

GENERAL SITE NOTES:

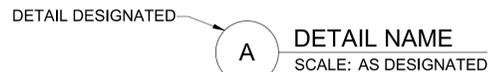
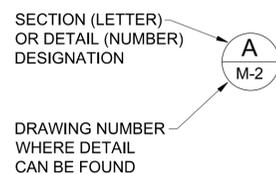
- SOURCE OF TOPOGRAPHY SHOWN ON THE CIVIL PLANS FOR PUMP STATION B ARE BASE MAPS PROVIDED BY AVIROM & ASSOCIATES, INC., AUGUST 2013 AND RECORD DRAWINGS FROM CH2M. THE BASE MAPS FOR PUMP STATION H ARE FROM RECORD DRAWINGS FROM CH2M. EXISTING CONDITIONS MAY VARY FROM THOSE SHOWN ON THESE PLANS. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND ADJUST WORK PLAN ACCORDINGLY PRIOR TO BEGINNING CONSTRUCTION.
- EXISTING TOPOGRAPHY, STRUCTURES, AND SITE FEATURES ARE SHOWN SCREENED AND/OR LIGHT-LINED. NEW FINISH GRADE, STRUCTURES, AND SITE FEATURES ARE SHOWN HEAVY-LINED.
- HORIZONTAL DATUM: FOR PUMP STATION B, NAD 83, STATE PLANE - FLORIDA EAST. FOR PUMP STATION H, UNKNOWN.
- VERTICAL DATUM: FOR PUMP STATION B, NGVD 1929. FOR PUMP STATION H, UNKNOWN.
- ALL UNITS ARE IN US SURVEY FEET.
- MAINTAIN, RELOCATE, OR REPLACE EXISTING SURVEY MONUMENTS, CONTROL POINTS, AND STAKES WHICH ARE DISTURBED OR DESTROYED. PERFORM THE WORK TO PRODUCE THE SAME LEVEL OF ACCURACY AS THE ORIGINAL MONUMENT(S) IN A TIMELY MANNER, AND AT THE CONTRACTOR'S EXPENSE.
- COORDINATE STAGING AREA WITH THE CITY. STAGING AREA SHALL BE FOR CONTRACTOR'S EMPLOYEE PARKING, CONTRACTOR'S EQUIPMENT AND ON-SITE STORAGE OF MATERIALS.
- PROVIDE TEMPORARY FENCING AS NECESSARY TO MAINTAIN SECURITY AT ALL TIMES.
- ELEVATIONS GIVEN ARE TO FINISH GRADE AND PIPE INVERT UNLESS OTHERWISE SHOWN.
- CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING EROSION CONTROL DEVICES DURING CONSTRUCTION.
- CONTRACTOR SHALL TAKE ALL OTHER MEASURES TO POSITIVELY PRECLUDE EROSION MATERIALS FROM LEAVING THE SITE.
- LIMIT CONSTRUCTION OPERATIONS TO WITHIN THE RIGHT-OF-WAY EASEMENTS AND ANY OTHER DESIGNATED WORK AREAS AS INDICATED. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ANY DAMAGES AS A RESULT OF CONSTRUCTION ACTIVITIES OUTSIDE OF RIGHT-OF-WAY, EASEMENTS AND ANY OTHER DESIGNATED WORK AREAS SHOWN ON THE DRAWINGS.
- CONTRACTOR SHALL REPLACE ALL PAVEMENTS, PAVEMENT MARKINGS, SIGNS, AND REFLECTIVE MARKERS DISTURBED OR REMOVED DURING CONSTRUCTION.
- TREE AND SHRUB REMOVAL AND/OR TRIMMING MUST BE COMPLETED BY A CITY APPROVED ISA CERTIFIED ARBORIST.
- ALL DISTURBED AREAS NOT PAVED OR COVERED WITH GRAVEL SHALL BE SODDED.

LEGEND

	ANTENNA		BUTTON WOOD (DIAMETER)
	BACK FLOW PREVENTOR VALVE		PALM SPECIES (DIAMETER)
	BENCHMARK		POINCIANA (DIAMETER)
	BOLLARD (UNLESS NOTED)		UNKNOWN SPECIES (DIAMETER)
	CATCH BASIN		
	CONCRETE UTILITY POLE		
	DRAINAGE MANHOLE		
	ELECTRIC SERVICE BOX		
	EXISTING ELEVATION		
	METAL LIGHT POLE		
	OVERHEAD WIRES		
	PARKING METER		
	SANITARY MANHOLE		
	SEWER VALVE		
	SIGN (UNLESS NOTED)		
	SPIGOT		
	WATER METER		
	WATER VALVE		
	WOOD UTILITY POLE		
	UNDERGROUND DRAINAGE LINE		
	UNDERGROUND SEWER LINE		
	APPROXIMATE RIGHT-OF-WAY LINE		

SECTION AND DETAIL IDENTIFICATION

SECTION AND DETAIL DESIGNATORS



ON DRAWING WHERE DETAIL IS DRAWN:

STANDARD DETAIL DESIGNATION



DESIGN CRITERIA

- APPLICABLE CODE: 2014 FL BUILDING CODE AND ALL OTHER APPLICABLE LOCAL AGENCIES.
- FLOOR LIVE LOADS:

STAIR AND LANDING LIVE LOAD	200 PSF
	100 PSF
- WIND LOAD: (ASCE 7-10)

BASIC WIND SPEED (3-SECOND GUST)	= 200 MPH
EXPOSURE	= C
RISK CATEGORY	= III
- SOIL DESIGN PARAMETERS:
 - NET ALLOWABLE SOIL BEARING PRESSURES: 2000 PSF

GENERAL INFORMATION

- FOR ABBREVIATIONS NOT LISTED, SEE ASME Y14.38 "ABBREVIATIONS AND ACRONYMS: PUBLICATION AS DISTRIBUTED BY THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME).
- DESIGN DETAILS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS OCCURRING THROUGHOUT THE PROJECT, WHETHER OR NOT THEY ARE INDIVIDUALLY CALLED OUT.
- DETAILING AND DIMENSIONS OF EXISTING STRUCTURES SHOWN ARE BASED ON AS-BUILT DESIGN DRAWINGS, AND DO NOT NECESSARILY REPRESENT THE AS-CONSTRUCTED CONDITIONS. THE CONTRACTOR SHALL FIELD VERIFY DIMENSIONS AND DETAILING OF THE EXISTING STRUCTURES PRIOR TO FABRICATION OF ADJACENT FRAMING OR CONNECTIONS OR SUPPORTS THAT ARE AFFECTED BY THE EXISTING STRUCTURE.
- STRUCTURAL MEMBERS SHALL NOT BE CUT OR MODIFIED FOR PIPES, DUCTS, ETC., UNLESS SPECIFICALLY DETAILED OR APPROVED IN WRITING BY THE ENGINEER.
- VISITS TO THE JOB SITE BY THE ENGINEER TO OBSERVE THE CONSTRUCTION DO NOT IN ANY WAY MEAN THAT ENGINEER IS GUARANTOR OF CONSTRUCTOR'S WORK, NOR RESPONSIBLE FOR THE COMPREHENSIVE OR SPECIAL INSPECTIONS, COORDINATION, SUPERVISION, OR SAFETY AT THE JOB SITE.

FORMWORK, SHORING AND BRACING

- STRUCTURES SHOWN ON THE DRAWINGS HAVE BEEN DESIGNED FOR STABILITY UNDER FINAL CONDITIONS ONLY. DESIGN SHOWN DOES NOT INCLUDE NECESSARY COMPONENTS OR EQUIPMENT FOR STABILITY OF THE STRUCTURES DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ALL WORK RELATING TO CONSTRUCTION ERECTION METHODS, BRACING, SHORING, RIGGING, GUYS, SCAFFOLDING, FORMWORK, AND OTHER WORK AIDS REQUIRED TO SAFELY PERFORM THE WORK SHOWN.
- TEMPORARY SHORING SHALL REMAIN IN PLACE UNTIL ELEVATED CONCRETE FLOOR OR SLABS HAVE REACHED 80 PERCENT OF THE 28 DAY DESIGN STRENGTH AS DETERMINED BY CYLINDER BREAKS.

CONCRETE REINFORCING

- MINIMUM REINFORCING FOR ALL CONCRETE WALLS AND SLABS SHALL BE AS FOLLOWS:

WALL THICKNESS	REINF EACH WAY	LOCATION
6"	#4@12"	CENTERED
8"	#5@12"	CENTERED
10"	#4@12"	EACH FACE
12"	#5@12"	EACH FACE

PROVIDE LARGER SIZES AND MORE REINFORCING IN SECTIONS OF CONCRETE WHERE REQUIRED BY THE DETAILS ON THE DRAWINGS OR BY THE SPECIFICATIONS.

- CLEARANCE FOR REINFORCEMENT BARS, UNLESS SHOWN OTHERWISE, SHALL BE:

WHEN PLACED ON GROUND:	3"
ALL OTHER CONCRETE SURFACES:	2"
- 90 DEGREE BENDS, UNLESS OTHERWISE SHOWN, SHALL BE ACI 318 STANDARD HOOKS.
- REINFORCEMENT BENDS AND LAPS, UNLESS OTHERWISE NOTED, SHALL SATISFY THE FOLLOWING MINIMUM REQUIREMENTS:

CONCRETE DESIGN STRENGTH = 4,000 PSI ** *** GRADE 60 REINFORCING STEEL										
BAR SIZE	#3	#4	#5	#6	#7	#8	#9	#10	#11	
LAP SPLICE LENGTH										
SPACING < 6"	TOP BAR *	1'-4"	2'-0"	3'-0"	4'-0"	5'-10"	6'-8"	7'-7"	8'-6"	9'-5"
	OTHER BAR	1'-4"	1'-7"	2'-4"	3'-1"	4'-6"	5'-2"	5'-10"	6'-7"	7'-3"
SPACING ≥ 6"	TOP BAR *	1'-4"	1'-6"	2'-0"	2'-5"	3'-6"	4'-0"	5'-0"	6'-2"	7'-5"
	OTHER BAR	1'-4"	1'-4"	1'-7"	1'-10"	2'-9"	3'-1"	3'-10"	4'-9"	5'-8"
EMBEDMENT LENGTH										
SPACING < 6"	TOP BAR *	1'-0"	1'-7"	2'-4"	3'-1"	4'-6"	5'-2"	5'-10"	6'-7"	7'-3"
	OTHER BAR	1'-0"	1'-3"	1'-9"	2'-5"	3'-6"	4'-0"	4'-6"	5'-1"	5'-7"
SPACING ≥ 6"	TOP BAR *	1'-0"	1'-3"	1'-7"	1'-10"	2'-9"	3'-1"	3'-10"	4'-9"	5'-8"
	OTHER BAR	1'-0"	1'-0"	1'-3"	1'-5"	2'-1"	2'-5"	3'-0"	3'-8"	4'-5"

* TOP BARS SHALL BE DEFINED AS ANY HORIZONTAL BARS PLACED SUCH THAT MORE THAN 12 INCHES OF CONCRETE IS CAST IN THE MEMBER BELOW THE BAR IN ANY SINGLE POUR. HORIZONTAL WALL BARS ARE CONSIDERED TOP BARS.

** WHERE 3000 PSI CONCRETE IS USED, INCREASE ABOVE LENGTHS BY 16 PERCENT

*** WHERE 5000 PSI CONCRETE IS USED, DECREASE ABOVE LENGTHS BY 16 PERCENT

CONCRETE

- 28-DAY CAST-IN-PLACE CONCRETE STRENGTHS:

TYPICAL:	5000 PSI
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- REINFORCING STEEL:

TYPICAL:	ASTM A615, GRADE 60
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- FABRICATION AND PLACEMENT OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH CRSI MSP-1 "MANUAL OF STANDARD PRACTICE" AND ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE".
- ROUGHEN AND CLEAN CONSTRUCTION JOINTS IN WALLS AND SLABS AS SPECIFIED PRIOR TO PLACING ADJACENT CONCRETE.
- THE CONTRACTOR SHALL COORDINATE PLACEMENT OF OPENINGS, CURBS, DOWELS, SLEEVES, CONDUITS, BOLTS AND INSERTS PRIOR TO PLACEMENT OF CONCRETE.
- NO ALUMINUM CONDUIT OR PRODUCTS CONTAINING ALUMINUM OR ANY OTHER MATERIAL INJURIOUS TO THE CONCRETE SHALL BE EMBEDDED IN THE CONCRETE.

WELDING

- WELDS SHALL CONFORM TO AMERICAN WELDING SOCIETY (AWS), LATEST EDITION: AWS D1.1/D1.1M:2015
- BUTT JOINT WELDS SHALL BE COMPLETE JOINT PENETRATION (CJP) UNLESS INDICATED OTHERWISE.

FOUNDATIONS

- ALL FOUNDATION BEARING SURFACES SHALL BE INSPECTED BY THE CONTRACTOR'S GEOTECHNICAL ENGINEER OR HIS DESIGNEE PRIOR TO PLACEMENT OF FORMWORK OR REINFORCEMENT. THE INSPECTION SHALL VERIFY THAT THE EXPOSED SUBGRADE IS ADEQUATE. SEE SOIL DESIGN PARAMETERS THIS SHEET.

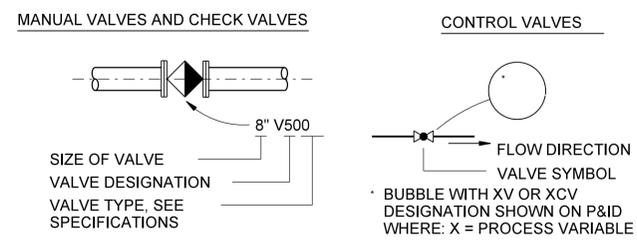
3011 S.W. WILLISTON ROAD GAINESVILLE, FLORIDA 32608 EB0000072 AAC001982	ROCCO DEVILLIERS KOEKEMOER PE 76468	PUMP STATIONS H & B REHABILITATION AND PUMP STATION GENERATOR REPLACEMENT CITY OF KEY WEST KEY WEST, FLORIDA	GENERAL CIVIL AND STRUCTURAL GENERAL NOTES, LEGEND, AND ABBREVIATIONS	NO. DATE DSGN REVISION (CHK) DR R MORRISON R MORRISON T MALONE R KOEKEMOER	BY AP/VD R KOEKEMOER
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING. 0 1"				DATE MAY 2018	
				PROJ 683450	
				DWG 001-G-003	
				SHEET 03 of 30	

Call 48 hours before you dig

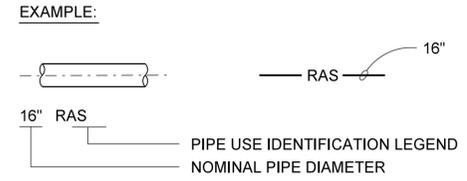
It's the Law! 811

Sunshine State One Call of Florida, Inc.

VALVE DESIGNATIONS

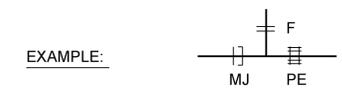


PIPING DESIGNATION



PIPE DESIGNATIONS AND FITTING END PATTERNS

B	BELL	PE	PLAIN END
S	SPIGOT	GE	GROOVED END
F	FLANGE	MJ	MECHANICAL JOINT

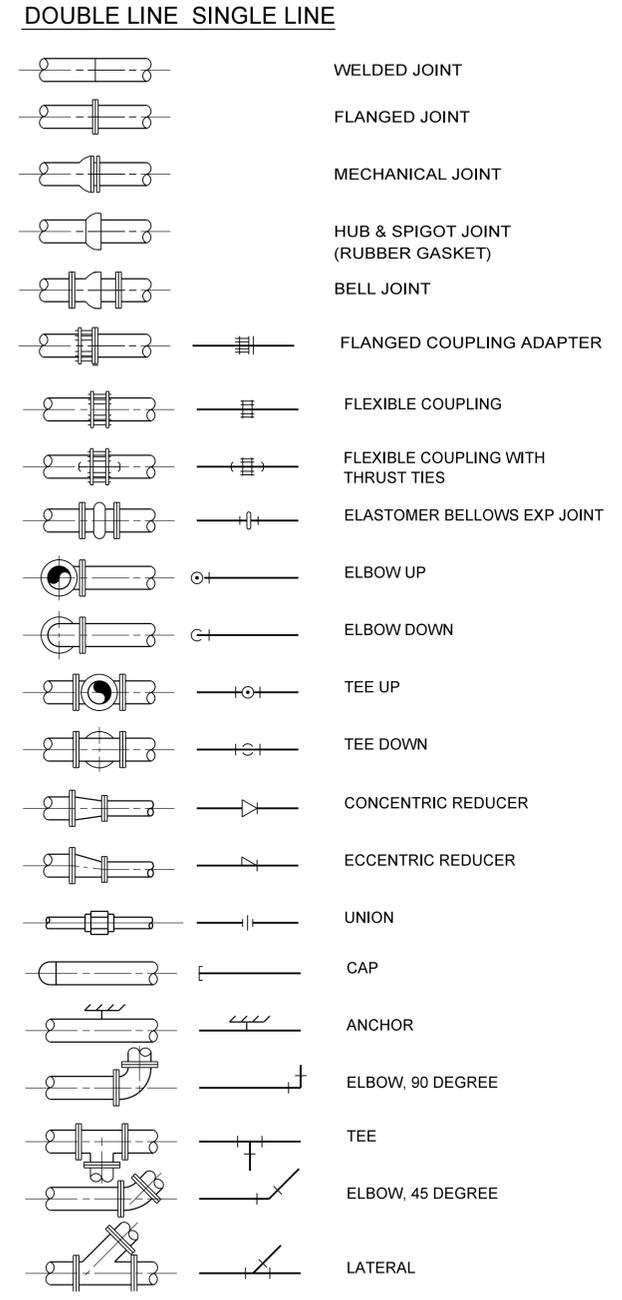


MECHANICAL LEGEND AND NOTES

GENERAL PIPING NOTES

- LAY PIPE TO UNIFORM GRADE BETWEEN INDICATED ELEVATION POINTS.
- SIZE OF FITTINGS SHOWN ON PLANS SHALL CORRESPOND TO ADJACENT STRAIGHT RUN OF PIPE, UNLESS OTHERWISE INDICATED. TYPE OF JOINT AND FITTING MATERIAL SHALL BE THE SAME AS SHOWN FOR ADJACENT STRAIGHT RUN OF PIPE, UNLESS OTHERWISE INDICATED.
- LOCATION AND NUMBER OF PIPE HANGERS AND PIPE SUPPORTS SHOWN IS ONLY APPROXIMATE. FINAL SUPPORT REQUIREMENTS SHALL BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER PRIOR TO INSTALLATION. MAXIMUM SPACING SHALL BE AS SPECIFIED.
- ALL JOINTS SHALL BE WATERTIGHT. STANDARD WALL PIPE DETAIL SHALL BE USED WHEREVER PIPING PASSES FROM A STRUCTURE TO BACKFILL.
- ALL FLEXIBLE CONNECTORS OR FLANGED COUPLING ADAPTERS SHALL BE PROVIDED WITH THRUST TIES, UNLESS OTHERWISE NOTED. THRUST PROTECTION SHALL BE ADEQUATE FOR PRESSURES SPECIFIED.
- ALL NEW BURIED PIPING SPECIFIED TO BE PRESSURE TESTED, EXCEPT FLANGED, WELDED, OR SCREWED PIPING, SHALL BE PROVIDED WITH THRUST RESTRAINT, AS SPECIFIED AT ALL DIRECTIONAL CHANGES AND DEAD ENDS, UNLESS OTHERWISE NOTED. ALL CONNECTIONS TO EXISTING PIPE SHALL BE MADE WITH MEGALUGS. ANY EXCEPTIONS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION BEFORE PROCEEDING.
- NUMBER AND LOCATION OF UNIONS SHOWN ON PLANS IS ONLY APPROXIMATE. PROVIDE ALL UNIONS NECESSARY TO FACILITATE CONVENIENT REMOVAL OF VALVES AND MECHANICAL EQUIPMENT.
- WHERE A FLANGED COUPLING ADAPTER IS SHOWN, A STANDARD FLANGE SHALL BE JOINED TO THE COUPLING ADAPTER.

PIPE AND FITTING SYMBOLS



3011 S.W. WILLISTON ROAD
GAINESVILLE, FLORIDA 32608
EB0000072 AAC001982
TAO FU PE 63138

PUMP STATIONS H & B REHABILITATION
AND PUMP STATION GENERATOR REPLACEMENT
CITY OF KEY WEST
KEY WEST, FLORIDA

GENERAL
MECHANICAL LEGEND

1" = X'	
VERIFY SCALE	
BAR IS ONE INCH ON ORIGINAL DRAWING.	
DATE	MAY 2018
PROJ	683450
DWG	001-G-005
SHEET	04 of 30

BID DOCUMENTS

RE/USE OF DOCUMENTS: THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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SYMBOL	DESCRIPTION
ONE LINE DIAGRAMS-1	
	DRAWOUT AIR CIRCUIT BREAKER, LOW VOLTAGE
	CIRCUIT BREAKER, THERMAL MAGNETIC TRIP SHOWN, 3 POLE, UNO
	CIRCUIT BREAKER, STATIC TRIP UNIT, SENSOR AMP TRIP AND FRAME RATINGS SHOWN, 3 POLE, UNO
	CIRCUIT BREAKER, MAGNETIC TRIP ONLY, TRIP RATING SHOWN, 3 POLE, UNO
	CIRCUIT BREAKER WITH CURRENT LIMITING FUSES, TRIP AND FUSE RATING INDICATED, 3 POLE, UNO
	FUSED SWITCH, SWITCH AND FUSE CURRENT RATING INDICATED, 3 POLE, UNO
	SWITCH, CURRENT RATING INDICATED, 3 POLE, UNO
	FUSE, CURRENT RATING AND QUANTITY INDICATED
	MAGNETIC STARTER WITH OVERLOAD, NEMA SIZE INDICATED, FVNR UNO
	ELECTRONIC STARTER/SPEED CONTROL RVSS = REDUCED VOLTAGE SOFT STARTER AFD = AC ADJUSTABLE FREQUENCY DRIVE DC = DC ADJUSTABLE SPEED DRIVE RVAT = REDUCED VOLTAGE AUTO TRANSFORMER TYPE RVRT = REDUCED VOLTAGE REACTOR TYPE
	CABLE OR BUS CONNECTION POINT
	MECHANICAL INTERLOCK
	SURGE ARRESTER (GAP TYPE)
	CAPACITOR - KVAR INDICATED, 3 PHASE
	MOTOR, SQUIRREL CAGE INDUCTION - HORSEPOWER INDICATED
	GENERATOR, KW/KVA RATING SHOWN
	DELTA CONNECTION
	WYE GROUNDED CONNECTION, SOLID GROUND
	DIGITAL POWER METER (MULTIFUNCTION)
	UTILITY REVENUE METER
	GROUND
	TRANSFORMER, SIZE, VOLTAGE RATINGS, AND PHASE INDICATED
	SHIELDED ISOLATION TRANSFORMER
	POTENTIAL TRANSFORMER, VOLTAGE RATING AND QUANTITY INDICATED
	CURRENT TRANSFORMER, RATIO(100:5) AND QUANTITY INDICATED (3)
	CONNECTION POINT TO EQUIPMENT SPECIFIED IN OTHER DIVISIONS. RACEWAY, CONDUCTOR AND CONNECTION IN THIS DIVISION
	SURGE SUPPRESSION DEVICE

SYMBOL	DESCRIPTION
POWER SYSTEM PLAN-1	
	CONNECTION POINT TO EQUIPMENT SPECIFIED. RACEWAY, CONDUCTOR, TERMINATION AND CONNECTION IN THIS DIVISION.
	MOTOR, SQUIRREL CAGE INDUCTION
	GENERATOR, VOLTAGE AND SIZE AS INDICATED.
	HOME RUN - DESTINATION SHOWN
	EXPOSED CONDUIT AND CONDUCTORS
	CONCEALED CONDUIT AND CONDUCTORS
	CONDUIT DOWN
	CONDUIT UP
	CONDUIT, STUBBED AND CAPPED
	CONCRETE ENCASED CONDUIT
	DIRECT BURIED CONDUIT
	FIBER OPTIC CONDUIT
	TRANSFORMER
	GENERAL CONTROL OR WIRING DEVICE. LETTER SYMBOLS OR ABBREVIATIONS INDICATE TYPE OF DEVICE
	CONTROL STATION, SEE CONTROL DIAGRAMS FOR CONTROL DEVICE(S) REQUIRED.
	NONFUSED DISCONNECT SWITCH, CURRENT RATING INDICATED, 3 POLE
	FUSED DISCONNECT SWITCH, CURRENT RATING INDICATED (60/40, 60=SWITCH RATING / 40=FUSE RATING) 3 POLE
	COMBINATION CIRCUIT BREAKER AND MAGNETIC STARTER, NEMA SIZE INDICATED
	CONVENIENCE RECEPTACLE - DUPLEX UNLESS SPECIFIED OTHERWISE WP- WEATHERPROOF C- CLOCK HANGER TL- TWIST LOCK CRE- CORROSION RESISTANT GFI = GROUND FAULT INTERRUPTION
	EXIT SIGN; FILLED SECTION INDICATES LIGHTED FACE, FULLY GASKETED REINFORCED POLYESTER HOUSING, WITH STAINLESS STEEL HARDWARE, RED LETTERS, INTEGRAL 90 MINUTES MAINTENANCE FREE SEALED NICKLE CADMIUM EMERGENCY BATTERY BACKUP. SELF TEST DIAGNOSTIC WITH INDICATOR LIGHT, UL LISTED NEMA 4X AND NFPA 101 RATED, LED, HALOPHANE DELEON HD SERIES, MODEL: LHD2E-NC-R-NK-SH OR APPROVED EQUAL.
	ALARM HORN
	ALARM LIGHT
	WALL SWITCH: 2- DOUBLE POLE 3- THREE WAY 4- FOUR WAY WP- WEATHERPROOF
	SMALL LETTER SUBSCRIPT AT SWITCH AND LUMINAIRE INDICATES SWITCHING. SUBSCRIPT NUMBER AT LUMINAIRE INDICATES CIRCUIT IN PANELBOARD.
	TYPE A LUMINAIRE: ENCLOSED FLUORESCENT; (2) F32T8 LAMPS, ALUMINUM HOUSING, ELECTRONIC BALLAST, 120V WITH EMERGENCY LIGHTING BATTERY PACK. COLUMBIA LIGHTING MODEL 47A-4-232-E-U-DR12-EL, OR APPROVED EQUAL. LIGHTS TO BE WIRED SO THAT EMERGENCY BATTERY PACK ILLUMINATES FIXTURE ON POWER FAILURE.
	TYPE B LUMINAIRE: CLEAR IMPACT RESISTANT GLASS LENS LED WALL PACK, CAST ALUMINUM HOUSING, FULL CUT-OFF DISTRIBUTION, UL LISTED FOR WET LOCATIONS, NOMINAL 3448 LUMENS OUTPUT, 35.4 WATT INPUT, 120V, 90-MINUTE, EMERGENCY BATTERY BACKUP, EXTERNAL TEST SWITCH, HUBBELL LIGHTING LAREDO SERIES, MODEL: LMC-30LU-SK-3-035-4-BOC, OR APPROVED EQUAL.
	POLE MOUNTED LUMINAIRE

SYMBOL	DESCRIPTION							
GROUND SYSTEM PLAN								
	GROUND ROD, REQUIRES TEST WELL IF LOCATED IN PAVED AREA							
	GROUNDING CONDUCTOR, SIZE AS INDICATED							
	CABLE TO CABLE TEE							
	CABLE TO CABLE CROSS							
	PLATE ADAPTER							
	CABLE TO REINFORCING STEEL							
	GROUND ROD TO CABLE							
	FLEXIBLE GROUND STRAP							
	CABLE TO PIPE (BOLTED CONNECTION)							
	CABLE TO FLAT							
	CABLE TO STEEL/ALUMINUM SURFACE							
	CABLE TO TOP OF GROUND ROD							
	PARALLEL SPLICE							
	PIGTAIL FOR CONNECTION TO EQUIPMENT CABINET OR FRAME							
	EQUIPMENT GROUND BUS							
	EQUIPMENT NEUTRAL BUS							
	CABLE TO LUG							
<p>NOTES:</p> <p>1. THESE ARE STANDARD LEGEND SHEETS. SOME SYMBOLS AND ABBREVIATIONS MAY APPEAR ON THE LEGEND AND NOT ON THE DRAWINGS.</p> <p>2. FOR ADDITIONAL ABBREVIATIONS OF OTHER DIVISIONS (HVAC, MECHANICAL, AND STRUCTURAL/ARCHITECTURAL) SEE OTHER LEGENDS.</p>								
<p>NOTES:</p> <p>1. FOR CABLE TYPES, SEE SPECIFICATIONS.</p> <p>2. CONDUIT SIZES ARE BASED ON THE AREA OF THW CONDUCTORS.</p> <p>3. SIZING OF CONDUCTORS #1AWG AND SMALLER BASED ON AMPACITIES AT 60 DEGREES C, SIZING OF CONDUCTORS #10AWG AND LARGER BASED ON AMPACITIES AT 75 DEGREES C.</p> <p>4. WHERE CIRCUITS ARE UNDERGROUND, DIRECT BURIED OR CONCRETE ENCASED, MINIMUM CONDUIT SIZE SHALL BE 1".</p> <p>5. FOR METRIC CONDUIT SIZES USE THE FOLLOWING CONVERSION: 1/2" = 16 mm 1/4" = 35 mm 3/4" = 21 mm 1 1/2" = 41 mm 1" = 27 mm 2" = 53 mm</p>								
LIGHTING FIXTURE SCHEDULE								
SYMBOL	MARK	VOLTS	LAMP TYPE	QTY	FIXTURE WATTS	MOUNT	DESCRIPTION	MAKE/MODEL
	A	120	LED	MFG STD	90	POLE	LED POLE MOUNTED AREA LUMINAIRE LUMINAIRE, TURTLE FRIENDLY, DIE-CAST ALUMINUM HOUSING, AMBER LED, LABELED FOR UL COMPLIANCE AND IP68 - NOMINAL 1400 LUMENS MAX OUTPUT, 120V TYPE 4 DISTRIBUTION, FULL CUT-OFF, FWC SHIELDING	P21-SPA1,2-14-90LA-AM-UNV-WP-PCB-FWC
	B	120	LED	MFG STD	35	POLE	LED POLE MOUNTED AREA LUMINAIRE LUMINAIRE, DIE-CAST ALUMINUM HOUSING, AMBER LED, LABELED FOR UL COMPLIANCE AND IP68 - NOMINAL 5000 LUMENS MAX OUTPUT, 4000K, 120V TYPE 4 DISTRIBUTION, 360 DEG FULL CUT-OFF.	LITHONA DSXD LED-200-530-40K-9LC-LCCO-RCCO-VOLT-SPA-DWHD

POWER CIRCUIT CALLOUTS			
[P1]	[1/2" FLEX, 2#12, #12G]	[P26]	[1" C, 3#8, 5#14, 1#10G]
[P2]	[3/4" C, 2#12, 1#12G]	[P27]	[1" C, 2#6, 1#10G]
[P3]	[3/4" C, 3#12, 1#12G]	[P28]	[1" C, 3#6, 1#8G]
[P4]	[3/4" C, 4#12, 1#12G]	[P28A]	[1" C, 4#6, 1#8G]
[P5]	[3/4" C, 5#12, 1#12G]	[P29]	[1" C, 3#6, 2#14, 1#8G]
[P6]	[3/4" C, 6#12, 1#12G]	[P30]	[1" C, 3#6, 3#14, 1#8G]
[P7]	[3/4" C, 7#12, 1#12G]	[P31]	[1" C, 3#6, 4#14, 1#8G]
[P8]	[3/4" C, 8#12, 1#12G]	[P32]	[1" C, 3#6, 5#14, 1#8G]
[P9]	[3/4" C, 3#12, 2#14, 1#12G]	[P33]	[1" C, 3#4, 1#8G]
[P10]	[3/4" C, 3#12, 3#14, 1#12G]	[P34]	[1 1/4" C, 3#4, 3#14, 1#8G]
[P11]	[3/4" C, 3#12, 4#14, 1#12G]	[P35]	[1 1/4" C, 3#4, 5#14, 1#8G]
[P12]	[3/4" C, 3#12, 5#14, 1#12G]	[P36]	[1 1/4" C, 3#3, 1#6G]
[P13]	[3/4" C, 3#12, 6#14, 1#12G]	[P37]	[1 1/4" C, 3#3, 3#14, 1#6G]
[P14]	[3/4" C, 3#12, 7#14, 1#12G]	[P38]	[1 1/4" C, 3#2, 1#6G]
[P15]	[3/4" C, 2#10, 1#10G]	[P39]	[1 1/4" C, 3#1, 1#6G]
[P16]	[3/4" C, 3#10, 1#10G]	[P39A]	[1 1/2" C, 4#1, 1#6G]
[16A]	[3/4" C, 4#10, 1#10G]	[P40]	[1 1/2" C, 3#1, 3#14, 1#6G]
[P17]	[3/4" C, 3#10, 2#14, 1#10G]	[P41]	[1 1/2" C, 3#2/0, 1#4G]
[P18]	[3/4" C, 3#10, 3#14, 1#10G]	[P42]	[2" C, 3#3/0, 1#6G]
[P19]	[3/4" C, 3#10, 4#14, 1#10G]	[P43]	[2" C, 3#4/0, 1#3G]
[P20]	[3/4" C, 3#10, 5#14, 1#10G]	[P43A]	[2 1/2" C, 4#4/0, 1#4G]
[P21]	[1" C, 2#8, 1#10G]	[P44]	[2" C, 3#3/0, 1#3G]
[P22]	[1" C, 3#8, 1#10G]	[P45]	[2 1/2" C, 4#3/0, 1#3G]
[P23]	[1" C, 3#8, 2#14, 1#10G]	[P46]	[1 1/2" C, 3#1/0, 1#6G]
[P24]	[1" C, 3#8, 3#14, 1#10G]	[P47]	[2 1/2" C, 4-250 KCMIL, 1#4G]
[P25]	[1" C, 3#8, 4#14, 1#10G]	[P48]	[3" C, 3-500 KCMIL, 1#3G]
ANALOG CIRCUIT CALLOUTS		CONTROL CIRCUIT CALLOUTS	
[A1]	[3/4" C, 1 TYPE 3]	[C1]	[3/4" C, MSC]
[A2]	[1" C, 2 TYPE 3]	[C2]	[3/4" C, 2#14, 1#14G]
[A3]	[1" C, 3 TYPE 3]	[C3]	[3/4" C, 3#14, 1#14G]
[A4]	[1" C, 4 TYPE 3]	[C4]	[3/4" C, 4#14, 1#14G]
[A5]	[1 1/4" C, 5 TYPE 3]	[C5]	[3/4" C, 5#14, 1#14G]
[A6]	[1 1/4" C, 6 TYPE 3]	[C6]	[3/4" C, 6#14, 1#14G]
[A7]	[1 1/2" C, 7 TYPE 3]	[C7]	[3/4" C, 7#14, 1#14G]
[A8]	[1 1/2" C, 8 TYPE 3]	[C8]	[3/4" C, 8#14, 1#14G]
[A9]	[1 1/2" C, 9 TYPE 3]	[C9]	[3/4" C, 9#14, 1#14G]
[A10]	[2" C, 10 TYPE 3]	[C10]	[3/4" C, 10#14, 1#14G]
[A11]	[2" C, 11 TYPE 3]	[C11]	[3/4" C, 11#14, 1#14G]
[A12]	[2" C, 12 TYPE 3]	[C12]	[3/4" C, 12#14, 1#14G]
[A13]	[2" C, 13 TYPE 3]	[C13]	[3/4" C, 13#14, 1#14G]
[A14]	[2" C, 14 TYPE 3]	[C14]	[3/4" C, 14#14, 1#14G]
[A15]	[3/4" C, 1 TYPE 4]	[C15]	[3/4" C, 15#14, 1#14G]
[A16]	[3/4" C, 2 TYPE 4]	[C16]	[3/4" C, 16#14, 1#14G]
[A17]	[1" C, 3 TYPE 4]	[C17]	[3/4" C, 17#14, 1#14G]
[A18]	[1 1/4" C, 4 TYPE 4]	[C18]	[3/4" C, 18#14, 1#14G]
[A19]	[1 1/4" C, 5 TYPE 4]	[C19]	[3/4" C, 19#14, 1#14G]
[A20]	[1 1/4" C, 6 TYPE 4]	[C20]	[1" C, 20#14, 1#14G]
[A21]	[1 1/2" C, 7 TYPE 4]	[C21]	[1" C, 21#14, 1#14G]
[A22]	[1 1/2" C, 8 TYPE 4]	[C22]	[1" C, 22#14, 1#14G]
[A23]	[2" C, 9 TYPE 4]	[C23]	[1" C, 23#14, 1#14G]
[A24]	[3/4" C, 1-4 pr. TYPE 5]	[C24]	[1" C, 24#14, 1#14G]
[A25]	[1" C, 2-4 pr. TYPE 5]	[C25]	[1" C, 25#14, 1#14G]
[A26]	[3/4" C, 1 - TYPE 32]		
[A27]	[3/4" C, 1 - TYPE 33]		
[A28]	[3/4" C, 1 - TYPE 34]		
[A29]	[3/4" C, 1 - TYPE 30]		
MULTICONDUCTOR CONTROL CABLE CIRCUIT CALLOUTS			
[CC5]	[3/4" C, 1-5C TYPE 1]		
[CC7]	[3/4" C, 1-7C TYPE 1]		
[CC9]	[1" C, 1-9C TYPE 1]		
[CC12]	[1" C, 1-12C TYPE 1]		
[CC19]	[1 1/2" C, 1-19C TYPE 1]		
[CC25]	[1 1/2" C, 1-25C TYPE 1]		
[CC37]	[2" C, 1-37C TYPE 1]		
[CCC1]	[1-7C #12 TYPE 1]		
[CX]	[2" C, COAX CABLE]		
[MSC]	[MANUFACTURER SUPPLIED CABLE]		

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DAVID C. NICHOLSON PE 60201

PUMP STATIONS H & B REHABILITATION
AND PUMP STATION GENERATOR REPLACEMENT
CITY OF KEY WEST
KEY WEST, FLORIDA

REVISION
BY APVD
CHK
DR

DATE
NO. DSGN

GENERAL
ELECTRICAL LEGEND
SHEET 1

1" = X'
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING.

DATE MAY 2018
PROJ 683450
DWG 001-G-006
SHEET 05 of 30