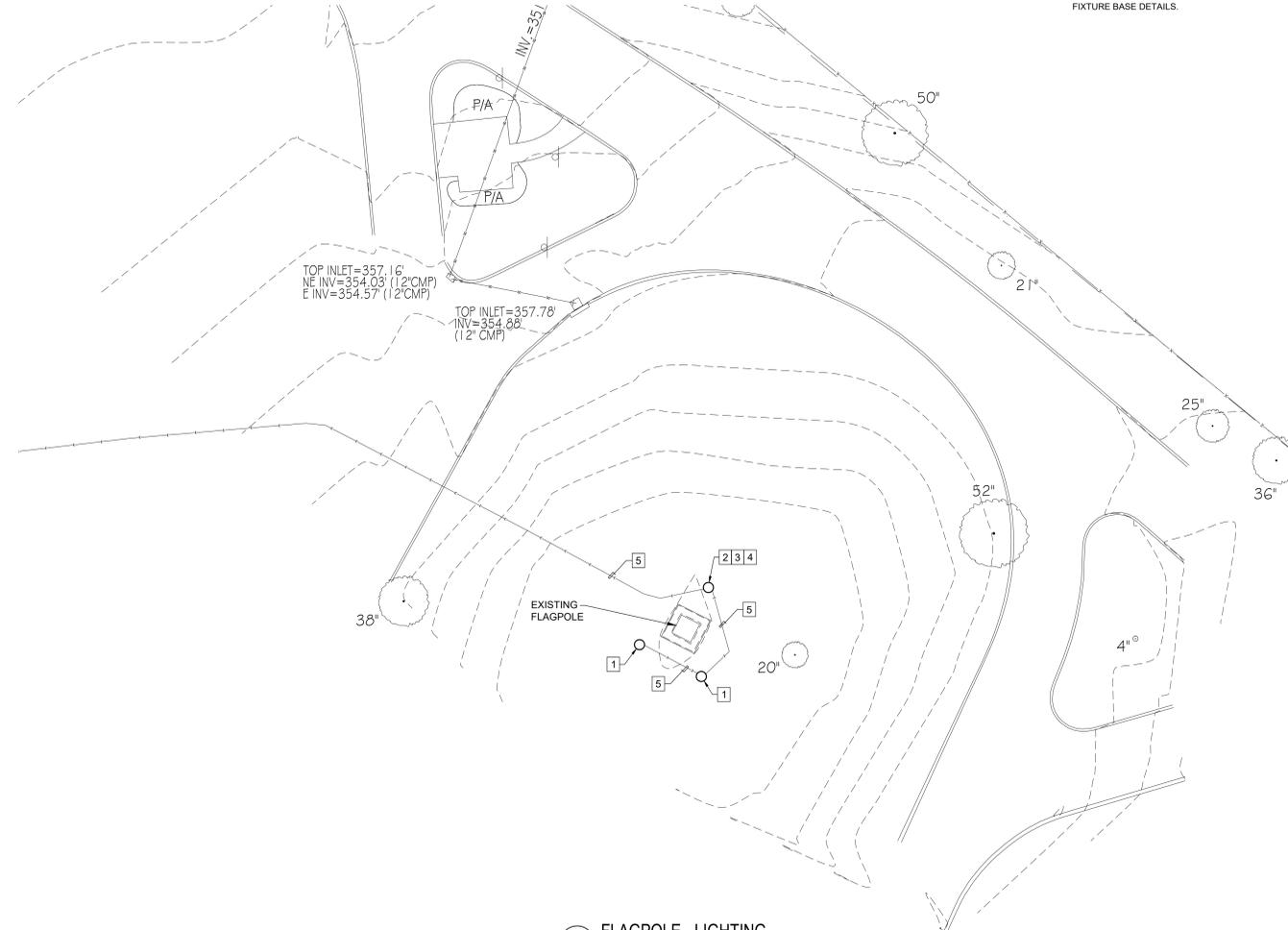
**NATIONAL CEMETERY ADMINISTRATION OFFICE OF DESIGN AND CONSTRUCTION**

**GENERAL NOTES**

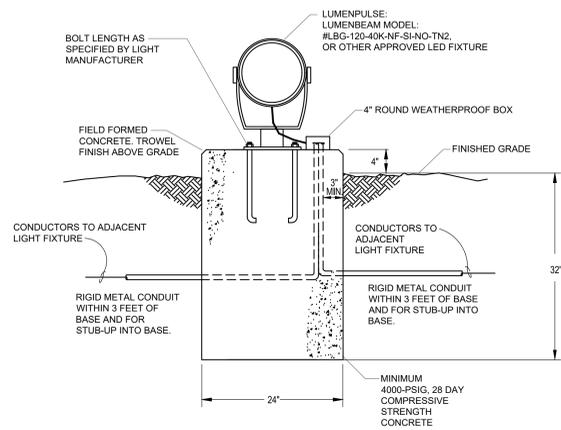
- A. CONTRACTOR SHALL COORDINATE WITH OWNER AND LANDSCAPE ARCHITECT FOR FINAL AIMING OF LIGHT FIXTURES.
- B. LIGHTING FIXTURE AND RECEPTACLE ENCLOSURE TYPES ARE FOUND ON FIXTURE BASE DETAILS.

**KEYED NOTES**

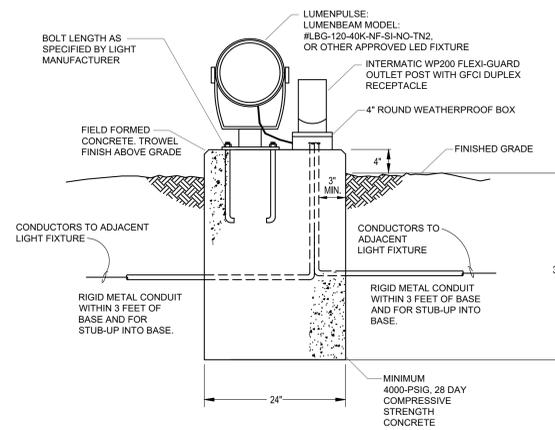
- 1 REFER TO FIXTURE BASE DETAIL 'A' ON THIS DRAWING. PROVIDE LIGHT FIXTURE AS REQUIRED IN DETAIL.
- 2 REFER TO FIXTURE BASE DETAIL 'B' ON THIS DRAWING. PROVIDE LIGHT FIXTURE AS REQUIRED IN DETAIL.
- 3 GFI RECEPTACLE TO BE POWERED FROM EXISTING LIGHTING CIRCUIT. PROVIDE 2#12,1#12GRD. - 3/4"Ø. REWORK AND EXTEND EXISTING LIGHTING BRANCH CIRCUIT AS REQUIRED.
- 4 PROVIDE PHOTOCELL FOR CONTROL OF FLAGPOLE LIGHTS. MOUNT PHOTOCELL ON BACKSIDE OF RECEPTACLE HOUSING.
- 5 REUSE EXISTING WIRING AND CONDUIT. EXTEND WIRING AND CONDUIT AS NEEDED TO ACCOMMODATE NEW FIXTURE LOCATION. TRACE CIRCUIT BACK TO SOURCE. VERIFY THAT THE EXISTING BRANCH CIRCUIT BREAKER AND WIRING ARE IN GOOD WORKING ORDER. LABEL EXISTING BRANCH CIRCUIT BREAKER IN EXISTING PANELBOARD WITH NEW DESIGNATION.



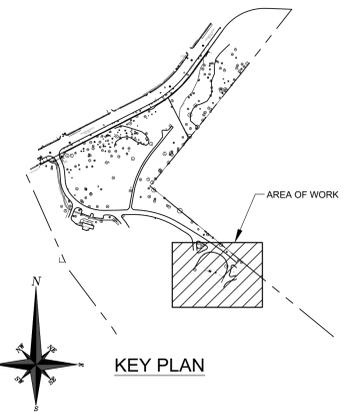
**1 FLAGPOLE - LIGHTING**  
SCALE: 1"=20'-0"



**FIXTURE BASE DETAIL 'A'**  
NO SCALE



**FIXTURE BASE DETAIL 'B'**  
NO SCALE



**KEY PLAN**

**BID SET - FOR CONSTRUCTION**

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Drawing Title	<b>FLAGPOLE - LIGHTING</b>
Approved Project Director	

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Location	Baltimore National Cemetery 5501 Frederick Ave. Catonsville, MD 21228
Date	MAY 20, 2016

Project Number	802-CM3-021
Building Number	-
Drawing Number	<b>E-1.2</b>
Dwg.	37 of 37

**NATIONAL CEMETERY  
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