

CONSTRUCTION DOCUMENTS

SMALL BOAT HARBOR- LIGHTING UPGRADES

FOR THE

CITY OF VALDEZ

PREPARED BY:

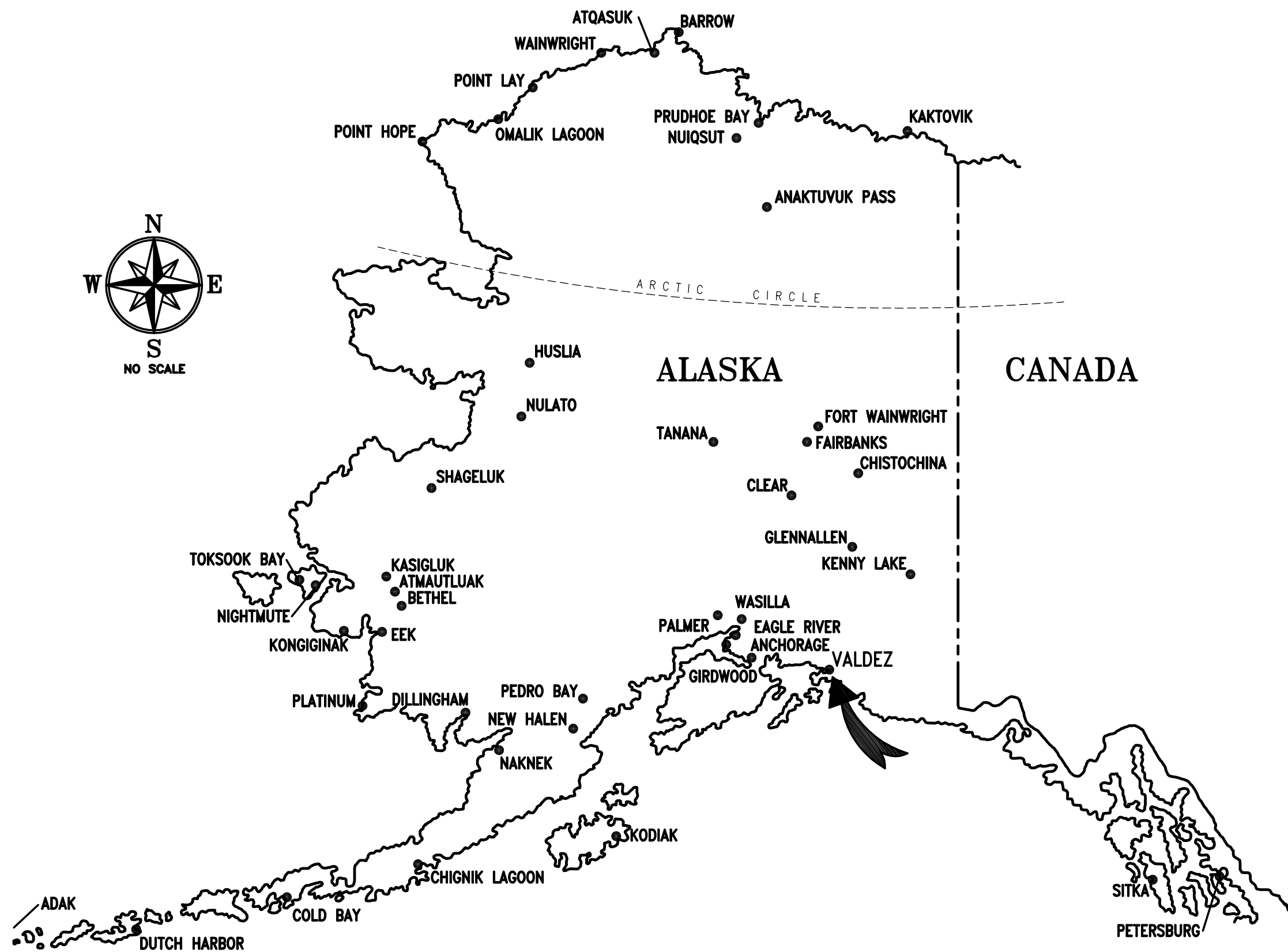
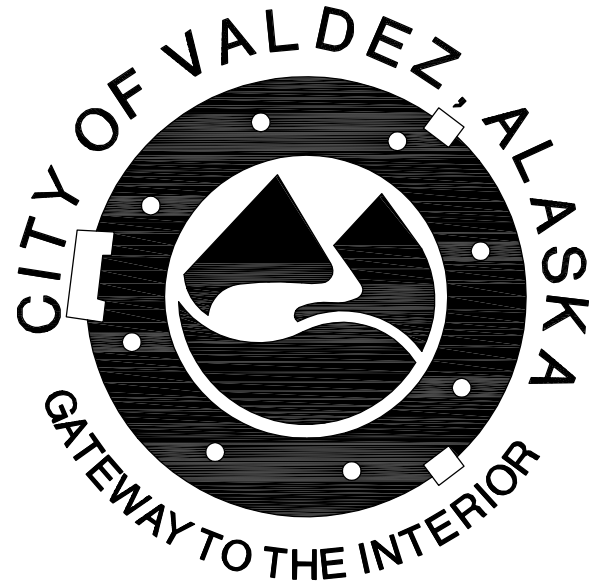
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Engineering, Inc.

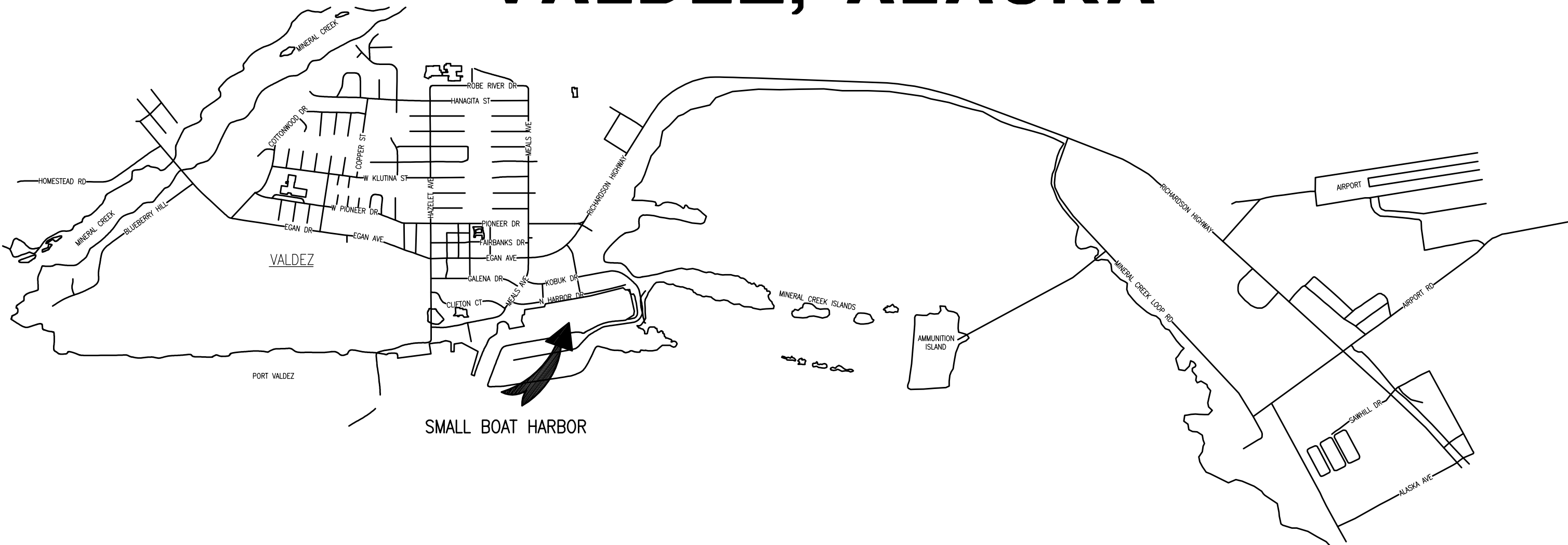
MECHANICAL AND ELECTRICAL CONSULTING ENGINEERS

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VALDEZ, ALASKA



INDEX TO DRAWINGS:

ELECTRICAL

- E0.1 ELECTRICAL LEGEND, FIXTURE SCHEDULE, AND SPECIFICATIONS
- E0.2 ELECTRICAL REFERENCE PLAN
- E1.1 LIGHTING PLAN - WEST
- E1.2 LIGHTING PLAN - EAST
- E2.1 ELECTRICAL DETAILS
- E3.1 REFERENCE PHOTOS

SUMMARY OF WORK:

PROJECT INCLUDES THE DEMOLITION OF EXISTING HIGH MAST LIGHTING FIXTURES AND INSTALLATION OF NEW REPLACEMENT LED FIXTURES.

0"
1"
2"
3"

2 1

2 1

2 1

2 1

2 1

LIGHT FIXTURE SCHEDULE

TYPE	LOCATION	MANUFACTURER AND CATALOG NUMBER (OR APPROVED EQUAL)	LUMINAIRE DESCRIPTION	MOUNTING		LAMPS	BALLAST/DRIVER	TOTAL INPUT WATTS
				TYPE	HEIGHT			
A15	AS SHOWN, REFERENCE E2.1	APACK #F640A-15D	14.29"Ø x 17.74"L EXTERIOR HIGH MAST FLOOD LIGHT, 29.2 LBS, 1.49 EPA, 15 DEGREE LENS.	POLE	SEE PLANS	4000K LED 70,400LM	ELECTRONIC 240V & 480V, 1Ø SEE E2.1 FOR DETAILS	640
A20	AS SHOWN, REFERENCE E2.1	APACK #F640A-20D	SAME AS TYPE 'A' EXCEPT 20 DEGREE LENS AND OUTPUT.	POLE	SEE PLANS	4000K LED 70,400LM	ELECTRONIC 240V & 480V, 1Ø SEE E2.1 FOR DETAILS	640
A30	AS SHOWN, REFERENCE E2.1	APACK #F640A-30D	SAME AS TYPE 'A' EXCEPT 30 DEGREE LENS AND OUTPUT.	POLE	SEE PLANS	4000K LED 70,400LM	ELECTRONIC 240V & 480V, 1Ø SEE E2.1 FOR DETAILS	640
A45	AS SHOWN, REFERENCE E2.1	APACK #F640A-45D	SAME AS TYPE 'A' EXCEPT 45 DEGREE LENS AND OUTPUT.	POLE	SEE PLANS	4000K LED 70,400LM	ELECTRONIC 240V & 480V, 1Ø SEE E2.1 FOR DETAILS	640
A60	AS SHOWN, REFERENCE E2.1	APACK #F640A-60D	SAME AS TYPE 'A' EXCEPT 60 DEGREE LENS AND OUTPUT.	POLE	SEE PLANS	4000K LED 70,400LM	ELECTRONIC 240V & 480V, 1Ø SEE E2.1 FOR DETAILS	640

LEGEND

1	NOTE TAG (No. INDICATES NOTE)	LM	LUMENS
AFG	ABOVE FINISHED GRADE	NEC	NATIONAL ELECTRICAL CODE
C	CONDUIT	NRTL	NATIONALLY RECOGNIZED TESTING LABORATORY
E	DENOTES EXISTING ITEM	NTS	NOT TO SCALE
HPS	HIGH PRESSURE SODIUM	TYP	TYPICAL
K	KELVIN	UON	UNLESS OTHERWISE NOTED
LED	LIGHT EMITTING DIODE		

SHEET NOTES:

1 PROVIDE MOUNTING HARDWARE REQUIRED FOR MOUNTING ONTO EXISTING HIGH MAST HARDWARE. REFERENCE PHOTOS ON SHEET E3.1 FOR EXISTING CONDITIONS. FIELD VERIFY ALL REQUIRED MOUNTING BRACKETS AND HARDWARE PRIOR TO BEGINNING WORK.

2 COORDINATE WITH MANUFACTURER AND/OR SUPPLIER TO PROVIDE NRTL LISTING FOR 480V, 1Ø LED DRIVER USED WITH FIXTURES SPECIFIED AT 480V, 1Ø.

ELECTRICAL SPECIFICATIONS

26.05.00 – COMMON WORK RESULTS FOR ELECTRICAL

- A. SCOPE OF WORK: FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT FOR A COMPLETE AND WORKABLE 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. REVIEW THE DRAWINGS AND SPECIFICATIONS FOR EQUIPMENT FURNISHED BY OTHER CRAFTS BUT INSTALLED IN ACCORDANCE WITH THIS SECTION. BRING QUESTIONABLE OR OBSCURE ITEMS, APPARENT CONFLICTS BETWEEN PLANS AND SPECIFICATIONS, GOVERNING CODES OR UTILITIES REGULATIONS TO THE ATTENTION OF THE ARCHITECT. 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 ROUTING OF WORK IN PERMANENTLY CONCEALED BLIND SPACES WITHIN THE BUILDING. 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 INSTRUCTIONS AND A SCHEDULE OF PREVENTIVE MAINTENANCE IN TABULAR FORM FOR ALL ROUTINE CLEANING AND INSPECTION. 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 AND EXISTING RECORD DRAWING. REPORT DISCREPANCIES TO ENGINEER BEFORE DISTURBING THE EXISTING INSTALLATION. 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 ELECTRICAL DEVICES AND EQUIPMENT SERVING UTILIZATION EQUIPMENT THAT HAS BEEN REMOVED. 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.

26.05.26 – GROUNDING AND BONDING

- A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.
- B. INSTALLATION:
- BOND TOGETHER EXPOSED NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT, METAL RACEWAY SYSTEMS, AND GROUNDING CONDUCTOR IN RACEWAYS AND CABLES.

26.05.53 – IDENTIFICATION FOR ELECTRICAL SYSTEMS

- A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.
- B. MATERIALS:
- TAPE LABELS: ADHESIVE TAPE LABELS, WITH 3/16 INCH BOLD BLACK LETTERS ON CLEAR BACKGROUND MADE USING DYMO RHINOPRO 5000 OR EQUAL LABEL PRINTER.
 - WIRE AND CABLE MARKERS: CLOTH MARKERS, SPLIT SLEEVE OR TUBING TYPE.
- C. INSTALLATION:
- JUNCTION BOXES: MARK ALL CIRCUIT NUMBERS OF WIRING ON ALL JUNCTION BOXES WITH SHEET STEEL COVERS. MARK WITH INDELIBLE BLACK MARKER. ON EXPOSED JUNCTION BOXES IN PUBLIC AREAS, MARK ON INSIDE OF COVER.
 - WIRE IDENTIFICATION: PROVIDE WIRE MARKERS ON EACH CONDUCTOR IN JUNCTION BOXES. MARKERS SHALL BE LOCATED WITHIN ONE INCH OF EACH CABLE END.

26.50.00 – LIGHTING FIXTURES

- A. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL.
- FIXTURE SUBSTITUTIONS: SUBMIT POINT-BY-POINT LIGHTING CALCULATIONS ON 10'X10' GRID SHOWING LIGHTING LEVELS AND UNIFORMITY. CALCULATIONS SHALL HAVE A LIGHT LOSS FACTOR OF 0.72 APPLIED TO FIXTURE IES FILES.
- B. MATERIALS:
- 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.
 - 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°F.
 - LED LAMPS: UNLESS OTHERWISE SCHEDULED ON THE PLANS, PROVIDE NOMINAL 4000 K, WITH MINIMUM 75CRI AND A MINIMUM L70 LAMP LIFE OF 50,000 HOURS.
- C. INSTALLATION:
- PROVIDE LUMINAIRE DISCONNECTING MEANS IN BALLAST/DRIVER CHANNEL OF EACH LIGHT FIXTURE.
 - PROVIDE CORROSION RESISTANT MOUNTING BRACKETS AS REQUIRED FOR PROPER FIXTURE MOUNTING ONTO EXISTING HIGH MAST LOWER RINGS. ALL MOUNTING HARDWARE SHALL BE MARINE GRADE STAINLESS STEEL.



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SMALL BOAT HARBOR - LIGHTING UPGRADE

VALDEZ SMALL BOAT HARBOR
VALDEZ, ALASKA

REVISIONS:

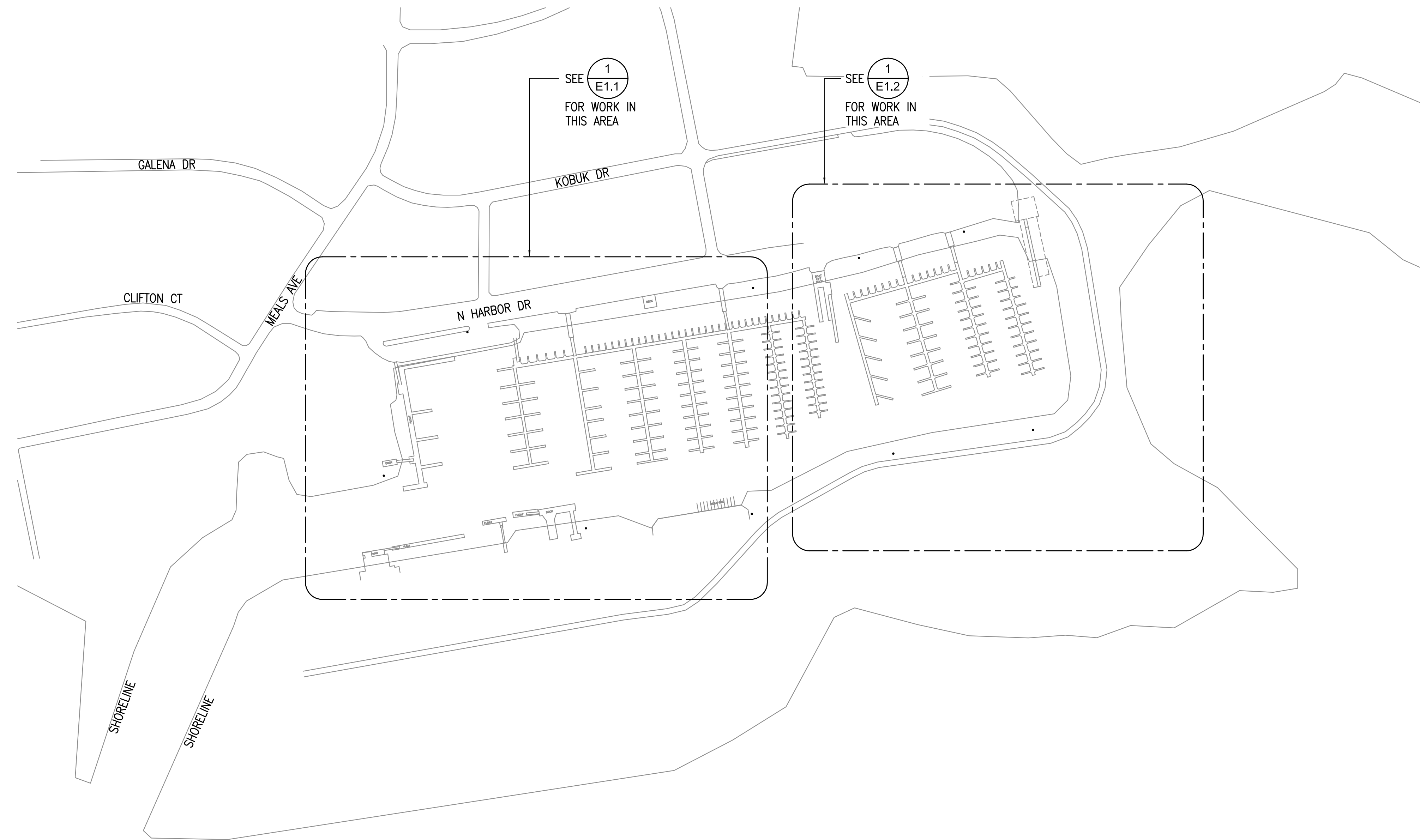
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CHECKED BY: DB,CPL
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JOB NUMBER: L7241
DWG FILE: L7241 - ESeries

DRAWING TITLE:
ELECTRICAL LEGEND,
FIXTURE SCHEDULE,
AND SPECIFICATIONS

SHEET:

E0.1

0"
1"
2"
3"



1 ELECTRICAL REFERENCE PLAN
1" = 200'-0"



GENERAL NOTES:

- A. THE INFORMATION SHOWN ON THIS DRAWING IS TAKEN FROM RECORD 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 AFFECTED SYSTEMS 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. ALL EXISTING HIGH MAST FIXTURES TO BE DEMOLISHED ARE 1000W HPS TYPE FIXTURES.
- D. REFERENCE SHEET E3.1 FOR PHOTOS OF EXISTING CONDITIONS.



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SMALL BOAT HARBOR - LIGHTING UPGRADE

**VALDEZ SMALL BOAT HARBOR
VALDEZ, ALASKA**

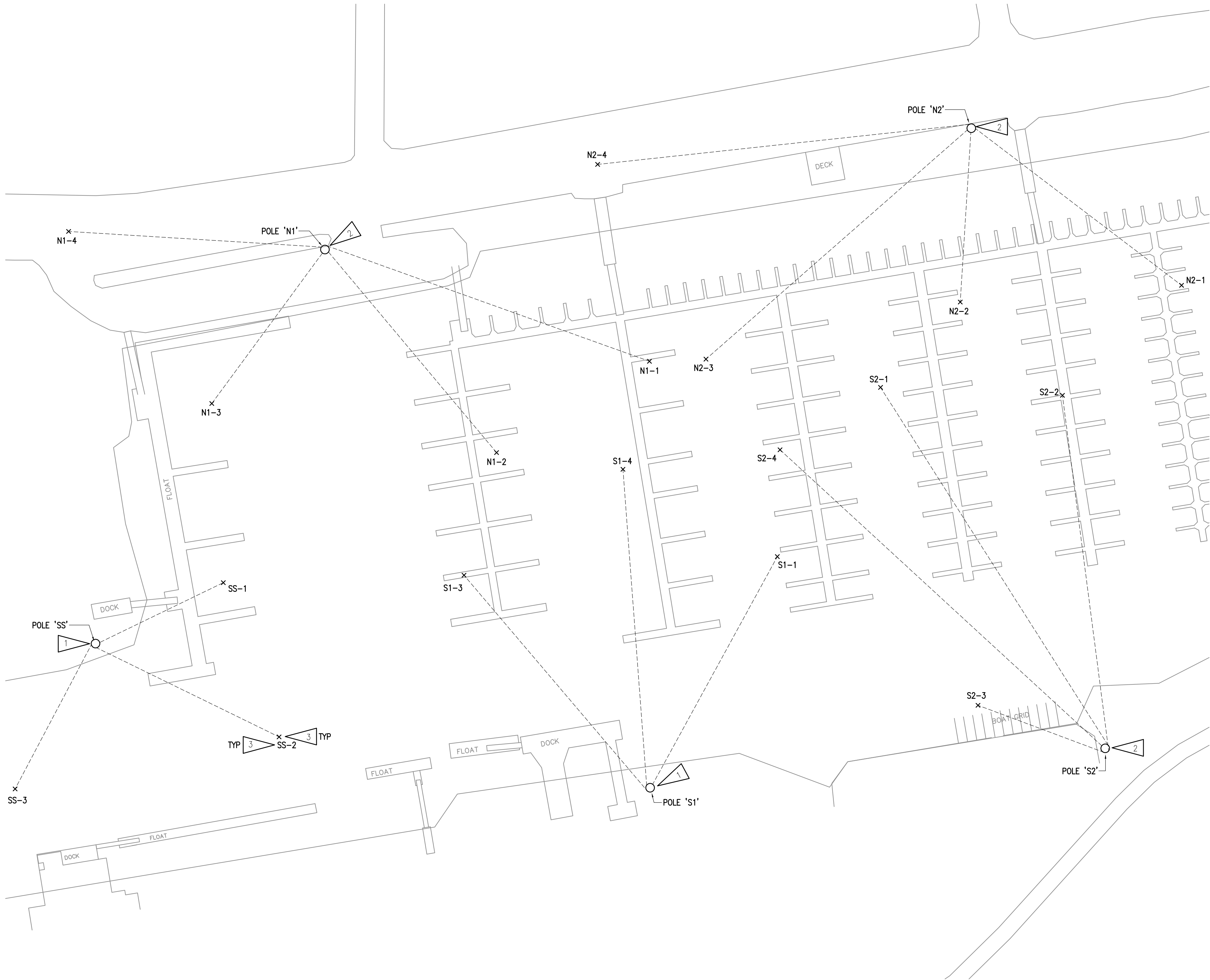
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DATE: 4/10/18
JOB NUMBER: L7241
DWG FILE: L7241 - ESeries

DRAWING TITLE:
ELECTRICAL
REFERENCE
PLAN

SHEET:
E0.2

0"
1"
2"
3"

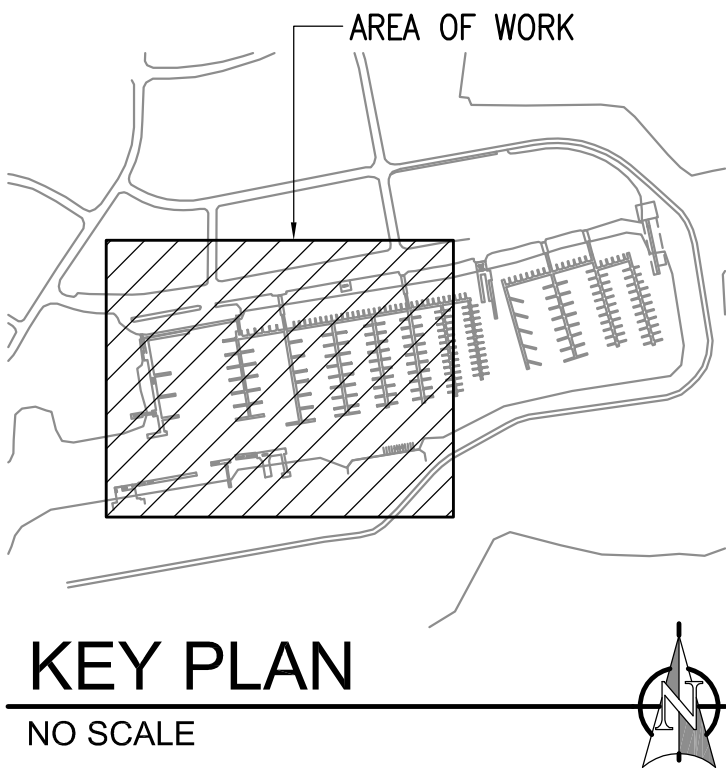


GENERAL NOTES:

A. SEE E0.2 FOR GENERAL NOTES

SHEET NOTES:

- 1 DEMOLISH EXISTING (3)HIGH MAST FIXTURES. EXISTING 160' POLE AND LOWERING DEVICE TO REMAIN. SALVAGE EXISTING CIRCUITS FOR RECONNECTION TO NEW FIXTURES. PROVIDE MOUNTING HARDWARE AS REQUIRED TO INSTALL NEW FIXTURES ON EXISTING LOWERING RING. SEE 2/E2.1 FOR HIGH MAST RING DETAIL. SEE 3/E2.1 AND LUMINAIRE AIMING SCHEDULE FOR FOR NEW FIXTURES TO BE INSTALLED.
- 2 DEMOLISH EXISTING (4)HIGH MAST FIXTURES. EXISTING 160' POLE AND LOWERING DEVICE TO REMAIN. SALVAGE EXISTING CIRCUITS FOR RECONNECTION TO NEW FIXTURES. PROVIDE MOUNTING HARDWARE AS REQUIRED TO INSTALL NEW FIXTURES ON EXISTING LOWERING RING. SEE 2/E2.1 FOR HIGH MAST RING DETAIL. SEE 3/E2.1 AND LUMINAIRE AIMING SCHEDULE FOR FOR NEW FIXTURES TO BE INSTALLED.
- 3 FIXTURE CALL-OUT AND AIMING POINT FOR NEW HIGH MAST FIXTURES. SEE 3/E2.1 AND LUMINAIRE AIMING SCHEDULE ON E2.1 FOR DETAILS.



1 LIGHTING PLAN - WEST
1" = 50'-0"



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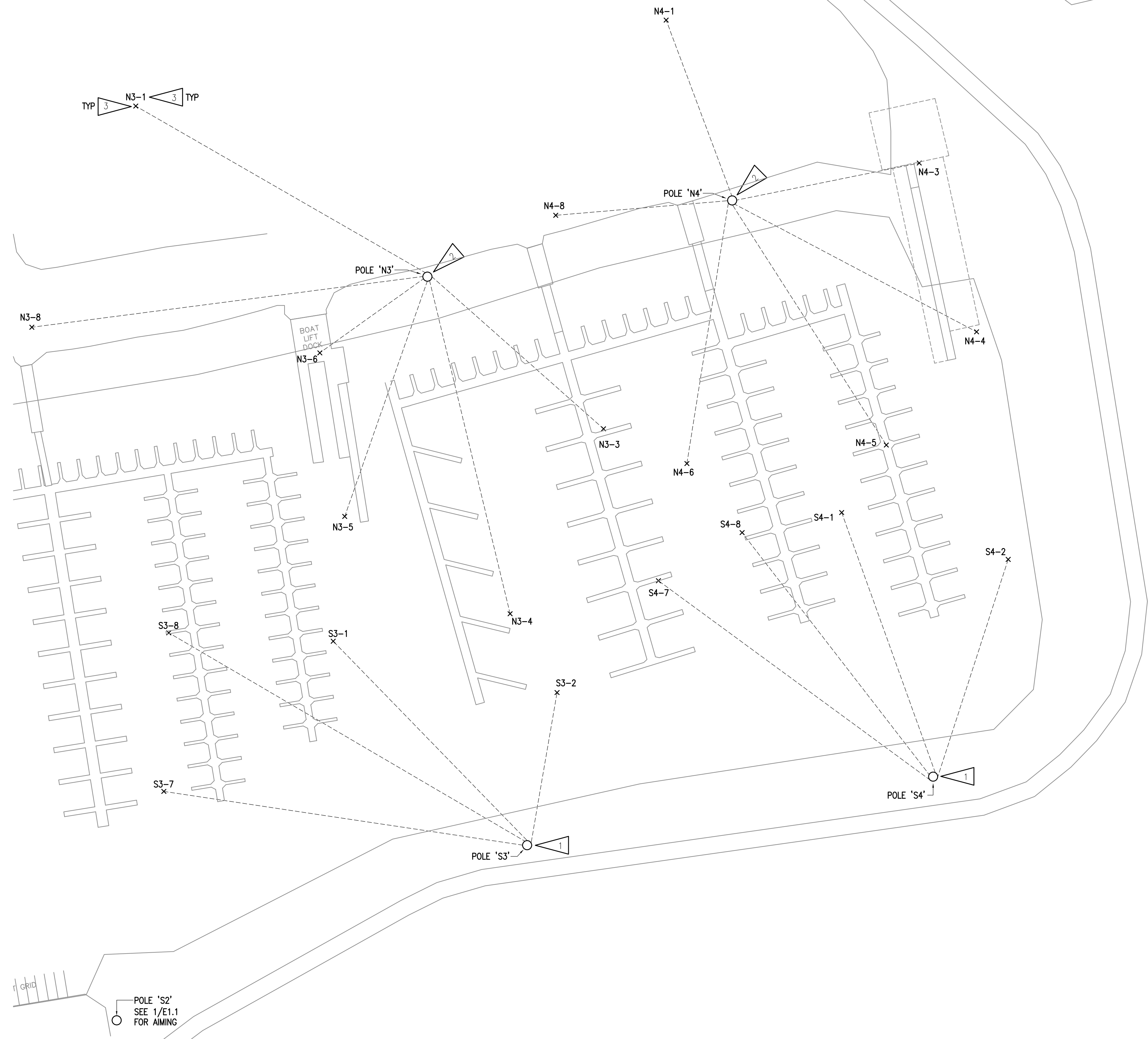
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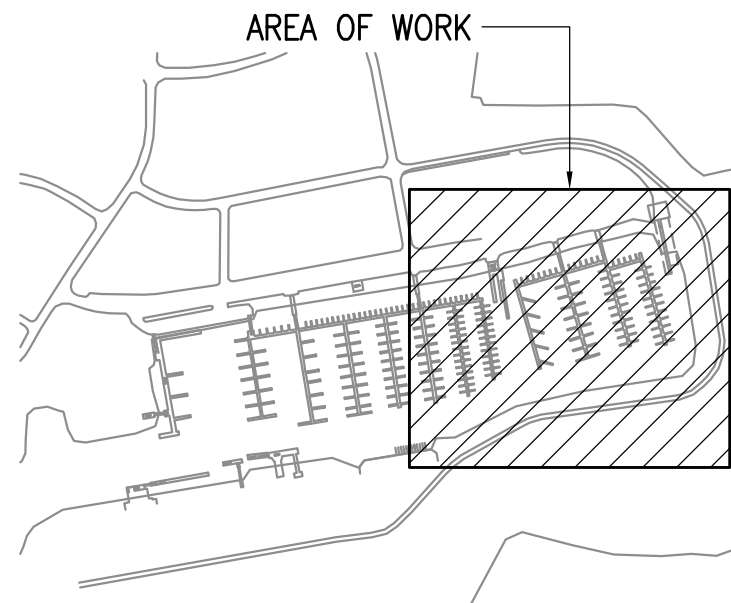
DRAWING TITLE:
LIGHTING PLAN - WEST

SHEET:
E1.1

0"
1"
2"
3"



1 LIGHTING PLAN - EAST
1" = 50'-0"



KEY PLAN
NO SCALE



GENERAL NOTES:

A. SEE E0.2 FOR GENERAL NOTES.

SHEET NOTES:

- 1 DEMOLISH EXISTING (4) HIGH MAST FIXTURES. EXISTING 160' POLE AND LOWERING DEVICE TO REMAIN. SALVAGE EXISTING CIRCUITS FOR RECONNECTION TO NEW FIXTURES. PROVIDE MOUNTING HARDWARE AS REQUIRED TO INSTALL NEW FIXTURES ON EXISTING LOWERING RING. SEE 1/E2.1 FOR HIGH MAST RING DETAIL. SEE 3/E2.1 AND LUMINAIRE AIMING SCHEDULE FOR FOR NEW FIXTURES TO BE INSTALLED.
- 2 DEMOLISH EXISTING (6) HIGH MAST FIXTURES. EXISTING 160' POLE AND LOWERING DEVICE TO REMAIN. SALVAGE EXISTING CIRCUITS FOR RECONNECTION TO NEW FIXTURES. PROVIDE MOUNTING HARDWARE AS REQUIRED TO INSTALL NEW FIXTURES ON EXISTING LOWERING RING. SEE 1/E2.1 FOR HIGH MAST RING DETAIL. SEE 3/E2.1 AND LUMINAIRE AIMING SCHEDULE FOR FOR NEW FIXTURES TO BE INSTALLED.
- 3 FIXTURE CALL-OUT AND AIMING POINT FOR NEW HIGH MAST FIXTURES. SEE 3/E2.1 AND LUMINAIRE AIMING SCHEDULE ON E2.1 FOR DETAILS.



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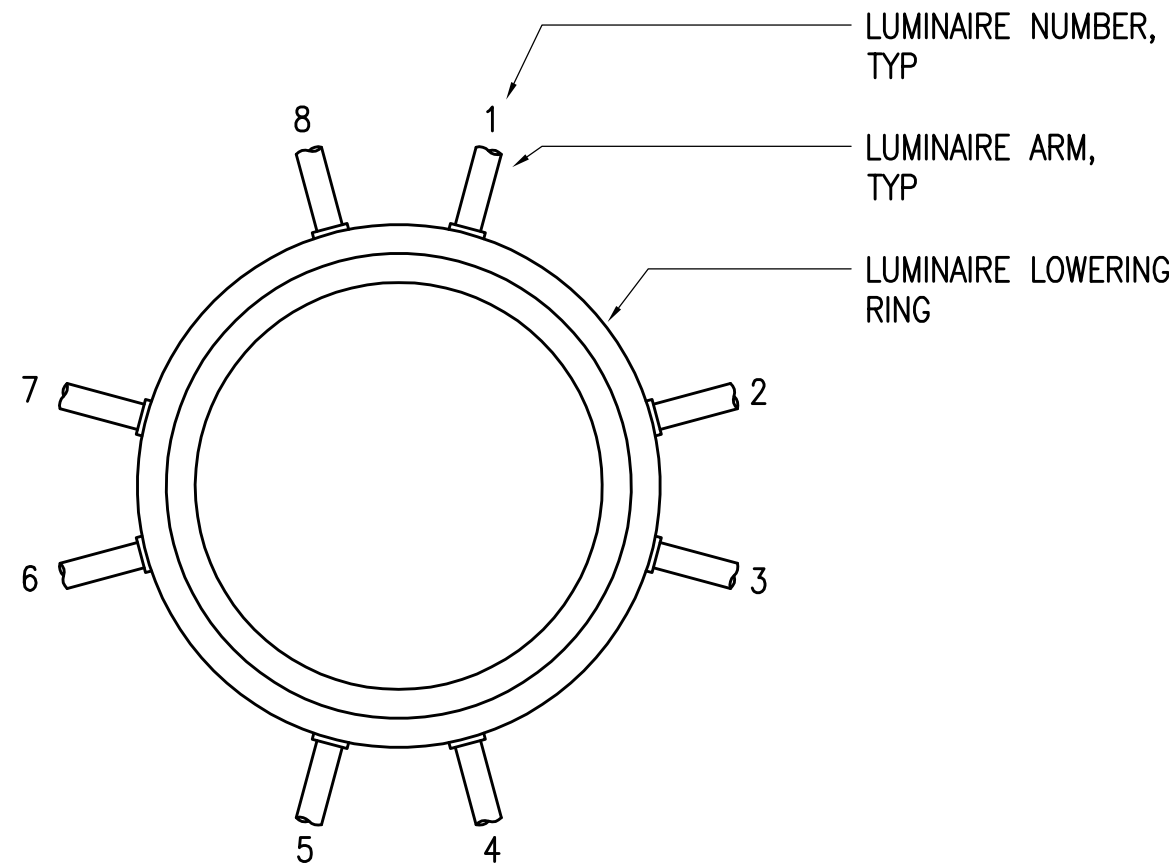
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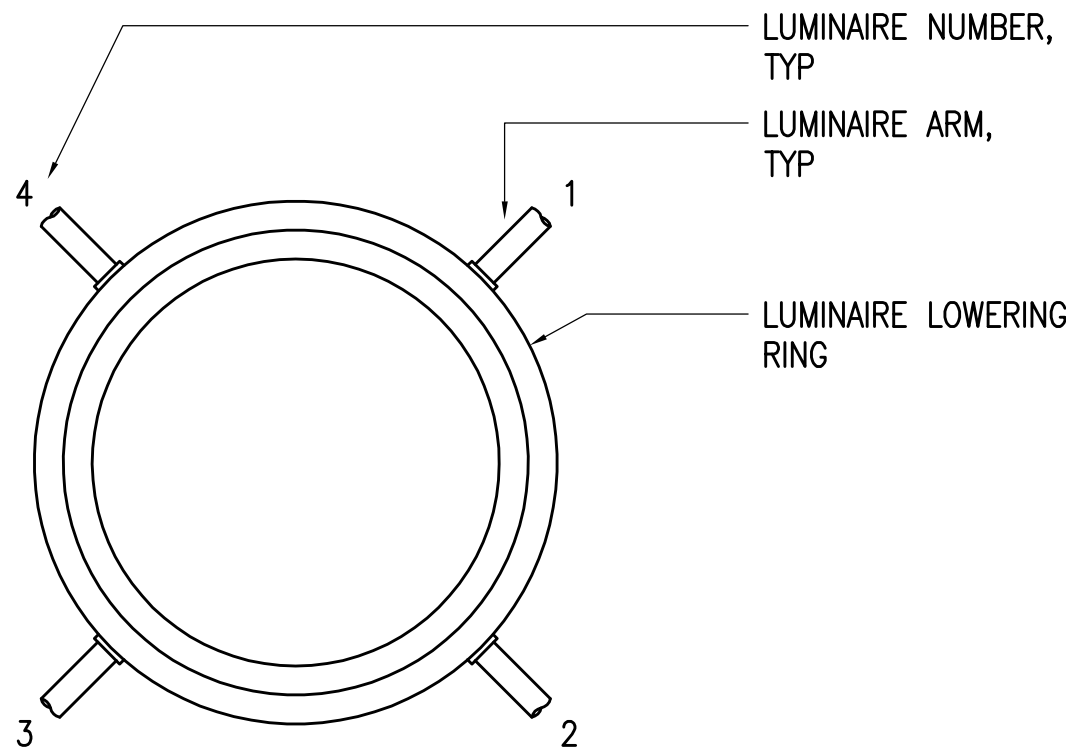
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LIGHTING PLAN - EAST

SHEET:
E1.2

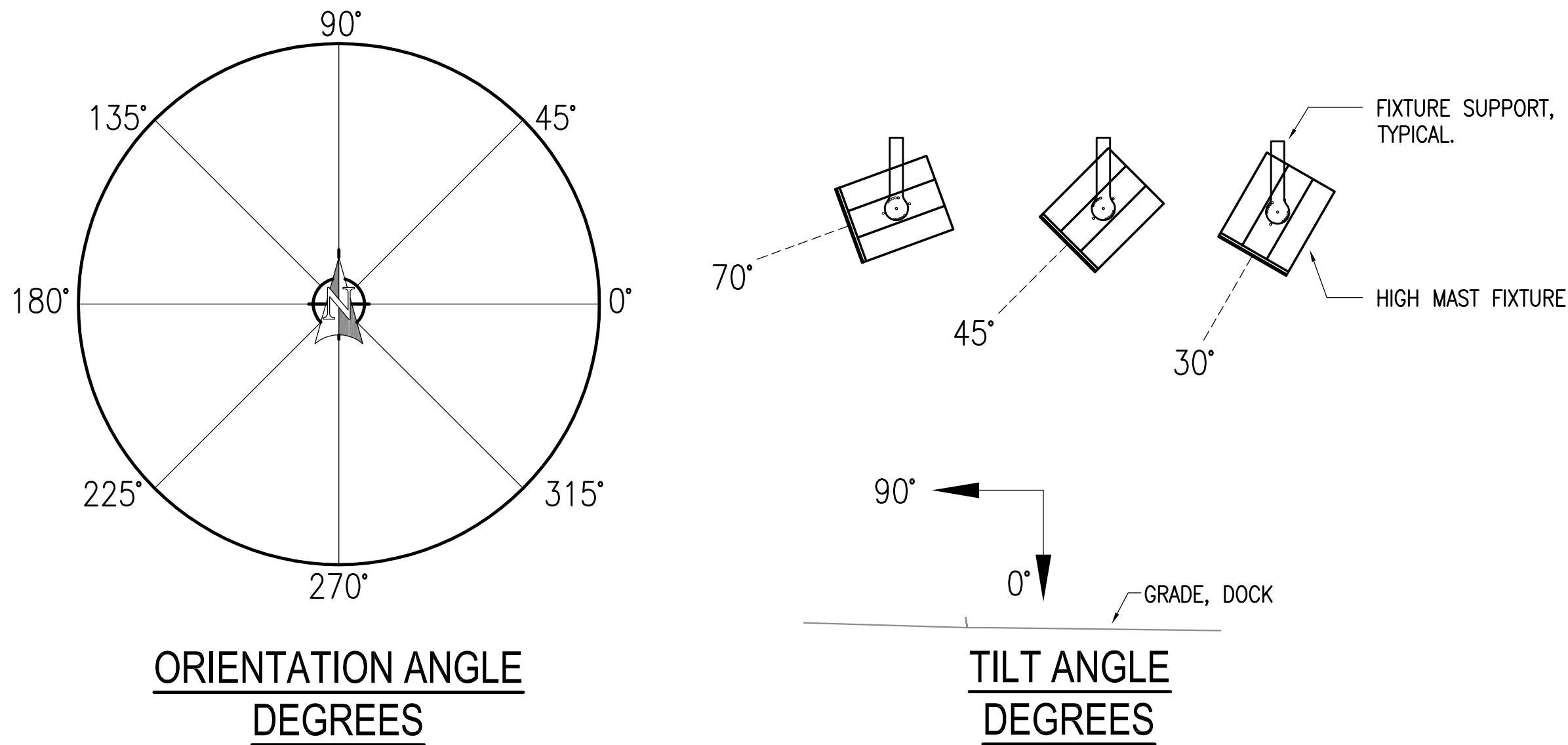
0"
1"
2"
3"



1 HIGHMAST MOUNTING CONFIGURATION - POLE #N3, N4, S3, S4
NO SCALE



2 HIGHMAST MOUNTING CONFIGURATION - POLE #N1, N2, S1, S2, SS
NO SCALE



3 HIGHMAST FIXTURE AIMING DETAIL
NO SCALE

HIGH MAST LUMINAIRE AIMING SCHEDULE

POLE	FIXTURE NUMBER	ORIENTATION ANGLE	TILT ANGLE	FIXTURE TYPE	VOLTAGE	PHASE
N1	1	340	67	A45	240V	1Ø
N1	2	310	61	A30	240V	1Ø
N1	3	234	50	A30	240V	1Ø
N1	4	160	58	A45	240V	1Ø
N2	1	323	60	A45	240V	1Ø
N2	2	266	49	A60	240V	1Ø
N2	3	221	67	A30	240V	1Ø
N2	4	186	67	A45	240V	1Ø
N3	1	150	63	A30	240V	1Ø
N3	2	NO FIXTURE	-	-	-	-
N3	3	318	56	A45	240V	1Ø
N3	4	284	65	A30	240V	1Ø
N3	5	251	56	A20	240V	1Ø
N3	6	215	39	A45	240V	1Ø
N3	7	NO FIXTURE	-	-	-	-
N3	8	187	68	A15	240V	1Ø
N4	1	110	50	A30	240V	1Ø
N4	2	NO FIXTURE	-	-	-	-
N4	3	11	48	A20	240V	1Ø
N4	4	332	59	A30	240V	1Ø
N4	5	303	60	A45	240V	1Ø
N4	6	261	59	A45	240V	1Ø
N4	7	NO FIXTURE	-	-	-	-
N4	8	186	48	A30	240V	1Ø

POLE	FIXTURE NUMBER	ORIENTATION ANGLE	TILT ANGLE	FIXTURE TYPE	VOLTAGE	PHASE
S1	1	61	60	A30	480V	1Ø
S1	2	NO FIXTURE	-	-	-	-
S1	3	131	62	A30	480V	1Ø
S1	4	95	65	A30	480V	1Ø
S2	1	122	71	A15	480V	1Ø
S2	2	97	67	A30	480V	1Ø
S2	3	160	40	A60	480V	1Ø
S2	4	137	71	A20	480V	1Ø
S3	1	134	61	A30	480V	1Ø
S3	2	80	44	A45	480V	1Ø
S3	3	NO FIXTURE	-	-	-	-
S3	4	NO FIXTURE	-	-	-	-
S3	5	NO FIXTURE	-	-	-	-
S3	6	NO FIXTURE	-	-	-	-
S3	7	171	67	A15	480V	1Ø
S3	8	150	69	A20	480V	1Ø
S4	1	109	60	A30	480V	1Ø
S4	2	72	55	A45	480V	1Ø
S4	3	NO FIXTURE	-	-	-	-
S4	4	NO FIXTURE	-	-	-	-
S4	5	NO FIXTURE	-	-	-	-
S4	6	NO FIXTURE	-	-	-	-
S4	7	144	65	A15	480V	1Ø
S4	8	128	63	A30	480V	1Ø
SS	1	25	41	A30	240V	1Ø
SS	2	333	52	A45	240V	1Ø
SS	3	242	46	A45	240V	1Ø
SS	4	NO FIXTURE	-	-	-	-



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DWG FILE: L7241 - ESeries

DRAWING TITLE:
ELECTRICAL DETAILS

SHEET:
E2.1

0"
1"
2"
3"



1 HIGHMAST LIGHTING POLE N4 (POLES N3,S3 & S4 SIMILAR)
NO SCALE



3 HIGHMAST LIGHTING POLE N1 (POLES N2, S1, S2 & SS SIMILAR)
NO SCALE



2 HIGHMAST LIGHTING POLE N4 (POLES N3,S3 & S4 SIMILAR)
NO SCALE



4 HIGHMAST LIGHTING POLE N1 (POLES N2, S1, S2 & SS SIMILAR)
NO SCALE



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SMALL BOAT HARBOR - LIGHTING UPGRADE
VALDEZ SMALL BOAT HARBOR
VALDEZ, ALASKA

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DRAWN BY: FS
CHECKED BY: DB,CPL
DATE: 4/10/18
JOB NUMBER: L7241
DWG FILE: L7241 - ESeries

DRAWING TITLE:
REFERENCE PHOTOS

SHEET:
E3.1