CONSTRUCTION DOCUMENTS

VALDEZ CITY HALL AND LIBRARY PARKING LOT LIGHTING UPGRADES

FOR THE

CITY OF VALDEZ

PREPARED BY:

RSA Engineering, Inc.
MECHANICAL AND ELECTRICAL CONSULTING ENGINEERS
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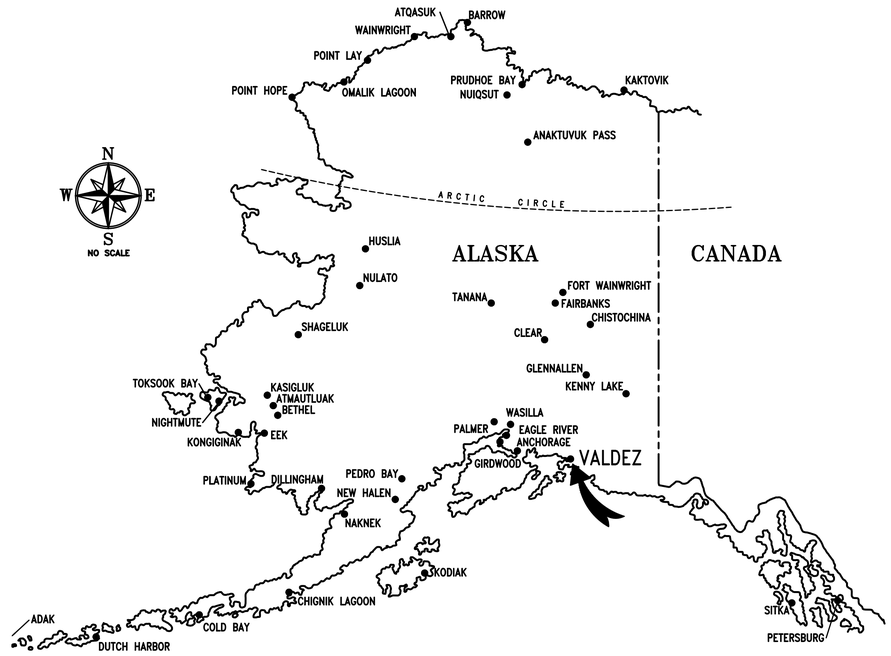
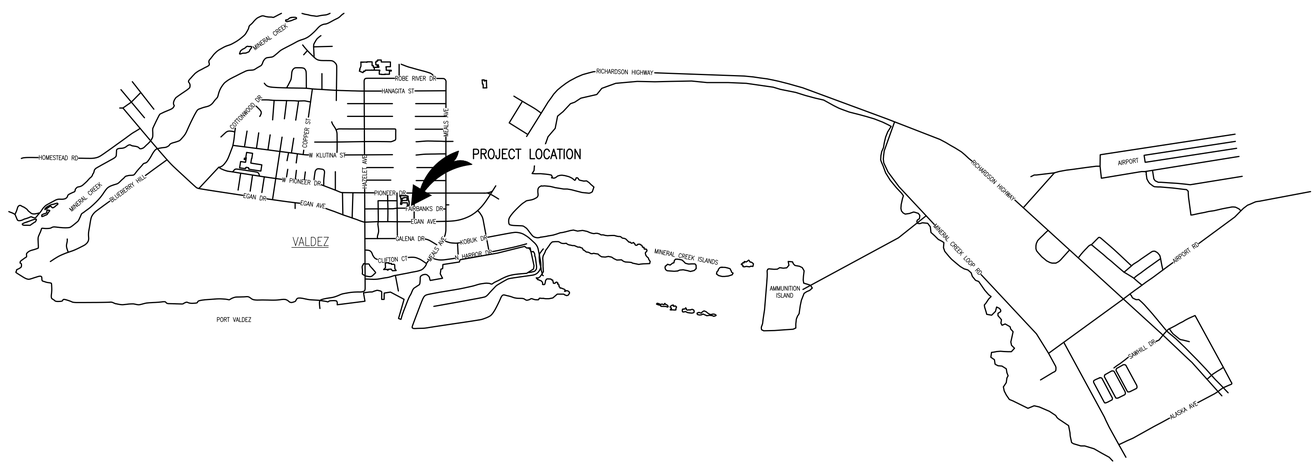


VALDEZ, ALASKA

INDEX TO DRAWINGS:

ELECTRICAL



SCOPE OF WORK

THIS PROJECT CONSISTS OF DEMOLITION AND REPLACEMENT OF PARKING LOT LIGHT FIXTURES, POLES, AND POLE BASES AT CITY HALL AND THE LIBRARY IN VALDEZ ALASKA. THIS PROJECT ALSO INCLUDES NEW FLAG POLES AT CITY HALL.

LIGHT FIXTURE SCHEDULE

TYPE	LOCATION	MANUFACTURER AND CATALOG NUMBER (OR APPROVED EQUAL)	LUMINAIRE DESCRIPTION	MOUNTING		LAMPS	BALLAST/DRIVER	TOTAL INPUT WATTS
				TYPE	HEIGHT			
A	AS SHOWN	FIXTURE: HOLOPHANE # GELF2-P40-40K-AS-4-Z-L4 POLE: HOLOPHANE # SL-A-15-T2J-BP-P01-ABG-BZ-R168A	EXTENDED AREA LIGHT WITH FLAT GLASS, STEM MOUNTING STYLE, TYPE 4 DISTRIBUTION, CAST ALUMINUM HOUSING AND BRONZE FINISH. 15' ALUMINUM POLE WITH 5.75" SQUARE SHAFT, BASE PLATE, POLE CAP, ANCHOR BOLTS, 36" ARM WITH CROSSARM, TWO BANNER ARMS, HANDHOLE, RECEPTACLE, AND BRONZE FINISH. SEE 1/E0.2.	POLE MOUNTED	SEE E0.2	4000K LED 10,059LM	120/277V DRIVER	91
B	ADDITIVE ALTERNATE #1 AS SHOWN	FIXTURE: LITHONIA # DSX1LED-P7-40K-T2S-MVOLT-RPA-DDBXD POLE: HOLOPHANE # SL-A-15-T2J-BP-P01-ABG-BZ-R168A	HIGH OUTPUT AREA LIGHT WITH FORWARD OPTICS, TYPE II SHORT DISTRIBUTION AND DARK BRONZE FINISH. PROVIDE WITH MOUNTING ADAPTER SUITABLE FOR POLE MAST ARM. 20' ALUMINUM POLE WITH 8.5" SQUARE SHAFT, BASE PLATE, POLE CAP, ANCHOR BOLTS, 72" ARM, HANDHOLE, AND BRONZE FINISH. SEE 2/E0.2.	POLE MOUNTED	SEE E0.2	4000K LED 20,690LM	120/277V DRIVER	183

LEGEND

	POLE MOUNTED LIGHT – OUTDOORS, WEATHERPROOF
A	FIXTURE TAG (LETTER INDICATES TYPE)
	CONDUIT, CONCEALED
#10	NUMBER AND SIZE OF WIRES (NO MARKS = 3 #12)
—UG/E—	UNDERGROUND ELECTRIC LINE
	IN-GRADE JUNCTION BOX
1	NOTE TAG (No. INDICATES NOTE)
AFG	ABOVE FINISHED GRADE
AWG	AMERICAN WIRE GAUGE
C	CONDUIT
COV	CITY OF VALDEZ
CU	COPPER
K	KELVIN
LED	LIGHT EMITTING DIODE
LM	LUMENS
TYP	TYPICAL

ELECTRICAL LOAD REDUCTION CALCULATION

EXISTING SERVICE SIZE:		**800 A, 480 V, 3 PH**
PEAK KW DEMAND - PAST 12 MO (JUNE, 2017):		65 kW
ASSUMED POWER FACTOR:		0.85 PF
EXISTING PEAK DEMAND (IN KVA):		76.471 KVA
125% OF PEAK LOAD (NEC 220.87)		95.588 KVA
EXISTING PEAK DEMAND (IN AMPS):		**115 A**
EXISTING SPARE CAPACITY:		685 A
CITY HALL:		
EXISTING LOADS REMOVED (IN KVA):		
POLE MOUNTED FIXTURES	1.40 KVA	
SUBTOTAL:	1.40 KVA	
TOTAL LOADS REMOVED:		-1.40 KVA
TOTAL LOADS REMOVED (IN AMPS):		**-1.68 A**
NEW LOADS ADDED (IN KVA)		
DECORATIVE POLES	0.78 KVA	
ROADSIDE POLES	0.48 KVA	
SUBTOTAL:	1.27 KVA	
TOTAL LOADS ADDED:		1.27 KVA
TOTAL LOADS ADDED (IN AMPS):		**1.52 A**
NET LOAD CHANGE:		-0.13 KVA
NET LOAD CHANGE (IN AMPS):		**-0.16 A**
LIBRARY:		
EXISTING LOADS REMOVED (IN KVA):		
POLE MOUNTED FIXTURES	0.60 KVA	
SUBTOTAL:	0.60 KVA	
TOTAL LOADS REMOVED:		-0.60 KVA
TOTAL LOADS REMOVED (IN AMPS):		**-0.72 A**
NEW LOADS ADDED (IN KVA)		
DECORATIVE POLES	0.34 KVA	
RAODSIDE POLES	0.24 KVA	
SUBTOTAL:	0.58 KVA	
TOTAL LOADS ADDED:		0.58 KVA
TOTAL LOADS ADDED (IN AMPS):		**0.69 A**
NET LOAD CHANGE:		-0.02 KVA
NET LOAD CHANGE (IN AMPS):		**-0.03 A**

ELECTRICAL SPECIFICATIONS

10 75 00 – FLAGPOLES
A. SUBMITTALS: SUBMIT PRODUCT DATA AND SHOP DRAWINGS FOR APPROVAL.
B. MATERIALS:
1. MANUFACTURER: AMERICAN FLAGPOLE #XESR25F61-SAT, OR APPROVED EQUAL.
2. MOUNTING: GROUND SLEEVE ASSEMBLY FOR INSTALLATION WITHIN CONCRETE BASE. GROUND SLEEVE SHALL BE 16 GAUGE GALVANIZED STEEL TUBE WITH 3/16" STEEL SUPPORT PLATE. PROVIDE CONCRETE BASE IN ACCORDANCE WITH SECTION 26 05 29.
3. POLE: TAPERED ALUMINUM TUBE WITH SATIN ALUMINUM FINISH. EXPOSED POLE LENGTH 24', SET DEPTH OF 2.5', OVERALL POLE LENGTH OF 26.5', 6" BUTT DIAMETER, 0.25" WALL THICKNESS, 3.5" TOP DIAMETER, SINGLE SECTION, SUITABLE FOR A MAXIMUM 5'x8' FLAG SIZE, 197 MPH FLAG WIND SPEED, AND 287 MPH NO FLAG WIND SPEED.
4. EXTERNAL HALYARD: CAM CLEAT SYSTEM, 5/16-INCH-DIAMETER, BRAIDED POLYPROPYLENE HALYARD; CONCEALED REVOLVING TRUCK ASSEMBLY WITH PLASTIC-COATED COUNTERWEIGHT AND SLING. PROVIDE FLUSH ACCESS DOOR SECURED WITH CYLINDER LOCK. FINISH TRUCK ASSEMBLY TO MATCH FLAGPOLE.
5. PROVIDE WITH EXTERNAL ROTATING FLAGPOLE BEACON TO FIT POLE TOP, GOLD FINISH, 8" DIAMETER, 500 LUMEN 6W 120V LED LIGHT, AND INTERNAL CONDUCTORS.
C. INSTALLATION:
1. INSTALL FLAGPOLE IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
2. CONCRETE BASES SHALL BE IN ACCORDANCE WITH SECTION 26 05 29.

26 05 00 – COMMON WORK RESULTS FOR ELECTRICAL
A. SCOPE OF WORK: FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT FOR AN EXTENSION TO THE EXISTING ELECTRICAL SYSTEM AS INDICATED ON THE DRAWINGS AND IN THESE SPECIFICATIONS.
B. STANDARDS, CODES AND REGULATIONS: COMPLY WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE, INTERNATIONAL BUILDING CODE, AND INTERNATIONAL FIRE CODE INCLUDING ALL STATE AND LOCAL AMENDMENTS TO THESE CODES. COMPLY WITH THE LATEST PUBLISHED VERSION OF THE NECA STANDARD OF INSTALLATION.
C. DRAWINGS: THE DRAWINGS ARE DIAGRAMMATIC, NOT NECESSARILY SHOWING ALL OFFSETS OR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. UNLESS SPECIFICALLY DIMENSIONED. BRING QUESTIONABLE OR OBSCURE ITEMS, APPARENT CONFLICTS BETWEEN PLANS AND SPECIFICATIONS, GOVERNING CODES OR UTILITIES REGULATIONS TO THE ATTENTION OF THE OWNER. CODES, ORDINANCES, REGULATIONS, MANUFACTURER'S INSTRUCTIONS OR STANDARDS TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT OR CONFLICT WITH THE DRAWINGS AND SPECIFICATIONS.
D. RECORD DRAWINGS: MARK UP A CLEAN SET OF DRAWINGS AS THE WORK PROGRESSES TO SHOW THE DIMENSIONED LOCATION AND ROUTING OF ALL ELECTRICAL WORK WHICH WILL BECOME PERMANENTLY CONCEALED. SHOW COMPLETE ROUTING AND SIZING OF ANY SIGNIFICANT REVISIONS TO THE SYSTEMS SHOWN.
E. WORKMANSHIP: INSTALLATION OF ALL WORK SHALL BE MADE SO THAT ITS SEVERAL COMPONENT PARTS SHALL FUNCTION AS A WORKABLE SYSTEM COMPLETE WITH ALL ACCESSORIES NECESSARY FOR ITS OPERATION. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, INSTRUCTIONS AND/OR INSTALLATION DRAWINGS AND IN ACCORDANCE WITH NECA STANDARDS. MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL CONFORM WITH APPLICABLE INDUSTRY STANDARDS, NEMA STANDARDS AND UNDERWRITERS LABORATORIES STANDARDS WHERE APPLICABLE.
F. SUBMITTALS: PROVIDE MATERIAL AND EQUIPMENT SUBMITTALS CONTAINING A COMPLETE LISTING OF MATERIAL AND EQUIPMENT SHOWN ON THE DRAWINGS. INCLUDE CATALOG NUMBERS, WIRING DIAGRAMS, ROUGH-IN DIMENSIONS AND PERFORMANCE DATA FOR ALL MATERIAL AND EQUIPMENT. SUBMITTALS SHALL BE IN ELECTRONIC .PDF FORMAT, SEPARATE FROM WORK FURNISHED UNDER OTHER DIVISIONS. INDEX AND CLEARLY IDENTIFY ALL MATERIAL AND EQUIPMENT BY ITEM, NAME OR DESIGNATION USED ON THE DRAWINGS. SUBMITTAL REVIEW IS FOR GENERAL DESIGN AND ARRANGEMENT ONLY AND DOES NOT RELIEVE THE CONTRACTOR FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE SUBMITTALS ARE NOT CHECKED FOR QUANTITY, DIMENSION, OR FOR PROPER OPERATION. WHERE DEVIATIONS OF A SUBSTITUTE PRODUCT OR SYSTEM PERFORMANCE HAVE NOT BEEN SPECIFICALLY NOTED IN THE SUBMITTAL BY THE CONTRACTOR, PROVISIONS OF A COMPLETE AND SATISFACTORY WORKING INSTALLATION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
G. OPERATION AND MAINTENANCE MANUALS: PROVIDE OPERATION AND MAINTENANCE MANUALS FOR TRAINING OF THE OWNER'S PERSONNEL. PROVIDE INSTRUCTIONS AND A SCHEDULE OF PREVENTIVE MAINTENANCE IN TABULAR FORM FOR ALL ROUTINE CLEANING, INSPECTION AND LUBRICATION WITH RECOMMENDED LUBRICANTS. PROVIDE INSTRUCTIONS FOR MINOR REPAIR OR ADJUSTMENTS REQUIRED FOR PREVENTIVE MAINTENANCE ROUTINES. PROVIDE MANUFACTURER'S DESCRIPTIVE LITERATURE INCLUDING APPROVED SHOP DRAWINGS COVERING DEVICES USED IN ANY CONTRACTOR-PROVIDED EQUIPMENT OR SYSTEMS WITH ILLUSTRATION, EXPLODED VIEWS, ETC.
H. WARRANTY: THE CONTRACTOR SHALL GUARANTEE ALL WORK EXECUTED UNDER THIS CONTRACT TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM BENEFICIAL OCCUPANCY. ANY FAULTY MATERIALS OR WORKMANSHIP SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER DURING THE GUARANTEE PERIOD.
I. PERMITS: SECURE AND PAY FOR ALL FEES, PERMITS, ETC. REQUIRED BY LOCAL AND STATE AGENCIES.
J. REFERENCE SYMBOLS: THE ELECTRICAL "LEGEND" ON THE DRAWINGS IS A STANDARDIZED VERSION, AND ALL SYMBOLS SHOWN MAY NOT BE USED. USE THE "LEGEND" AS A REFERENCE FOR THE SYMBOLS USED ON THE DRAWINGS.

26 05 05 – SELECTIVE DEMOLITION FOR ELECTRICAL
A. DEMOLITION DRAWINGS ARE BASED ON A NON-DESTRUCTIVE FIELD OBSERVATION. REPORT DISCREPANCIES TO OWNER BEFORE DISTURBING THE EXISTING INSTALLATION. DISCONNECT ELECTRICAL SYSTEMS SCHEDULED FOR REMOVAL. PROVIDE TEMPORARY WIRING AND CONNECTIONS TO MAINTAIN ALL EXISTING ELECTRICAL SYSTEMS (TELEPHONE, FIRE ALARM, LIGHTING, ELECTRICAL SERVICE, ETC.) IN SERVICE DURING CONSTRUCTION. DISABLE SYSTEMS ONLY TO MAKE SWITCHOVERS AND CONNECTIONS.
B. OBTAIN PERMISSION FROM OWNER AT LEAST 24 HOURS BEFORE PARTIALLY OR COMPLETELY DISABLING SYSTEM. MINIMIZE OUTAGE DURATION AND MAKE TEMPORARY CONNECTIONS TO MAINTAIN SERVICE IN AREAS ADJACENT TO WORK AREA. WHEN WORK MUST BE PERFORMED ON ENERGIZED EQUIPMENT OR CIRCUITS, USE PERSONNEL EXPERIENCED IN SUCH OPERATIONS.
C. REMOVE, RELOCATE AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION. REMOVE ABANDONED WIRING TO SOURCE OF SUPPLY.
D. DISCONNECT AND REMOVE ABANDONED LUMINAIRES. REMOVE BRACKETS, STEMS, HANGERS AND OTHER ACCESSORIES. REPAIR ADJACENT CONSTRUCTION AND FINISHES DAMAGED DURING DEMOLITION AND EXTENSION WORK. MAINTAIN ACCESS TO EXISTING ELECTRICAL INSTALLATIONS WHICH REMAIN ACTIVE.

26 05 19 – WIRE AND CABLE
A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.
B. MATERIALS:
1. ALL CONDUCTORS SHALL BE COPPER WITH TYPE XHHW OR THWN INSULATION. MINIMUM BRANCH CIRCUIT CONDUCTOR SIZE SHALL BE #12 AWG.
C. INSTALLATION:
1. COLOR CODE WIRES BY LINE OR PHASE. COLOR CODE THE 120/208V CONDUCTORS BLACK, RED, BLUE, AND WHITE. FOR 277/480 VOLT SYSTEMS, USE BROWN, ORANGE, YELLOW, AND WHITE WITH AN IDENTIFIABLE COLORED STRIPE.
2. DO NOT SHARE NEUTRAL CONDUCTORS. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT THAT REQUIRES A NEUTRAL.
3. USE PROPERLY SIZED INSULATED SPRING WIRE CONNECTORS WITH PLASTIC CAPS FOR ALL CONDUCTORS #8 AWG AND SMALLER. TERMINATE #6 AWG AND LARGER CONDUCTORS WITH CRIMP OR COMPRESSION TYPE CONNECTORS INSTALLED WITH TOOL RECOMMENDED BY CONNECTION MANUFACTURER AND INSULATE WITH PROPERLY SIZED 600 VOLT RATED HEAT SHRINK TUBING.
4. INSTALLATION SCHEDULE: BUILDING WIRE IN RACEWAYS AT ALL LOCATIONS UNLESS OTHERWISE NOTED. PROVIDE XHHW-2 IN EXTERIOR LOCATIONS.

26 05 26 – GROUNDING AND BONDING
A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.
B. MATERIAL: SOLID GROUND RODS: COPPER-ENCASED STEEL, 3/4 INCH DIAMETER, MINIMUM LENGTH 10 FEET.
C. INSTALLATION:
1. MECHANICAL CONNECTORS: NON-REVERSIBLE CRIMP TYPE LUGS ONLY. USE FACTORY MADE COMPRESSION LUG FOR ALL TERMINATIONS. FOR TELECOMMUNICATION SYSTEMS USE COPPER, COPPER ALLOY, OR TIN-PLATED COPPER, NON-REVERSIBLE LONG BARREL CRIMP TYPE BOLT LUGS WITH TWO BOLT TONGUES FOR 6 AWG OR LARGER CONDUCTORS. CRIMP TYPE ONE HOLE FOR CONDUCTORS SMALLER THAN 6 AWG.
2. BOND TOGETHER EXPOSED NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT, METAL RACEWAY SYSTEMS, GROUNDING CONDUCTOR IN RACEWAYS AND CABLES, AND RECEPTACLE GROUND CONNECTORS.

26 05 29 – HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS
A. SUBMITTALS: PROVIDE STRUCTURALLY ENGINEERED SHOP DRAWINGS AND CALCULATIONS, STAMPED BY A LICENSED STRUCTURAL ENGINEER IN THE STATE OF ALASKA, FOR CONCRETE POLE BASES. SHOP DRAWINGS SHALL STATE CONFORMANCE TO THE INTERNATIONAL BUILDING CODE (IBC), THE AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE), AND THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) REQUIREMENTS SPECIFIC TO THE PROJECT AREA.
B. MATERIALS:
1. CONCRETE, REBAR, ANCHOR BOLTS, ETC. SHALL BE IN ACCORDANCE WITH THE COV STANDARD SPECIFICATIONS, AND AS REQUIRED BY THE CONTRACTOR PROVIDED STRUCTURALLY ENGINEERED SHOP DRAWINGS.
2. HARDWARE SHALL BE CORROSION RESISTANT HOT-DIPPED GALVANIZED OR STAINLESS STEEL.
C. INSTALLATION: INSTALLATION OF EQUIPMENT SHALL BE IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, COV STANDARD SPECIFICATIONS, AND AS REQUIRED BY THE SEISMIC STRUCTURAL ENGINEER'S DRAWINGS.

26 05 33 – RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS
A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.
B. MATERIALS:
1. RIGID STEEL CONDUIT: ANSI C80.1. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; THREADED TYPE WITH INSULATED THROAT BUSHINGS, MATERIAL TO MATCH CONDUIT.
2. INTERMEDIATE METAL CONDUIT (IMC): GALVANIZED STEEL. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; USE FITTINGS AND CONDUIT BODIES SPECIFIED ABOVE FOR RIGID STEEL CONDUIT.
3. RIGID NONMETALLIC CONDUIT: NEMA TC 2; SCHEDULE 40 AND 80 PVC, RATED FOR 90° C CABLE.
4. POLYMER CONCRETE JUNCTION BOXES FOR UNDERGROUND INSTALLATIONS: POLYMER CONCRETE CONSISTING OF SAND AND AGGREGATE BOUND TOGETHER WITH A POLYMER RESIN. INTERNAL REINFORCEMENT SHALL BE PROVIDED BY MEANS OF STEEL, FIBERGLASS OR A COMBINATION OF THE TWO. THE INSTALLED ENCLOSURE SHALL BE RATED FOR A MINIMUM TEST LOAD OF 7500 POUNDS DISTRIBUTED OVER A 10 INCH BY 10 INCH AREA AND USED IN OCCASIONAL, NON-DELIBERATE VEHICULAR TRAFFIC OR PEDESTRIAN TRAFFIC APPLICATION. PROVIDE STEEL "LIGHTING" COVER. ALL HARDWARE SHALL BE STAINLESS STEEL
C. INSTALLATION:
1. INSTALL CONDUIT FOR ALL SYSTEMS UNLESS OTHERWISE NOTED, 1 INCH MINIMUM SIZE, UNLESS OTHERWISE NOTED. EXPOSED OUTDOOR LOCATIONS AND BELOW GRADE 90 DEGREE TRANSITIONS SHALL BE RIGID STEEL CONDUIT. PROVIDE SCHEDULE 40 PVC BELOW GRADE IN NON-TRAFFIC AREAS AND SCHEDULE 80 PVC BELOW GRADE UNDER TRAFFIC AREAS.
2. ALL RIGID STEEL CONDUIT IN CONTACT WITH CONCRETE SHALL BE WRAPPED WITH VINYL TAPE IN OVERLAPPING LAYERS TO PREVENT DIRECT CONTACT WITH CONCRETE.

26 50 00 – LIGHTING FIXTURES
A. SUBMITTALS: SUBMIT PRODUCT DATA AND SHOP DRAWINGS FOR POLES FOR APPROVAL.
B. MATERIALS:
1. LUMINAIRES: PROVIDE AND INSTALL ALL LIGHTING EQUIPMENT OR APPROVED EQUAL AS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE "FIXTURE SCHEDULE". PROVIDE LIGHTING EQUIPMENT COMPLETE, WIRED, ASSEMBLED, WITH PROPER FLANGES, MOUNTING SUPPORTS, HARDWARE, ETC.
2. LED DRIVERS: PROVIDE UL LISTED POWER SUPPLY AS RECOMMENDED BY THE LED FIXTURE MANUFACTURER FOR OPERATION OF THE SPECIFIED LED LAMPS. POWER SUPPLY SHALL BE INTEGRAL TO THE LUMINAIRE UNLESS OTHERWISE NOTED ON THE PLANS. POWER SUPPLY SHALL OPERATE AT THE SUPPLY VOLTAGE INDICATED ON THE PLANS AND SHALL BE LISTED FOR STARTING AND OPERATING THE LAMPS AT -20 WHERE INSTALLED OUTDOORS.
3. LED LAMPS: UNLESS OTHERWISE SCHEDULED ON THE PLANS, PROVIDE NOMINAL 4000K, WITH MINIMUM 75CRI AND A MINIMUM L70 LAMP LIFE OF 50,000 HOURS.
4. LIGHT POLES: AS SCHEDULED ON PLANS AND DETAILS.
C. INSTALLATION:
1. PROVIDE LUMINAIRE DISCONNECTING MEANS IN BALLAST/DRIVER CHANNEL OF EACH LIGHT FIXTURE.
2. INSTALL LIGHT POLES AND FIXTURES IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
3. CONCRETE BASES SHALL BE IN ACCORDANCE WITH SECTION 26 05 29.

CALL BEFORE YOU DIG

THE CONTRACTOR SHALL NOTIFY ALL AREA UTILITY COMPANIES PRIOR TO COMMENCEMENT OF EXCAVATION. THE FOLLOWING IS A PARTIAL LIST:

LOCATE CALL CENTER OF ALASKA	278-3121
COPPER VALLEY ELECTRIC ASSOCIATION	811

STATE OF ALASKA – LEVIN K. BLUBAUGH – EE-13883 – REGISTERED PROFESSIONAL ENGINEER – 10/30/20

RSA Engineering, Inc.
MECHANICAL AND ELECTRICAL CONSULTING ENGINEERS
4300 Boniface Parkway, Suite 200
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Phone (907) 276-0521
Corporate No.: AECC542

VALDEZ CITY HALL AND LIBRARY PARKING LOT LIGHTING UPGRADES

CITY HALL / LIBRARY
212 CHENEGA AVE / 212 FAIRBANKS DR.
VALDEZ, AK 99686

REVISIONS:

DRAWN BY:	KSB, DB
CHECKED BY:	DB, TEH
DATE:	10/30/2020
JOB NUMBER:	M0088
DWG FILE:	M0088-Eseries

DRAWING TITLE: LEGEND, SCHEDULES, SPECIFICATIONS AND LOAD CALCULATION

SHEET: E0.1

CALL BEFORE YOU DIG

THE CONTRACTOR SHALL NOTIFY ALL AREA UTILITY COMPANIES PRIOR TO COMMENCEMENT OF EXCAVATION. THE FOLLOWING IS A PARTIAL LIST:

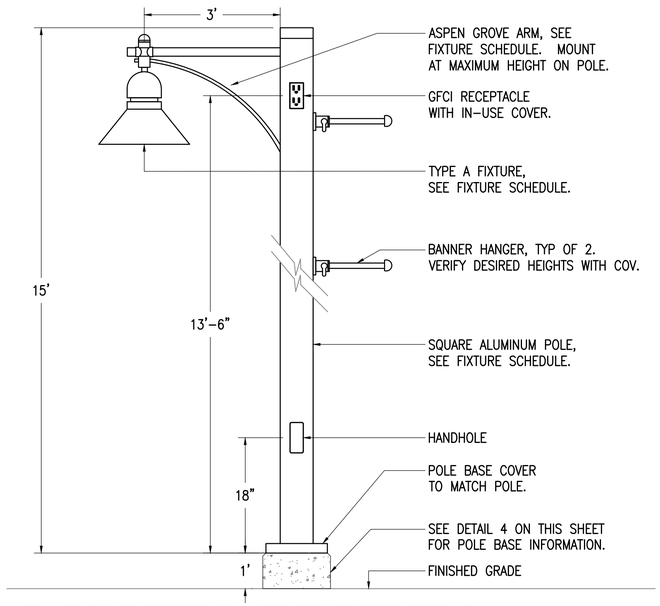
LOCATE CALL CENTER OF ALASKA	278-3121
COPPER VALLEY ELECTRIC ASSOCIATION	811

GENERAL NOTES:

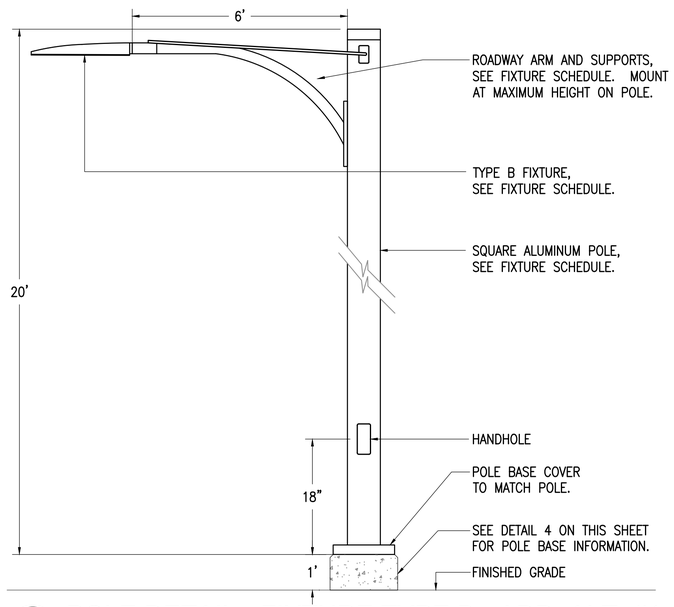
A. REFERENCE THE CITY OF VALDEZ STANDARD SPECIFICATIONS FOR ALL REQUIREMENTS RELATED TO TRENCHING, EXCAVATION, BACKFILL, CONCRETE, ASPHALT, AND GRASS/SOD PRIOR TO BEGINNING WORK.

SHEET NOTES:

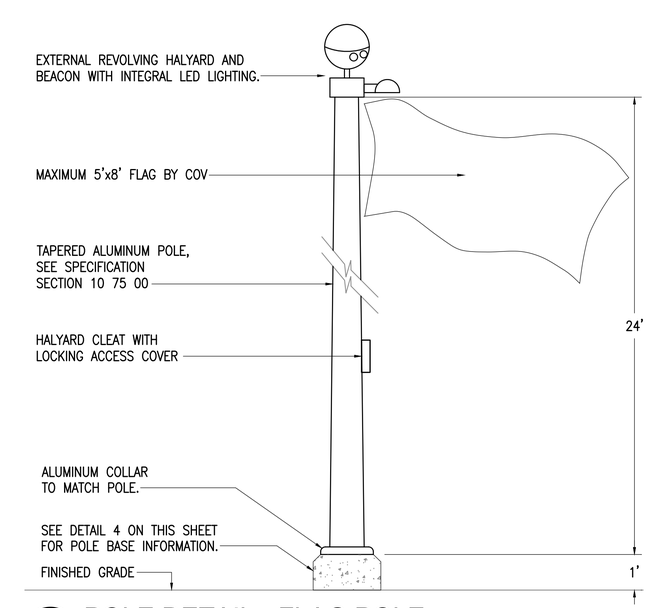
1. CONCRETE POLE BASE DETAIL SHOWN FOR BIDDING PURPOSES ONLY. ACTUAL CONCRETE BASE DESIGN SHALL BE PROVIDED BY THE CONTRACTOR IN ACCORDANCE WITH SPECIFICATION 26 05 48.



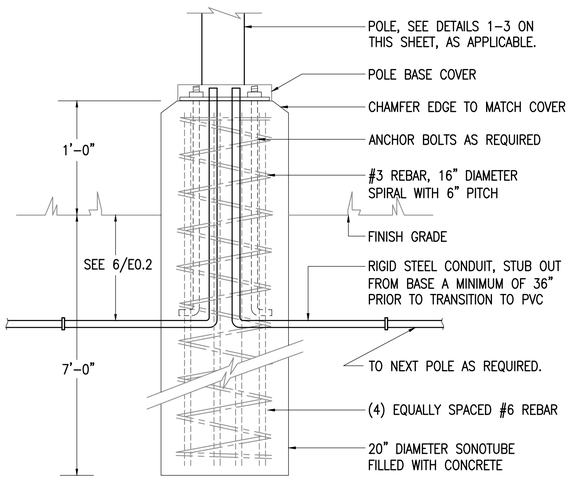
1 POLE DETAIL - FIXTURE TYPE A
NO SCALE



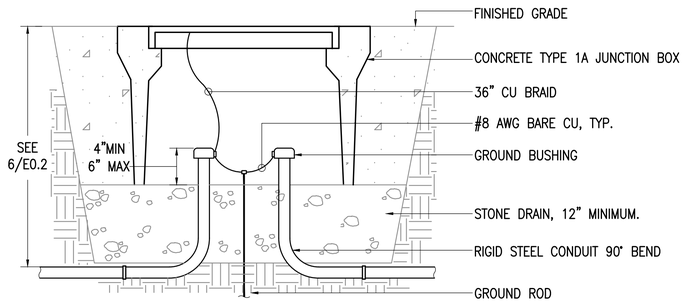
2 POLE DETAIL - FIXTURE TYPE B - ADD. ALT. #1
NO SCALE



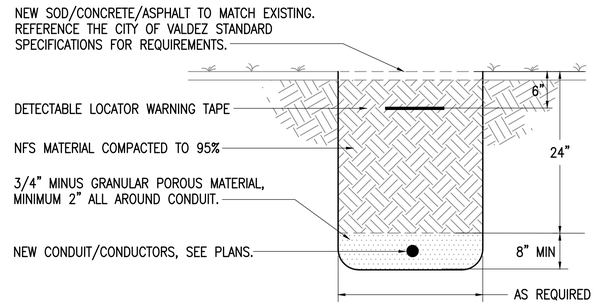
3 POLE DETAIL - FLAG POLE
NO SCALE



4 TYPICAL POLE BASE DETAIL 
NO SCALE



5 IN-GRADE BOX DETAIL
NO SCALE



6 TYPICAL TRENCHING DETAIL
NO SCALE

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2700 West Tudor Road, Suite 200
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VALDEZ CITY HALL AND LIBRARY
PARKING LOT LIGHTING UPGRADES

CITY HALL AND LIBRARY
212 FAIRBANKS DR.
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CHECKED BY:	DB, TEH
DATE:	10/30/2020
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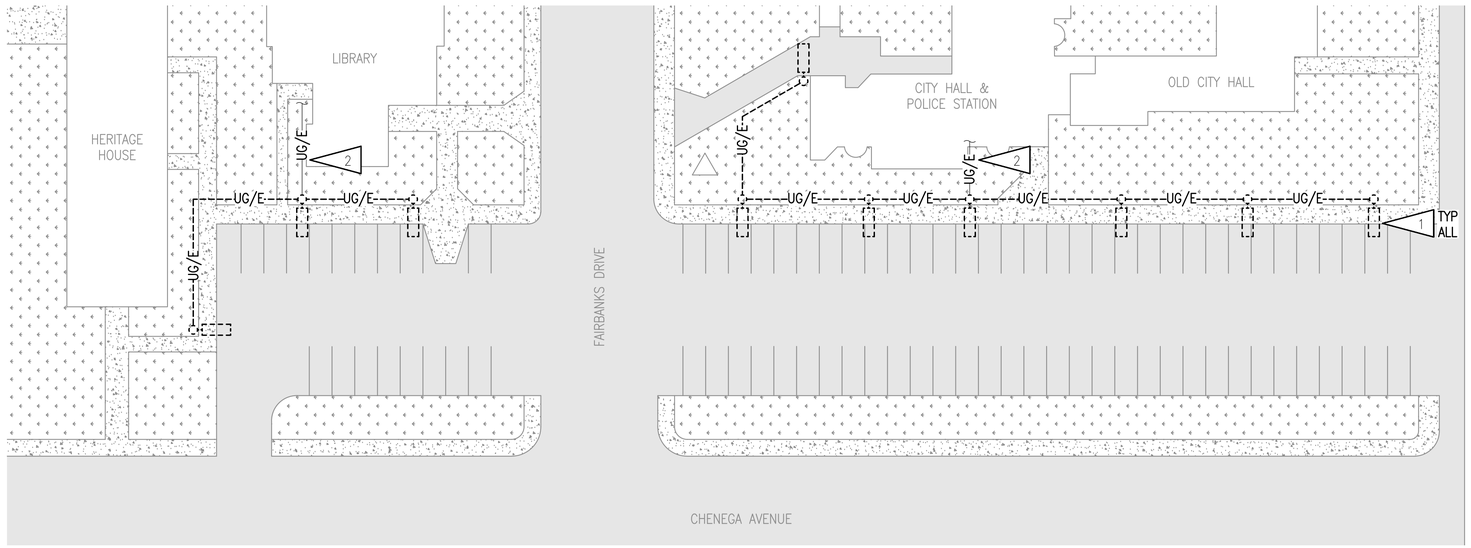
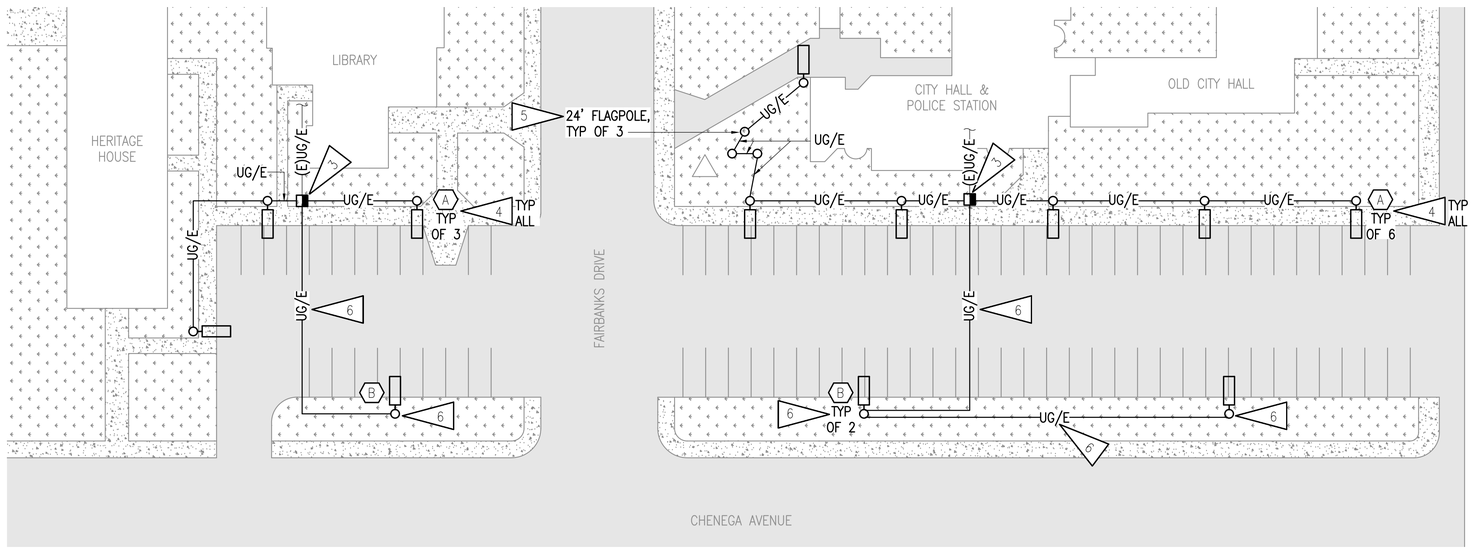
DWG FILE:	M0088-Eseries

DRAWING TITLE:
ELECTRICAL DETAILS

SHEET:
E0.2



1 ELECTRICAL DEMOLITION PLAN
1" = 30'-0"



2 ELECTRICAL REMODEL PLAN
1" = 30'-0"

GENERAL NOTES:

A. THE INFORMATION SHOWN ON THIS DRAWING IS TAKEN FROM AS-BUILT DRAWINGS AND A NON-DESTRUCTIVE WALK THROUGH OF THE FACILITY. THERE IS NO WARRANTY OR GUARANTEE AS TO THE ACCURACY OF THE INFORMATION SHOWN HERE-IN. THE CONTRACTOR SHALL FIELD VERIFY ALL ITEMS SCHEDULED FOR DEMOLITION PRIOR TO START OF WORK.

B. THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL SALVAGEABLE MATERIALS. THE CONTRACTOR SHALL DELIVER SALVAGED MATERIALS TO A WAREHOUSE AS DIRECTED BY THE OWNER. THE CONTRACTOR SHALL DISPOSE OF, OFF SITE, ALL UNWANTED MATERIALS.

C. DASHED OR DOTTED LINES INDICATE ITEMS TO BE REMOVED. SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.

D. EXISTING UNDERGROUND UTILITY LOCATIONS ARE UNKNOWN AND NOT SHOWN ON THESE DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING UTILITY LOCATES WITHIN THE VICINITY OF THEIR EXCAVATION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.

E. REFERENCE THE CITY OF VALDEZ STANDARD SPECIFICATIONS FOR ALL REQUIREMENTS RELATED TO TRENCHING, EXCAVATION, BACKFILL, CONCRETE, ASPHALT, AND GRASS/SOD PRIOR TO BEGINNING WORK.

F. ALL FIXTURES SHALL BE POWERED AND CONTROLLED FROM THE EXISTING CIRCUITING. PROVIDE EXTENSION OF THE EXISTING CONDUIT AND WIRE AS REQUIRED TO ACCOMMODATE THE NEW FIXTURE LOCATIONS.

G. REFERENCE DETAILS ON SHEET E0.2 FOR ADDITIONAL REQUIREMENTS.

SHEET NOTES:

1. DEMOLISH LIGHT POLES AND FIXTURES. DEMOLISH POLE BASE TO 6" BELOW GRADE MINIMUM AND ABANDON IN PLACE. DEMOLISH CONDUIT AND WIRE BETWEEN FIXTURES AS SHOWN.
2. CONDUIT AND WIRE FROM BUILDING PANEL TO FIRST FIXTURE SHALL REMAIN FOR REUSE. LOCATION SHOWN IS ASSUMED ONLY, FIELD VERIFY AND DOCUMENT ON RED LINED DRAWINGS.
3. PROVIDE IN-GRADE JUNCTION BOX TO ALLOW FOR EXTENDING THE EXISTING LIGHTING CIRCUIT FROM THE BUILDING PANEL TO THE NEW FIXTURES AND FLAG POLES. NEW CONDUIT AND WIRE SHALL BE 1"C, 3#10 AWG, CU, XHHW-2. SEE DETAILS 5 & 6 ON SHEET E0.2.
4. PROVIDE NEW FIXTURES, POLES, AND POLE BASES IN LOCATIONS SHOWN AND CONNECT TO NEW CONDUIT AND WIRE, REFERENCE NOTE 3. REFERENCE DETAILS 1, 2, AND 4 ON SHEET E0.2.
5. PROVIDE THREE (3) NEW 24' FLAGPOLES AND BASES IN APPROXIMATE LOCATIONS SHOWN AND CONNECT TO NEW CONDUIT AND WIRE FOR POWERING OF INTEGRAL FINIAL LIGHT. REFERENCE DETAILS 3 AND 4 ON SHEET E0.2. COORDINATE WITH THE CITY OF VALDEZ FOR FINAL LOCATIONS PRIOR TO BEGINNING WORK.
6. ITEMS NOTED ARE ASSOCIATED WITH ADDITIVE ALTERNATE #1.

SITE LEGEND

- CONCRETE – REFERENCE THE APPLICABLE PORTIONS OF DIVISION 20 AND DIVISION 30 OF THE CITY OF VALDEZ STANDARD SPECIFICATIONS.
- ASPHALT – REFERENCE THE APPLICABLE PORTIONS OF DIVISION 20 AND DIVISION 40 THE CITY OF VALDEZ STANDARD SPECIFICATIONS.
- SOD/GRASS – REFERENCE THE APPLICABLE PORTIONS OF DIVISION 20 AND DIVISION 75 OF THE CITY OF VALDEZ STANDARD SPECIFICATIONS.
- BUILDING AS LABELED

CALL BEFORE YOU DIG

THE CONTRACTOR SHALL NOTIFY ALL AREA UTILITY COMPANIES PRIOR TO COMMENCEMENT OF EXCAVATION. THE FOLLOWING IS A PARTIAL LIST:

LOCATE CALL CENTER OF ALASKA	278-3121
COPPER VALLEY ELECTRIC ASSOCIATION	811

STATE OF ALASKA
LEAVIN K. BLUBAUGH
EE-13893
10/30/20
REGISTERED PROFESSIONAL ENGINEER

RSA Engineering, Inc.
MECHANICAL AND ELECTRICAL CONSULTING ENGINEERS
#2 West Fireweed Lane, Suite 200
Anchorage, AK 99503
Phone (907) 276-0521
Corporate No.: AECC542

VALDEZ CITY HALL AND LIBRARY
PARKING LOT LIGHTING UPGRADES

CITY HALL
212 CHENEGA AVE
VALDEZ, AK 99686

LIBRARY
212 FAIRBANKS DR.
VALDEZ, AK 99686

REVISIONS:

DRAWN BY:	KSB, DB
CHECKED BY:	DB, TEH
DATE:	10/30/2020
JOB NUMBER:	M0088
DWG FILE:	M0088-Eseries

DRAWING TITLE:
ELECTRICAL PLANS

SHEET:
E1.1