

WAUKEGAN PORT DISTRICT WAUKEGAN, LAKE COUNTY, ILLINOIS

CONSTRUCTION PLANS FOR WAUKEGAN NATIONAL AIRPORT

REHABILITATE AIRFIELD LIGHTING - PHASE 1 AND 2 (RUNWAY 5/23, 14/32, TAXIWAY A, B, AND C) AND AIRFIELD LIGHTING CONTROL AND MONITORING SYSTEM (ALCMS)

ILLINOIS PROJECT: UGN-4824
S.B.G. PROJECT: 3-17-SBGP-XX



D. Kyle Peabody

LICENSE EXPIRATION
DATE: 11/30/2021
DATE SIGNED: 4/16/2021

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DATE: 11/30/2021
DATE SIGNED: 4/16/2021



Know what's below.
Call before you dig.

J.U.L.I.E.
JOINT UTILITY LOCATING
INFORMATION FOR EXCAVATORS
www.illinois1call.com

THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE. SUFFICIENT OR COMPLETE IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ACTUAL LOCATIONS OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES OF HIS OPERATIONAL PLANS, OBTAIN FROM RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION AND THE ONE-CALL NOTICE SYSTEM. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY SUCH UTILITY OR SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

CALL J.U.L.I.E. FOR UTILITY INFORMATION AT 811.

APRIL 16, 2021

CALL J.U.L.I.E. BEFORE
EXCAVATING AT 811
WAUKEGAN NATIONAL AIRPORT

TOWNSHIP: 46 NORTH
RANGE: 12 EAST
SECTION: 31 AND 32
COUNTY: LAKE
TOWNSHIP: BENTON

DESIGN INFORMATION

DESIGN AIRCRAFT APPROACH CATEGORY C
DESIGN AIRCRAFT GROUP III (GULFSTREAM 450)



WAUKEGAN NATIONAL AIRPORT
WAUKEGAN PORT DISTRICT
2601 Plane Rest Drive
Waukegan, Illinois 60087
Telephone: 847.244.0055
Fax: 847.244.3813

APPROVED BY

Skip Goss
SKIP GOSS

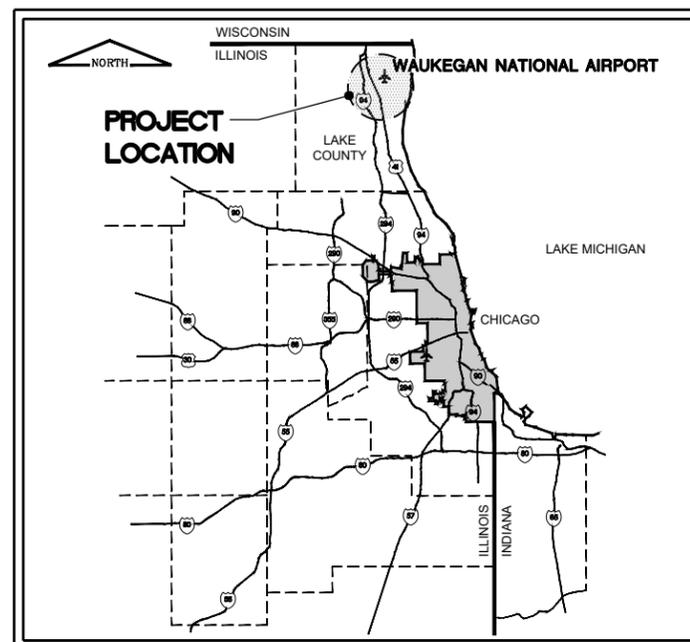
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GENERAL MANAGER

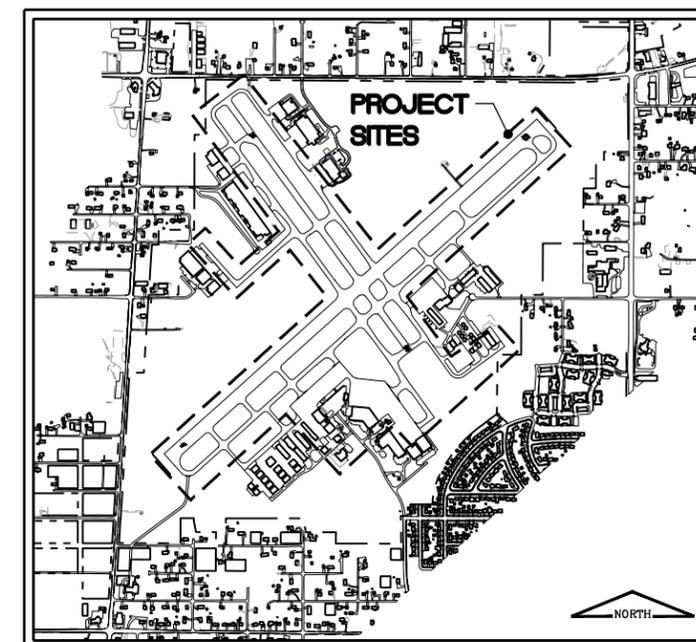
DATE

APRIL 16,

2021



LOCATION MAP



SITE PLAN



CRAWFORD, MURPHY & TILLY, INC.
CONSULTING ENGINEERS
License No. 184-000613

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200226-02-00

SUBMITTED BY

D. Kyle Peabody
D. KYLE PEABODY, P.E.

DATE

APRIL 16

2021

UGN 20022602-00-TITLE.dwg
 UGN 20022602-00-BASE.dwg
 UGN 20022602-00-PLAN.dwg
 UGN 20022602-00-C-UTL.dwg

CMT 30-CMT.dwg
 Waukegan Airport Logo.dwg

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RUNWAY 5/23 PROJECT REFERENCE POINTS

NO.	NORTHING	EASTING	STATION / LOCATION
1	2094482.83	1107871.86	STA. 1050+24.89 CL RUNWAY 5-23 STA. 300+00.00 CL TAXIWAY A1
2	2094866.58	1108300.06	STA. 110+99.89 CL RUNWAY 5-23 STA. 1320+00.00 CL TAXIWAY A2
3	2095216.96	1108691.03	STA. 116+24.89 CL RUNWAY 5-23 STA. 1330+00.00 CL TAXIWAY A3
4	2095596.77	1109114.85	STA. 121+93.99 CL RUNWAY 5-23 STA. 1340+00.00 CL TAXIWAY A4
5	2096373.01	1109981.01	STA. 133+57.08 CL RUNWAY 5-23 STA. 418+59.57 CL TAXIWAY B
6	2096540.53	1110167.94	STA. 136+08.09 CL RUNWAY 5-23 STA. 214+84.84 CL RUNWAY 14-32
7	2096708.37	1110355.22	STA. 138+59.58 CL RUNWAY 5-23 STA. 23+26.84 CL TAXIWAY C
8	2097074.91	1110764.23	STA. 144+08.79 CL RUNWAY 5-23 STA. 1350+00.00 CL TAXIWAY A5
9	2097520.72	1111261.69	STA. 150+76.79 CL RUNWAY 5-23 STA. 1360+00.00 CL TAXIWAY A6
10	2098300.30	1112131.58	STA. 162+44.89 CL RUNWAY 5-23 STA. 1370+00.00 CL TAXIWAY A7
11	2098453.73	1112302.78	STA. 164+74.77 CL RUNWAY 5-23 STA. 364+97.00 CL TAXIWAY A8
12	2098470.68	1112321.70	STA. 165+00.17 CL RUNWAY 5-23
13	2094466.14	1107853.24	STA. 104+99.89 CL RUNWAY 5-23

TAXIWAY A PROJECT REFERENCE POINTS

14	2094625.89	1108515.71	STA. 308+47.37 CL TAXIWAY A STA. 1323+24.26 CL TAXIWAY A2
15	2094976.24	1108906.76	STA. 313+72.42 CL TAXIWAY A STA. 1333+25.00 CL TAXIWAY A3
16	2095078.21	1109020.57	STA. 315+25.22 CL TAXIWAY A CL TAXIWAY S2
17	2095355.94	1109330.56	STA. 319+41.43 CL TAXIWAY A STA. 1343+24.33 CL TAXIWAY A4
18	2095744.79	1109764.58	STA. 325+24.16 CL TAXIWAY A CL TAXIWAY M1
19	2096110.58	1110172.86	STA. 330+72.33 CL TAXIWAY A STA. 415+34.49 CL TAXIWAY B
20	2096445.65	1110546.86	STA. 335+74.47 CL TAXIWAY A STA. 20+01.65 CL TAXIWAY C
21	2096833.90	1110980.21	STA. 341+56.32 CL TAXIWAY A STA. 1353.24.47 CL TAXIWAY A5
22	2097080.50	1111255.45	STA. 345+25.86 CL TAXIWAY A CL TAXIWAY S2
23	2097279.65	1111477.74	STA. 348+24.32 CL TAXIWAY A STA. 1363+25.00 CL TAXIWAY A6
24	2098059.11	1112347.74	STA. 359+92.42 CL TAXIWAY A STA. 1373+25.00 CL TAXIWAY A7

RUNWAY 14/32 PROJECT REFERENCE POINTS

25	2095744.59	1110748.63	STA. 204+99.58 CL RUNWAY 14/32 END OF RUNWAY
26	2095773.44	1110727.58	STA. 205.35.31 CL RUNWAY 14/32 STA. 1410+00.00 CL TAXIWAY B1
27	2096277.86	1110359.58	STA. 211+59.69 CL RUNWAY 14/32 STA. 333+23.02 CL TAXIWAY A
28	2097244.96	1109654.01	STA. 223+56.82 CL RUNWAY 14/32 STA. 1420+00.00 CL TAXIWAY B2
29	2098351.10	1108847.01	STA. 237+26.05 CL RUNWAY 14/32 STA. 1430+00.00 CL TAXIWAY B3
30	2098753.92	1108553.13	STA. 242+24.68 CL RUNWAY 14/32 STA. 448+33.41 CL TAXIWAY B4
31	2098774.07	1108538.42	STA. 242+49.63 CL RUNWAY 14/32 END OF RUNWAY

TAXIWAY B PROJECT REFERENCE POINTS

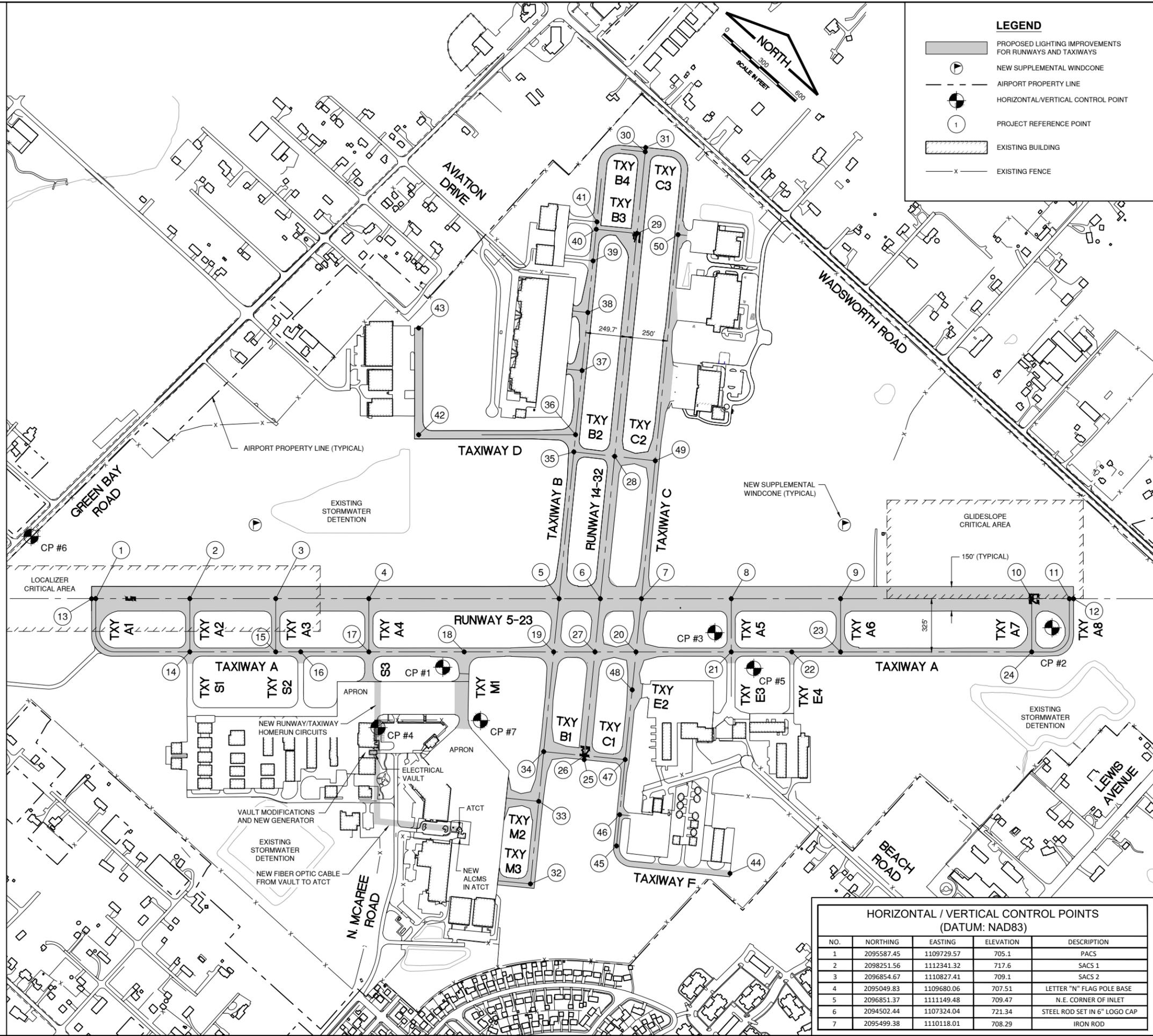
32	2094962.01	1111010.08	STA. 401+13.18 CL TAXIWAY B STA. 0+00.00 CL TAXIWAY
33	2095370.65	1110712.21	STA. 406+18.86 CL TAXIWAY B STA. 0+00.00 CL TAXIWAY
34	2095623.72	1110527.75	STA. 409+32.02 CL TAXIWAY B STA. 1412+50.00 CL TAXIWAY B1
35	2097101.81	1109448.94	STA. 427+61.93 CL TAXIWAY B STA. 1422+51.00 CL TAXIWAY B2
36	2097184.68	1109388.50	STA. 428+64.50 CL TAXIWAY B STA. 500+00.00 CL TAXIWAY D
37	2097502.37	1109156.81	STA. 432+57.70 CL TAXIWAY B STA. 0+00.00 CL TAXIWAY
38	2097789.78	1108947.19	STA. 436+13.43 CL TAXIWAY B STA. 0+00.00 CL TAXIWAY
39	2098045.27	1108760.86	STA. 439+29.65 CL TAXIWAY B STA. 0+00.00 CL TAXIWAY
40	2098203.05	1108645.56	STA. 441+25.07 CL TAXIWAY B STA. 1432+50.00 CL TAXIWAY B3
41	2098238.30	1108619.78	STA. 441+68.74 CL TAXIWAY B STA. 0+00.00 CL TAXIWAY

TAXIWAY D PROJECT REFERENCE POINTS

42	2096544.88	1108671.75	STA. 509+49.30 CL TAXIWAY D
43	2097028.87	1108240.20	STA. 515+86.28 CL TAXIWAY D

TAXIWAY C PROJECT REFERENCE POINTS

44	2095822.01	1111876.69	STA. 0+49.99 CL TAXIWAY F END OF TAXIWAY
45	2095486.91	1111244.77	STA. 8+15.79 CL TAXIWAY C
46	2095639.69	1111134.20	STA. 10+04.39 CL TAXIWAY C STA. 0+00.00 CL TAXIWAY C
47	2095914.97	1110933.94	STA. 13+44.80 CL TAXIWAY C STA. 1012+50 CL TAXIWAY C1
48	2096257.64	1110683.99	STA. 17+68.95 CL TAXIWAY C STA. 0+00.00 CL TAXIWAY C
49	2097392.25	1109856.39	STA. 31+73.32 CL TAXIWAY C STA. 1022+50 CL TAXIWAY C2
50	2098511.09	1109040.30	STA. 45+58.17 CL TAXIWAY C STA. 0+00.00 CL TAXIWAY



LEGEND

- PROPOSED LIGHTING IMPROVEMENTS FOR RUNWAYS AND TAXIWAYS
- NEW SUPPLEMENTAL WINDCONE
- AIRPORT PROPERTY LINE
- HORIZONTAL/VERTICAL CONTROL POINT
- PROJECT REFERENCE POINT
- EXISTING BUILDING
- EXISTING FENCE

IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS

NUMBER	BY	DATE

0 1 2
 THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

SITE PLAN - PROJECT CONTROL PLAN

CMT
 CRAWFORD, MURPHY & TILLY, INC.
 CONSULTING ENGINEERS
 License No. 184-000613

DESIGN BY: DKP
 DRAWN BY: JRO
 CHECKED BY: DKP
 APPROVED BY: DKP
 DATE: 4/16/2021
 JOB No: 20022602-00

FINAL

SHEET 3 OF 61 SHEETS

HORIZONTAL / VERTICAL CONTROL POINTS (DATUM: NAD83)

NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	2095587.45	1109729.57	705.1	PACS
2	2098251.56	1112341.32	717.6	SACS 1
3	2096854.67	1110827.41	709.1	SACS 2
4	2095049.83	1109680.06	707.51	LETTER "N" FLAG POLE BASE
5	2096851.37	1111149.48	709.47	N.E. CORNER OF INLET
6	2094502.44	1107324.04	721.34	STEEL ROD SET IN 6" LOGO CAP
7	2095499.38	1110118.01	708.29	IRON ROD

DATE: Thursday, May 6, 2021 3:24:50 PM
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CMT 3G CONSULTING INC.
6050 Old Orchard Road, Suite 100, Waukegan, IL 60087
630-991-1111
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GENERAL

1. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL FOLLOW THE REQUIREMENTS OF THE AIRPORT'S APPROVED CONSTRUCTION SAFETY AND PHASING PLAN (CSPP), FAA AC 150/5370-2G OR LATEST EDITION, AND ALL AIRPORT SAFETY AND SECURITY REQUIREMENTS.
2. PRIOR TO THE NOTICE TO PROCEED, THE CONTRACTOR SHALL SUBMIT TO THE AIRPORT THROUGH THE RESIDENT ENGINEER, FOR APPROVAL A SAFETY PLAN COMPLIANCE DOCUMENT (SPCD) IN ACCORDANCE WITH FAA AC 150/5370-2G OR LATEST EDITION. NO CONSTRUCTION ACTIVITY SHALL BEGIN UNTIL THE AIRPORT HAS APPROVED THE SPCD.
3. THE CSPP COVERS OPERATIONAL SAFETY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INDIVIDUAL SAFETY OF HIS/HER PERSONNEL AND MEETING OSHA REQUIREMENTS.
4. A MINIMUM OF 10 DAYS PRIOR TO THE NOTICE TO PROCEED THE CONTRACTOR SHALL PROVIDE A LIST OF SUBCONTRACTORS AND MATERIAL SUPPLIERS.
5. ALL CONTRACTOR COSTS ASSOCIATED WITH THE REQUIREMENTS LISTED ON THIS SHEET SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
6. THE SUGGESTED SEQUENCE OF CONSTRUCTION SHOWN IS INTENDED TO ALLOW FOR THE ORDERLY CONSTRUCTION OF THE NEW IMPROVEMENTS WHILE MAINTAINING AIRCRAFT ACCESS AT ALL TIMES. THE PHASING SHOWN IS A SUGGESTED SEQUENCE OF CONSTRUCTION ONLY. THIS SEQUENCE MAY BE MODIFIED WITH THE APPROVAL OF THE RESIDENT ENGINEER AND AIRPORT MANAGER AND BE APPROVED BY THE DIVISION OF AERONAUTICS AND FEDERAL AVIATION ADMINISTRATION. HOWEVER ALTERNATE STAGING PLANS MUST MAINTAIN AIRPORT OPERATIONS TO THE SATISFACTION OF THE AIRPORT.
7. PAYMENT FOR ALL AIRSIDE, LANDSIDE AND ROADWAY TRAFFIC CONTROL INCLUDING BUT NOT LIMITED TO, TEMPORARY CONSTRUCTION FENCING, RUNWAY CLOSED MARKERS, TAXIWAY CLOSED MARKERS, BARRICADES, SIGNING, AIR OPERATIONS AREA (A.O.A.) LATH AND RIBBON, ETC. SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

1. COORDINATION

1. PRIOR TO THE START OF CONSTRUCTION THE CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION CONFERENCE WITH THE AIRPORT, RESIDENT ENGINEER, AND ILLINOIS DIVISION OF AERONAUTICS (IDA). THE COST OF PREPARING FOR AND ATTENDING THE PRE-CONSTRUCTION CONFERENCE SHALL BE INCIDENTAL TO THE CONTRACT.
2. ON OR BEFORE THE PRE-CONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL SUBMIT A PROPOSED SCHEDULE FOR THE PROJECT. THE SCHEDULE SHALL INCLUDE A START AND COMPLETION DATE FOR EACH ITEM OF WORK. THE SCHEDULE SHALL BE UPDATED ON A WEEKLY BASIS. ALL COSTS ASSOCIATED WITH THE SCHEDULE SHALL BE INCIDENTAL TO THE CONTRACT.
3. DURING CONSTRUCTION THE CONTRACTOR SHALL ATTEND A WEEKLY COORDINATION MEETING WITH THE AIRPORT STAFF AND RESIDENT ENGINEER. ALL COSTS ASSOCIATED WITH ATTENDING THE WEEKLY MEETING SHALL BE INCIDENTAL TO THE CONTRACT.
4. THE CONTRACTOR SHALL BE REQUIRED TO ESTABLISH A COORDINATION PLAN WITH THE AIRPORT MANAGER OR HIS/HER DESIGNATED REPRESENTATIVE, REGARDING DE-ENERGIZING AND ENERGIZING OF THE AIRFIELD CIRCUITS IMPACTED BY CONSTRUCTION ACTIVITY.

2. PHASING

1. TOTAL CONTRACT TIME SHALL BE 185 CALENDAR DAYS.
2. PHASING SHALL BE AS NOTED BELOW AND AS SHOWN ON THE CONSTRUCTION ACTIVITY PLAN (CAP) SHEETS.

3. AREAS AND OPERATIONS AFFECTED BY THE CONSTRUCTION ACTIVITY

1. ALL RUNWAYS, TAXIWAYS AND APRONS SHALL BE KEPT OPEN TO AIRCRAFT TRAFFIC DURING CONSTRUCTION EXCEPT AS NOTED ON THE PHASING PLAN.
2. WHEN CONFLICTS ARISE BETWEEN CONSTRUCTION ACTIVITIES AND AIRCRAFT OPERATIONS AND SAFETY, AIRCRAFT OPERATIONS AND SAFETY SHALL TAKE PRECEDENCE AND SHALL GOVERN. FINAL AUTHORITY IN THE APPROVAL OF CONSTRUCTION SEQUENCING LIES WITH THE AIRPORT.
3. ALL CONSTRUCTION TRAFFIC SHALL IMMEDIATELY YIELD TO ONCOMING AIRCRAFT AT ALL TIMES.
4. SHOULD IT BE NECESSARY FOR THE CONTRACTOR TO TEMPORARILY RELOCATE EQUIPMENT AT ANY TIME TO ALLOW AN AIRCRAFT TO PASS, THE CONTRACTOR SHALL DO SO IMMEDIATELY AT NO EXTRA COST TO THE OWNER.

4. NAVAIDS THAT COULD BE AFFECTED

1. THE CONTRACTOR MUST COORDINATE WITH AIRPORT OPERATIONS/ENGINEER IN ADVANCE FOR ANY WORK WITHIN A NAVAID CRITICAL AREA OR AFFECTING THE VISUAL, TRANSMITTED SIGNAL OR POWER SUPPLY OF A NAVAID.
2. EDGE LIGHTS, THRESHOLD LIGHTS, VISUAL AIDS AND ALL ILS EQUIPMENT SHALL BE SHUT OFF FOR THE DURATION OF A CLOSURE PERIOD ON ANY ASSOCIATED PAVEMENTS. IF THE LIGHTING CIRCUIT MUST BE ON FOR OPEN PAVEMENT AREAS, CLOSED PAVEMENT AREA LIGHTS SHALL BE COVERED COMPLETELY.
3. EXCEPT WHERE NOTED IN THE PLANS, EXISTING COMMUNICATIONS EQUIPMENT AND NAVIGATIONAL AIDS (NAVAIDS) SHALL NOT BE DISTURBED BY THE CONTRACTOR AND SHALL BE PROTECTED FROM DAMAGE.
4. PRIOR TO BEGINNING SITE WORK, CONTRACTOR SHALL LOCATE AND MARK ALL UNDERGROUND COMMUNICATIONS CABLES AND FACILITIES, WITHIN THE PROJECT AREA.
5. IF CONTRACTOR CAUSES INTERRUPTION OF POWER OR COMMUNICATIONS TO A NAVAID CONTRACTOR SHALL REPAIR WITHIN 24 HOURS AT THE CONTRACTOR'S COST. CONTRACTOR MUST COORDINATE REPAIR WITH AIRPORT OPERATIONS BEFORE ANY REPAIR IS MADE.

5. CONTRACTOR ACCESS

1. CONTRACTOR ACCESS SHALL BE AS NOTED BELOW AND AS SHOWN ON THE SITE PLAN AND CONSTRUCTION ACTIVITY PLAN SHEETS. ALL COSTS RELATING TO CONTRACTOR'S ACCESS AND SECURITY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. THE CONTRACTOR IS TO ACCESS THE SITE USING THE GATE(S) SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE ACCESS GATE CLOSED DURING WORK HOURS.
3. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND TEMPORARY EASEMENTS FOR THE PUBLIC ACCESS ROAD(S) SHOWN AND SHALL COMPLY WITH ALL REQUIREMENTS, LOAD RESTRICTIONS, & TRAFFIC CONTROL SIGNAGE REQUIRED BY THE CITY, COUNTY, TOWNSHIP, OR I.D.O.T.
4. CONTRACTOR'S VEHICLES AND EQUIPMENT SHALL BE MARKED AND FLAGGED PER SECTION 40-05 OF THE STANDARD SPECIFICATIONS. MAXIMUM HEIGHT OF CONTRACTOR'S EQUIPMENT WILL BE 25'.
5. DRIVERS OF TRUCKS CONTAINING MATERIAL DELIVERIES (AGGREGATE, ASPHALT, ETC.) NEED NOT OBTAIN AN AIRPORT ID BADGE BUT SHALL BE REQUIRED TO SUBMIT THEIR NAME, DRIVER'S LICENSE NUMBER, TRUCK LICENSE PLATE NUMBER AND NAME OF TRUCKING COMPANY TO THE PRIME CONTRACTOR PRIOR TO ENTERING THE JOBSITE. WHILE INSIDE THE AOA FENCE, THE TRUCK DRIVERS SHALL BE ESCORTED BY THE CONTRACTOR PERSONNEL THAT HAS OBTAINED PROPER DRIVING PRIVILEGES.
6. CONTRACTOR WORK CREWS MUST MAINTAIN RADIO CONTACT WITH THE WAUKEGAN AIR TRAFFIC CONTROL TOWER GROUND CONTROL (121.65 MHZ) AT ALL TIMES WHEN INSIDE THE AIRPORT OPERATIONS AREA (AOA). THE CONTRACTOR SHALL SUPPLY ALL APPROPRIATE RADIOS NEEDED FOR COMMUNICATIONS AND ONLY HIS PERSONNEL WHO HAVE SUCCESSFULLY SATISFIED THE AIRPORT OF THEIR COMPETENCE MAY OPERATE THESE RADIOS.
7. THE CONTRACTORS STORAGE AND STAGING AREAS WILL BE AS SHOWN ON THE SITE PLAN.
8. THE CONTRACTOR SHALL KEEP A RECORD OF THE NAMES OF ALL EMPLOYEES ENTERING THE JOB SITE ON A DAILY BASIS. A RECORD OF EACH SUBCONTRACTOR ENTERING THE JOB SITE SHALL ALSO BE KEPT BY THE CONTRACTOR.
9. WHEN THE CONTRACTOR IS NOT WORKING, EQUIPMENT SHALL BE STORED AT THE STAGING AREAS.
10. DURING ADVERSE WEATHER THE CONTRACTOR SHALL MAINTAIN ACCESS TO THE WORK AT NO ADDITIONAL COST TO THE CONTRACT. NO EXTENSION OF THE CONTRACT TIME WILL BE CONSIDERED FOR DELAYS DUE TO LACK OF ADEQUATE ACCESS TO THE WORK SITE.
11. THE CONTRACTOR WILL BE PERMITTED TO STORE EQUIPMENT AND MATERIALS ONLY AT THE LOCATIONS SHOWN. PARKED EQUIPMENT AND MATERIAL STOCKPILES SHALL NOT PENETRATE SURFACES DEFINED BY F.A.R. TITLE 14 PART 77 - OBJECTS AFFECTING NAVIGABLE AIRSPACE. EXISTING TURF AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY HIM AT HIS EXPENSE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND THE AIRPORT.
12. ALL CONSTRUCTION TRAFFIC OPERATING ON, OR CROSSING RUNWAYS, TAXIWAYS AND APRONS OPEN TO AIRCRAFT TRAFFIC SHALL BE UNDER CONTROL BY A FLAGMAN OR ESCORT IN RADIO CONTACT WITH THE COMMON TRAFFIC ADVISORY FREQUENCY. THE CONTRACTOR SHALL PROVIDE HIS OWN FLAGMEN.
13. THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL CONSTRUCTION AREAS AND HAUL ROUTES WHICH WILL BE OPENED TO AIR TRAFFIC TO THE SATISFACTION OF AIRPORT OPERATIONS OR THE RESIDENT ENGINEER. A POWER BROOM AND OPERATOR SHALL BE ON SITE AT ALL TIMES WHEN ACTIVE PAVEMENTS ARE UTILIZED FOR CONSTRUCTION TRAFFIC.
14. ALL PAVEMENTS, DRIVES OR ANY OTHER AREAS UTILIZED BY THE CONTRACTOR FOR HAUL ROADS OR STORAGE AREAS SHALL BE MAINTAINED AND REPAIRED TO THE SAME CONDITION OR BETTER THAN THEY WERE PRIOR TO BEGINNING CONSTRUCTION. NO ADDITIONAL COMPENSATION WILL BE MADE TO THE CONTRACTOR FOR THIS WORK.
15. ALL VEHICLE AND EQUIPMENT OPERATORS USED BY THE CONTRACTOR SHALL BE PROPERLY TRAINED BY THE CONTRACTOR.
16. THE CONTRACTOR SHALL NOTIFY THE AIRPORT IF CONSTRUCTION ACTIVITY WILL REQUIRE THE BLOCKAGE OF EMERGENCY ACCESS TO THE AIRPORT.

6. WILDLIFE MANAGEMENT

1. THE CONTRACTOR SHALL NOTIFY THE AIRPORT OR THE RESIDENT ENGINEER IF ANY WILDLIFE IS SEEN ENTERING THE AIRPORT.
2. CONTRACTOR ACCESS GATES SHALL REMAIN CLOSED WHEN THE CONTRACTOR IS NOT WORKING.
3. THE CONTRACTOR SHALL DISPOSE OF ALL TRASH INCLUDING FOOD SCRAPS IN APPROVED CONTRACTOR PROVIDED CONTAINERS.

7. FOREIGN OBJECT DEBRIS (FOD) MANAGEMENT

1. THE CONTRACTOR SHALL PICK UP ANY FOREIGN OBJECT DEBRIS (FOD) SEEN ON THE AIRFIELD PAVEMENTS.
2. THE CONTRACTOR SHALL SECURE ALL LOOSE ITEMS FROM VEHICLES PRIOR TO DRIVING ON AIRFIELD PAVEMENTS.

8. HAZARDOUS MATERIALS (HAZMAT) MANAGEMENT

1. THE CONTRACTOR SHALL DEVELOP A HAZMAT MANAGEMENT PLAN AND KEEP COPIES ON THE JOBSITE OF MATERIAL SAFETY DATA SHEETS (MSDS) FOR ALL MATERIALS HANDLED ON THE JOBSITE.

9. NOTIFICATION OF CONSTRUCTION ACTIVITIES

1. THE CONTRACTOR SHALL PROVIDE A 24 HOUR EMERGENCY CONTACT PERSON AND PHONE NUMBER.
2. THE CONTRACTOR SHALL GIVE A MINIMUM OF 10 DAYS NOTICE TO THE FAA AND AIRPORT PRIOR TO THE CLOSURE OF ANY RUNWAY SO THAT THE FAA MAY DEACTIVATE THE FAA - OWNED NAVAIDS.
3. THE CONTRACTOR SHALL GIVE A MINIMUM 30 DAYS NOTICE TO THE AIRPORT, AND PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, PRIOR TO CLOSING ANY RUNWAY OR TAXIWAY PAVEMENT SO THAT THE PROPER NOTAMS MAY BE ISSUED BY THE AIRPORT FOR COORDINATION WITH THE AIRPORT TENANTS.
4. FOR ANY EQUIPMENT USED BY THE CONTRACTOR WITH A HEIGHT GREATER THAN 25', THE CONTRACTOR SHALL PROVIDE TO THE AIRPORT THE TYPE OF EQUIPMENT, TOTAL HEIGHT, AND LOCATION WHERE THE EQUIPMENT WILL BE USED. THE CONTRACTOR WILL SUBMIT FAA FORM 7460-1 TO THE FAA FOR AN AIRSPACE STUDY. NO EQUIPMENT WITH A HEIGHT GREATER THAN 25' SHALL BE USED UNTIL A DETERMINATION FROM FAA IS RECEIVED.
5. IN THE EVENT OF AN EMERGENCY, THE CONTRACTOR SHALL CALL 911.

10. INSPECTION REQUIREMENTS

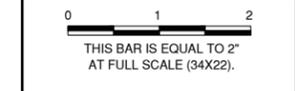
1. THE CONTRACTOR SHALL INSPECT THE JOBSITE DAILY TO ENSURE COMPLIANCE WITH THE CSPP. THE CHECKLIST FOUND IN APPENDIX 3 OF FAA AC 150/5370-2G OR LATEST EDITION MAY BE USED TO AID IN THE INSPECTIONS.
2. THE CONTRACTOR SHALL REQUEST OPERATIONAL INSPECTION OF EACH PHASE WORK AREA PRIOR THE AREA BEING REOPENED. THE AIRPORT WILL DETERMINE IF THE WORK AREA IS ALLOWED TO BE OPENED.

11. UNDERGROUND UTILITIES

1. IT WILL BE NECESSARY FOR THE CONTRACTOR TO MAKE HIS OWN FIELD INVESTIGATION TO DETERMINE THE EXACT LOCATION OF THE UNDERGROUND UTILITIES AT CRITICAL POINTS. THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAS BEEN OBTAINED FROM EXISTING RECORDS. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY IN RESPECT TO THE ACCURACY, COMPLETENESS OR SUFFICIENCY OF THE INFORMATION. ANY UTILITY, INCLUDING AIRFIELD ELECTRICAL CABLE AND LIGHTS, DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY HIM AT HIS OWN EXPENSE IN A MANNER WHICH IS SATISFACTORY TO THE ENGINEER AND TO THE OWNER OF THE UTILITY. ANY REPAIRS THAT MUST BE MADE BY THE OWNER OF THE UTILITY SHALL HAVE THE COST REIMBURSED TO THE UTILITY BY THE CONTRACTOR. AIRFIELD LIGHTING CABLES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED BY A QUALIFIED ELECTRICIAN WITH THE COSTS TO BE BORNE BY THE CONTRACTOR.
2. BEFORE INITIATING ANY DIGGING, DRILLING OR EXCAVATING ON THE AIRPORT PROPERTY, THE CONTRACTOR SHALL CALL J.U.L.I.E. AND CONTACT THE LOCAL FAA OFFICE TO ARRANGE FOR UTILITY LOCATES. SEE SECTION 70-16 OF THE SPECIAL PROVISIONS FOR UTILITY CONTACT INFORMATION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL AIRPORT OWNED UTILITIES AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

IL CONTRACT: **WA075**
IL LETTING ITEM: **06A**
IL PROJECT: **UGN-4824**
S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS		
NUMBER	BY	DATE



**WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

CONSTRUCTION ACTIVITY PLAN NOTES - SHEET 1

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DESIGN BY:	DKP
DRAWN BY:	JM
CHECKED BY:	DKP
APPROVED BY:	DKP
DATE:	4/16/2021
JOB No:	20022602-00

FINAL

DATE: Thursday, May 6, 2024 3:24:55 PM
 FILE: K:\Waukegan\2022602-00_RehabilitateLighting\PH1-2\Draw\Sheets\2022602-00_Construction\Activity Notes - 2.dwg
 CMT 303 CONSTRUCTION
 Waukegan National Airport
 6/16/2021 10:00 AM
 2022602-00

12. PENALTIES

- NONCOMPLIANCE BY THE CONTRACTOR WITH AIRPORT RULES AND REGULATIONS OR FAILURE TO COMPLY WITH THE AIRPORT'S APPROVED CSPP AND THE CONTRACTOR'S APPROVED SPCD MAY RESULT IN FINES AS ALLOWED BY LAW.
- BECAUSE OF THE CRITICAL LIMITATIONS WHICH THE CLOSURE OF A RUNWAY PLACES ON THE USERS OF THE AIRPORT, LIQUIDATED DAMAGES IN THE AMOUNT OF **\$2,500** MAY BE DEDUCTED FROM THE MONIES OWED THE CONTRACTOR. FOR EACH HALF HOUR PAST 6:00 A.M. OVER THE CLOSURE PERIODS FOR THE PHASE 3 UNTIL THE SPECIFIED WORK IS COMPLETED AND THE ASSOCIATED RUNWAY IS OPENED TO AIRCRAFT OPERATIONS. DAMAGES MAY BE ASSESSED STARTING IMMEDIATELY AFTER EACH OF THE CLOSURE PERIODS WHEN EITHER RUNWAY IS NOT OPENED. THESE ASSESSED DAMAGES ARE IN ADDITION TO THE DEDUCTIONS FOR EACH DAY OF OVERRUN IN TOTAL CONTRACT TIME AS DEFINED IN SECTION 80, PROSECUTION AND PROGRESS, OF THE CONTRACT DOCUMENTS. SEE CONSTRUCTION ACTIVITY PLAN NOTES AND DETAILS FOR MORE INFORMATION ON RUNWAY AND TAXIWAY CLOSURES.
- THE CONTRACTOR SHALL RESTRICT ALL CONSTRUCTION ACTIVITIES TO THE CONSTRUCTION AREA DETAILED IN THE CONSTRUCTION SAFETY AND PHASING PLAN. ANY UNAUTHORIZED MOVEMENTS, PEDESTRIAN OR VEHICULAR, BEYOND THE CONSTRUCTION LIMITS SHOWN SHALL BE CONSIDERED AND AIRFIELD INCURSION. AIRFIELD INCURSIONS, AT THE DISCRETION OF THE AIRPORT DIRECTOR OF AVIATION, MAY BE FINED UP TO \$1,000 PER INCIDENT. INCURSION FINES WILL BE ASSESSED IMMEDIATELY AND TAKEN FROM MONIES DUE THE CONTRACTOR ON THE NEXT CONSTRUCTION PAYMENT.

13. SPECIAL CONDITIONS

- ADJACENT CONSTRUCTION MAY IMPACT THE OPERATIONS OF THE CONTRACTOR. SEE THE COORDINATION NOTES FOR ADDITIONAL INFORMATION.

14. RUNWAY AND TAXIWAY VISUAL AIDS

- ALL RUNWAYS, TAXIWAYS, AND APRONS SHALL BE KEPT OPEN TO AIRPORT TRAFFIC DURING CONSTRUCTION EXCEPT AS NOTED IN THE CONSTRUCTION ACTIVITY PLAN.
- IF ANY RUNWAY OR TAXIWAY CLOSURES ARE REQUESTED BY THE CONTRACTOR AND APPROVED BY THE AIRPORT, THE CONTRACTOR SHALL USE MARKING, LIGHTING AND SIGNS THAT FOLLOWING THE REQUIREMENTS OF FAA AC 150/5370-2G OR LATEST EDITION.

15. MARKING AND SIGNS FOR ACCESS ROUTES

- BARRICADES AND SIGNS SHALL BE USED ALONG THE CONTRACTOR'S ACCESS ROUTE AS DETAILED ON THE CONSTRUCTION ACTIVITY PLAN SHEETS.

16. HAZARD MARKING AND LIGHTING

- THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN MARKINGS AND ASSOCIATED LIGHTING OF OPEN TRENCHES, EXCAVATIONS, TEMPORARY STOCKPILES, AND HIS/HER CONSTRUCTION EQUIPMENT.
- ALL CONSTRUCTION EQUIPMENT SHALL BE FLAGGED AND/OR LIGHTED IN ACCORDANCE WITH FAA ADVISORY CIRCULAR 150/5370-2G AND 150/5210-5C OR LATEST EDITION AT ALL TIMES WHILE OPERATING ON AIRPORT PROPERTY. THE MAXIMUM EQUIPMENT HEIGHT IS 25'.
- BARRICADES SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE CONSTRUCTION ACTIVITY PLAN SHEET OR AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR SHALL INSPECT THE BARRICADES ONCE DURING EACH WORK DAY TO INSURE PROPER PLACEMENT AND PROPER OPERATION OF THE RED LIGHTS AND FLAG PLACEMENT.
- THE AIRPORT WILL PROVIDE TWO PORTABLE CLOSED RUNWAY MARKERS FOR USE DURING THE PROJECT. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF THE RUNWAY CLOSURE MARKERS INCLUDING FUEL, OIL CHANGES AND REPLACEMENT OF THE LIGHTS. UPON COMPLETION OF THE PROJECT, THE PORTABLE CLOSED RUNWAY MARKERS SHALL BE RETURNED TO THE AIRPORT. THE CONTRACTOR SHALL SUPPLY TWO PORTABLE CLOSED RUNWAY CLOSURE MARKERS FOR THE OTHER RUNWAY.
- BARRICADES SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE CONSTRUCTION SAFETY AND PHASING PLAN SHEET OR AS DIRECTED BY THE RESIDENT ENGINEER. THE CONTRACTOR SHALL PLACE ALL BARRICADES AND CONSTRUCTION SETBACK LINES ITEMS AS SHOWN PRIOR TO INITIATING WORK IN EACH PHASE. ALL COSTS TO FURNISH, INSTALL, REPOSITION, AND MAINTAIN THESE ITEMS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

17. WORK ZONE LIGHTING FOR NIGHTTIME CONSTRUCTION

- WORK PERFORMED BY THE CONTRACTOR OUTSIDE OF DAYLIGHT HOURS SHALL BE DONE UNDER SUFFICIENT ARTIFICIAL AREA LIGHTING TO ALLOW FOR PROPER CONSTRUCTION METHODS AND INSPECTION.
- LIGHTS SHALL CONSIST OF VEHICLE OR MOVABLE POLE MOUNTED FLOODLIGHTS AND/OR SPOTLIGHTS OF SUFFICIENT NUMBER TO ILLUMINATE THE WORK AREA. VEHICLE HEADLIGHTS WILL BE ALLOWED ONLY IN ADDITION TO OTHER LIGHTS MENTIONED ABOVE. LIGHTING SHALL NOT INTERFERE WITH AIR OPERATIONS. ANY WORK BEING PERFORMED UNDER INSUFFICIENT ARTIFICIAL LIGHTING, IN THE RESIDENT ENGINEER'S JUDGEMENT, SHALL BE STOPPED UNTIL SUCH TIME AS ADDITIONAL LIGHTING IS PROVIDED. ALL WORK PERFORMED DURING THAT TIME WILL NOT BE ACCEPTABLE UNTIL PROPER INSPECTION AND TESTING CAN BE MADE.

18. PROTECTION

- ALL WORK REQUIRED INSIDE OF A RUNWAY SAFETY AREA, WILL REQUIRE THE RUNWAY TO BE CLOSED.
- ALL WORK REQUIRED ON AN ACTIVE TAXIWAY OR INSIDE OF AN ACTIVE TAXIWAY OBJECT FREE AREA, WILL REQUIRE THE TAXIWAY TO BE CLOSED.

19. OTHER LIMITATIONS ON CONSTRUCTION

- IF, DURING CONSTRUCTION, AN EMERGENCY IS DECLARED BY THE AIRPORT, THE CONTRACTOR SHALL IMMEDIATELY CLEAR THE PAVEMENT OF ALL VEHICLES, PERSONNEL AND EQUIPMENT.
- BROKEN CONCRETE, BROKEN ASPHALT, RUBBISH FROM DEMO, AND OTHER MISCELLANEOUS DEBRIS SHALL BE DISPOSED OF OFF AIRPORT PROPERTY, UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR COORDINATING THE AIRSPACE FOR THE CONSTRUCTION EQUIPMENT THAT IS TALLER THAN THAT SPECIFIED ON THE PLANS WITH THE FAA. THIS PROCESS MAY TAKE UP TO 12 WEEKS TO COMPLETE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEGGAR TESTING ALL EXISTING CIRCUITS PRIOR TO CONSTRUCTION AND FOLLOWING CONSTRUCTION AS SPECIFIED IN THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL PROVIDE WASTE RECEPTACLES THROUGHOUT THE WORK ZONE AND MAINTAIN SANITARY FACILITIES FOR EMPLOYEES TO USE, FACILITIES WITHIN THE HANGARS/AIRPORT BUILDINGS SHALL NOT BE USED.

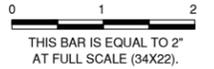
20. SUGGESTED SEQUENCE OF CONSTRUCTION

- NOTIFY RESIDENT ENGINEER/AIRPORT MANAGER 10 DAYS PRIOR TO START OF CONSTRUCTION TO ISSUE NOTAMS
- WORK AREAS 1 THRU 12
 - COORDINATE WITH RESIDENT ENGINEER AND AIRPORT MANGER FOR REQUIRED PAVEMENT CLOSURES FOR WORK AREA.
 - PLACE REQUIRED BARRICADES AND PAVEMENT CLOSURE MARKERS
 - MEGGER AIRFIELD CIRCUITS
 - DE-ENERGIZE CIRCUITS FOR CLOSED PAVEMENTS
 - INSTALL TEMPORARY CABLING/DE-ENERGIZE TAXIWAY CIRCUIT OR COVER LIGHT FIXTURE IN SUCH A WAY TO PREVENT LIGHT LEAKAGE WITHIN WORK AREA LIMITS
 - INSTALL EROSION CONTROL ITEMS
 - COMPLETE NEW REHABILITATE LIGHTING, SIGNAGE AND MISCELLANEOUS IMPROVEMENTS
 - COMPLETE TOPSOILING, SEEDING AND MULCHING AROUND SIGNS TO MEET RSA/TSA GRADING
 - REMOVE TEMPORARY CABLING AND RE-ENERGIZE CIRCUITS WITHIN WORK AREA LIMITS AND RE-MEGGER AIRFIELD CIRCUITS
 - COORDINATE WITH RESIDENT ENGINEER AND AIRPORT MANAGER PAVEMENT CLOSURES FOR NEXT WORK AREA
 - CLEAN PAVEMENTS, RESTORE DISTURBED WORK AREAS AND REMOVE MISCELLANEOUS DEBRIS FROM WORK AREA
 - RELOCATE BARRICADES AND PAVEMENT CLOSURE MARKERS FOR NEXT WORK AREA
 - RESTORE STAGING AREAS

IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS

NUMBER	BY	DATE



**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

CONSTRUCTION ACTIVITY PLAN NOTES - SHEET 2



DESIGN BY:	DKP
DRAWN BY:	JM
CHECKED BY:	DKP
APPROVED BY:	DKP
DATE:	4/16/2021
JOB No:	20022602-00

FINAL

DATE: Thursday, May 6, 2021 3:25:00 PM
 FILE: K:\WaukeganAP\2022602-00_RehabilitateAirfieldLighting-PH-2\Draw\Sheets\2022602-00-construct\Activity Notes - 3.dwg
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LIMITATIONS ON CONSTRUCTION WITHIN RUNWAY SAFETY AREA (RSA) AND TAXIWAY/TAXILANE OBJECT FREE AREA (TOFA)

RUNWAYS:

THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER THIRTY (30) CALENDAR DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS. WORK SHALL BE EXPEDITED IN THESE AREAS AND AT THE END OF EACH WORKING DAY THESE AREAS SHALL BE SMOOTHLY GRADED TO ALLOW THE RUNWAY TO BE REOPENED UNLESS OTHERWISE SHOWN ON THE PLANS. AT LEAST ONE OF THE RUNWAYS SHALL REMAIN IN OPERATION AT ALL TIMES UNLESS OTHERWISE APPROVED BY THE AIRPORT MANAGER IN CONSULTATION WITH THE RESIDENT ENGINEER. IF NECESSARY STEEL PLATES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR TO COVER ANY OPEN TRENCHES OR EXCAVATION WITHIN THE RSA IF DURING RUNWAY CLOSURE AN EMERGENCY IS DECLARED, THE CONTRACTOR SHALL IMMEDIATELY CLEAR THE RUNWAY OF ALL VEHICLES, MEN AND EQUIPMENT. REFERENCE TABLE ON PLANS FOR SAFETY AREA WIDTHS.

TAXIWAYS/TAXILANES:

ANY WORK WITHIN TAXIWAY OBJECT FREE AREA (TOFA) WILL REQUIRE A TAXIWAY CLOSURE. WORK WITHIN THE TOFA SHALL BE EXPEDITED. ANY DROP OFF SHALL BE ADEQUATELY LIGHTED, SIGNED AND BARRICADED. NO MATERIAL SHALL BE STOCKPILED WITHIN THE TOFA. SHOULD IT BE NECESSARY FOR THE CONTRACTOR TO TEMPORARILY RELOCATE EQUIPMENT TO ALLOW AIRCRAFT TO PASS, THEY SHALL DO SO AT NO EXTRA COST TO THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER FIVE (5) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS. REFERENCE TABLE ON PREVIOUS SHEET FOR OBJECT FREE AREA WIDTHS. NO DROP-OFFS OR OPEN EXCAVATIONS WILL BE ALLOWED WITHIN THE TAXIWAY SAFETY AREAS OF OPEN TAXIWAYS.

CONTRACTOR CROSSING RUNWAY/TAXIWAY/TAXILANE/APRON AIR OPERATIONS AREA (A.O.A.)

- ANYTIME THE CONTRACTOR IS REQUIRED TO UTILIZE OR CROSS ACTIVE AIRFIELD PAVEMENTS FOR ACCESS TO AND FROM THE WORK ZONE, A CROSSING GUARD OR ESCORT IN RADIO CONTACT WITH THE CONTROL TOWER SHALL BE FURNISHED BY THE CONTRACTOR FOR MOVEMENTS OF VEHICLES OR EQUIPMENT TO AND FROM THE WORK ZONE. THE RADIO OPERATOR SHALL BE FAMILIAR WITH AIRPORT GROUND CONTROL PROCEDURES AND DEMONSTRATE KNOWLEDGE OF SAME TO THE AIRPORT. THE AIRPORT RESERVES THE RIGHT TO APPROVE THE CROSSING GUARDS. THE CONTRACTOR SHALL PROVIDE THEIR OWN RADIOS. THIS COST SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYMENT OF MUNICIPAL FINES (\$1,000 PER OCCURRENCE) DUE TO AIRFIELD INCURSIONS BY HIS EMPLOYEES, SUBCONTRACTORS, SUPPLIERS, CONSULTANTS AND/OR AGENTS.
- ANY PAVEMENT DAMAGED BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY BY HIM TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT DIRECTOR AT NO ADDITIONAL COST TO THE OWNER. PAVEMENT SHALL BE CONTINUALLY SWEEPED TO PROVIDE DEBRIS FREE SURFACE DURING ALL HAUL ROAD OPERATIONS. THIS COST SHALL NOT BE PAID SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- WORK WITHIN THE A.O.A. SHALL BE EXPEDITED. ANY DROP OFF SHALL BE ADEQUATELY LIGHTED, SIGNED AND BARRICADED. NO MATERIAL SHALL BE STOCKPILED WITHIN THE A.O.A. SHOULD IT BE NECESSARY FOR THE CONTRACTOR TO TEMPORARILY RELOCATE MEN AND EQUIPMENT TO ALLOW AIRCRAFT TO PASS, THEY SHALL DO SO AT NO EXTRA COST TO THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT DIRECTOR TEN (10) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS.

AIRFIELD LIGHTS AND SIGNS NOTES FOR CLOSED TAXIWAYS/RUNWAYS

- CONTRACTOR SHALL COVER ALL AIRFIELD SIGNS AND TAXIWAY LIGHTS ON CLOSED TAXIWAYS UNTIL THE TAXIWAY IS RE-OPENED FOR AIRCRAFT USE. THE METHOD AND MATERIALS USED TO COVER THE SIGNS AND LIGHTS SHALL MEET THE ENGINEER'S AND AIRPORT'S APPROVAL. COST INCIDENTAL TO THE CONTRACT. REMOVING LAMPS FROM ENERGIZED FIXTURES AS A MEANS TO REMOVE THE LIGHTS OR FIXTURES FROM SERVICE SHALL NOT BE ACCEPTABLE.
- CONTRACTOR SHALL TURN OFF RUNWAY EDGE LIGHTING REGULATOR AND LOCK-OUT/TAG-OUT CIRCUIT BREAKER AND CUT OUT INSIDE THE ELECTRICAL VAULT. DURING ALL RUNWAY CLOSURES, CONTRACTOR SHALL COORDINATE ACCESS TO THE VAULT WITH THE AIRPORT MANAGER/RESIDENT ENGINEER PRIOR TO RE-OPENING THE RUNWAY, THE CONTRACTOR SHALL COORDINATE WITH AIRPORT MANAGER/RESIDENT ENGINEER TO RE-ENERGIZE THE RUNWAY CIRCUIT.

CONTRACTOR SHALL PLAN AND PERFORM HIS WORK SO AS NOT TO INTERFERE OR HINDER THE PROGRESS, WORK OR HAUL ROAD ACCESS OF OTHER CONTRACTORS (SEE SPECIAL PROVISIONS SECTION 50-05). THE PRIME CONTRACTOR WILL BE RESPONSIBLE TO COORDINATE CONSTRUCTION ACTIVITIES AND ACCESS BETWEEN ALL ON-SITE CONTRACTORS SUBCONTRACTORS. IT IS ANTICIPATED THE FOLLOWING PROJECTS MAY BE UNDER CONSTRUCTION CONCURRENTLY WITH THIS PROJECT. NO ADDITIONAL COMPENSATION SHALL BE CONSIDERED FOR ANY EFFORTS TO COORDINATE AND ACCESS THE TAXIWAY SITE DUE TO ADJACENT BUILDING CONSTRUCTION

- CONSTRUCT PERIMETER FENCE PHASE 5.
- AIRPORT PAVEMENT REHABILITATION PROJECTS.

GROUND CONTROL FREQUENCY: 121.65 MHz
AIR CONTROL FREQUENCY: 120.05 MHz

MAXIMUM ANTICIPATED HEIGHT OF CONSTRUCTION EQUIPMENT: DUMP TRUCK IN DUMP POSITION - 25'

IN THE EVENT THE CONTRACTOR PROPOSES TO UTILIZE CONSTRUCTION EQUIPMENT THAT IS TALLER THAN WHAT IS LISTED, THE CONTRACTOR WILL BE RESPONSIBLE TO SUBMIT FAA FORM 7460 FOR AIRSPACE APPROVAL. THE RESIDENT ENGINEER WILL PROVIDE BASE AIRPORT INFORMATION FOR THE CONTRACTOR'S USE.

ELECTRICAL NOTES - ALL PHASES

- ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER AIRPORT ELECTRICAL CABLES SHALL REMAIN IN SERVICE UNTIL REPLACED AS ACCEPTABLE TO THE RESIDENT ENGINEER. ALL TEMPORARY CABLING AND SPLICING NECESSARY TO KEEP THE CIRCUITS IN OPERATION SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.
- WHEN FAA CABLES ARE REQUIRED TO BE LOCATED, A 10 WORKING DAY ADVANCED NOTICE SHALL BE GIVEN TO THE FAA BEFORE ANY SUCH MARKINGS ARE REQUIRED. ONCE FAA MARKS THE CABLES, THE CONTRACTOR WILL BE REQUIRED TO SURVEY THE FAA UTILITIES SO THEY CAN BE REPLACED DURING CONSTRUCTION WITHOUT REMARKING BY THE FAA. THIS SHALL BE INCIDENTAL AND AT THE CONTRACTOR'S EXPENSE. THE FAA PERSONNEL ARE ONLY AVAILABLE FROM 9 AM TO 3 PM, MONDAY THROUGH FRIDAY WITH ADVANCED NOTICE.
- SPECIAL ATTENTION IS NECESSARY WHEN WORKING NEAR FAA POWER AND CONTROL CABLES. ANY FAA UTILITY THAT IS DAMAGED OR CUT DURING CONSTRUCTION SHALL BE REPAIRED IMMEDIATELY. FAA REQUIRES THAT ANY DAMAGED CABLE BE REPLACED IN ITS ENTIRETY, FROM POWER/CONTROL SOURCE TO THE EQUIPMENT/SERVICE. SPLICES OF ANY KIND WILL NOT BE PERMITTED. EXPOSURES OF ANY FAA CABLES MUST BE DONE BY HAND DIGGING OR HYDRO-EXCAVATION. NO ADDITIONAL COMPENSATION WILL BE MADE FOR LOCATING, REPLACEMENT OR REPAIR OF FAA FACILITIES OR CABLES BUT, SHALL BE INCIDENTAL AND AT THE CONTRACTOR'S EXPENSE.

PHASING NOTES (ALL PHASES)

- THE INTENT OF THE CONSTRUCTION ACTIVITY PLANS IS TO MINIMIZE THE IMPACT OF CONSTRUCTION ON THE OPERATION OF THE AIRPORT. THE CONTRACTOR SHALL CONSTRUCT THE PROJECT IN CONSECUTIVE PHASES OUTLINED IN THE PLANS UNLESS OTHERWISE APPROVED BY THE RESIDENT ENGINEER AND AIRPORT MANAGER.
- ASSUMPTION: 1 WORK PERIOD = 8 HOURS OF WORK

1 WEEKEND 10:00 PM FRIDAY TO 6:00 AM = 56 HOURS. ANTICIPATE 40 HOURS WORK PER WEEKEND. REMAINING BUFFER FOR OPENING, EMERGENCIES AND WEATHER AS APPROVED BY THE AIRPORT, ADDITIONAL WEEK NIGHT CLOSURES AND/OR WEEKEND CLOSURE MAY BE REQUIRED TO COMPLETE THE PROJECT IF CLOSURES ARE CANCELED DUE TO ADVERSE WEATHER CONDITIONS
- ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER AIRPORT ELECTRICAL CABLES SHALL REMAIN IN SERVICE UNTIL REPLACED AS ACCEPTABLE TO THE RESIDENT ENGINEER. ALL TEMPORARY CABLING AND SPLICING NECESSARY TO KEEP THE CIRCUITS IN OPERATION SHALL BE CONSIDERED INCIDENTAL TO CONTRACT. ALL TEMPORARY CABLING SHALL BE PLACED IN SCHEDULE 40 PVC CONDUIT ALONG CLOSED SIDE OF BARRICADE LINE.
- CONTRACTOR MAY REQUEST TO COMBINE WORK PHASES/AREAS. THE AIRPORT WILL DETERMINE IF THE REQUEST IS ACCEPTABLE.
- PRIOR TO REOPENING A CLOSED RUNWAY THE ENTIRE RUNWAY SAFETY AREA (RSA), AND THE TAXIWAY OBJECT FREE AREA (TOFA) MUST MEET FAA CRITERIA. FAA CRITERIA REQUIRES THAT THERE IS NO OPEN EXCAVATIONS OR TRENCHES IN THE SAFETY AREA(S), THE MAXIMUM PAVEMENT DROP OFF IS THREE (3) INCHES, AND ALL GRADES IN ANY DIRECTION BE LESS THAN THREE (3) PERCENT. STEEL PLATES MAY BE REQUIRED TO MEET CRITERIA. IF NECESSARY, TEMPORARY MEASURES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT
- THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SAFETY SCHEDULE, STRICT ADHERENCE TO THE APPROVED SCHEDULE WILL BE ENFORCED TO AVOID CONFLICT WITH OTHER CONSTRUCTION ACTIVITIES ON THE AIRPORT AND THE ADVERSE EFFECTS THEY COULD HAVE ON THE AIRPORT OPERATIONS.
- THE CONTRACTOR SHALL COORDINATE CLOSELY WITH THE AIRPORT STAFF TO SCHEDULE THE RUNWAY/TAXIWAY CLOSURES. ITEMS SUCH AS THE EXTENDED WEATHER FORECAST, MATERIAL AVAILABILITY, EQUIPMENT DEPENDABILITY AND MANPOWER AVAILABILITY SHALL BE DISCUSSED PRIOR TO SCHEDULING THIS CRITICAL CLOSURE. THE AIRPORT MANAGER AND THE CONTRACTOR SHALL MUTUALLY AGREE ON THE EXACT DATES AND TIMES OF THE CLOSURE(S).
- WHEN HAUL ROUTE IS IN USE ON ACTIVE AIRFIELD PAVEMENTS, THE CONTRACTOR WILL BE REQUIRED TO BE UNDER CONTROL BY A CROSSING GUARD OR ESCORT IN RADIO CONTACT WITH THE ATCT FOR CONSTRUCTION PERSONNEL, CONSTRUCTION TRAFFIC, CONTRACTORS VEHICLES AND EQUIPMENT CROSSING BY, TO OR FROM WORK ZONE. STOP SIGNS SHALL BE IN PLACE AT ALL TIMES IN THIS AREA. THIS WORK SHALL BE INCIDENTAL TO THE CONTRACT.
- TEMPORARY CLOSED TAXIWAY MARKERS ARE ONLY REQUIRED WHEN THE TAXIWAY WILL REMAIN CLOSED FOR 3 CONSECUTIVE DAYS OR MORE.
- IF A RUNWAY OR TAXIWAY IS TO REOPEN PRIOR TO FINAL TOPSOILING AND GRADING, THE MAXIMUM SIGN BASE EDGE DROP OFF SHALL BE 3-INCHES AND MAXIMUM SLOPES SHALL BE 3%. THE SURROUNDING AREA ADJACENT TO THE SIGN BASE SHALL BE SMOOTHLY GRADED.
- CONTRACTOR MUST MAINTAIN ACCESS TO ALL ACTIVE AND OPEN AREAS AT ALL TIMES. CONTRACTOR SHALL RELOCATE EQUIPMENT TO PROVIDE MINIMAL DISRUPTIONS TO THE ACTIVE AIRCRAFT MOVEMENT AREA. FAA AND AIRPORT ROAD(S) SHALL NOT BE USED AS A HAUL ROUTE BY THE CONTRACTOR WITHOUT PRIOR APPROVAL.
- TO THE EXTENT POSSIBLE THE CONTRACTOR SHALL HAVE ALL EMPLOYEE PARKING OUTSIDE OF THE AIRPORT FENCE OR AS INDICATED AT THE LOCATION SHOWN.
- THE AIRPORT RESERVES THE RIGHT TO MODIFY THE SEQUENCE OF THE CONSTRUCTION INCLUDING BUT NOT LIMITED TO PHASING, WORK AREAS, BARRICADE PLACEMENT, ACCESS AND HAUL ROUTES, AND CONTRACTOR MOVEMENT AT ANY TIME DURING THE PROJECT WITH FAA AND IDA APPROVAL.

LIQUIDATED DAMAGES (PHASE 3)

- BECAUSE OF CRITICAL LIMITATIONS WHICH THE CLOSURE OF RUNWAY 5-23, PLACES ON THE USERS OF THE AIRPORT, LIQUIDATED DAMAGES IN THE AMOUNT OF \$2,500 MAY BE DEDUCTED FROM THE CONTRACT FOR EACH HALF HOUR PAST 6:00 AM UNTIL SPECIFIED WORK IS COMPLETED AND THE RUNWAY IS REOPENED TO AIRCRAFT TRAFFIC. DAMAGES MAY BE ASSESSED STARTING AT 6:01 AM ON ANY DAY THE RUNWAY IS NOT REOPENED
- SEE SEQUENCE OF CONSTRUCTION PHASING, SCHEDULE AND GENERAL NOTES FOR DETAILS ON THE RUNWAY CLOSURE. FOR EVERY ADDITIONAL 5-23 CLOSURE REQUIRED BY THE CONTRACTOR, LIQUIDATED DAMAGES IN THE AMOUNT OF \$2,500 MAY BE ASSESSED.

IL CONTRACT: **WA075**
IL LETTING ITEM: **06A**
IL PROJECT: **UGN-4824**
S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS

NUMBER	BY	DATE



WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS

CONSTRUCTION ACTIVITY PLAN NOTES - SHEET 3


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DESIGN BY:	DKP
DRAWN BY:	JM
CHECKED BY:	DKP
APPROVED BY:	DKP
DATE:	4/16/2021
JOB No:	20022602-00

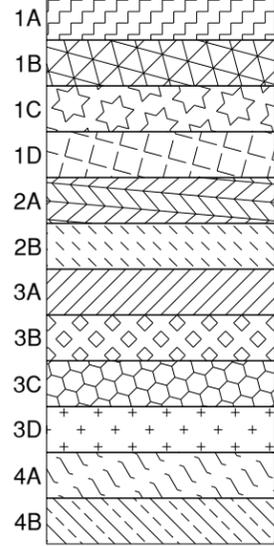
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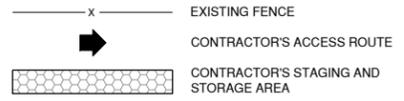
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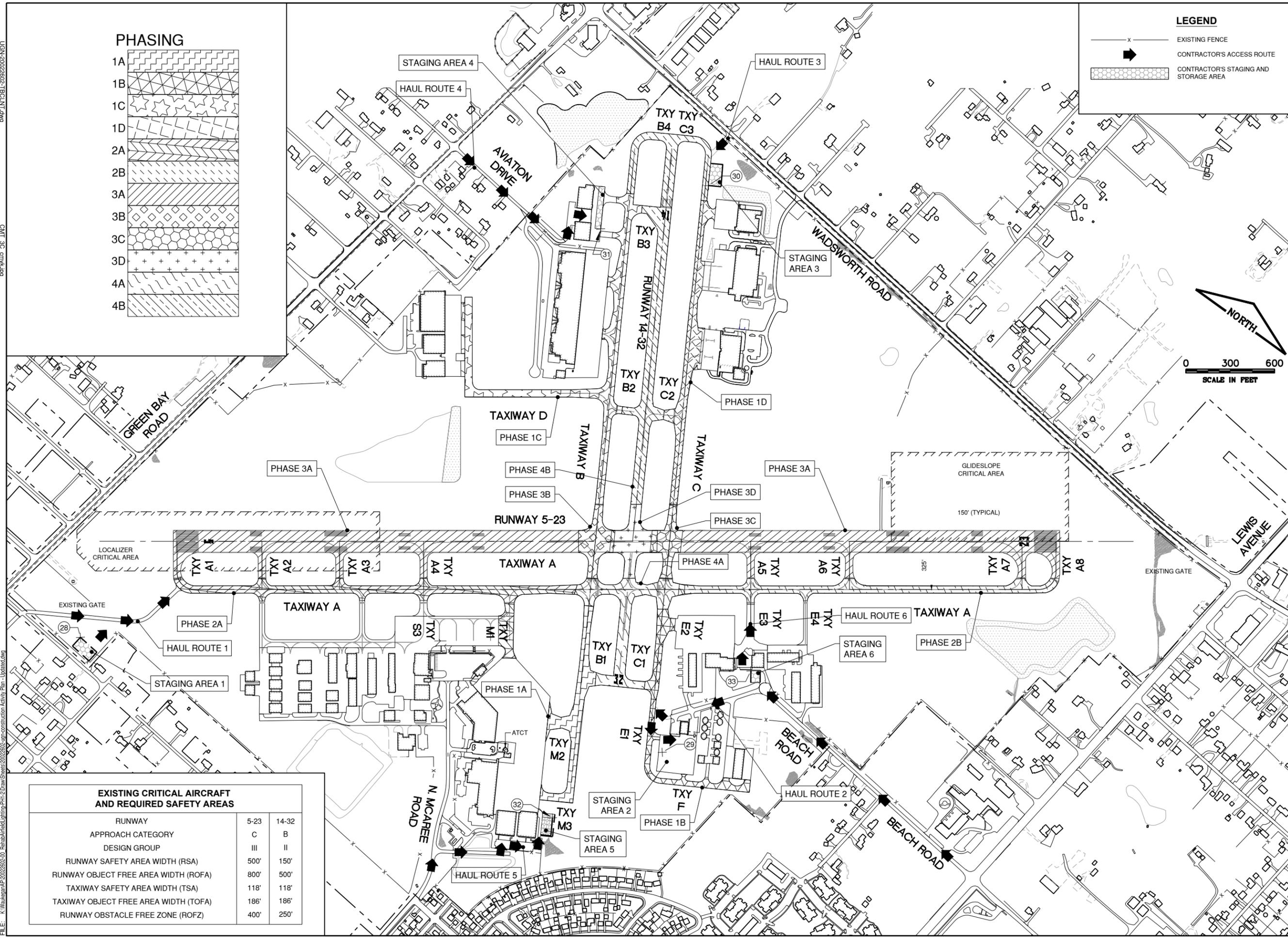
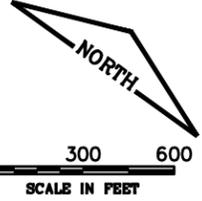
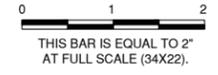
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IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS

NUMBER	BY	DATE



**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS**
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS
CONSTRUCTION ACTIVITY PLAN - INDEX

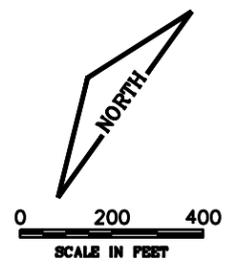
EXISTING CRITICAL AIRCRAFT AND REQUIRED SAFETY AREAS		
	5-23	14-32
RUNWAY	C	B
APPROACH CATEGORY	C	B
DESIGN GROUP	III	II
RUNWAY SAFETY AREA WIDTH (RSA)	500'	150'
RUNWAY OBJECT FREE AREA WIDTH (ROFA)	800'	500'
TAXIWAY SAFETY AREA WIDTH (TSA)	118'	118'
TAXIWAY OBJECT FREE AREA WIDTH (TOFA)	186'	186'
RUNWAY OBSTACLE FREE ZONE (ROFZ)	400'	250'

CMT
 CRAWFORD, MURPHY & TILLY, INC.
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 License No. 184-000613

DESIGN BY:	JMM
DRAWN BY:	JMM
CHECKED BY:	DKP
APPROVED BY:	AB
DATE:	4/16/2021
JOB No:	20022602-00

FINAL
 SHEET 7 OF 61 SHEETS

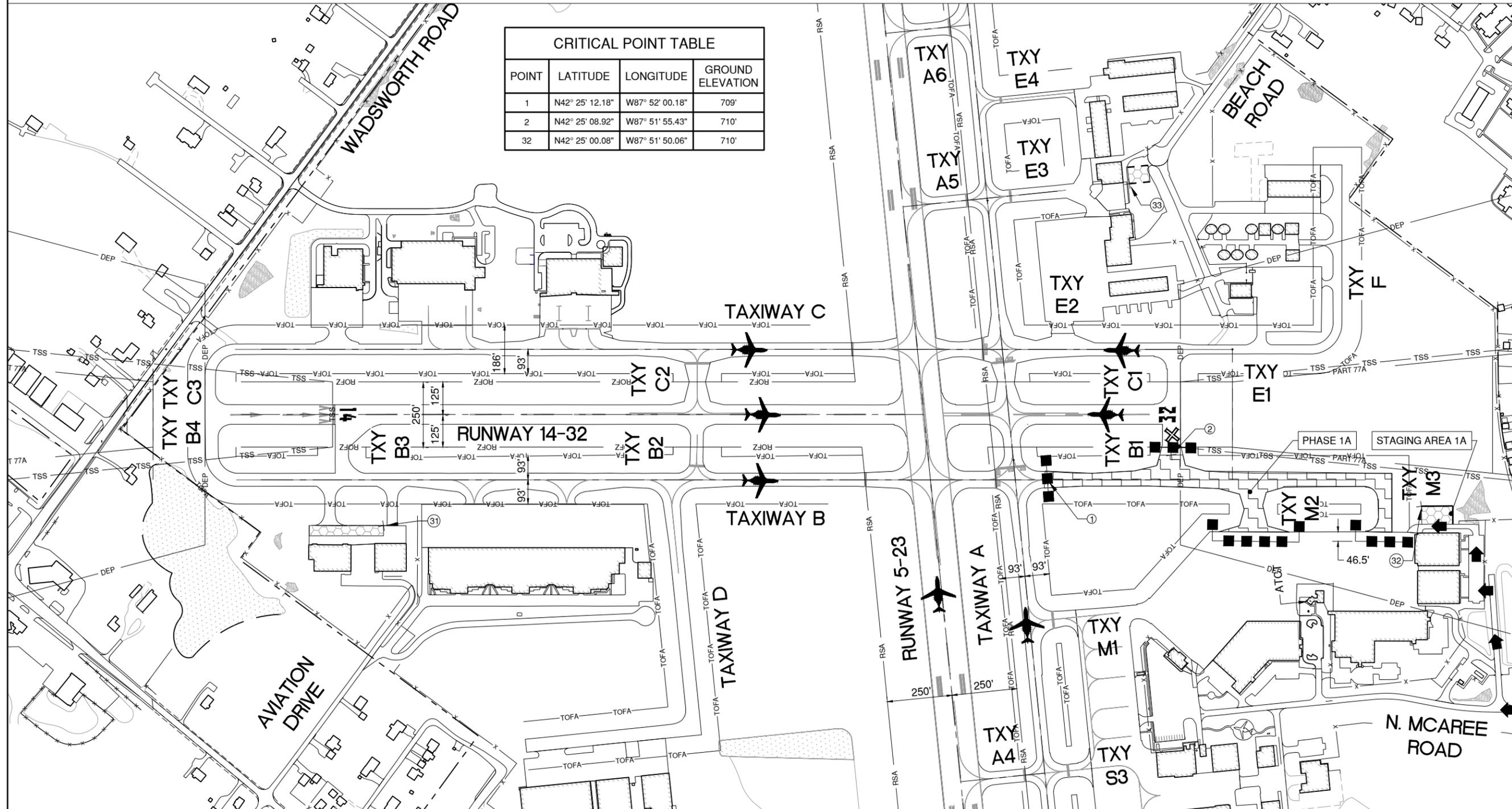
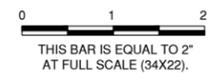
PHASE	CONSTRUCTION	AFFECTED ACTIVE OPERATIONS AREAS (AOA)	WORK HOURS	SAFETY AND SECURITY
1A	REHABILITATE TAXIWAY B EDGE LIGHTS	TAXIWAY B CLOSED SOUTH OF TAXIWAY A	UNRESTRICTED	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
1B	REHABILITATE TAXIWAY C EDGE LIGHTS	TAXIWAY C CLOSED SOUTH OF TAXIWAY A TAXIWAY F CLOSED	UNRESTRICTED	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
1C	REHABILITATE TAXIWAY B EDGE LIGHTS	TAXIWAY B CLOSED NORTH OF RUNWAY 5-23 TAXIWAY D CLOSED	UNRESTRICTED	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
1D	REHABILITATE TAXIWAY C EDGE LIGHTS	TAXIWAY C CLOSED NORTH OF RUNWAY 5-23	UNRESTRICTED	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.



LEGEND	
	WORK AREA LIMITS
	LOW PROFILE BARRICADES
	IDOT TYPE II BARRICADES
	RUNWAY SAFETY AREA
	RUNWAY PROTECTION ZONE
	EXISTING FENCE
	RUNWAY THRESHOLD SITING SURFACE
	RUNWAY APPROACH PART 77 SURFACE
	RUNWAY DEPARTURE SURFACE
	CONTRACTOR'S STAGING AND STORAGE AREA
	CONTRACTOR'S ACCESS ROUTE
	AIRCRAFT MOVEMENT AREA
	TAXIWAY CLOSURE MARKER
	RUNWAY CLOSURE MARKER
	TAXIWAY OBJECT FREE AREA
	RUNWAY OBSTACLE FREE ZONE

IL. CONTRACT: **WA075**
 IL. LETTING ITEM: **06A**
 IL. PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBG-XXX**

REVISIONS		
NUMBER	BY	DATE



CRITICAL POINT TABLE			
POINT	LATITUDE	LONGITUDE	GROUND ELEVATION
1	N42° 25' 12.18"	W87° 52' 00.18"	709'
2	N42° 25' 08.92"	W87° 51' 55.43"	710'
32	N42° 25' 00.08"	W87° 51' 50.06"	710'

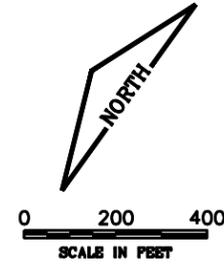
WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS

CONSTRUCTION ACTIVITY PLAN - PHASE 1A

CMT
 CRAWFORD, MURPHY & TILLY, INC.
 CONSULTING ENGINEERS
 License No. 184-000613

DESIGN BY:	JMM
DRAWN BY:	JMM
CHECKED BY:	DKP
APPROVED BY:	AB
DATE:	4/16/2021
JOB No:	20022602-00
FINAL	
SHEET 8 OF 61 SHEETS	

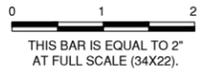
PHASE	CONSTRUCTION	AFFECTED ACTIVE OPERATIONS AREAS (AOA)	WORK HOURS	SAFETY AND SECURITY
1A	REHABILITATE TAXIWAY B EDGE LIGHTS	TAXIWAY B CLOSED SOUTH OF TAXIWAY A	UNRESTRICTED	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
1B	REHABILITATE TAXIWAY C EDGE LIGHTS	TAXIWAY C CLOSED SOUTH OF TAXIWAY A TAXIWAY F CLOSED	UNRESTRICTED	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
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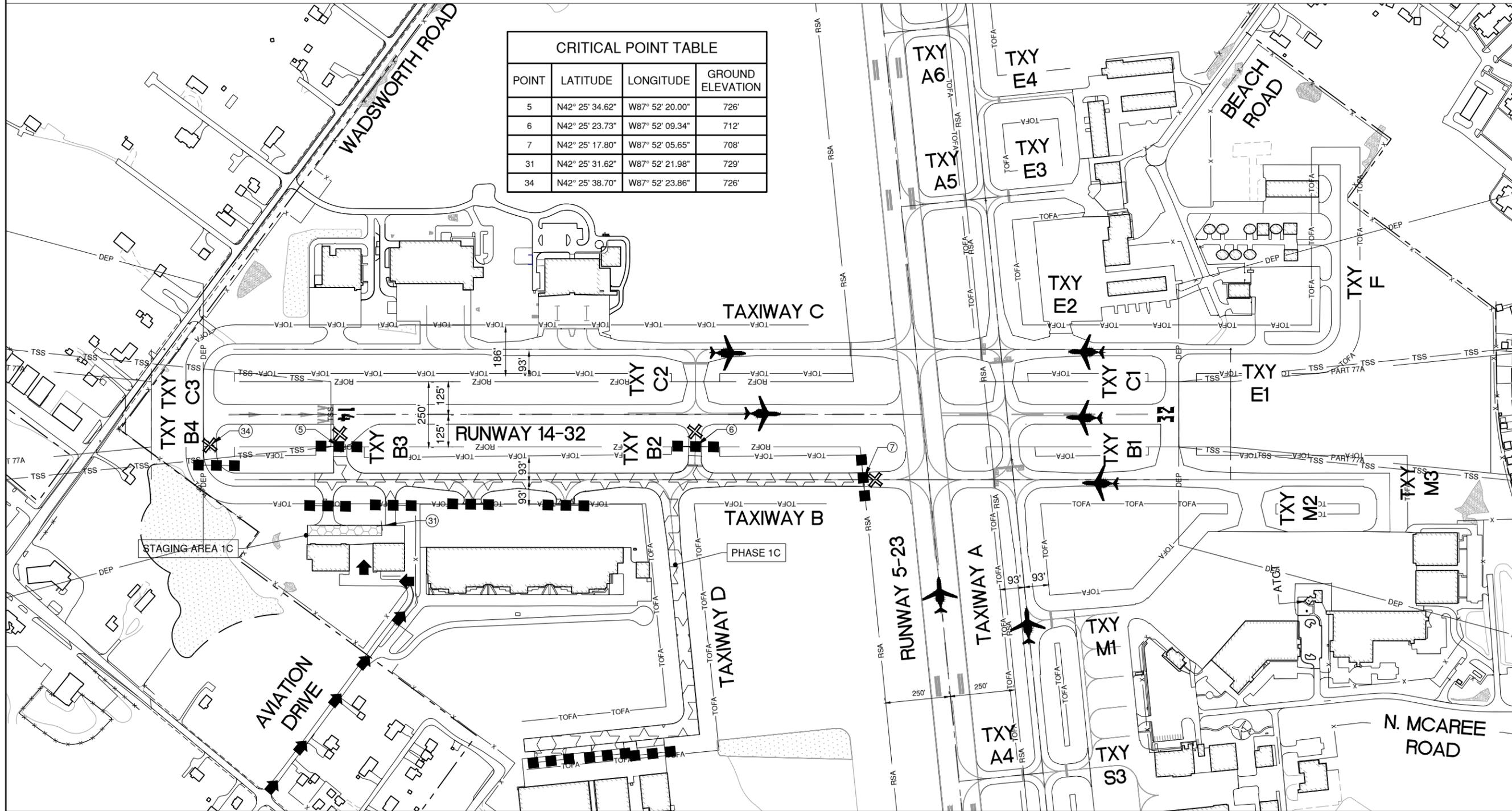
LEGEND	
	WORK AREA LIMITS
	LOW PROFILE BARRICADES
	IDOT TYPE II BARRICADES
	RUNWAY SAFETY AREA
	RUNWAY PROTECTION ZONE
	EXISTING FENCE
	RUNWAY THRESHOLD SITING SURFACE
	RUNWAY APPROACH PART 77 SURFACE
	RUNWAY DEPARTURE SURFACE
	CONTRACTOR'S STAGING AND STORAGE AREA
	CONTRACTOR'S ACCESS ROUTE
	AIRCRAFT MOVEMENT AREA
	TAXIWAY CLOSURE MARKER
	RUNWAY CLOSURE MARKER
	TAXIWAY OBJECT FREE AREA
	RUNWAY OBSTACLE FREE ZONE

IL. CONTRACT: **WA075**
 IL. LETTING ITEM: **06A**
 IL. PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBG-XXX**

REVISIONS		
NUMBER	BY	DATE



CRITICAL POINT TABLE			
POINT	LATITUDE	LONGITUDE	GROUND ELEVATION
5	N42° 25' 34.62"	W87° 52' 20.00"	726'
6	N42° 25' 23.73"	W87° 52' 09.34"	712'
7	N42° 25' 17.80"	W87° 52' 05.65"	708'
31	N42° 25' 31.62"	W87° 52' 21.98"	729'
34	N42° 25' 38.70"	W87° 52' 23.86"	726'



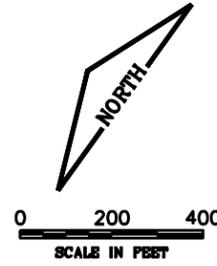
WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS

CONSTRUCTION ACTIVITY PLAN - PHASE 1C

CMT
 CRAWFORD, MURPHY & TILLY, INC.
 CONSULTING ENGINEERS
 License No. 184-000613

DESIGN BY:	JMM
DRAWN BY:	JMM
CHECKED BY:	DKP
APPROVED BY:	AB
DATE:	4/16/2021
JOB No:	20022602-00
FINAL	
SHEET 10 OF 61 SHEETS	

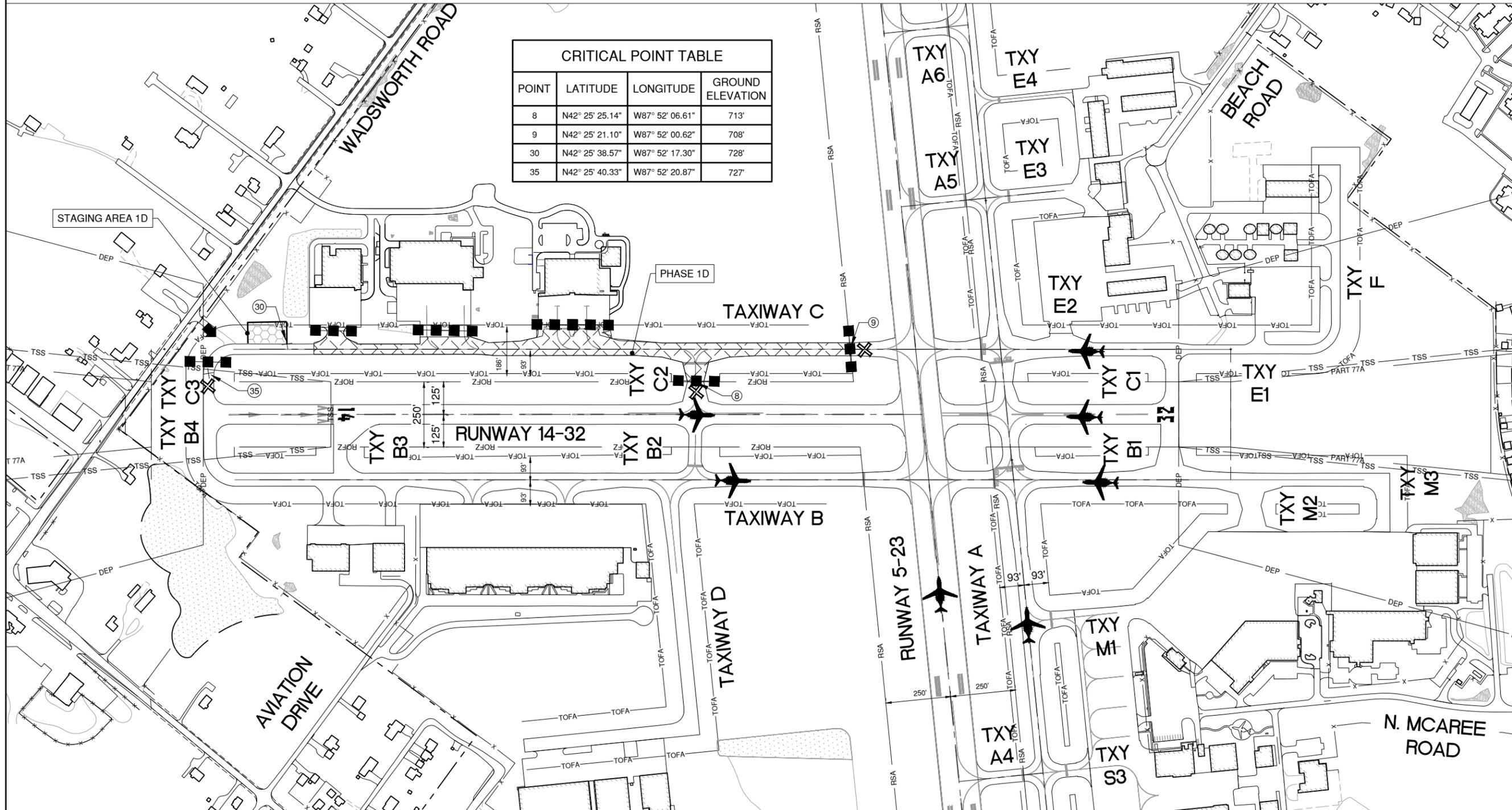
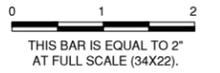
PHASE	CONSTRUCTION	AFFECTED ACTIVE OPERATIONS AREAS (AOA)	WORK HOURS	SAFETY AND SECURITY
1A	REHABILITATE TAXIWAY B EDGE LIGHTS	TAXIWAY B CLOSED SOUTH OF TAXIWAY A	UNRESTRICTED	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
1B	REHABILITATE TAXIWAY C EDGE LIGHTS	TAXIWAY C CLOSED SOUTH OF TAXIWAY A TAXIWAY F CLOSED	UNRESTRICTED	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
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LEGEND	
	WORK AREA LIMITS
	LOW PROFILE BARRICADES
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	EXISTING FENCE
	RUNWAY THRESHOLD SITING SURFACE
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	RUNWAY CLOSURE MARKER
	TAXIWAY OBJECT FREE AREA
	RUNWAY OBSTACLE FREE ZONE

IL. CONTRACT: **WA075**
 IL. LETTING ITEM: **06A**
 IL. PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS		
NUMBER	BY	DATE



POINT	LATITUDE	LONGITUDE	GROUND ELEVATION
8	N42° 25' 25.14"	W87° 52' 06.61"	713'
9	N42° 25' 21.10"	W87° 52' 00.62"	708'
30	N42° 25' 38.57"	W87° 52' 17.30"	728'
35	N42° 25' 40.33"	W87° 52' 20.87"	727'

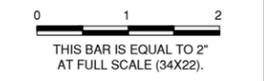
WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS

CONSTRUCTION ACTIVITY PLAN - PHASE 1D

CMT
 CRAWFORD, MURPHY & TILLY, INC.
 CONSULTING ENGINEERS
 License No. 184-000613

DESIGN BY:	JMM
DRAWN BY:	JMM
CHECKED BY:	DKP
APPROVED BY:	AB
DATE:	4/16/2021
JOB No:	20022602-00
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SHEET 11 OF 61 SHEETS	

REVISIONS		
NUMBER	BY	DATE



WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS
CONSTRUCTION ACTIVITY PLAN - PHASE 2A

 **CMT**
 CRAWFORD, MURPHY & TILLY, INC.
 CONSULTING ENGINEERS
 License No. 184-000613

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DRAWN BY:	JMM
CHECKED BY:	DKP
APPROVED BY:	AB
DATE:	4/16/2021
JOB No:	20022602-00
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SHEET 12 OF 61 SHEETS	

Vault Improvements

- USE EXISTING OLD VAULT FOR TEMPORARY 5/23 REGULATOR. CONTACT COMED TO ENERGIZE EXISTING SERVICE. INSTALL CIRCUIT BREAKER AND RADIO CONTROLLER. INSTALL JUMPERS TO EXISTING HANDHOLE TO FEED RUNWAY 5/23 CIRCUIT.
- RUNWAY 5/23 LIGHTING SHALL REMAIN IN OPERATION IN PHASE 2 UNDER A TEMPORARY CONDITION.
- ALL OTHER AIRFIELD LIGHTING CIRCUITS WILL NOT BE IN OPERATION DURING PHASE 2 VAULT IMPROVEMENTS.
- AT THE END OF PHASE 2 ALL AIRFIELD LIGHTING CIRCUITS SHALL BE OPERATIONAL.

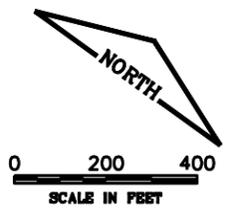
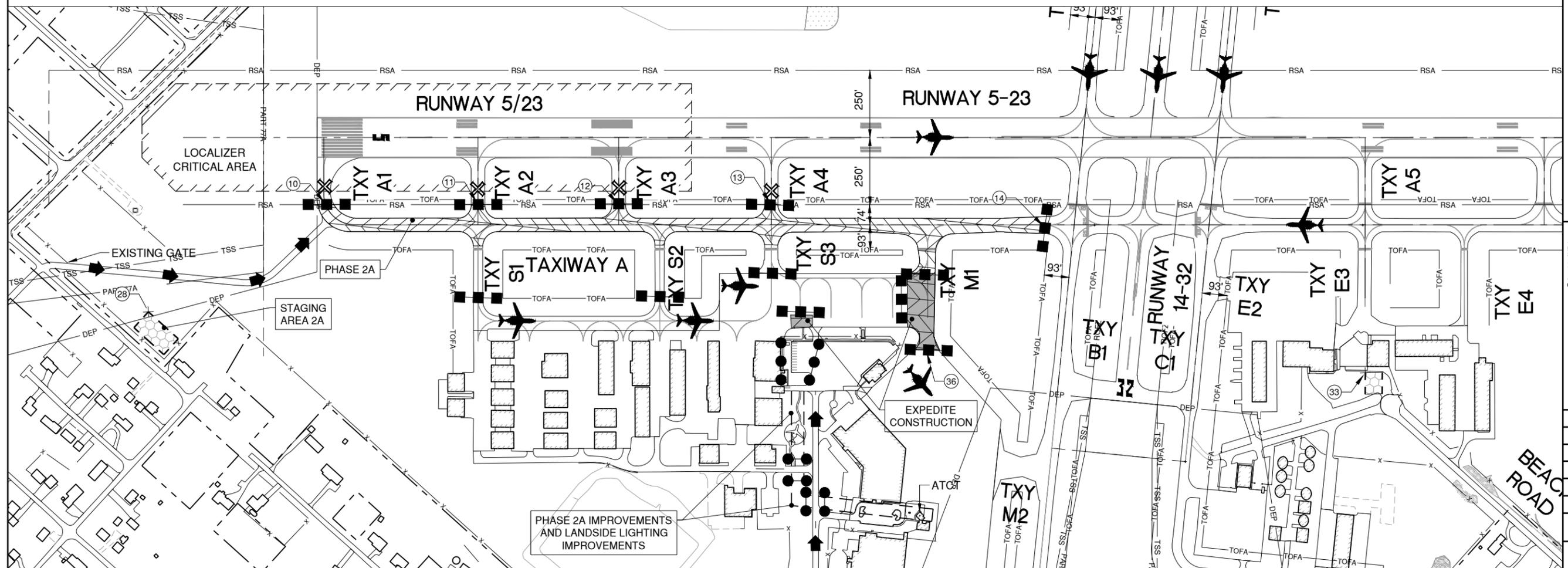
CRITICAL POINT TABLE			
POINT	LATITUDE	LONGITUDE	GROUND ELEVATION
10	N42° 24' 55.44"	W87° 52' 29.65"	723'
11	N42° 24' 59.15"	W87° 52' 23.99"	716'
12	N42° 25' 02.60"	W87° 52' 18.75"	710'
13	N42° 25' 06.32"	W87° 52' 13.07"	709'
14	N42° 25' 12.37"	W87° 52' 02.13"	709'
28	N42° 24' 48.16"	W87° 52' 32.73"	729'
36	N42° 25' 06.13"	W87° 52' 02.56"	708'

SEE SHEET 6, PHASING NOTES (ALL PHASES), NOTE 8 FOR CROSSING ACTIVE PAVEMENTS.

NOTES

- WORK ADJACENT TO APRON SHALL BE EXPEDITED AND OPENED TO TRAFFIC AT THE END OF EACH WORK DAY. THIS APRON WORK SHALL BE CONCURRENT.

PHASE	CONSTRUCTION	AFFECTED ACTIVE OPERATIONS AREAS (AOA)	WORK HOURS	SAFETY AND SECURITY
2A	REHABILITATE TAXIWAY A1 EDGE LIGHT CIRCUIT. INSTALL HOME RUN DUCT BANK AND ASSOCIATED HANDHOLES; CONSTRUCT VAULT IMPROVEMENTS AND LANDSIDE LIGHTING	TAXIWAY A CLOSED WEST OF B	UNRESTRICTED	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
2B	REHABILITATE TAXIWAY A2 EDGE LIGHT CIRCUIT; CONSTRUCT VAULT IMPROVEMENTS	TAXIWAY A CLOSED EAST OF C	UNRESTRICTED	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.



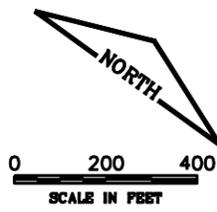
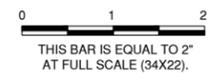
LEGEND

- WORK AREA LIMITS
- LOW PROFILE BARRICADES
- IDOT TYPE II BARRICADES
- RSA RUNWAY SAFETY AREA
- RPZ RUNWAY PROTECTION ZONE
- EXISTING FENCE
- TSS RUNWAY THRESHOLD SITING SURFACE
- PART 77A RUNWAY APPROACH PART 77 SURFACE
- DEP RUNWAY DEPARTURE SURFACE
- CONTRACTOR'S STAGING AND STORAGE AREA
- CONTRACTOR'S ACCESS ROUTE
- AIRCRAFT MOVEMENT AREA
- TAXIWAY CLOSURE MARKER
- RUNWAY CLOSURE MARKER
- TOFA TAXIWAY OBJECT FREE AREA
- ROFZ RUNWAY OBSTACLE FREE ZONE

IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS

NUMBER	BY	DATE



LEGEND

- WORK AREA LIMITS
- LOW PROFILE BARRICADES
- IDOT TYPE II BARRICADES
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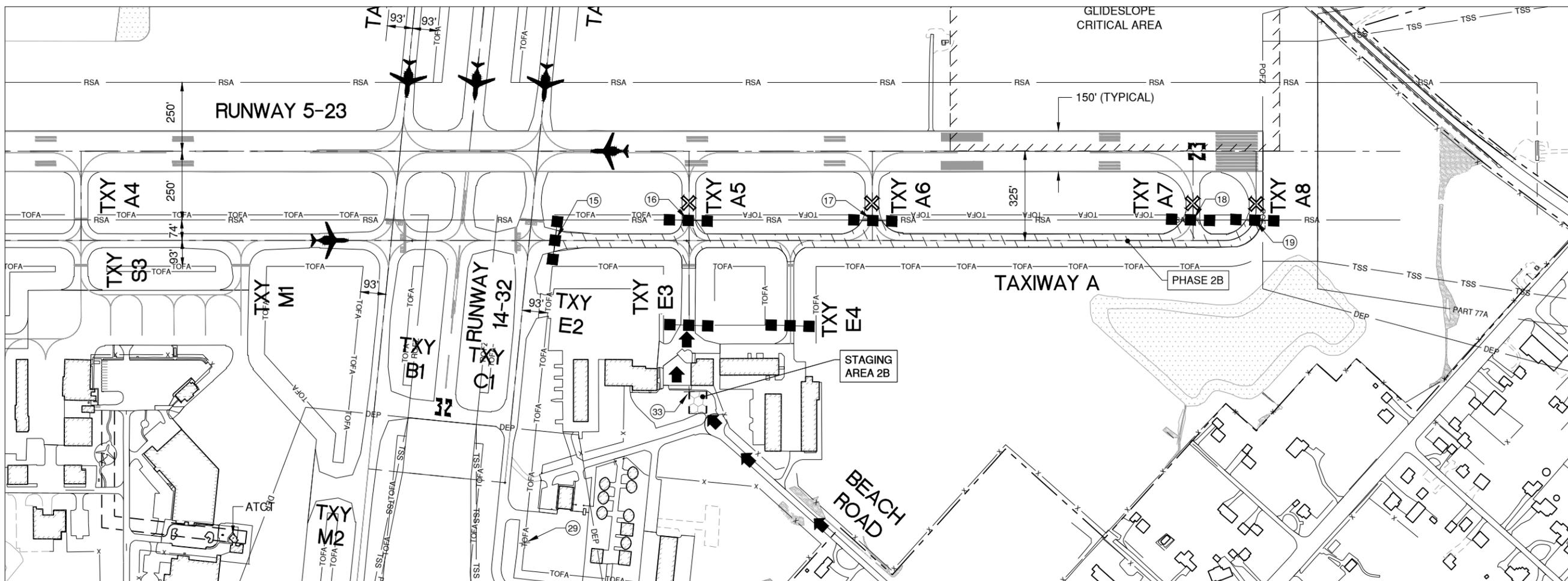
NOTES

- SEE CONSTRUCTION ACTIVITY PLAN - PHASE 2A FOR VAULT IMPROVEMENT NOTES.

POINT	LATITUDE	LONGITUDE	GROUND ELEVATION
15	N42° 25' 17.09"	W87° 51' 55.18"	709'
16	N42° 25' 20.80"	W87° 51' 50.99"	711'
17	N42° 25' 25.21"	W87° 51' 44.31"	712'
18	N42° 25' 32.85"	W87° 51' 32.64"	717'
19	N42° 25' 34.32"	W87° 51' 30.43"	719'
33	N42° 25' 16.22"	W87° 51' 45.45"	716'

TAXIWAY D CLOSED

PHASE	CONSTRUCTION	AFFECTED ACTIVE OPERATIONS AREAS (AOA)	WORK HOURS	SAFETY AND SECURITY
2A	REHABILITATE TAXIWAY A1 EDGE LIGHT CIRCUIT. INSTALL HOME RUN DUCT BANK AND ASSOCIATED HANDHOLES; CONSTRUCT VAULT IMPROVEMENTS AND LANDSIDE LIGHTING	TAXIWAY A CLOSED WEST OF B	UNRESTRICTED	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
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WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS
CONSTRUCTION ACTIVITY PLAN - PHASE 2B

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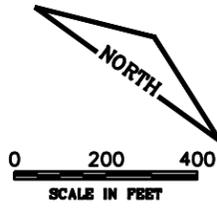
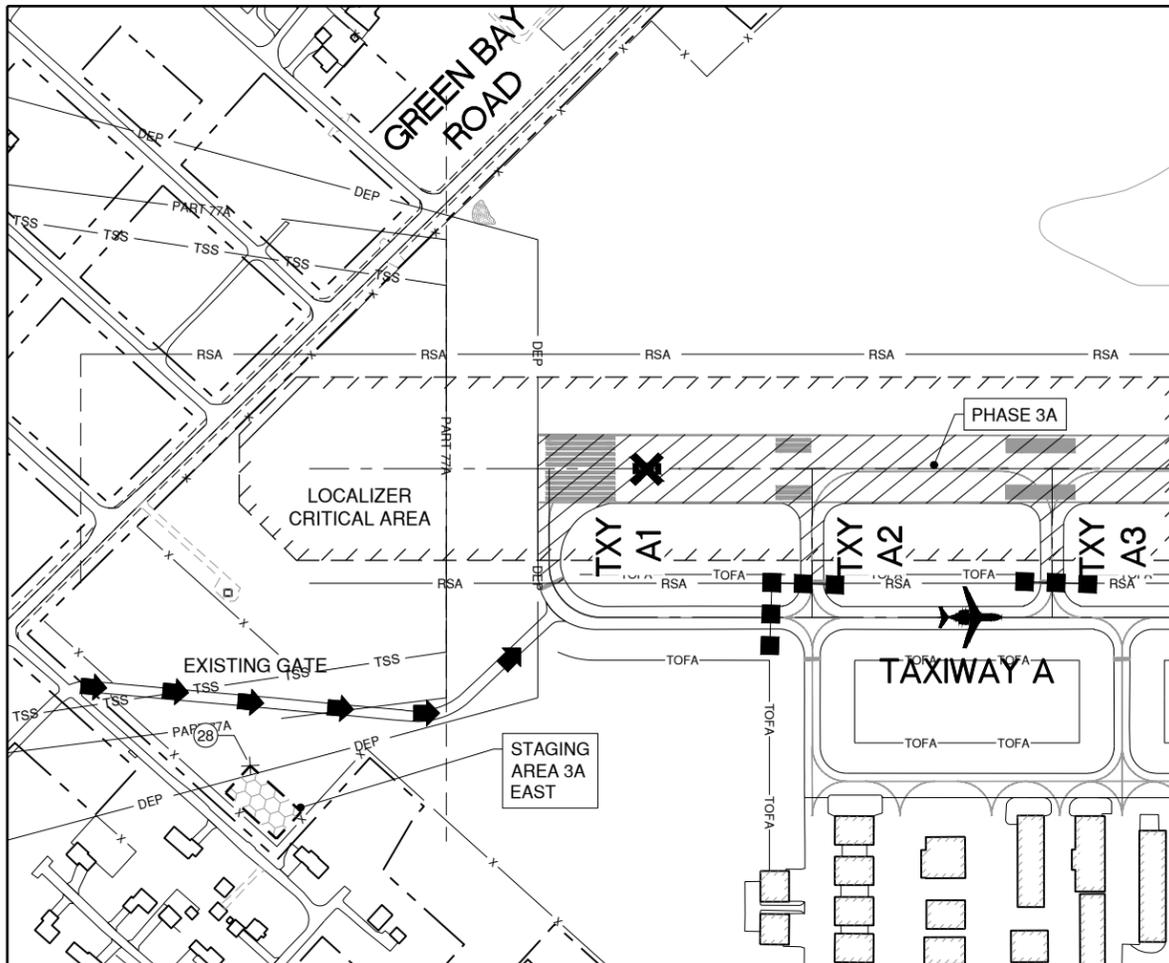


CMT
 CRAWFORD, MURPHY & TILLY, INC.
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 License No. 184-000613



DESIGN BY:	JMM
DRAWN BY:	JMM
CHECKED BY:	DKP
APPROVED BY:	AB
DATE:	4/16/2021
JOB No:	20022602-00

FINAL



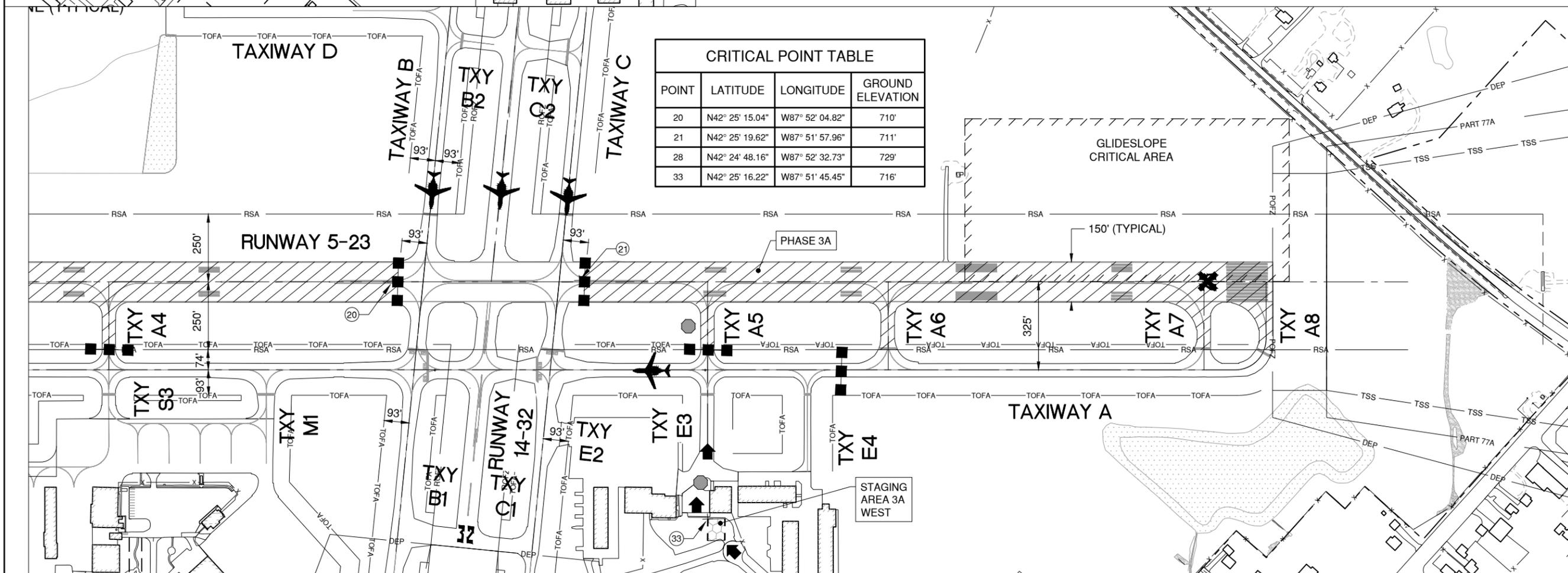
SEE SHEET 6, PHASING NOTES (ALL PHASES), NOTE 8 FOR CROSSING ACTIVE PAVEMENTS.

LEGEND	
	WORK AREA LIMITS
	LOW PROFILE BARRICADES
	IDOT TYPE II BARRICADES
	RUNWAY SAFETY AREA
	RUNWAY PROTECTION ZONE
	EXISTING FENCE
	RUNWAY THRESHOLD SITING SURFACE
	RUNWAY APPROACH PART 77 SURFACE
	RUNWAY DEPARTURE SURFACE
	CONTRACTOR'S STAGING AND STORAGE AREA
	CONTRACTOR'S ACCESS ROUTE
	AIRCRAFT MOVEMENT AREA
	TAXIWAY CLOSURE MARKER
	RUNWAY CLOSURE MARKER
	TAXIWAY OBJECT FREE AREA
	RUNWAY OBSTACLE FREE ZONE
	CROSSING GUARD STOP - A.O.A. SIGN OR CONTRACTOR'S ESCORT WITH RADIO

PHASE	CONSTRUCTION	AFFECTED ACTIVE OPERATIONS AREAS (AOA)	WORK HOURS	SAFETY AND SECURITY
3A	REHABILITATE RUNWAY 5-23 EDGE LIGHTS AND TAXIWAY A EDGE LIGHTS INSIDE RSA, INSTALL SUPPLEMENTARY WINDCONES ON CIRCUIT, INSTALL MANDATORY HOLD SIGNS AND DIRECTIONAL SIGNS INTO RUNWAY 5-23 CIRCUIT	RUNWAY 5-23 CLOSED. RUNWAY 14-32, TAXIWAY B, AND TAXIWAY C TO REMAIN OPEN	FRIDAY 10:00PM - MONDAY 6:00AM	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
3B	REHABILITATE RUNWAY 5-23 EDGE LIGHTS AND TAXIWAY B EDGE LIGHTS INSIDE RSA, INSTALL MANDATORY HOLD SIGNS AND DIRECTIONAL SIGNS INTO RUNWAY 5-23 CIRCUIT	RUNWAY 5-23 CLOSED, TAXIWAY B CLOSED AT RUNWAY 5-23 INTERSECTION. RUNWAY 14-32 AND TAXIWAY C TO REMAIN OPEN	FRIDAY 10:00PM - MONDAY 6:00AM	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
3C	REHABILITATE RUNWAY 5-23 EDGE LIGHTS AND TAXIWAY C EDGE LIGHTS INSIDE RSA, INSTALL MANDATORY HOLD SIGNS AND DIRECTIONAL SIGNS INTO RUNWAY 5-23 CIRCUIT	RUNWAY 5-23 CLOSED, TAXIWAY C CLOSED AT RUNWAY 5-23 INTERSECTION. RUNWAY 14-32 AND TAXIWAY B TO REMAIN OPEN	FRIDAY 10:00PM - MONDAY 6:00AM	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
3D	REHABILITATE RUNWAY 5-23 AND RUNWAY 14-32 EDGE LIGHTS INSIDE BOTH RUNWAY RSA	BOTH RUNWAY 5-23 AND RUNWAY 14-32 CLOSED	FRIDAY 10:00PM - MONDAY 6:00AM	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.

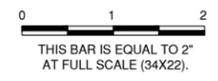
PHASE 3A SHALL BE COMPLETED IN TEN (10) WEEKEND CLOSURES

POINT	LATITUDE	LONGITUDE	GROUND ELEVATION
20	N42° 25' 15.04"	W87° 52' 04.82"	710'
21	N42° 25' 19.62"	W87° 51' 57.96"	711'
28	N42° 24' 48.16"	W87° 52' 32.73"	729'
33	N42° 25' 16.22"	W87° 51' 45.45"	716'



IL CONTRACT: WA075
 IL LETTING ITEM: 06A
 IL PROJECT: UGN-4824
 S.B.G. PROJECT: 3-17-SBGP-XXX

REVISIONS		
NUMBER	BY	DATE



WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS
CONSTRUCTION ACTIVITY PLAN - PHASE 3A

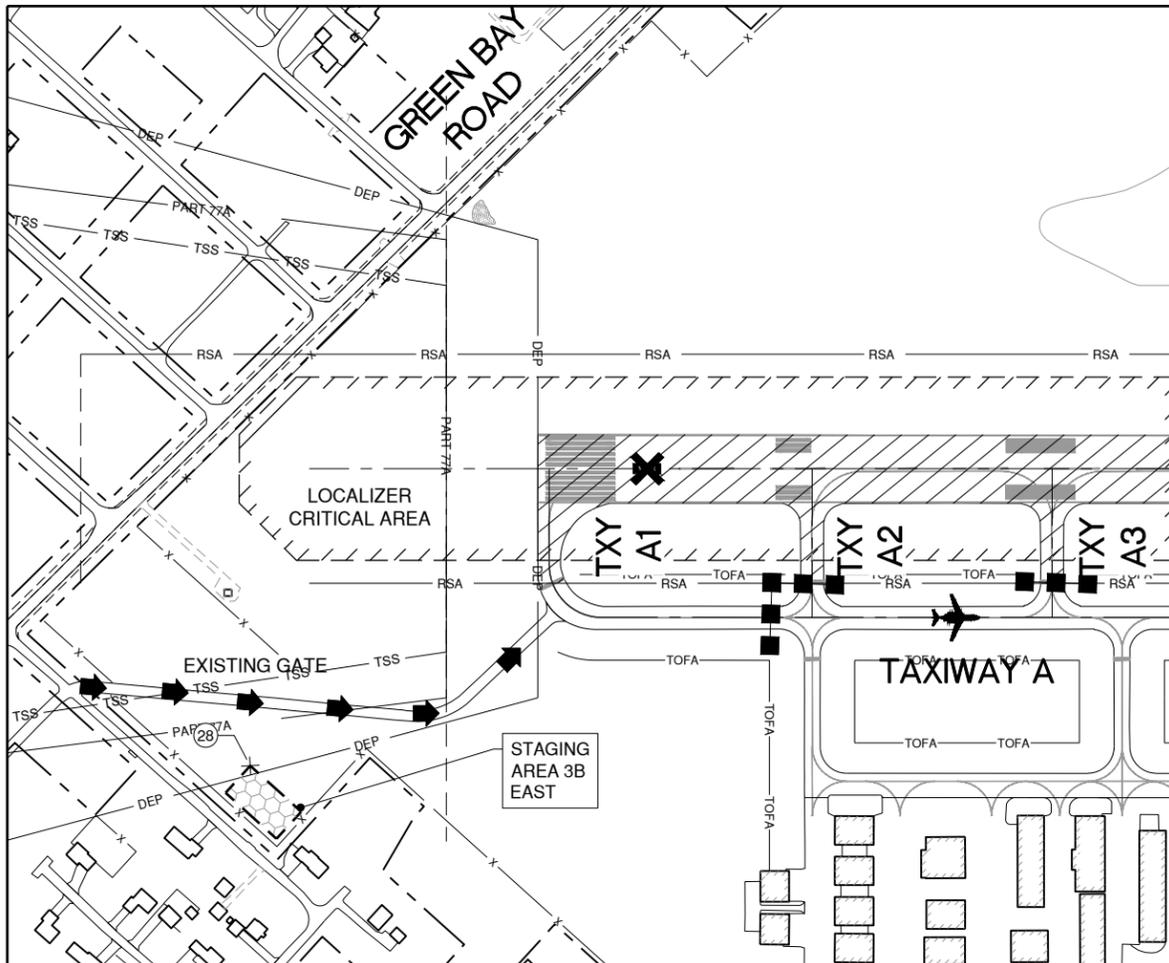
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CHECKED BY:	DKP
APPROVED BY:	AB
DATE:	4/16/2021
JOB No:	20022602-00

FINAL

SHEET 14 OF 61 SHEETS



NORTH

0 200 400

SCALE IN FEET

LEGEND

- WORK AREA LIMITS
- LOW PROFILE BARRICADES
- IDOT TYPE II BARRICADES
- RSA RUNWAY SAFETY AREA
- RPZ RUNWAY PROTECTION ZONE
- EXISTING FENCE
- TSS RUNWAY THRESHOLD SITING SURFACE
- PART 77A RUNWAY APPROACH PART 77 SURFACE
- DEP RUNWAY DEPARTURE SURFACE
- CONTRACTOR'S STAGING AND STORAGE AREA

- CONTRACTOR'S ACCESS ROUTE
- AIRCRAFT MOVEMENT AREA
- TAXIWAY CLOSURE MARKER
- RUNWAY CLOSURE MARKER
- TAXIWAY OBJECT FREE AREA
- RUNWAY OBSTACLE FREE ZONE
- CROSSING GUARD STOP - A.O.A. SIGN OR CONTRACTOR'S ESCORT WITH RADIO

SEE SHEET 6, PHASING NOTES
(ALL PHASES), NOTE 8 FOR
CROSSING ACTIVE PAVEMENTS.

IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

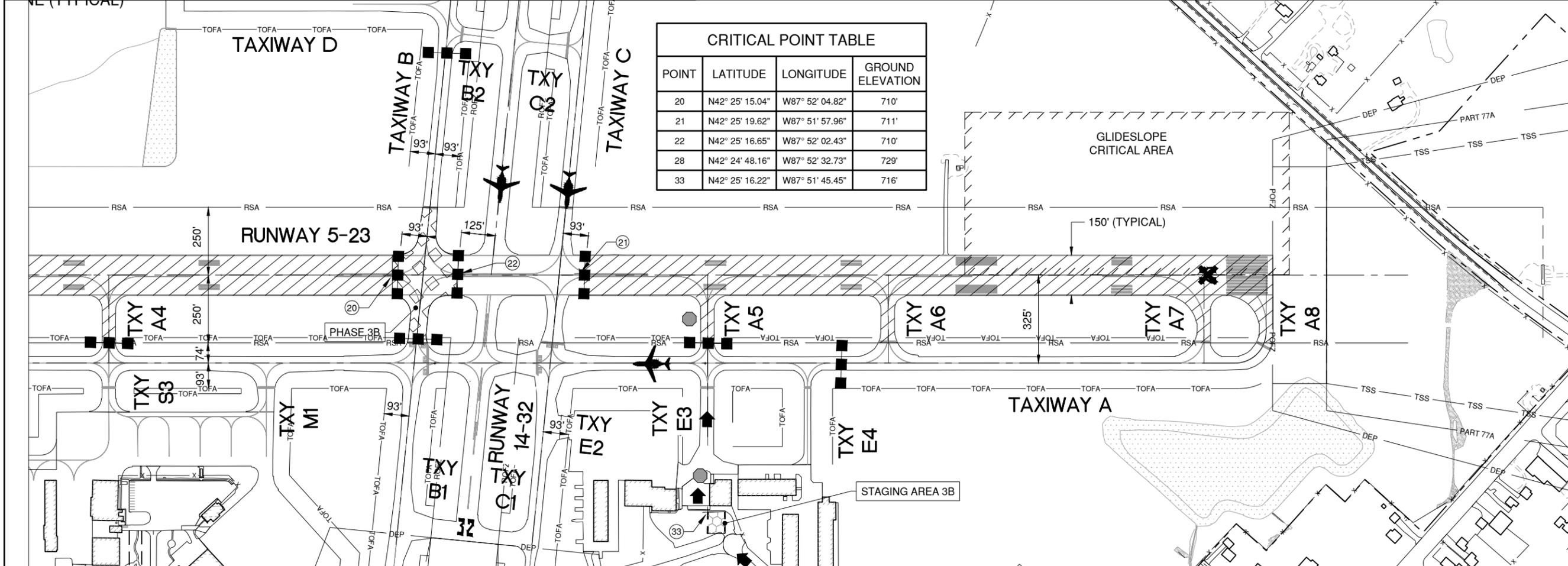
REVISIONS		
NUMBER	BY	DATE

0 1 2

THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

PHASE	CONSTRUCTION	AFFECTED ACTIVE OPERATIONS AREAS (AOA)	WORK HOURS	SAFETY AND SECURITY
3A	REHABILITATE RUNWAY 5-23 EDGE LIGHTS AND TAXIWAY A EDGE LIGHTS INSIDE RSA, INSTALL SUPPLEMENTARY WINDCONES ON CIRCUIT, INSTALL MANDATORY HOLD SIGNS AND DIRECTIONAL SIGNS INTO RUNWAY 5-23 CIRCUIT	RUNWAY 5-23 CLOSED. RUNWAY 14-32, TAXIWAY B, AND TAXIWAY C TO REMAIN OPEN	FRIDAY 10:00PM - MONDAY 6:00AM	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
3B	REHABILITATE RUNWAY 5-23 EDGE LIGHTS AND TAXIWAY B EDGE LIGHTS INSIDE RSA, INSTALL MANDATORY HOLD SIGNS AND DIRECTIONAL SIGNS INTO RUNWAY 5-23 CIRCUIT	RUNWAY 5-23 CLOSED, TAXIWAY B CLOSED AT RUNWAY 5-23 INTERSECTION. RUNWAY 14-32 AND TAXIWAY C TO REMAIN OPEN	FRIDAY 10:00PM - MONDAY 6:00AM	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
3C	REHABILITATE RUNWAY 5-23 EDGE LIGHTS AND TAXIWAY C EDGE LIGHTS INSIDE RSA, INSTALL MANDATORY HOLD SIGNS AND DIRECTIONAL SIGNS INTO RUNWAY 5-23 CIRCUIT	RUNWAY 5-23 CLOSED, TAXIWAY C CLOSED AT RUNWAY 5-23 INTERSECTION. RUNWAY 14-32 AND TAXIWAY B TO REMAIN OPEN	FRIDAY 10:00PM - MONDAY 6:00AM	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
3D	REHABILITATE RUNWAY 5-23 AND RUNWAY 14-32 EDGE LIGHTS INSIDE BOTH RUNWAY RSA	BOTH RUNWAY 5-23 AND RUNWAY 14-32 CLOSED	FRIDAY 10:00PM - MONDAY 6:00AM	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.

PHASE 3B SHALL BE COMPLETED IN ONE (1) WEEKEND CLOSURE AND SHALL BE CONCURRENT WITH PHASE 3A



CRITICAL POINT TABLE			
POINT	LATITUDE	LONGITUDE	GROUND ELEVATION
20	N42° 25' 15.04"	W87° 52' 04.82"	710'
21	N42° 25' 19.62"	W87° 51' 57.96"	711'
22	N42° 25' 16.65"	W87° 52' 02.43"	710'
28	N42° 24' 48.16"	W87° 52' 32.73"	729'
33	N42° 25' 16.22"	W87° 51' 45.45"	716'

**WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS**

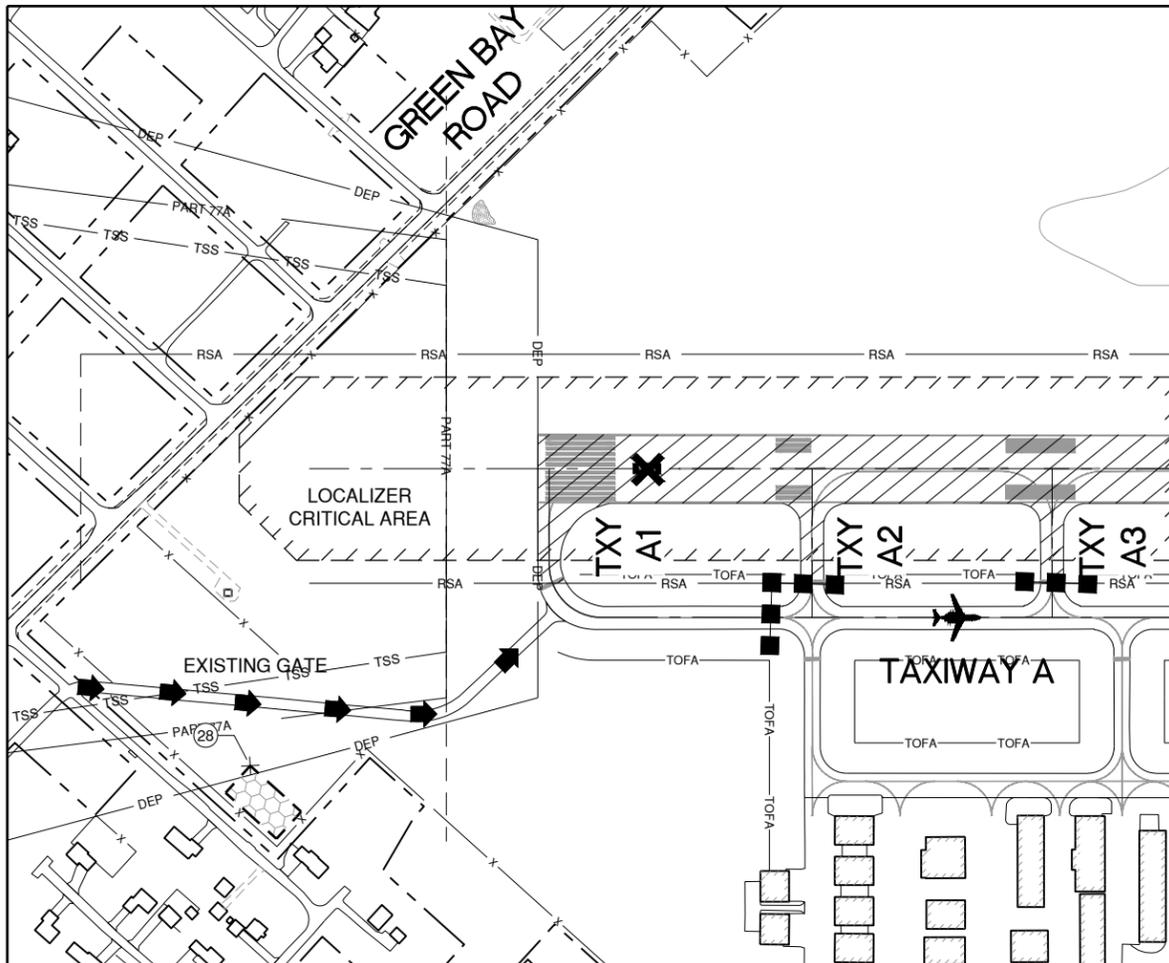
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS

CONSTRUCTION ACTIVITY PLAN - PHASE 3B

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CONSULTING ENGINEERS
License No. 184-000613

DESIGN BY:	JMM
DRAWN BY:	JMM
CHECKED BY:	DKP
APPROVED BY:	AB
DATE:	4/16/2021
JOB No:	20022602-00
FINAL	

SHEET 15 OF 61 SHEETS



NORTH

0 200 400
SCALE IN FEET

LEGEND

	WORK AREA LIMITS		CONTRACTOR'S ACCESS ROUTE
	LOW PROFILE BARRICADES		AIRCRAFT MOVEMENT AREA
	IDOT TYPE II BARRICADES		TAXIWAY CLOSURE MARKER
	RUNWAY SAFETY AREA		RUNWAY CLOSURE MARKER
	RUNWAY PROTECTION ZONE		TAXIWAY OBJECT FREE AREA
	EXISTING FENCE		RUNWAY OBSTACLE FREE ZONE
	RUNWAY THRESHOLD SITING SURFACE		CROSSING GUARD STOP - A.O.A. SIGN OR CONTRACTOR'S ESCORT WITH RADIO
	RUNWAY APPROACH PART 77 SURFACE		
	RUNWAY DEPARTURE SURFACE		
	CONTRACTOR'S STAGING AND STORAGE AREA		

SEE SHEET 6, PHASING NOTES (ALL PHASES), NOTE 8 FOR CROSSING ACTIVE PAVEMENTS.

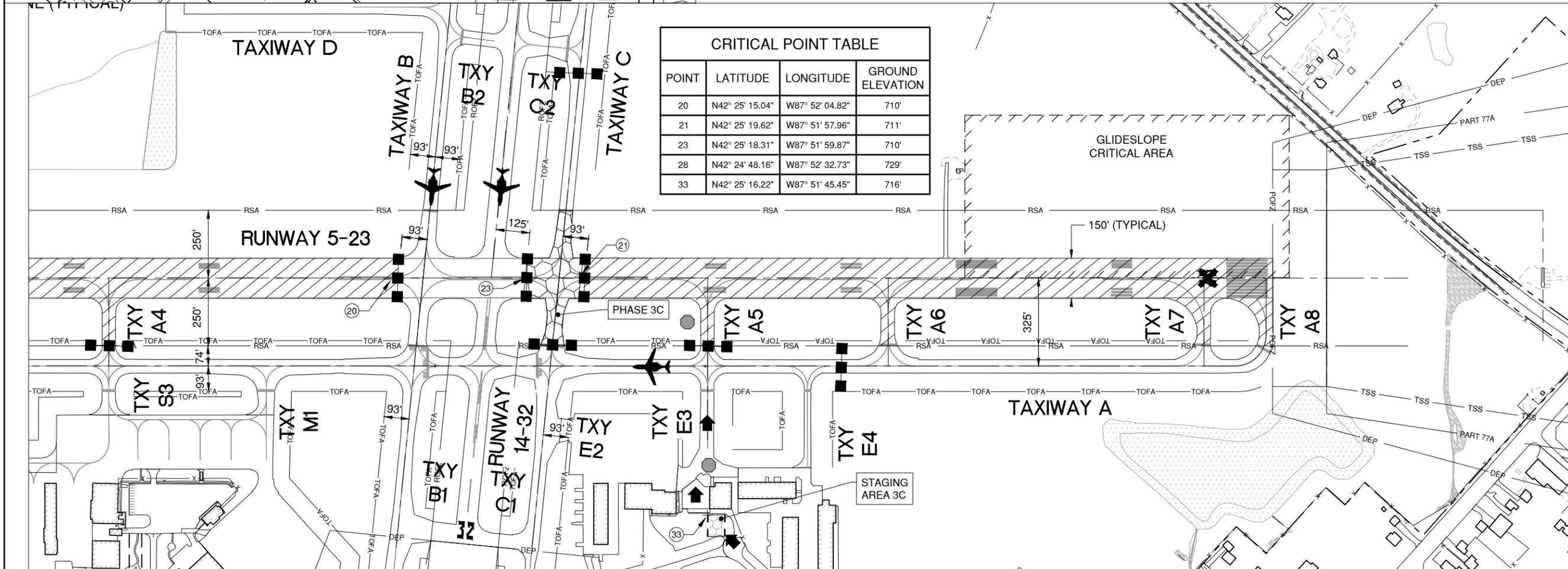
IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS		
NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

PHASE	CONSTRUCTION	AFFECTED ACTIVE OPERATIONS AREAS (AOA)	WORK HOURS	SAFETY AND SECURITY
3A	REHABILITATE RUNWAY 5-23 EDGE LIGHTS AND TAXIWAY A EDGE LIGHTS INSIDE RSA, INSTALL SUPPLEMENTARY WINDCONES ON CIRCUIT, INSTALL MANDATORY HOLD SIGNS AND DIRECTIONAL SIGNS INTO RUNWAY 5-23 CIRCUIT	RUNWAY 5-23 CLOSED. RUNWAY 14-32, TAXIWAY B, AND TAXIWAY C TO REMAIN OPEN	FRIDAY 10:00PM - MONDAY 6:00AM	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
3B	REHABILITATE RUNWAY 5-23 EDGE LIGHTS AND TAXIWAY B EDGE LIGHTS INSIDE RSA, INSTALL MANDATORY HOLD SIGNS AND DIRECTIONAL SIGNS INTO RUNWAY 5-23 CIRCUIT	RUNWAY 5-23 CLOSED, TAXIWAY B CLOSED AT RUNWAY 5-23 INTERSECTION. RUNWAY 14-32 AND TAXIWAY C TO REMAIN OPEN	FRIDAY 10:00PM - MONDAY 6:00AM	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
3C	REHABILITATE RUNWAY 5-23 EDGE LIGHTS AND TAXIWAY C EDGE LIGHTS INSIDE RSA, INSTALL MANDATORY HOLD SIGNS AND DIRECTIONAL SIGNS INTO RUNWAY 5-23 CIRCUIT	RUNWAY 5-23 CLOSED, TAXIWAY C CLOSED AT RUNWAY 5-23 INTERSECTION. RUNWAY 14-32 AND TAXIWAY B TO REMAIN OPEN	FRIDAY 10:00PM - MONDAY 6:00AM	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
3D	REHABILITATE RUNWAY 5-23 AND RUNWAY 14-32 EDGE LIGHTS INSIDE BOTH RUNWAY RSA	BOTH RUNWAY 5-23 AND RUNWAY 14-32 CLOSED	FRIDAY 10:00PM - MONDAY 6:00AM	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.

PHASE 3C SHALL BE COMPLETED IN ONE (1) WEEKEND CLOSURE AND SHALL BE CONCURRENT WITH PHASE 3A



CRITICAL POINT TABLE			
POINT	LATITUDE	LONGITUDE	GROUND ELEVATION
20	N42° 25' 15.04"	W87° 52' 04.82"	710'
21	N42° 25' 19.62"	W87° 51' 57.96"	711'
23	N42° 25' 18.31"	W87° 51' 59.87"	710'
28	N42° 24' 48.16"	W87° 52' 32.73"	729'
33	N42° 25' 16.22"	W87° 51' 45.45"	716'

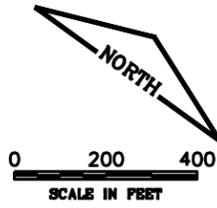
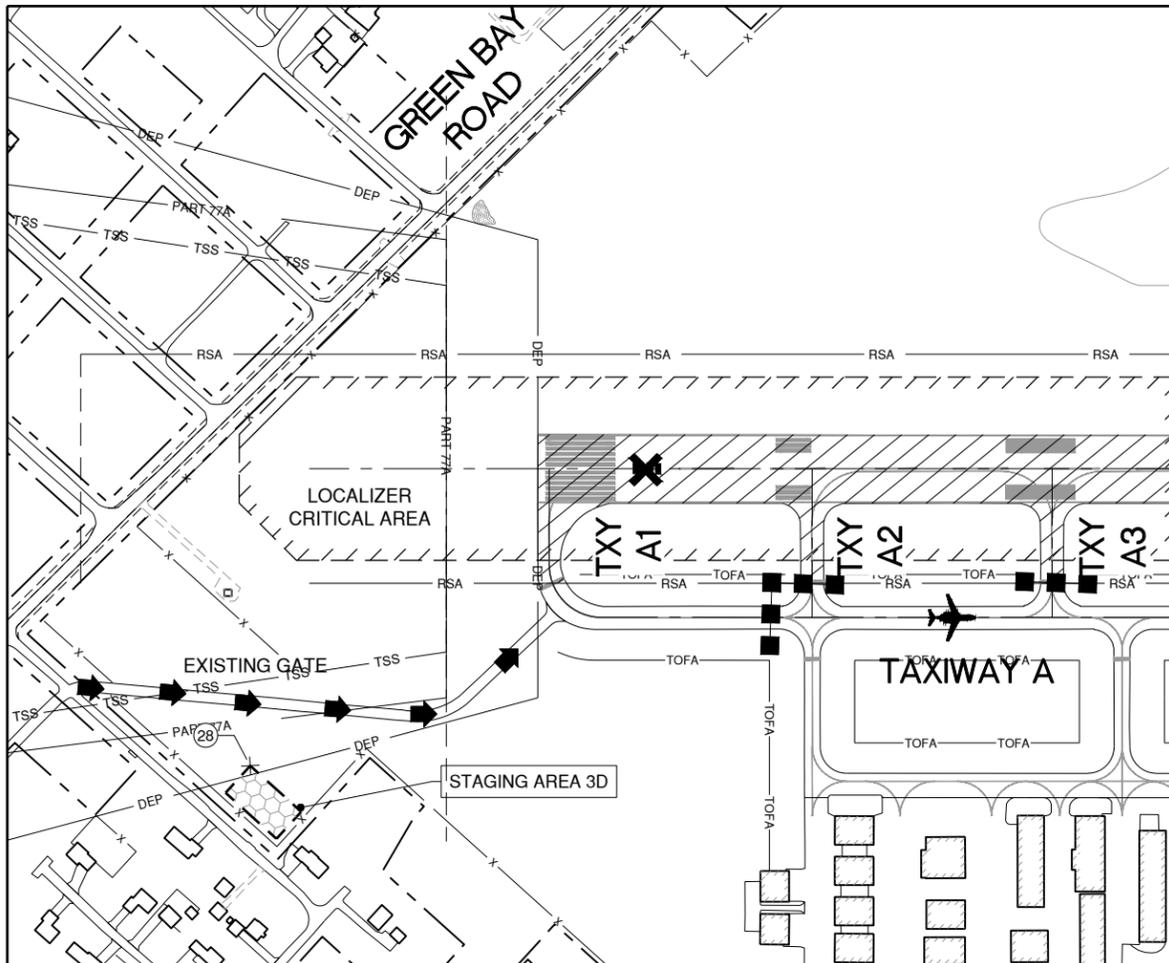
WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS

CONSTRUCTION ACTIVITY PLAN - PHASE 3C

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CONSULTING ENGINEERS
License No. 184-000613

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CHECKED BY:	DKP
APPROVED BY:	AB
DATE:	4/16/2021
JOB No:	20022602-00
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SHEET 16 OF 61 SHEETS



SEE SHEET 6, PHASING NOTES (ALL PHASES), NOTE 8 FOR CROSSING ACTIVE PAVEMENTS.

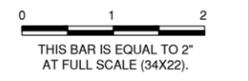
LEGEND

	WORK AREA LIMITS		CONTRACTOR'S ACCESS ROUTE
	LOW PROFILE BARRICADES		AIRCRAFT MOVEMENT AREA
	IDOT TYPE II BARRICADES		TAXIWAY CLOSURE MARKER
	RSA RUNWAY SAFETY AREA		RUNWAY CLOSURE MARKER
	RPZ RUNWAY PROTECTION ZONE		TOFA TAXIWAY OBJECT FREE AREA
	EXISTING FENCE		ROFZ RUNWAY OBSTACLE FREE ZONE
	TSS RUNWAY THRESHOLD SITING SURFACE		CROSSING GUARD STOP - A.O.A. SIGN OR CONTRACTOR'S ESCORT WITH RADIO
	PART 77A RUNWAY APPROACH PART 77 SURFACE		
	DEP RUNWAY DEPARTURE SURFACE		
	CONTRACTOR'S STAGING AND STORAGE AREA		

IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS

NUMBER	BY	DATE

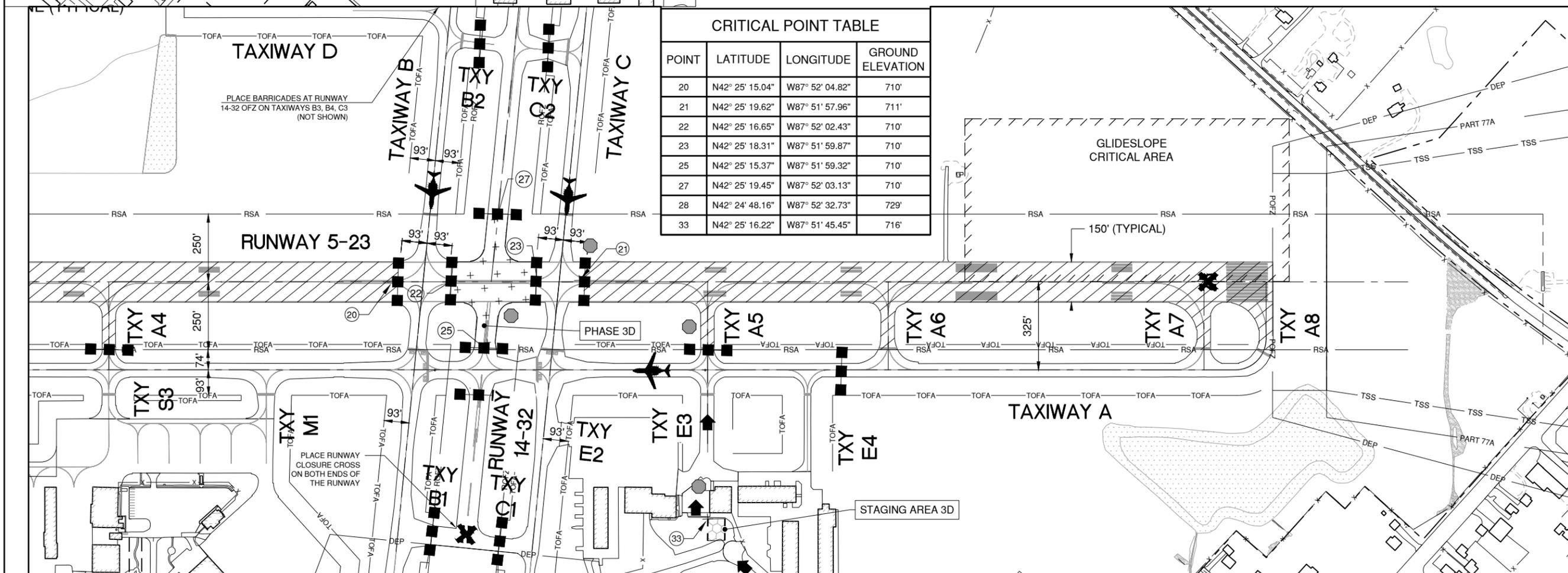


PHASE	CONSTRUCTION	AFFECTED ACTIVE OPERATIONS AREAS (AOA)	WORK HOURS	SAFETY AND SECURITY
3A	REHABILITATE RUNWAY 5-23 EDGE LIGHTS AND TAXIWAY A EDGE LIGHTS INSIDE RSA, INSTALL SUPPLEMENTARY WINDCONES ON CIRCUIT, INSTALL MANDATORY HOLD SIGNS AND DIRECTIONAL SIGNS INTO RUNWAY 5-23 CIRCUIT	RUNWAY 5-23 CLOSED. RUNWAY 14-32, TAXIWAY B, AND TAXIWAY C TO REMAIN OPEN	FRIDAY 10:00PM - MONDAY 6:00AM	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
3B	REHABILITATE RUNWAY 5-23 EDGE LIGHTS AND TAXIWAY B EDGE LIGHTS INSIDE RSA, INSTALL MANDATORY HOLD SIGNS AND DIRECTIONAL SIGNS INTO RUNWAY 5-23 CIRCUIT	RUNWAY 5-23 CLOSED, TAXIWAY B CLOSED AT RUNWAY 5-23 INTERSECTION. RUNWAY 14-32 AND TAXIWAY C TO REMAIN OPEN	FRIDAY 10:00PM - MONDAY 6:00AM	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
3C	REHABILITATE RUNWAY 5-23 EDGE LIGHTS AND TAXIWAY C EDGE LIGHTS INSIDE RSA, INSTALL MANDATORY HOLD SIGNS AND DIRECTIONAL SIGNS INTO RUNWAY 5-23 CIRCUIT	RUNWAY 5-23 CLOSED, TAXIWAY C CLOSED AT RUNWAY 5-23 INTERSECTION. RUNWAY 14-32 AND TAXIWAY B TO REMAIN OPEN	FRIDAY 10:00PM - MONDAY 6:00AM	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
3D	REHABILITATE RUNWAY 5-23 AND RUNWAY 14-32 EDGE LIGHTS INSIDE BOTH RUNWAY RSA	BOTH RUNWAY 5-23 AND RUNWAY 14-32 CLOSED	FRIDAY 10:00PM - MONDAY 6:00AM	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.

PHASE 3D SHALL BE COMPLETED IN ONE (1) WEEKEND CLOSURE AND SHALL BE CONCURRENT WITH PHASE 3A

CRITICAL POINT TABLE

POINT	LATITUDE	LONGITUDE	GROUND ELEVATION
20	N42° 25' 15.04"	W87° 52' 04.82"	710'
21	N42° 25' 19.62"	W87° 51' 57.96"	711'
22	N42° 25' 16.65"	W87° 52' 02.43"	710'
23	N42° 25' 18.31"	W87° 51' 59.87"	710'
25	N42° 25' 15.37"	W87° 51' 59.32"	710'
27	N42° 25' 19.45"	W87° 52' 03.13"	710'
28	N42° 24' 48.16"	W87° 52' 32.73"	729'
33	N42° 25' 16.22"	W87° 51' 45.45"	716'



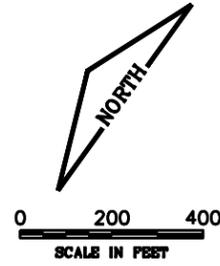
WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS
CONSTRUCTION ACTIVITY PLAN - PHASE 3D

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APPROVED BY:	AB
DATE:	4/16/2021
JOB No:	20022602-00
FINAL	
SHEET 17 OF 61 SHEETS	

PHASE	CONSTRUCTION	AFFECTED ACTIVE OPERATIONS AREAS (AOA)	WORK HOURS	SAFETY AND SECURITY
4A	REHABILITATE EDGE LIGHTS IN RUNWAY 14-32 AND TAXIWAY A INTERSECTION. TIE AIRFIELD SIGNS INTO SPECIFIED CIRCUIT	RUNWAY 14-32, TAXIWAY B, AND TAXIWAY C CLOSED AT TAXIWAY A INTERSECTION. RUNWAY 5-23 TO REMAIN OPEN	UNRESTRICTED	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
4B	REHABILITATE EDGE LIGHTS ON RUNWAY 14-32. TIE AIRFIELD SIGNS INTO SPECIFIED CIRCUIT REHABILITATE EDGE LIGHTS ON TAXIWAY B4 AND C3	RUNWAY 14-32 CLOSED, TAXIWAY B AND C CLOSED NORTH OF B3	UNRESTRICTED	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.



SEE SHEET 6, PHASING NOTES (ALL PHASES), NOTE 8 FOR CROSSING ACTIVE PAVEMENTS.

LEGEND

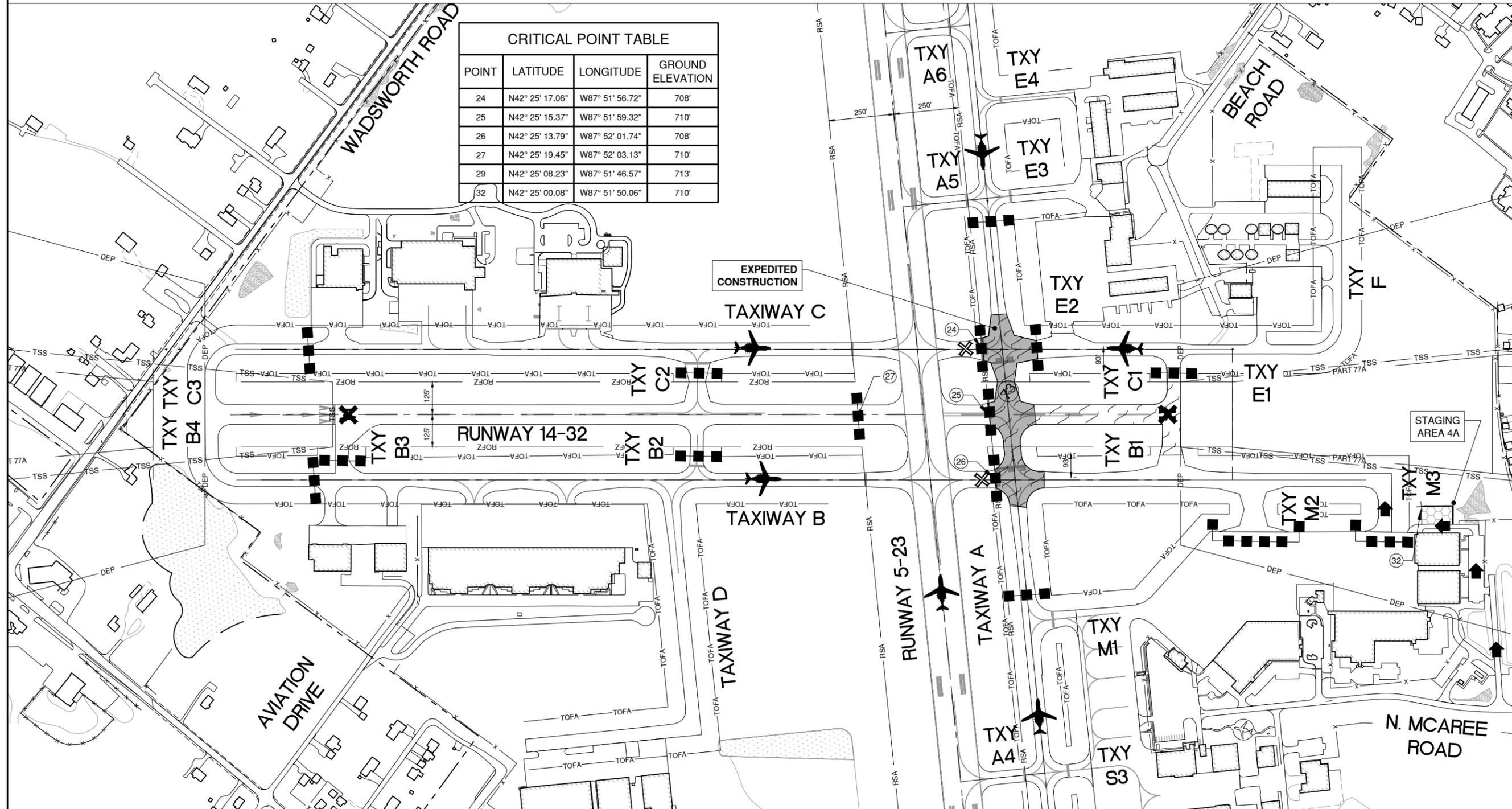
- WORK AREA LIMITS
- LOW PROFILE BARRICADES
- IDOT TYPE II BARRICADES
- RSA — RUNWAY SAFETY AREA
- RPZ — RUNWAY PROTECTION ZONE
- x - EXISTING FENCE
- TSS — RUNWAY THRESHOLD SITING SURFACE
- PART 77A — RUNWAY APPROACH PART 77 SURFACE
- DEP — RUNWAY DEPARTURE SURFACE
- ▨ CONTRACTOR'S STAGING AND STORAGE AREA
- ➔ CONTRACTOR'S ACCESS ROUTE
- ✈ AIRCRAFT MOVEMENT AREA
- ✕ TAXIWAY CLOSURE MARKER
- ✕ RUNWAY CLOSURE MARKER
- TOFA — TAXIWAY OBJECT FREE AREA
- ROFZ — RUNWAY OBSTACLE FREE ZONE

IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBG-XXX**

REVISIONS

NUMBER	BY	DATE

0 1 2
 THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).



CRITICAL POINT TABLE

POINT	LATITUDE	LONGITUDE	GROUND ELEVATION
24	N42° 25' 17.06"	W87° 51' 56.72"	708'
25	N42° 25' 15.37"	W87° 51' 59.32"	710'
26	N42° 25' 13.79"	W87° 52' 01.74"	708'
27	N42° 25' 19.45"	W87° 52' 03.13"	710'
29	N42° 25' 08.23"	W87° 51' 46.57"	713'
32	N42° 25' 00.08"	W87° 51' 50.06"	710'

WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS

CONSTRUCTION ACTIVITY PLAN - PHASE 4A

CMT
 CRAWFORD, MURPHY & TILLY, INC.
 CONSULTING ENGINEERS
 License No. 184-000613

DESIGN BY: **JMM**
 DRAWN BY: **JMM**
 CHECKED BY: **DKP**
 APPROVED BY: **AB**
 DATE: 4/16/2021
 JOB No: 20022602-00

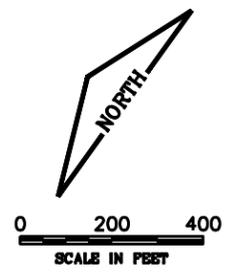
FINAL

SHEET **18** OF **61** SHEETS



PHASE	CONSTRUCTION	AFFECTED ACTIVE OPERATIONS AREAS (AOA)	WORK HOURS	SAFETY AND SECURITY
4A	REHABILITATE EDGE LIGHTS IN RUNWAY 14-32 AND TAXIWAY A INTERSECTION. TIE AIRFIELD SIGNS INTO SPECIFIED CIRCUIT	RUNWAY 14-32, TAXIWAY B, AND TAXIWAY C CLOSED AT TAXIWAY A INTERSECTION. RUNWAY 5-23 TO REMAIN OPEN	UNRESTRICTED	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.
4B	REHABILITATE EDGE LIGHTS ON RUNWAY 14-32. TIE AIRFIELD SIGNS INTO SPECIFIED CIRCUIT. REHABILITATE EDGE LIGHTS ON TAXIWAY B4 AND C3	RUNWAY 14-32 CLOSED, TAXIWAY B AND C CLOSED NORTH OF B3	UNRESTRICTED	PLACE BARRICADES AND CLOSURE X'S AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE AIRPORT AT LEAST 72 HOURS IN ADVANCE OF THE WORK SO THAT THE AIRPORT CAN ISSUE REQUIRED NOTAM'S. MAXIMUM EQUIPMENT HEIGHT IS 25' AGL.

POINT	LATITUDE	LONGITUDE	GROUND ELEVATION
25	N42° 25' 15.37"	W87° 51' 59.32"	710'
27	N42° 25' 19.45"	W87° 52' 03.13"	710'
30	N42° 25' 38.57"	W87° 52' 17.30"	728'



LEGEND

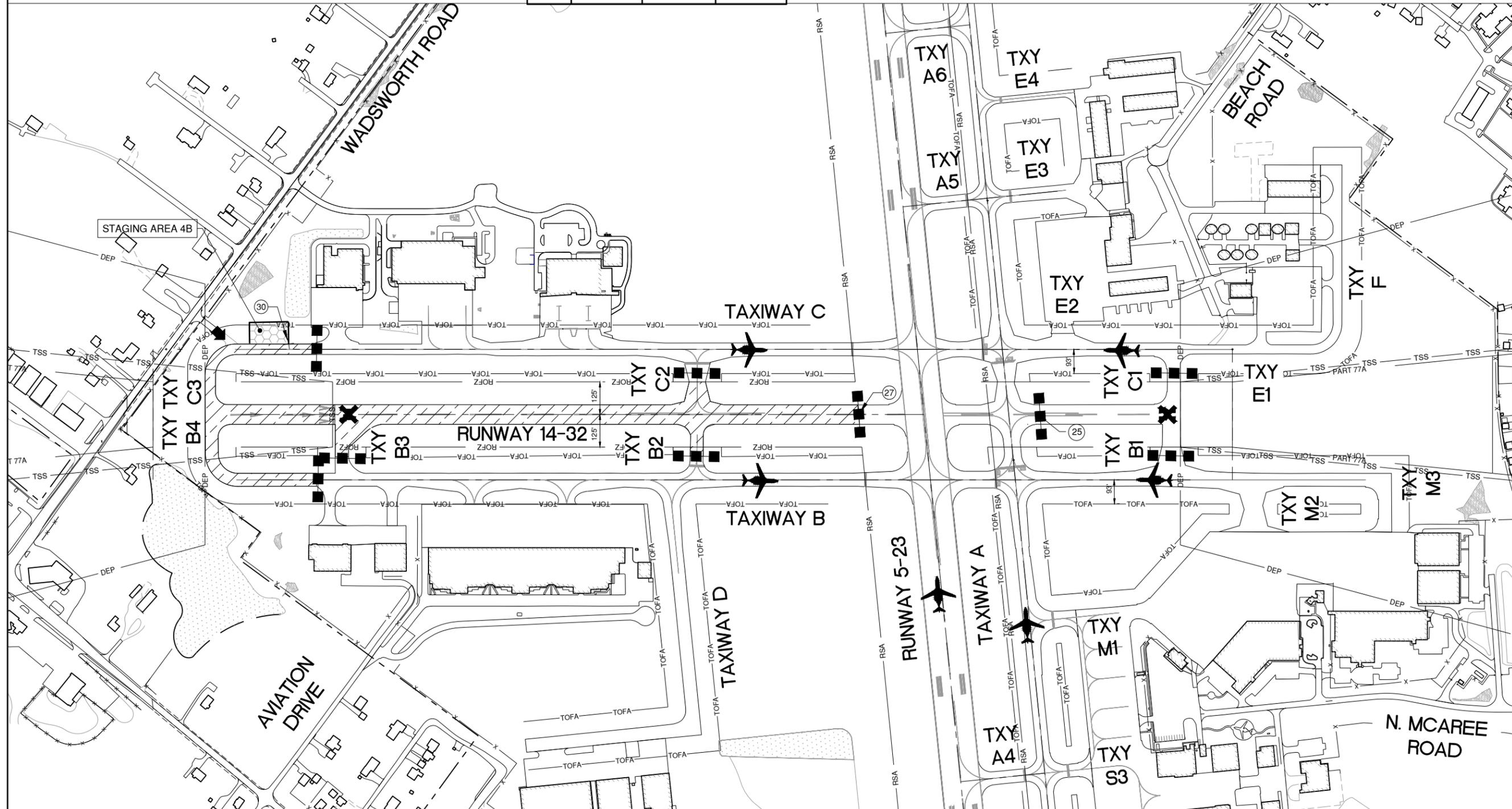
- WORK AREA LIMITS
- LOW PROFILE BARRICADES
- IDOT TYPE II BARRICADES
- RSA — RUNWAY SAFETY AREA
- RPZ — RUNWAY PROTECTION ZONE
- X — EXISTING FENCE
- TSS — RUNWAY THRESHOLD SITING SURFACE
- PART 77A — RUNWAY APPROACH PART 77 SURFACE
- DEP — RUNWAY DEPARTURE SURFACE
- ▨ CONTRACTOR'S STAGING AND STORAGE AREA
- ➔ CONTRACTOR'S ACCESS ROUTE
- ✈ AIRCRAFT MOVEMENT AREA
- ✕ TAXIWAY CLOSURE MARKER
- ✕ RUNWAY CLOSURE MARKER
- TOFA — TAXIWAY OBJECT FREE AREA
- ROFZ — RUNWAY OBSTACLE FREE ZONE

IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS

NUMBER	BY	DATE

0 1 2
 THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).



WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS

CONSTRUCTION ACTIVITY PLAN - PHASE 4B

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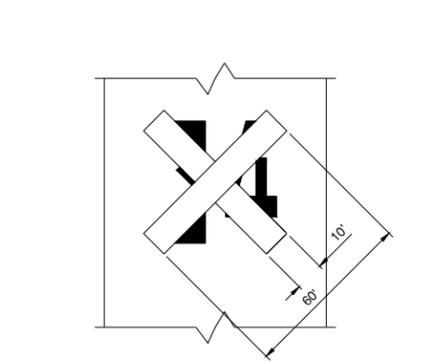
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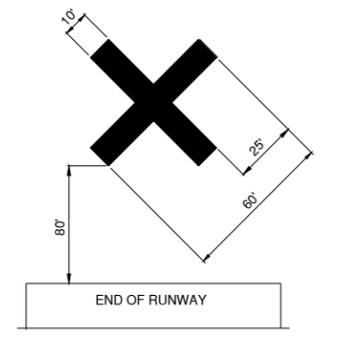
SHEET 19 OF 61 SHEETS

CLOSED RUNWAY MARKER NOTES

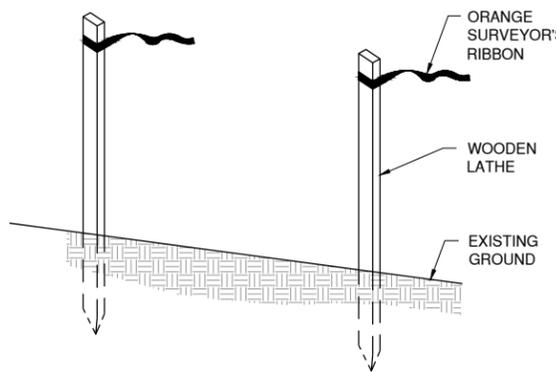
- DURING VARIOUS PHASES OF WORK, IT WILL BE NECESSARY TO CLOSE RUNWAYS TO AIR TRAFFIC ON A TEMPORARY BASIS AS COORDINATED WITH THE AIRPORT AND TOWER PERSONNEL.
- FOR RUNWAY CLOSURES INVOLVING A SINGLE RUNWAY, IT IS ANTICIPATED THAT THE AIRPORT SHALL MOBILIZE THE AIRPORT OWNED LIGHTED "X'S ON EACH END OF THE CLOSED RUNWAY. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE LIGHTED "X'S DURING EACH CLOSURE PERIOD. CONTRACTOR SUPPLIED MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO, FUELING, REPLACING LAMPS, CHECKING AND SUPPLYING OIL, ETC. IF ANY DAMAGE IS INCURRED TO THE AIRPORT LIGHTED "X'S DURING CONSTRUCTION BY THE CONTRACTOR, THE CONTRACTOR SHALL REPLACE THE LIGHTED "X" IN KIND AT NO COST TO THE CONTRACTOR OR AIRPORT.
- FOR RUNWAY CLOSURES INVOLVING MORE THAN ONE RUNWAY, OR IF THE AIRPORT OWNED LIGHTED "X'S ARE NOT AVAILABLE, THE CONTRACTOR SHALL MARK THE RUNWAYS TO BE CLOSED BY PLACING YELLOW CROSSES AT THE LOCATION AND DIMENSIONS DETAILED ON THE SEQUENCE OF CONSTRUCTION AND PER AC 150/5370-2 (LATEST EDITION). THE CROSSES ARE SHOWN ON THE RESPECTIVE RUNWAYS ACCORDING TO THE VARIOUS PHASES OF WORK AS DELINEATED IN THE SUGGESTED SEQUENCE OF CONSTRUCTION.
- TEMPORARY CLOSED RUNWAY MARKERS SHALL BE YELLOW.
- TEMPORARY MARKERS SHALL BE MATERIAL APPROVED BY THE ENGINEER.
- CONTRACTOR SHALL MAINTAIN AND RELOCATE MARKERS AS SHOWN ON THE PLANS OR AS NEEDED TO FACILITATE CONSTRUCTION.
- MARKERS AND LIGHTED "X'S ON PAVEMENT SHALL BE PLACED OVER EXISTING RUNWAY NUMERALS AS SHOWN. LIGHTED "X'S SHALL FACE THE APPROACH OF EACH RUNWAY END.
- COST OF FURNISHING, INSTALLING, MAINTAINING AND REMOVING MARKERS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.



TEMPORARY CLOSED RUNWAY MARKER DETAIL
ON PAVEMENT - NO SCALE



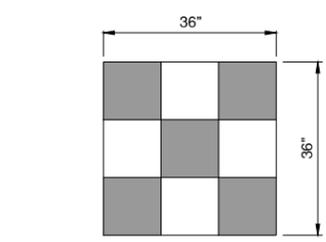
OFF PAVEMENT TEMPORARY CLOSED RUNWAY MARKER DETAIL
NO SCALE



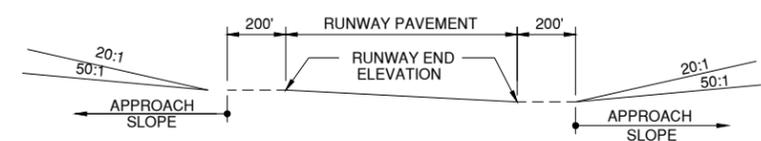
CONSTRUCTION SETBACK LINE DETAIL
NOT TO SCALE

CONSTRUCTION SETBACK NOTES

- CONTRACTOR SHALL MARKER THE RUNWAY SAFETY AREA PER THE CONSTRUCTION SETBACK DETAIL AS DIRECTED BY THE RESIDENT ENGINEER.
- ALL COST ASSOCIATED WITH THE CONSTRUCTION SETBACK LINE SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.



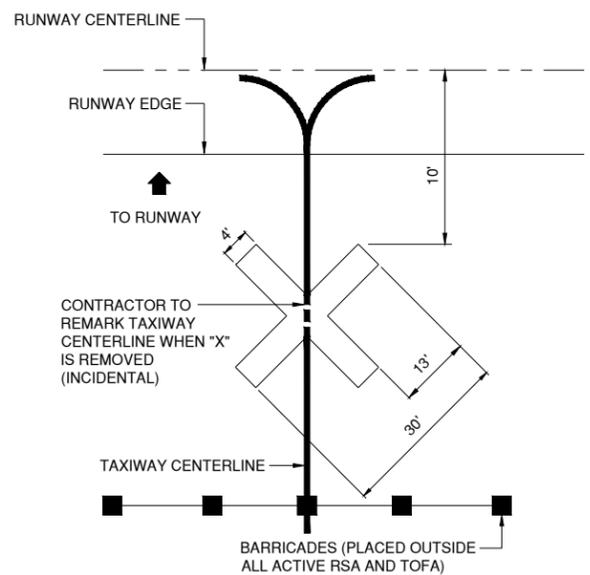
CONSTRUCTION EQUIPMENT AND TRUCK SIGNAL FLAG
NOT TO SCALE



TYPICAL PROFILE F.A.R. PART 77 IMAGINARY SURFACES

NO SCALE

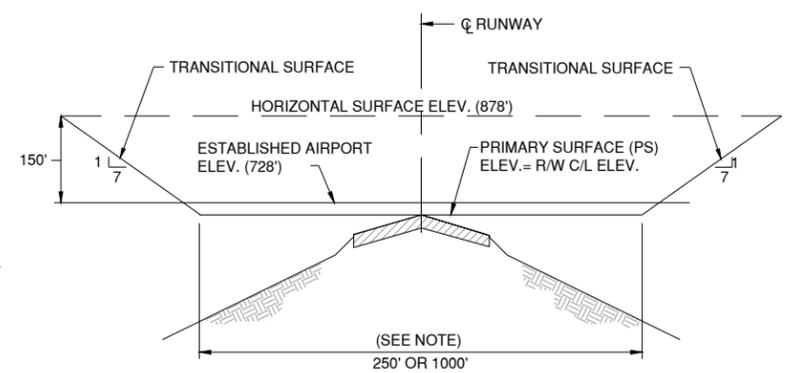
RUNWAY END	ELEVATION	APPROACH SLOPE
5	724.7	34:1
23	723.1	50:1
14	727.6	20:1
32	712.1	20:1



CLOSED TAXIWAY MARKER DETAIL
NOT TO SCALE

CLOSED TAXIWAY MARKER DETAIL NOTES

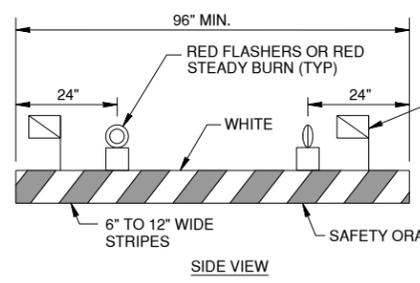
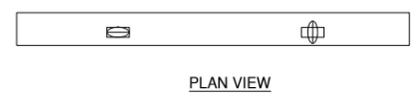
- CLOSED TAXIWAY MARKERS SHALL BE PAINTED YELLOW WITH TEMPORARY MARKING CAPABLE OF BEING REMOVED WITH LOW PRESSURE WATER BLASTING OR OTHER MATERIAL THAT DOES NOT VIOLATE THE OBJECT FREE AREA CRITERIA AND RUNWAY SAFETY AREA CRITERIA PER ADVISORY CIRCULAR 150/5300-13A (LATEST EDITION) AND ARE APPROVED BY THE RESIDENT ENGINEER AND AIRPORT.
- CONTRACTOR SHALL MAINTAIN AND RELOCATE MARKERS AS SHOWN ON THE PLANS OR AS NEEDED TO FACILITATE CONSTRUCTION
- COST OF FURNISHING, INSTALLING, MAINTAINING AND REMOVING MARKERS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- PLACE MARKERS OVER TAXIWAY CENTERLINE.
- MARKERS SHALL BE ADEQUATELY SECURED TO PREVENT MOVEMENT BY PROPELLER WASH, JET BLAST OR OTHER WIND CURRENTS.
- MARKERS ARE ONLY REQUIRED FOR CLOSURES EXCEEDING 72 HOURS.



TYPICAL SECTION F.A.R. PART 77 IMAGINARY SURFACES

NO SCALE

NOTE:
IMAGINARY SURFACE REQUIREMENTS FOR EXISTING ACTIVE RUNWAYS (R/W) ARE SIMILAR EXCEPT PRIMARY SURFACE (PS) DIMENSIONS VARY
RUNWAY 14-32 250' PS (125' LT & RT OF CENTERLINE)
RUNWAY 5-23 1000' PS (500' LT & RT OF CENTERLINE)



AIRSIDE LOW PROFILE LIGHTED BARRICADE
NOT TO SCALE

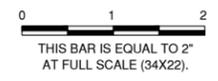
BARRICADE NOTES

- FLASHER OR STEADY BURN LIGHTS SHALL BE BATTERY OPERATED. LENS SHALL BE RED AND BE ABLE TO ROTATE 90°.
- FACING OF BARRICADE SHALL BE COVERED WITH REFLECTIVE TAPE OR PAINT.
- BARRICADES TO BE PLACED WITH A MAXIMUM OF 4' SPACING END TO END UP TO THE EDGE OF PAVEMENT ALONG OPERATIONAL PAVEMENT ADJACENT TO CONSTRUCTION AS DIRECTED BY THE RESIDENT ENGINEER. ALTERNATE FLASHER OR STEADY BURN LENSES SO THAT EVERY OTHER LENS IS ROTATED 90°.
- FLASHER OR STEADY BURN LIGHTS SHALL BE SECURED TO THE BARRICADES, AS APPROVED BY THE RESIDENT ENGINEER.
- BARRICADES SHALL BE OF LOW MASS, EASILY COLLAPSIBLE UPON CONTACT WITH AN AIRCRAFT OR ANY OF IT COMPONENTS, AND WEIGHTED TO AVOID BEING BLOWN OVER.
- BARRICADES SHALL BE OF A COMMERCIAL DESIGN AND SHALL MEET CURRENT FAA REQUIREMENTS.
- PLACE ALL BARRICADES OUTSIDE RUNWAY SAFETY AREAS AND OUTSIDE TAXIWAY OBJECT FREE AREAS.
- ALL COST ASSOCIATED WITH THE LOW PROFILE BARRICADES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

IL. CONTRACT: **WA075**
IL. LETTING ITEM: **06A**
IL. PROJECT: **UGN-4824**
S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS

NUMBER	BY	DATE



WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS

CONSTRUCTION ACTIVITY PLAN DETAILS

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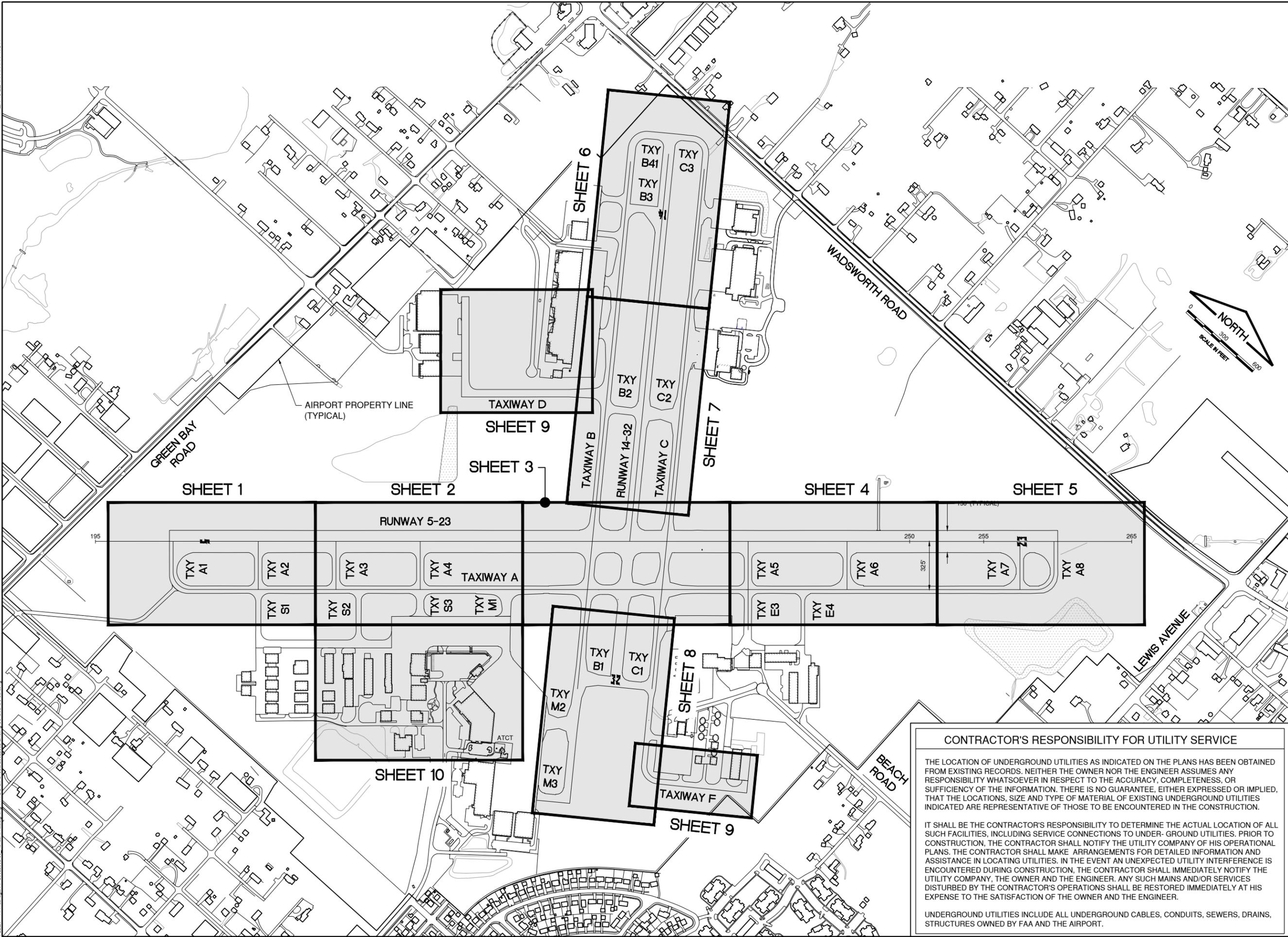
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APPROVED BY:	DKP
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JOB No:	20022602-00

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SHEET 20 OF 61 SHEETS

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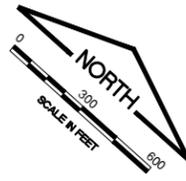
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IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS		
NUMBER	BY	DATE

0 1 2
 THIS BAR IS EQUAL TO 2"
 AT FULL SCALE (34X22).



WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS

INDEX TO SHEETS - EXISTING CONDITIONS REMOVALS LIGHTING PLAN

CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE

THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAS BEEN OBTAINED FROM EXISTING RECORDS. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY WHATSOEVER IN RESPECT TO THE ACCURACY, COMPLETENESS, OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED, THAT THE LOCATIONS, SIZE AND TYPE OF MATERIAL OF EXISTING UNDERGROUND UTILITIES INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED IN THE CONSTRUCTION.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDER-GROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY OF HIS OPERATIONAL PLANS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR DETAILED INFORMATION AND ASSISTANCE IN LOCATING UTILITIES. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY, THE OWNER AND THE ENGINEER. ANY SUCH MAINS AND/OR SERVICES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED IMMEDIATELY AT HIS EXPENSE TO THE SATISFACTION OF THE OWNER AND THE ENGINEER.

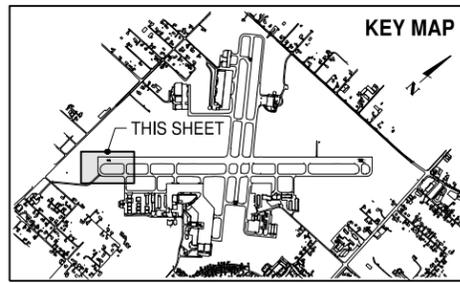
UNDERGROUND UTILITIES INCLUDE ALL UNDERGROUND CABLES, CONDUITS, SEWERS, DRAINS, STRUCTURES OWNED BY FAA AND THE AIRPORT.

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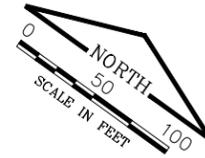
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JOB No:	20022602-00
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SHEET 21 OF 61 SHEETS	

UGN 20022602-00 BASE DRAINING.dwg
 UGN 20022602-00 Main AP T.dwg
 UGN 20022602-00 TIR.dwg
 UGN 20022602-00 T.dwg



NOTES :

- EXISTING LIGHTS, GUIDANCE SIGNS, AND AIRFIELD CIRCUITS, OTHER THAN THOSE INDICATED FOR REMOVAL, ARE TO BE PROTECTED FROM DAMAGE. CONTRACTOR IS TO REPAIR ALL DAMAGED EQUIPMENT AND CIRCUITS AT HIS EXPENSE.
- LIGHT FIXTURES, LAMPS TRANSFORMERS, SIGNS AND ELEVATED MARKERS TO BE REMOVED SHALL BE TURNED OVER TO AIRPORT MAINTENANCE. IF AIRPORT MAINTENANCE DOES NOT WANT ANY OF THE REMOVED MATERIALS THEN THE CONTRACTOR SHALL DISPOSE OF OFF AIRPORT PROPERTY AT NO ADDITIONAL COST TO THE CONTRACT. LIGHT BASES AND SIGN FOUNDATIONS SHALL BE DISPOSED OF OFF AIRPORT PROPERTY.
- WHEN POSSIBLE AND WHEN CABLES INSTALLED IN CONDUITS/UNIT DUCT, CONTRACTOR SHALL REMOVE ABANDONED CABLE FROM EXISTING CONDUIT. COST SHALL BE INCIDENTAL TO THE CONTRACT.
- PRIOR TO REMOVAL OF AIRFIELD SPLICE CAN, CONTRACTOR SHALL VERIFY THAT ALL ELECTRICAL CIRCUITS CONTAINED IN THE SPLICE CAN HAVE BEEN ABANDONED.
- ALL EXISTING AIRFIELD LIGHTING CIRCUITS CONNECTED TO SIGNS, WINDCONE AND REIL'S TO REMAIN, SHALL BE REMOVED AND REPLACED WITH NEW CIRCUIT AS SHOWN ON THE PLANS.
- CONTRACTOR SHALL COORDINATE WITH FAA TO LOCATE EXISTING FAA MALSR AND VASI CIRCUITS PRIOR TO ANY CONSTRUCTION ACTIVITY. EXISTING MALSR AND VASI CIRCUITS AND EQUIPMENT SHALL BE PROTECTED DURING CONSTRUCTION.
- CONTRACTOR SHALL FIELD INVESTIGATE AND VERIFY EXISTING CIRCUIT ROUTING. INSTALL JUMPERS BETWEEN EXISTING LIGHTS TO KEEP EXISTING CIRCUITS OPERATIONAL FOR EACH CONSTRUCTION PHASE AS LISTED ON PHASING SHEETS. THE COST OF ALL TEMPORARY CONNECTIONS SHALL BE INCIDENTAL TO THE CONTRACT.



IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS

NUMBER	BY	DATE

0 1 2
 THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

EXISTING CONDITIONS AND REMOVALS - SHEET 1

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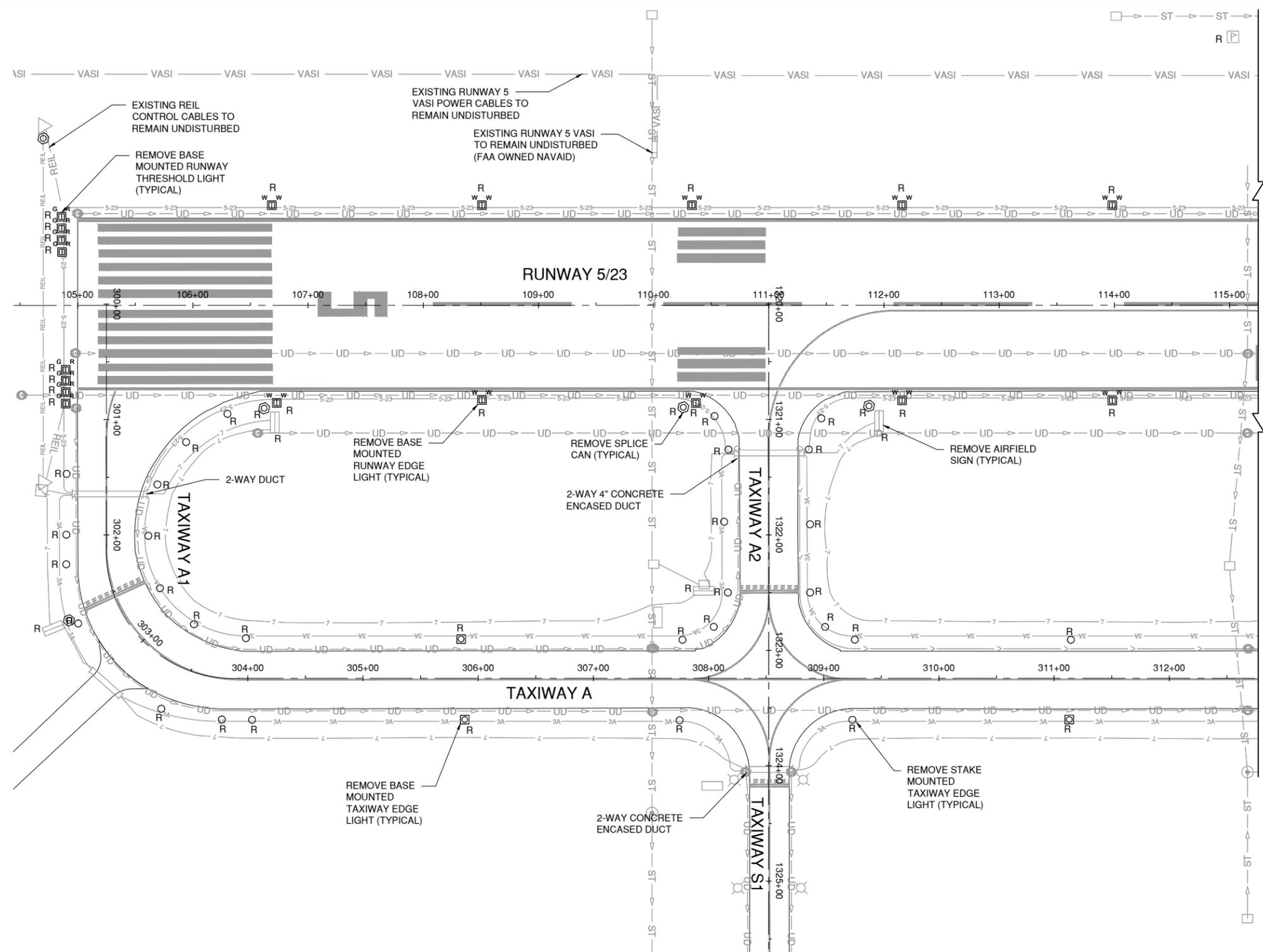
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 DATE: 4/16/2021
 JOB No: 20022602-00

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SHEET 22 OF 61 SHEETS

EXISTING CONDITIONS LEGEND

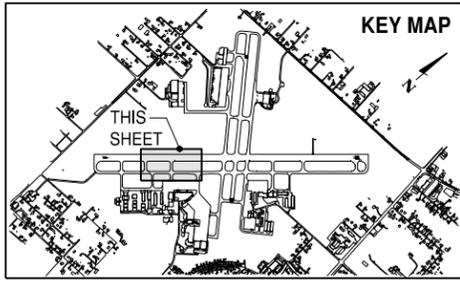
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- ◻ EXISTING BASE MOUNTED TAXIWAY LIGHT
- EXISTING STAKE MOUNTED TAXIWAY LIGHT
- ◻ EXISTING BASE MOUNTED RUNWAY LIGHT
- ⊙ EXISTING IN PAVEMENT MOUNTED HIGH INTENSITY RUNWAY LIGHT
- ⊙ EXISTING SPLICE CAN
- ◻ EXISTING VISUAL APPROACH SLOPE INDICATOR (VASI)
- △ EXISTING RUNWAY END IDENTIFIER LIGHT (REIL)
- ◻ EXISTING APPROACH LIGHTING SYSTEM
- ◻ EXISTING AIRFIELD GUIDANCE SIGN (LIT)
- ◻ EXISTING AIRFIELD GUIDANCE SIGN (REFLECTIVE)
- ◻ EXISTING WINDCONE
- ◻ EXISTING WINDCONE WITH SEGMENTED CIRCLE
- ⊗ EXISTING ELECTRICAL TRANSFORMER
- ⊙ EXISTING ELECTRICAL/STORM/SANITARY/TELEPHONE MANHOLE OR EXISTING WATER VALVE VAULT
- ⊗ EXISTING ELECTRICAL HANDHOLE
- ◻ EXISTING STORM INLET
- ⊙ EXISTING UNDERDRAIN CLEANOUT
- △ EXISTING FLARED END SECTION
- EXISTING CONDUIT/DUCT BANK
- FAA EXISTING FAA CABLES
- FAA COMED EXISTING COMED SERVICE TO FAA ILS SYSTEM
- ST EXISTING STORM SEWER
- UD EXISTING UNDERDRAIN
- W EXISTING WATERMAIN
- SS EXISTING SANITARY SEWER
- T EXISTING TELEPHONE LINES
- E EXISTING ELECTRIC LINE
- G EXISTING GAS LINE
- X EXISTING FENCE
- REIL EXISTING RUNWAY END IDENTIFIER LIGHTING CIRCUIT
- 5-23 EXISTING RUNWAY 5-23 CIRCUIT
- 14-32 EXISTING RUNWAY 14-32 CIRCUIT
- 3A EXISTING RUNWAY A (WEST) CIRCUIT
- 3B EXISTING RUNWAY A (EAST) CIRCUIT
- 4 EXISTING TAXIWAY B CIRCUIT
- 5 EXISTING TAXIWAY C AND TAXIWAY F CIRCUIT
- 6 EXISTING TAXIWAY D CIRCUIT
- 7 EXISTING GUIDANCE SIGN CIRCUIT
- VASI EXISTING VASI CIRCUIT



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 Waukegan Airport Logo.dwg

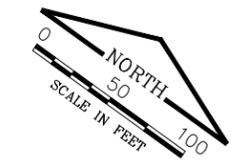
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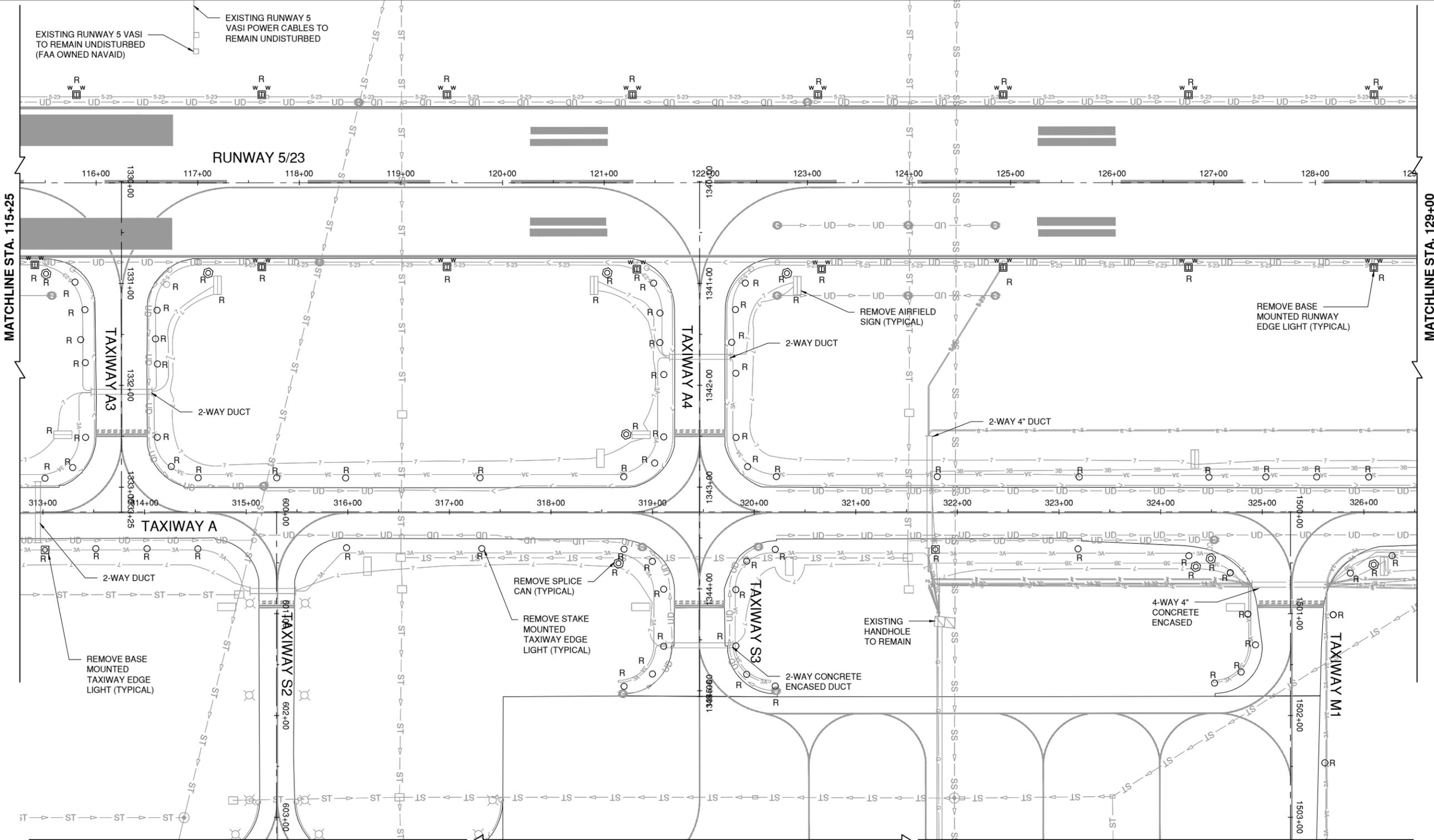
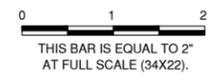
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1. REFER TO EXISTING CONDITIONS AND REMOVALS SHEET 1 FOR NOTES AND LEGEND.



IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS		
NUMBER	BY	DATE



MATCHLINE EXISTING CONDITIONS AND REMOVALS - SHEET 10

**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

EXISTING CONDITIONS AND REMOVALS - SHEET 2

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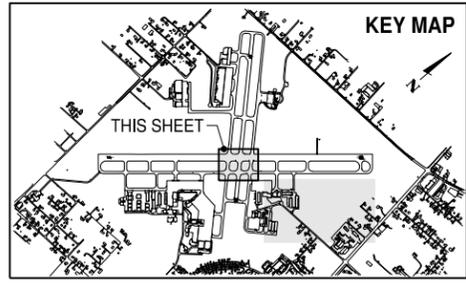
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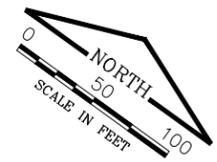
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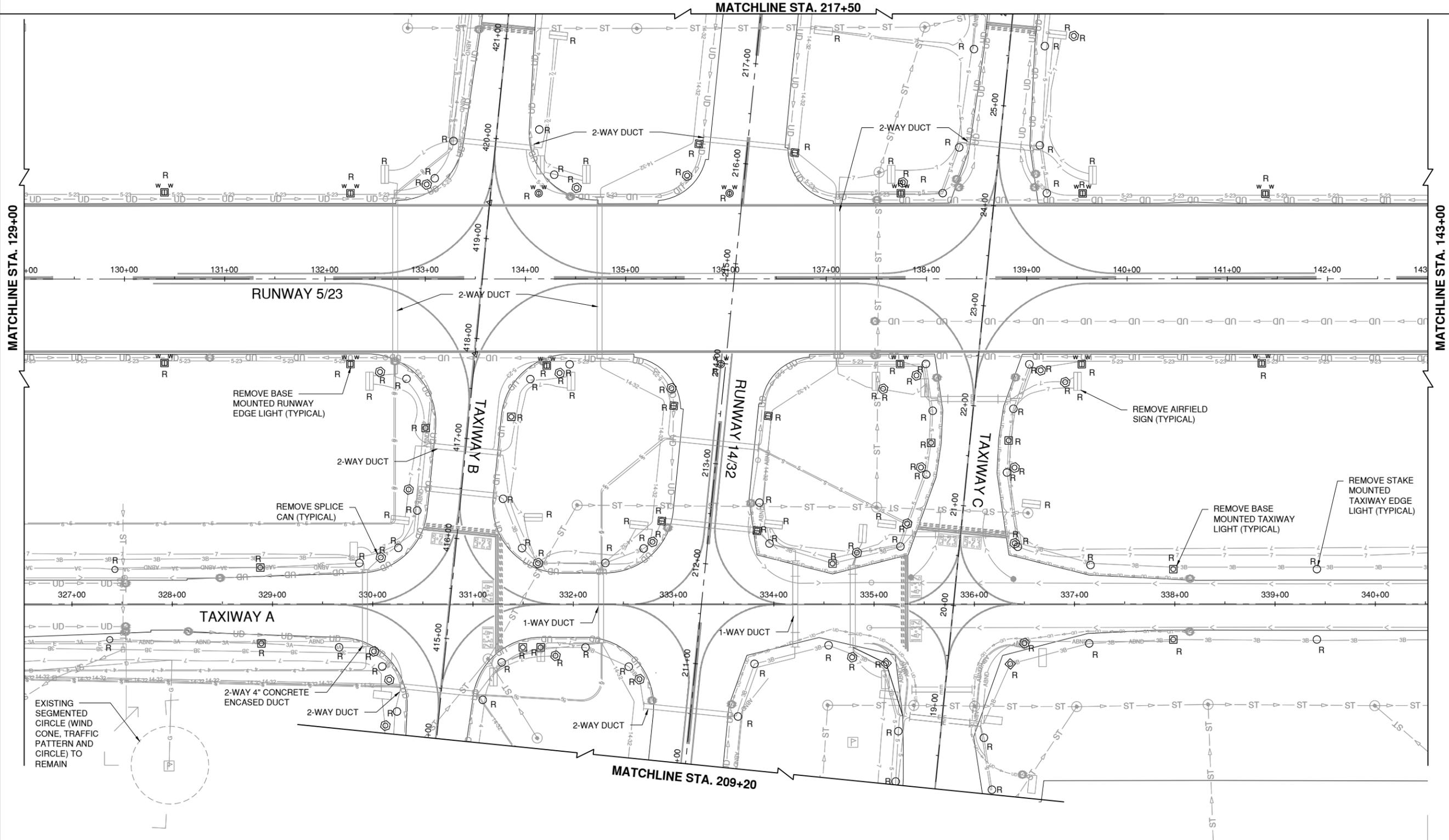
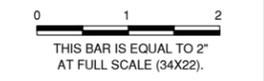
NOTES:

1. REFER TO EXISTING CONDITIONS AND REMOVALS SHEET 1 FOR NOTES AND LEGEND.



IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS		
NUMBER	BY	DATE



**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

EXISTING CONDITIONS AND REMOVALS - SHEET 3

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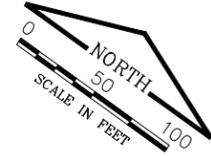
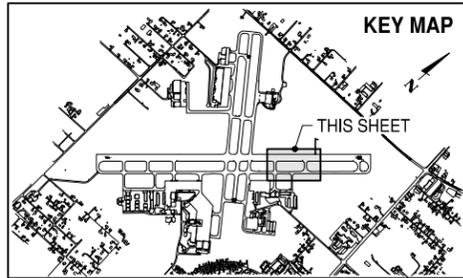
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SHEET 24 OF 61 SHEETS

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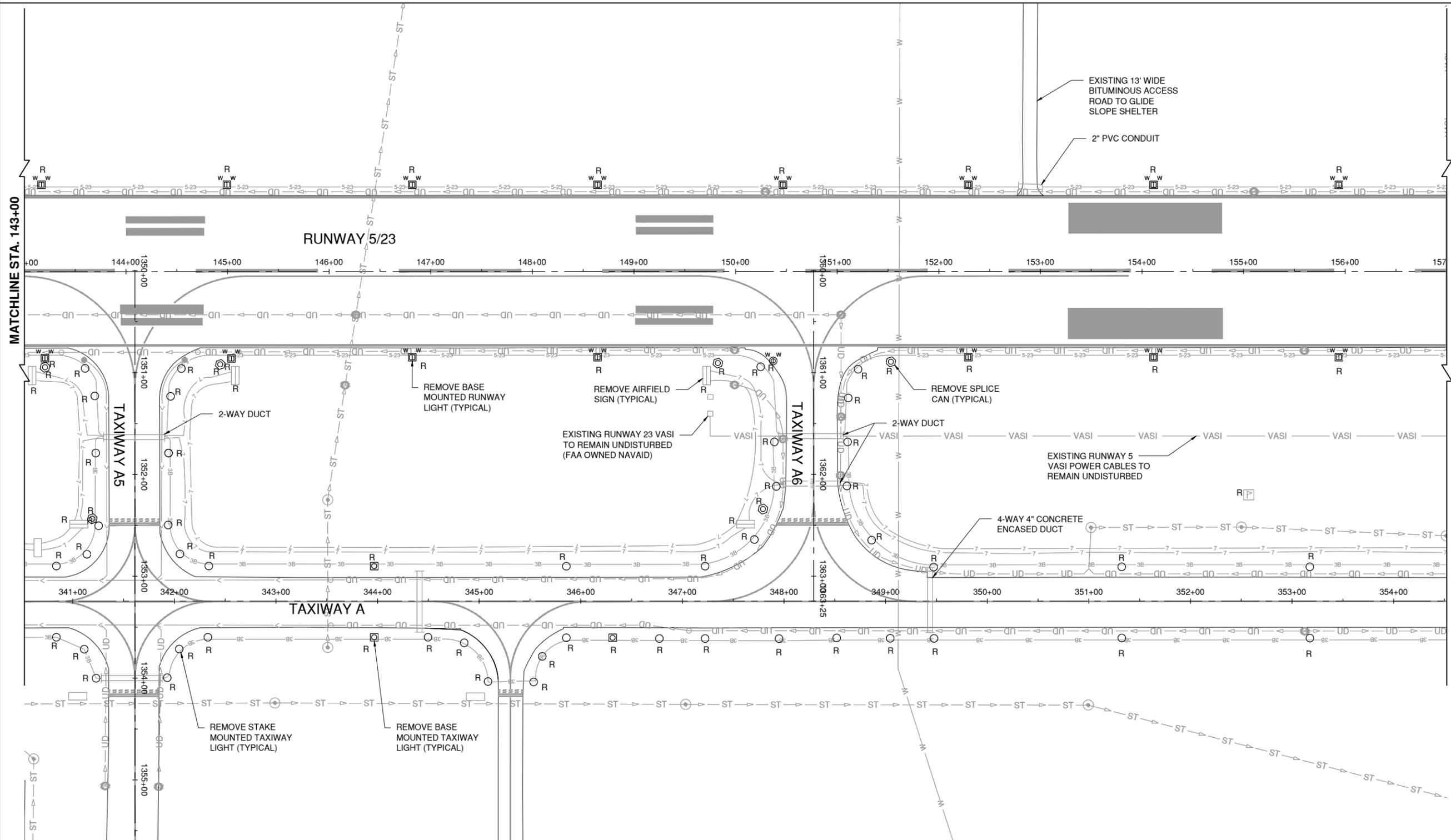
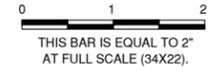


NOTES:

1. REFER TO EXISTING CONDITIONS AND REMOVALS SHEET 1 FOR NOTES AND LEGEND.

IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

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**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

EXISTING CONDITIONS AND REMOVALS - SHEET 4

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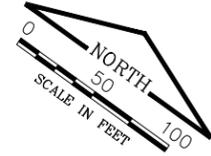
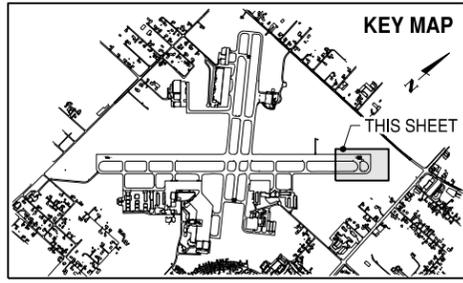
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JOB No:	20022602-00

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SHEET 25 OF 61 SHEETS

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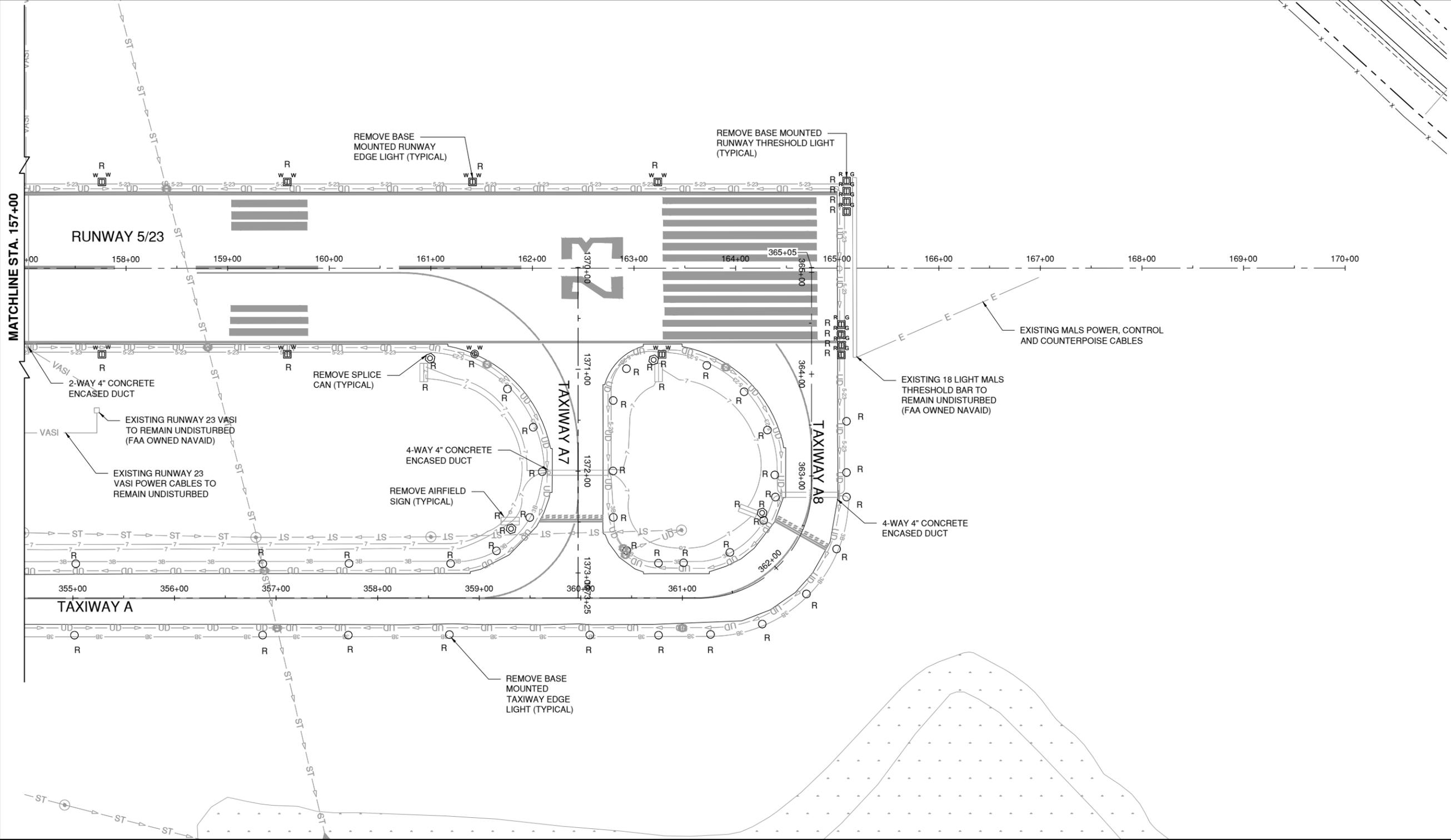
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IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
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 S.B.G. PROJECT: **3-17-SBGP-XXX**

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**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

EXISTING CONDITIONS AND REMOVALS - SHEET 5

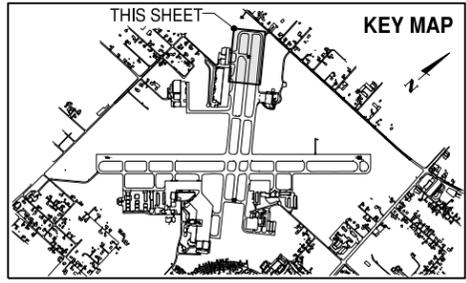
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 DATE: 4/16/2021
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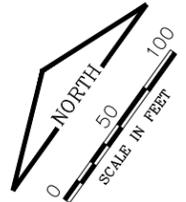
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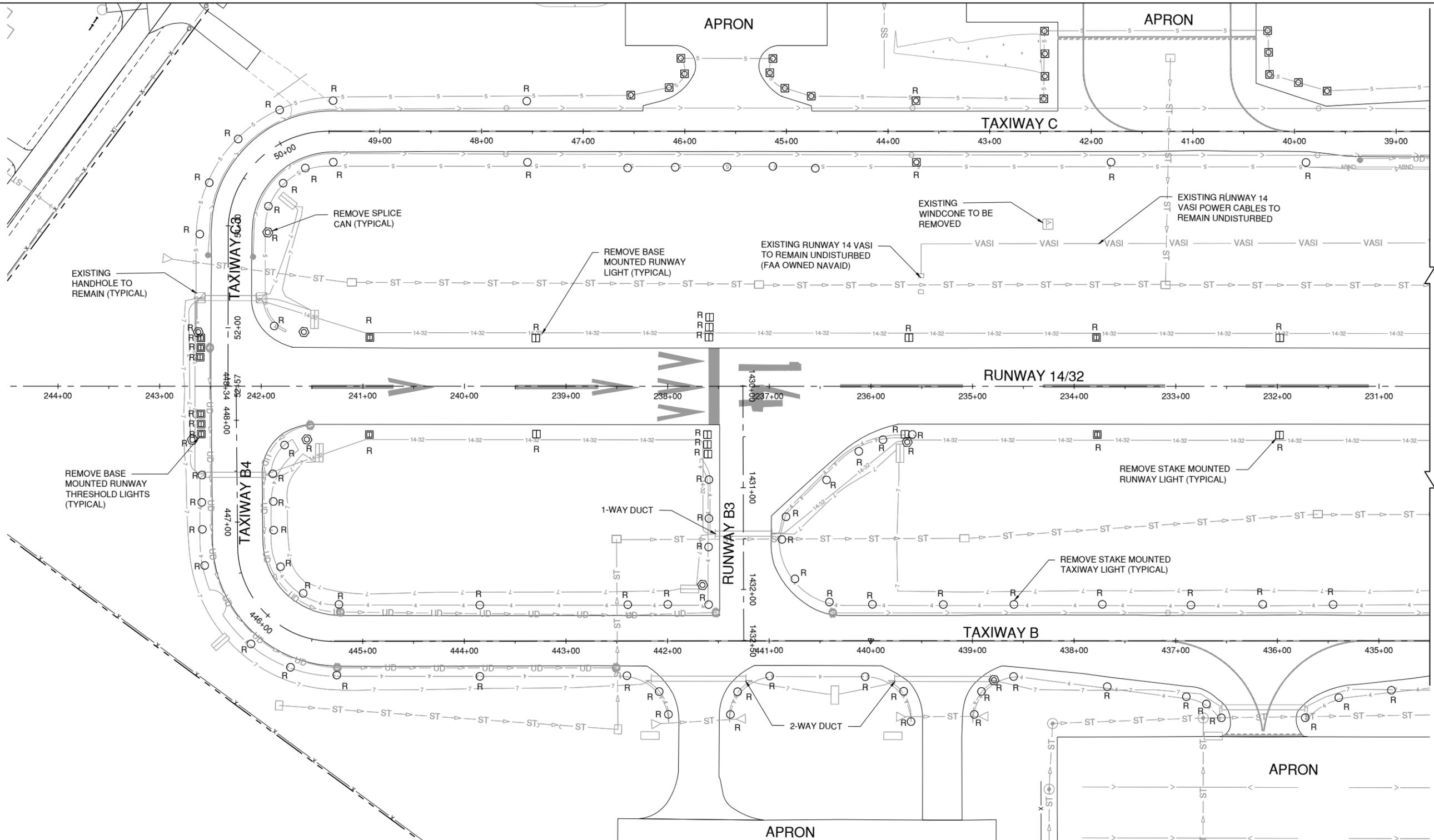
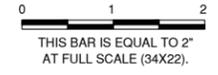
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IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

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**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS
 EXISTING CONDITIONS AND REMOVALS - SHEET 6**

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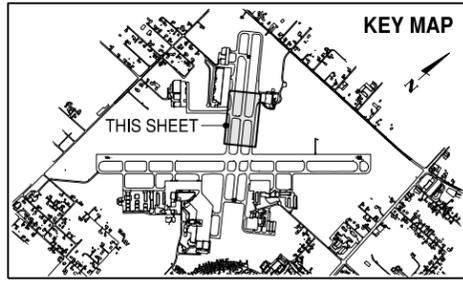
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APPROVED BY:	DKP
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SHEET 27 OF 61 SHEETS	

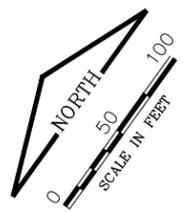
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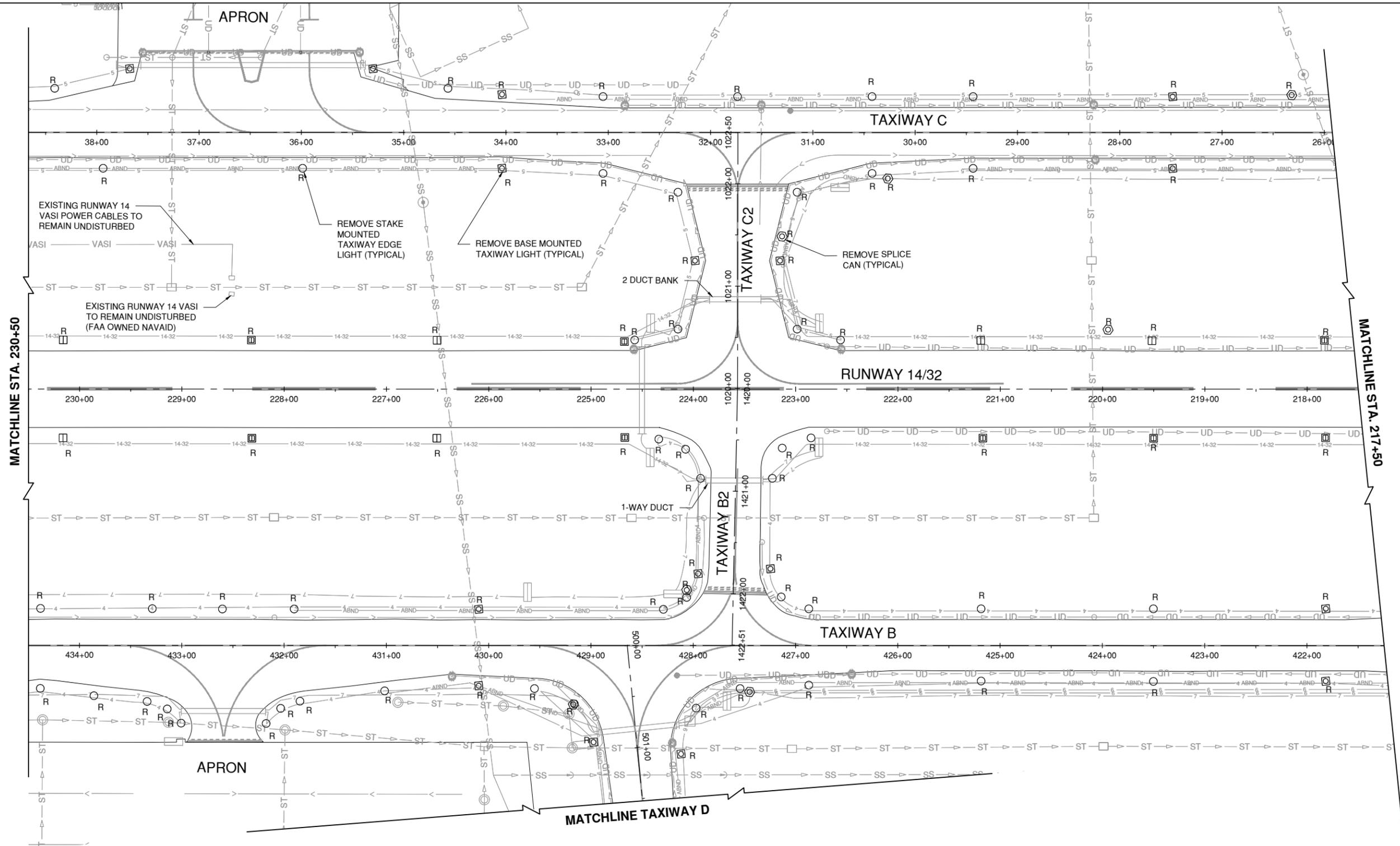
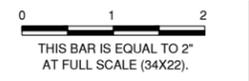


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 1. REFER TO EXISTING CONDITIONS AND REMOVALS SHEET 1 FOR NOTES AND LEGEND.



IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

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WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS
EXISTING CONDITIONS AND REMOVALS - SHEET 7

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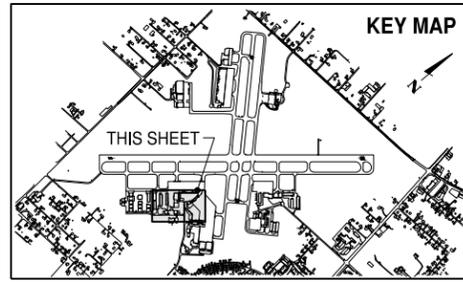
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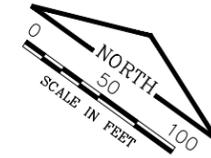
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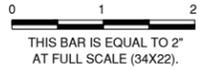
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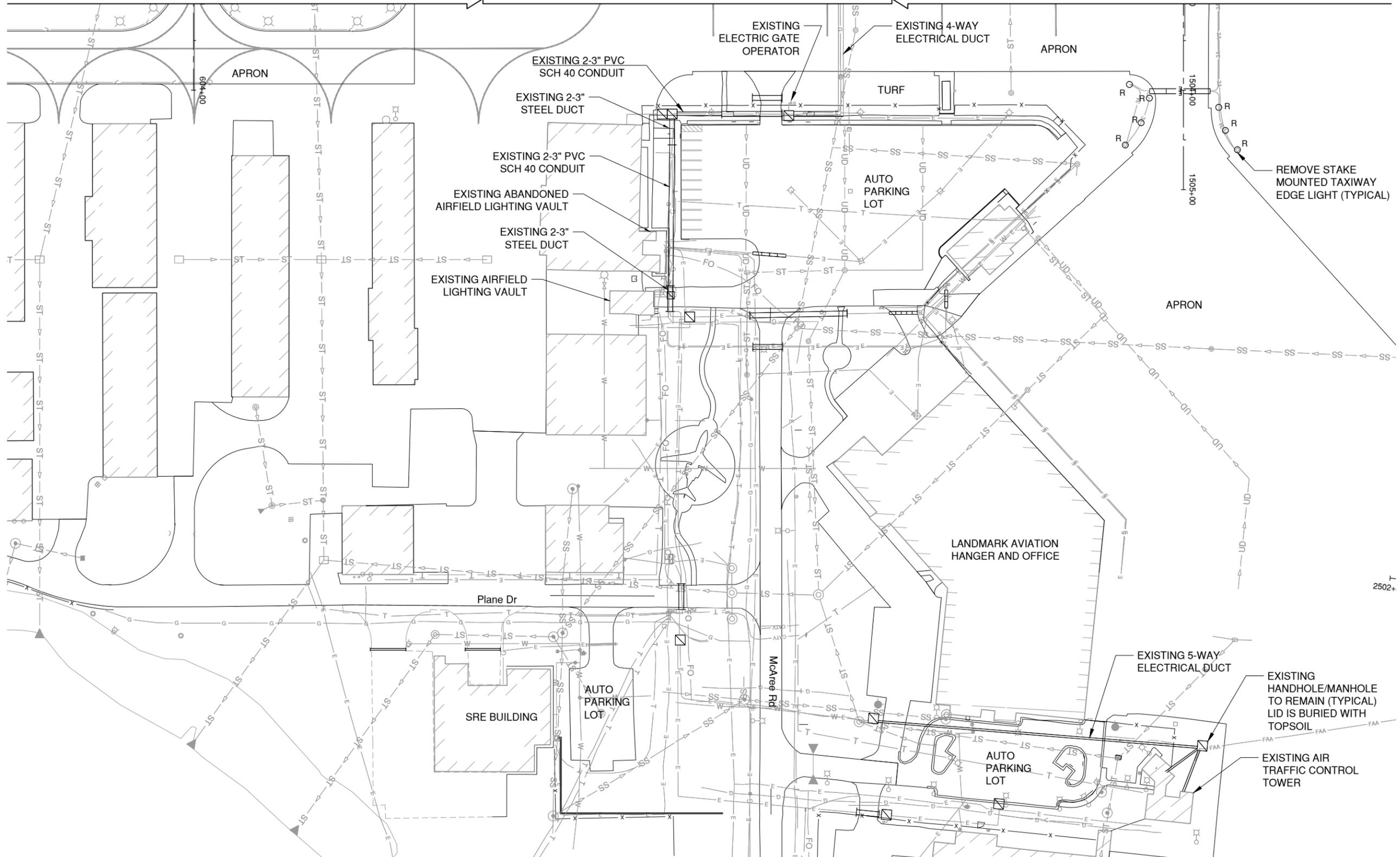


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 IL PROJECT: **UGN-4824**
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MATCHLINE EXISTING CONDITIONS AND REMOVALS - SHEET 2



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**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

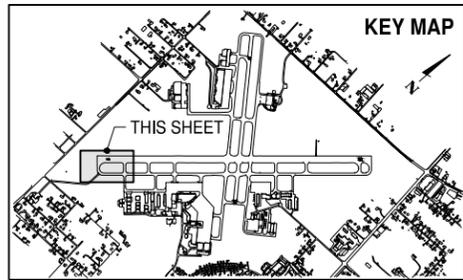
EXISTING CONDITIONS AND REMOVALS - SHEET 10

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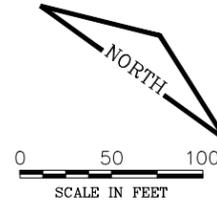
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LEGEND :

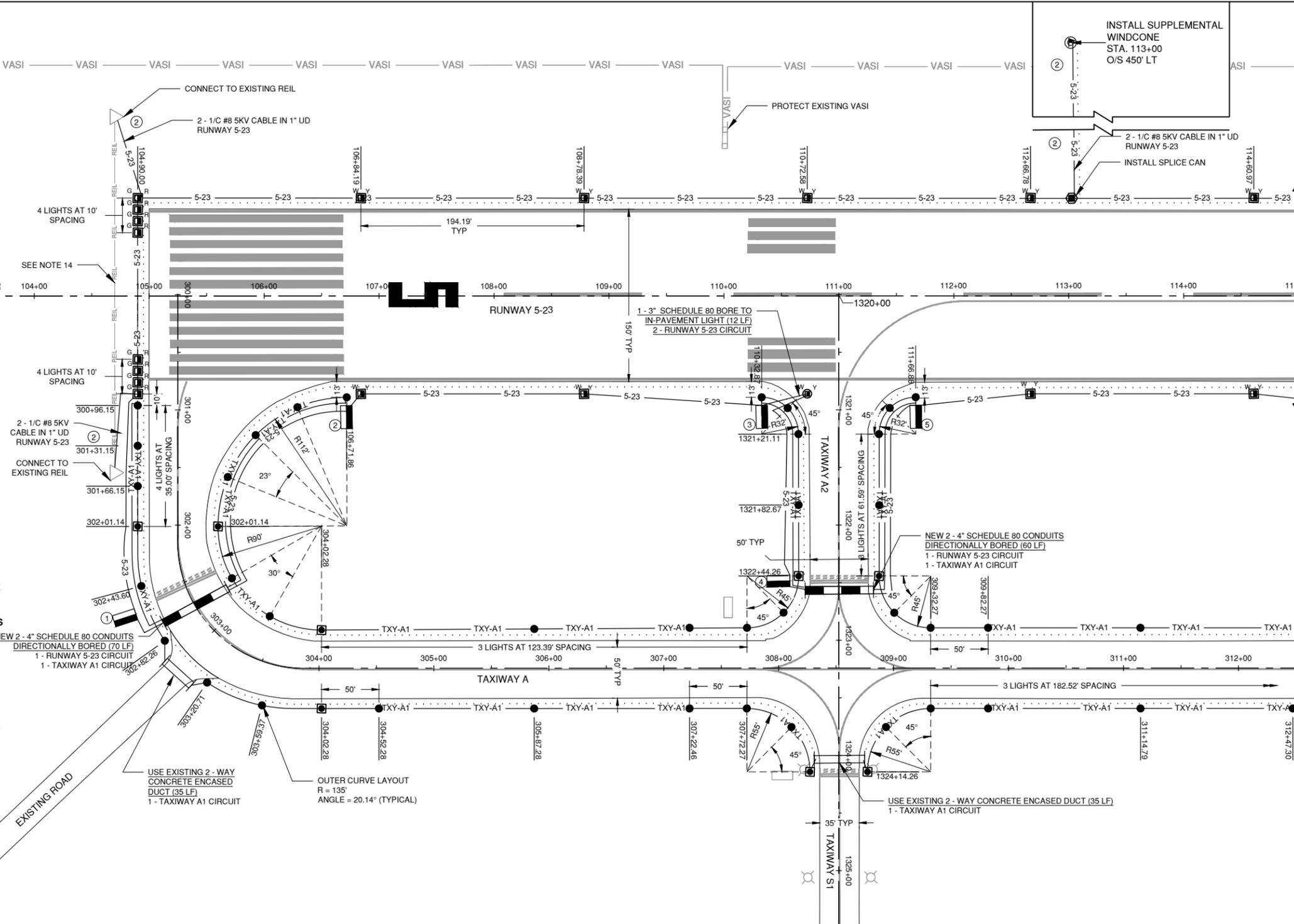
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●	NEW STAKE MOUNTED TAXIWAY EDGE LIGHT	-TXY-A2-	NEW TAXIWAY A WEST CIRCUIT 1 1/C #8 5KV UG CABLE IN UNIT DUCT		W Y	WHITE / YELLOW
●	NEW IN-PAVEMENT RUNWAY EDGE LIGHT	-TXY-B-	NEW TAXIWAY B CIRCUIT 1 1/C #8 5KV UG CABLE IN UNIT DUCT		G R	GREEN / RED
■	NEW HANDHOLE	-TXY-C-	NEW TAXIWAY C CIRCUIT 1 1/C #8 5KV UG CABLE IN UNIT DUCT		R	RED
①	NEW AIRFIELD SIGN (SEE NOTE 2)	NEW COUNTERPOISE BARE #6		G Y	GREEN / YELLOW
⊙	NEW SUPPLEMENTAL WINDCONE	—	EXISTING ELECTRICAL DUCT		G UNI	UNI - DIRECTIONAL GREEN
■	NEW SPLICE CAN	—	NEW ELECTRICAL DUCT - DIRECTIONALLY BURIED		R Y	RED / YELLOW
— 5-23 —	NEW RUNWAY 5-23 CIRCUIT 1 - 1/C #8 5KV UG CABLE IN UNIT DUCT	—	NEW ELECTRICAL DUCT - CONCRETE ENCASED		B	BLUE ALL TAXIWAY (NOT SHOWN)
②	NEW RUNWAY 5-23 CIRCUIT 2 - 1/C #5 KV UG CABLE IN UNIT DUCT	—	EXISTING AIRFIELD SIGN (SEE NOTE 17)			
— 14-32 —	NEW RUNWAY 14-32 CIRCUIT 1 - 1/C #8 5KV UG CABLE IN UNIT DUCT					



**FOR EXISTING CONDITIONS LEGEND
 SEE EXISTING CONDITIONS AND REMOVALS - SHEET 1**

GENERAL NOTES (ALL SHEETS):

- EXISTING LIGHTS, GUIDANCE SIGNS, AND AIRFIELD CIRCUITS, OTHER THAN THOSE INDICATED FOR REMOVAL, ARE TO BE PROTECTED FROM DAMAGE. CONTRACTOR IS TO REPAIR ALL DAMAGED EQUIPMENT AND CIRCUITS AT CONTRACTOR'S EXPENSE.
- FOR AIRFIELD SIGNAGE SCHEDULE SEE ELECTRICAL DETAILS - SHEET 5.
- ALL LIGHT BASES AND SIGN FOUNDATIONS REMOVED SHALL BE BACKFILLED IN ACCORDANCE WITH THE SPECIFICATIONS. COST OF BACKFILL SHALL BE INCIDENTAL TO THE ASSOCIATED PAY ITEM.
- PRIOR TO REMOVAL OF AIRFIELD SPLICE CAN, CONTRACTOR SHALL VERIFY THAT ALL ELECTRICAL CIRCUITS CONTAINED IN THE SPLICE CAN HAVE BEEN ABANDONED.
- ANY TEMPORARY CABLING REQUIRED FOR THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- FOR CLARITY, UNDERGROUND UTILITIES ARE NOT SHOWN. REFER TO EXISTING CONDITION SHEETS FOR UTILITIES LOCATION. CONTRACTOR IS RESPONSIBLE TO LOCATE ALL UNDERGROUND UTILITIES. ANY DAMAGE TO EXISTING EQUIPMENT OR UTILITIES DUE TO CONTRACTOR NEGLIGENCE SHALL BE REPAIRED IMMEDIATELY AT CONTRACTOR'S EXPENSE.
- UNLESS NOTED OTHERWISE, DIRECTIONAL BORE SHALL BE LOCATED 10' OUTSIDE OF OF RUNWAY HOLD LINE
- DIRECTIONAL BORE SHALL EXTEND 5' PAST THE EDGE OF PAVEMENT.
- CONTRACTOR SHALL VERIFY ALL LIGHTS ARE STRAIGHT UNLESS ON RADIUS.
- ALL EDGE LIGHTS SHALL BE OFFSET 10' FROM THE EDGE OF RUNWAY AND TAXIWAY PAVEMENT.
- ALL AIRFIELD GUIDANCE SIGNS SHALL BE INSTALLED 25' FROM THE EDGE OF RUNWAY AND TAXIWAY PAVEMENT.
- CIRCUITS ROUTED THROUGH NEW AND EXISTING CONDUITS SHALL BE CABLE IN UNIT DUCT UNLESS OTHERWISE NOTED.
- COUNTERPOISE WITH GROUND RODS SHALL BE INSTALLED ON ALL NEW ELECTRICAL CABLING UNLESS OTHERWISE NOTED. SEE ELECTRICAL DETAIL SHEETS FOR DETAILS.
- EXISTING CONTROL CABLES BETWEEN MASTER AND SLAVE REILS REMAINS AND SHALL BE PROTECTED DURING CONSTRUCTION.
- UNIT DUCT FOR 1 CABLE SHALL BE 3/4" DIAMETER AND 2 CABLES SHALL BE 1" DIAMETER PER THE SPECIFICATIONS.
- INSTALL PULL STRINGS FOR ALL SPARE CONDUITS FOR FUTURE USE.
- REPLACE EXISTING ISOLATION TRANSFORMER FOR ALL EXISTING SIGNS TO REMAIN. ISOLATION TRANSFORMERS SHALL BE SIZED TO MATCH EXISTING TRANSFORMERS.
- THE CONTRACTOR SHALL VERIFY THAT THE EXISTING RUNWAY/TAXIWAY LIGHTING CIRCUITS ARE OPERATIONAL. AT THE END OF EACH WORKING DAY.
- ANY EXISTING CABLE MARKERS THAT ARE DISTURBED SHALL BE REMOVED AND REINSTALLED AT THE SAME LOCATION. COST SHALL BE INCIDENTAL TO GRADING.
- AT ANY LOCATION WHERE THE PROPOSED DUCT OR CABLE ROUTE CROSSES AN EXISTING UTILITY, THE CONTRACTOR SHALL HAND DIG AND LOCATE THE EXISTING UTILITY PRIOR TO TRENCHING. COST OF LOCATING ALL EXISTING UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT.



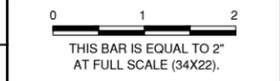
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**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

LIGHTING PLAN - SHEET 1

IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

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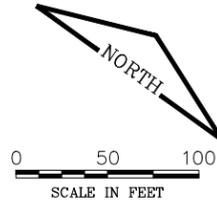
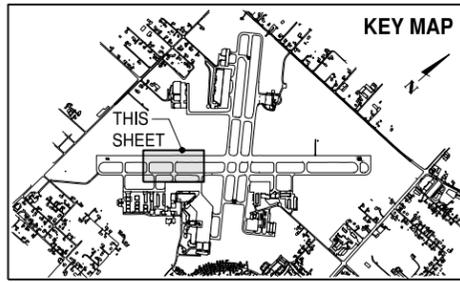
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CHECKED BY:	DKP
APPROVED BY:	AB
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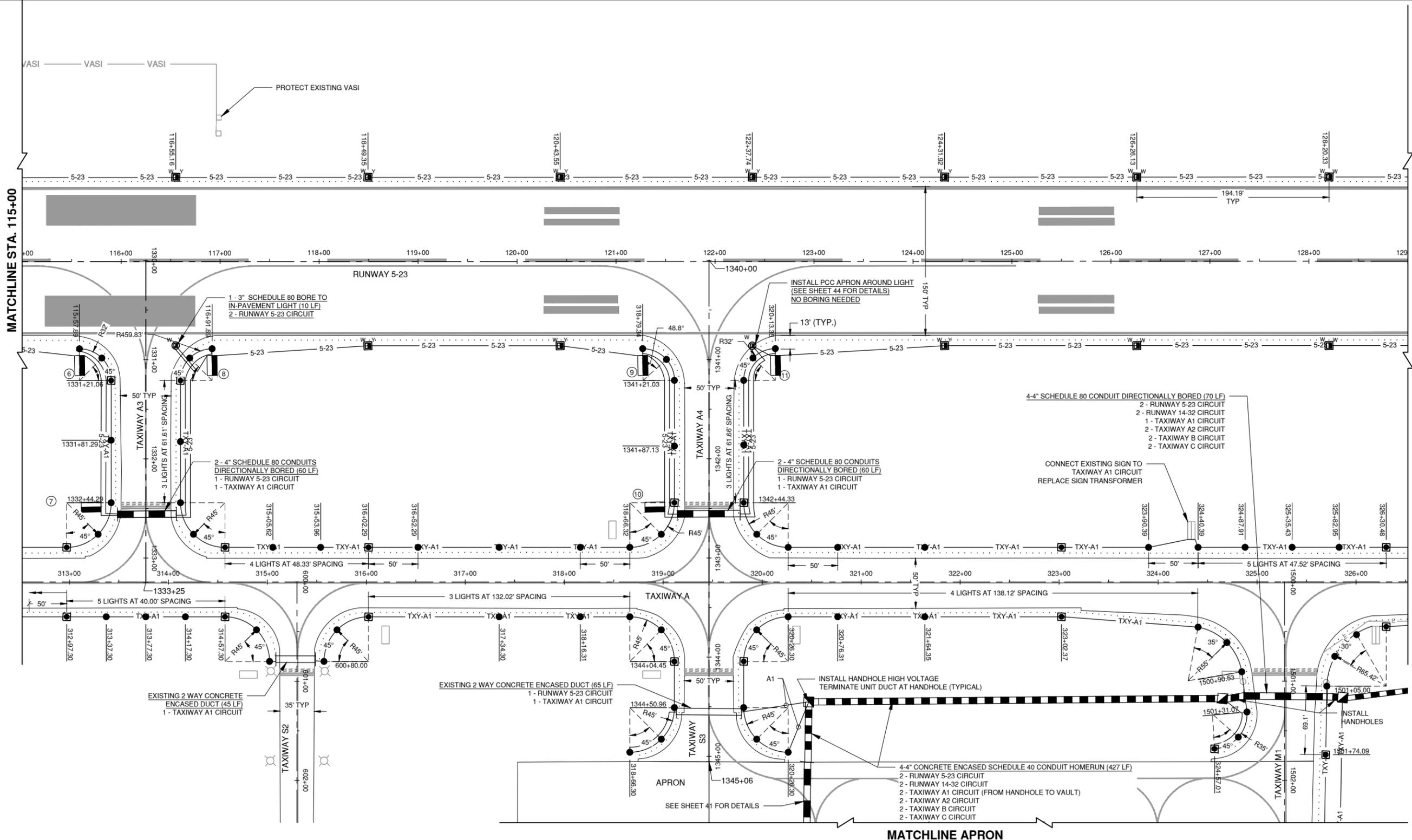
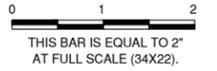
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NOTES: REFER TO LIGHTING PLAN - SHEET 1 FOR LEGEND AND NOTES

IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

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NUMBER	BY	DATE



**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

LIGHTING PLAN - SHEET 2

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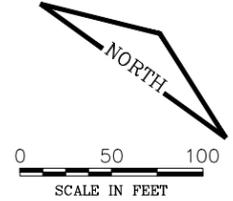
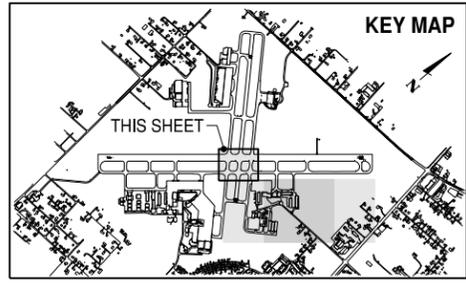
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FINAL
 SHEET 33 OF 61 SHEETS

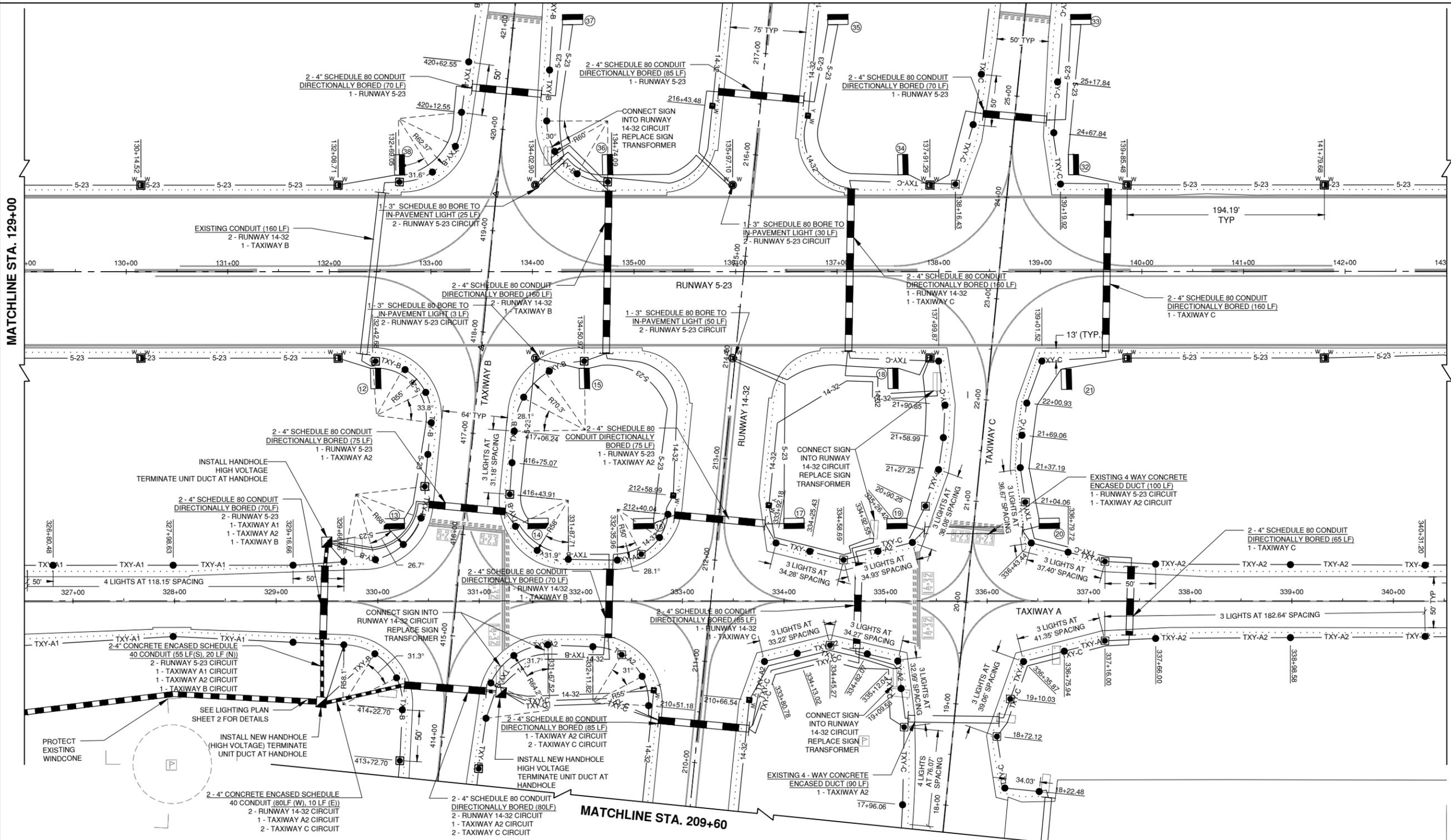
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 CL.dwg
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NOTES: REFER TO LIGHTING PLAN - SHEET 1 FOR LEGEND AND NOTES



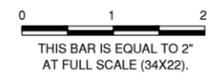
MATCHLINE STA. 129+00

MATCHLINE STA. 143+00

MATCHLINE STA. 209+60

IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

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**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS
 LIGHTING PLAN - SHEET 3**

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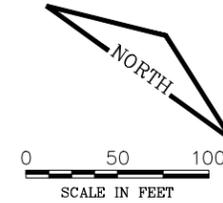
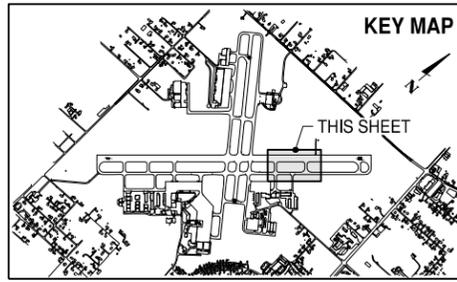
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JOB No:	20022602-00

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SHEET 34 OF 61 SHEETS

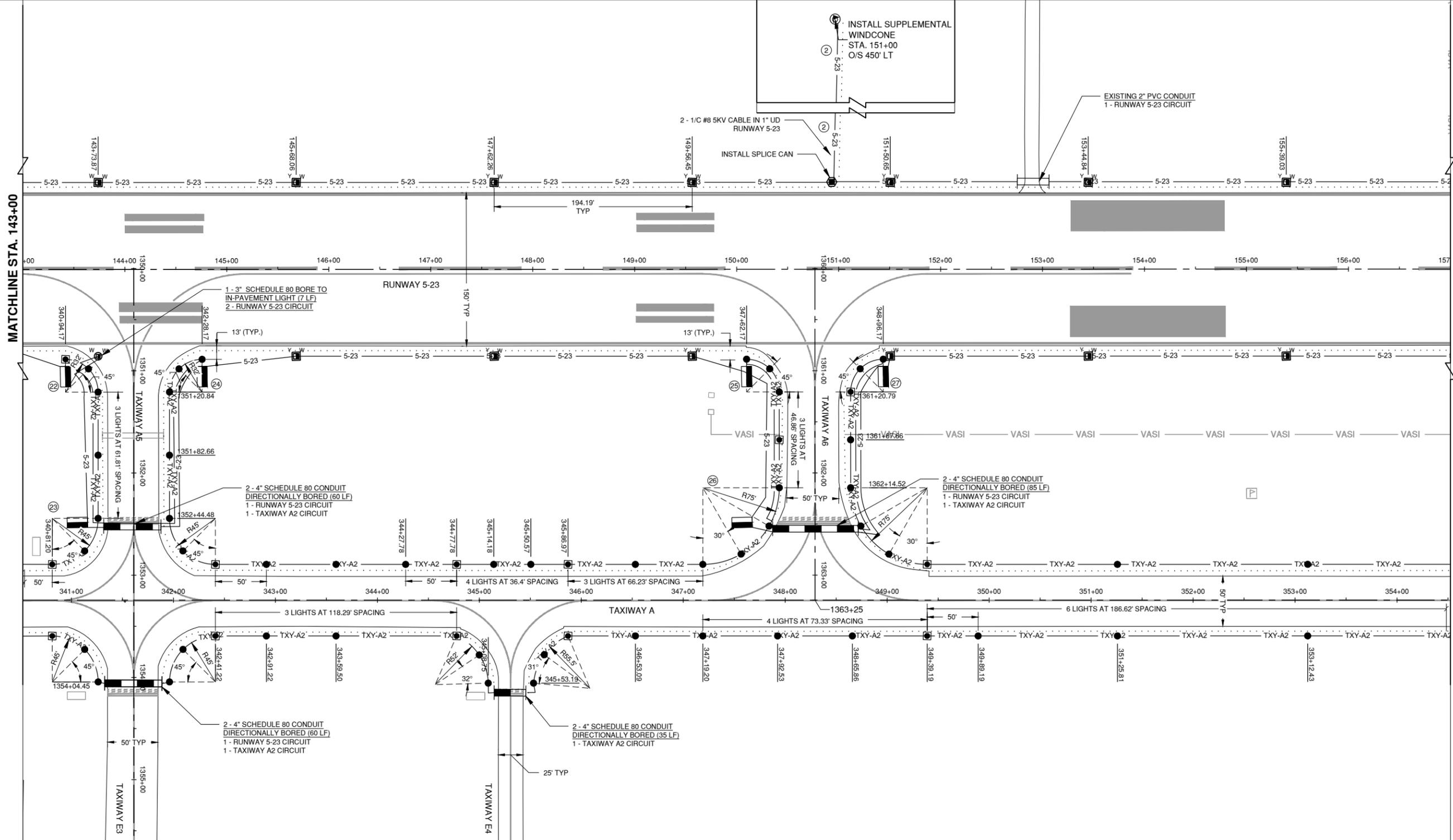
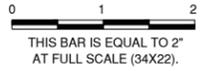
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 UGN 20022602 C-UTL.dwg



NOTES: REFER TO LIGHTING PLAN - SHEET 1 FOR LEGEND AND NOTES

IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
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MATCHLINE STA. 143+00

MATCHLINE STA. 157+00

**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS
 LIGHTING PLAN - SHEET 4**

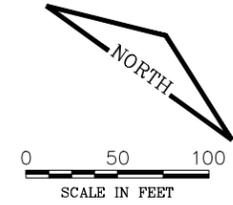
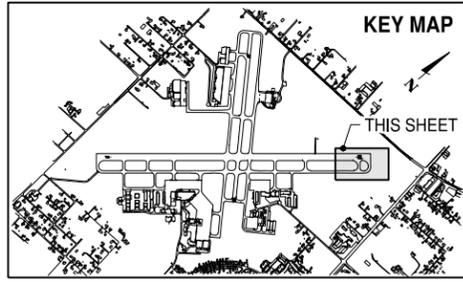
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SHEET 35 OF 61 SHEETS	

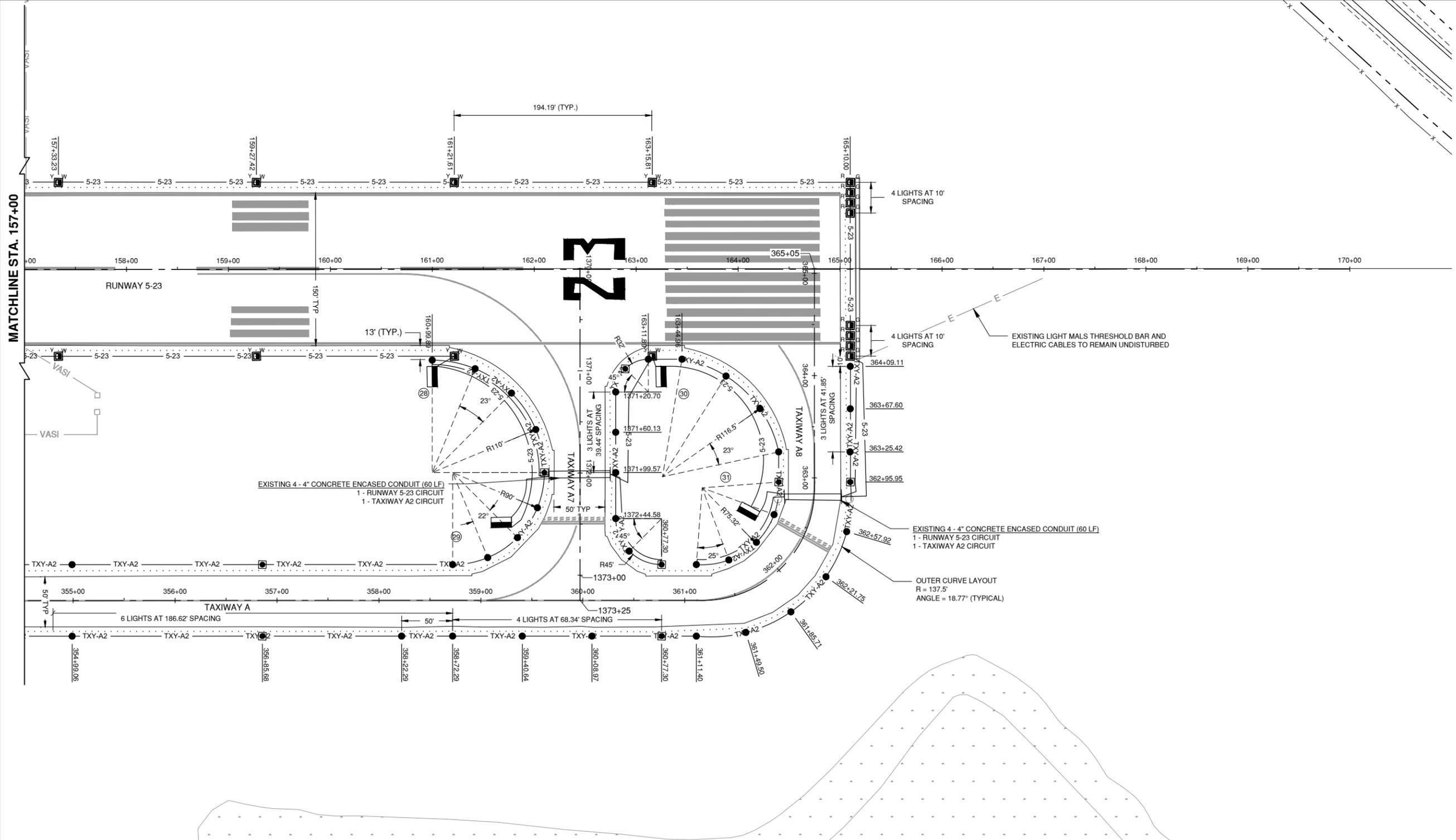
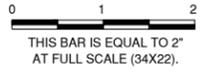
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NOTES: REFER TO LIGHTING PLAN - SHEET 1 FOR LEGEND AND NOTES

IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

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**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

LIGHTING PLAN - SHEET 5

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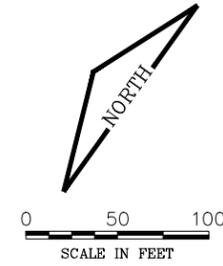
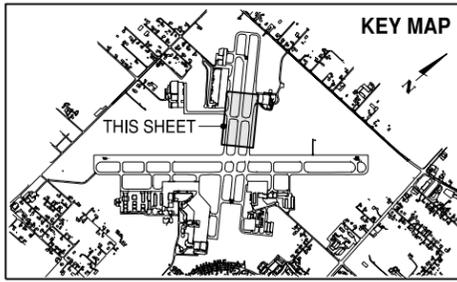
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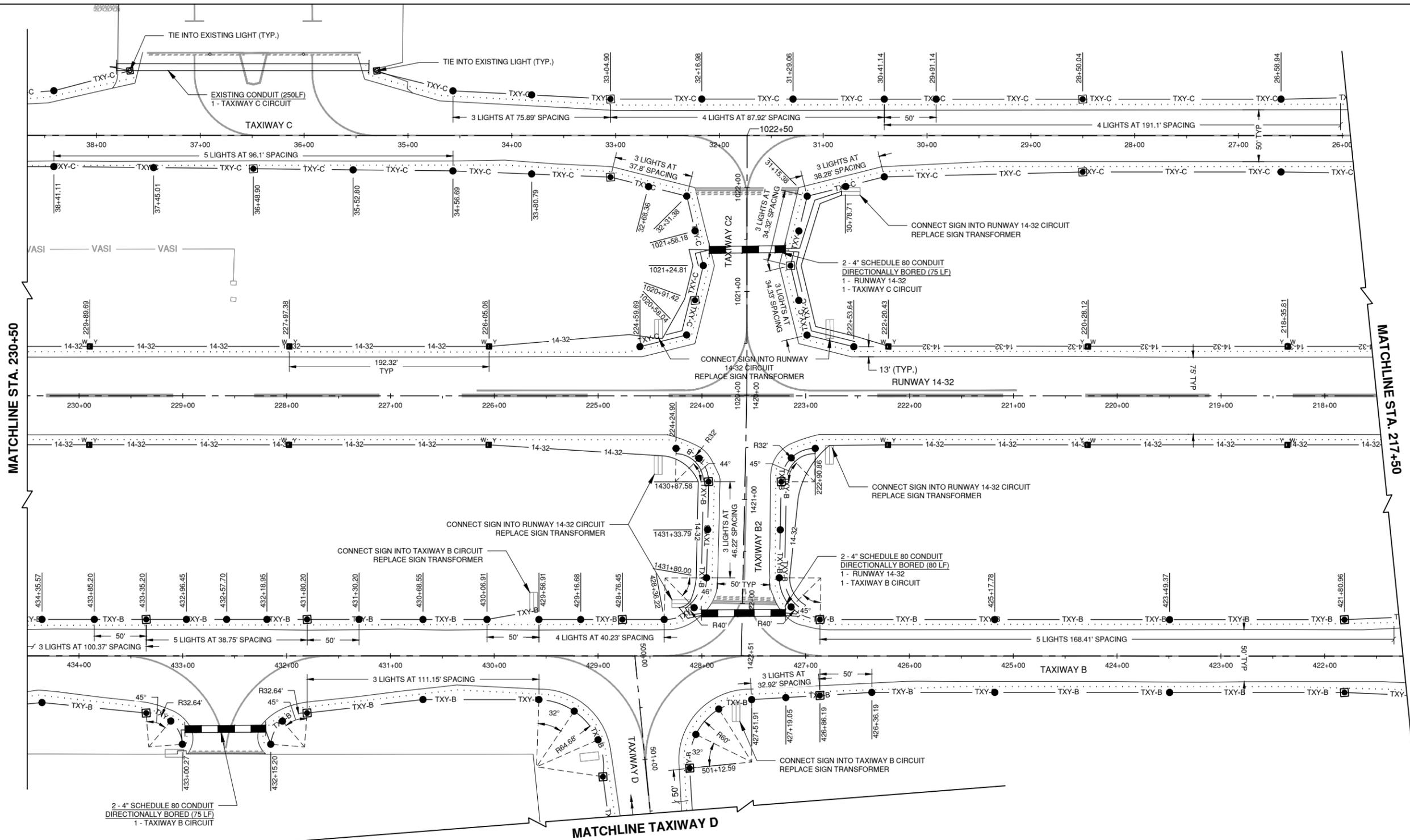
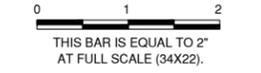
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IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

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NOTES: REFER TO LIGHTING PLAN - SHEET 1 FOR LEGEND AND NOTES



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REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS

LIGHTING PLAN - SHEET 7

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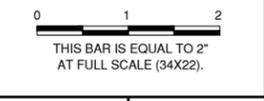
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SHEET 38 OF 61 SHEETS

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IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

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**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

LIGHTING PLAN - SHEET 8

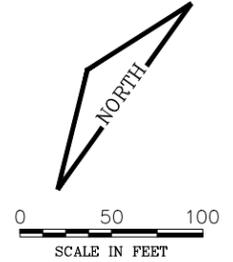
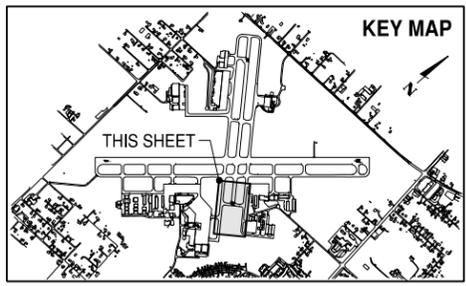
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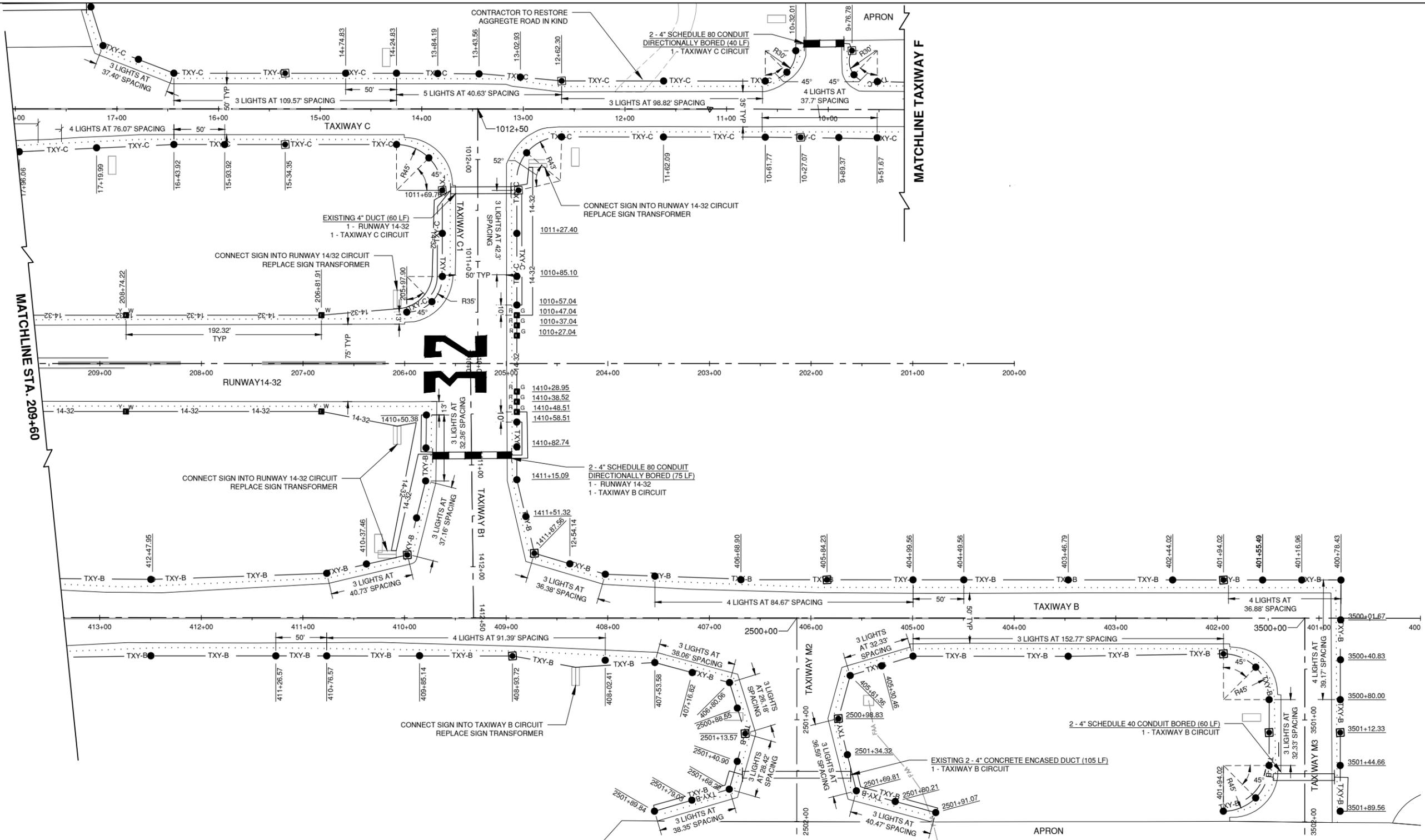
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APPROVED BY:	AB
DATE:	4/16/2021
JOB No:	20022602-00

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SHEET 39 OF 61 SHEETS



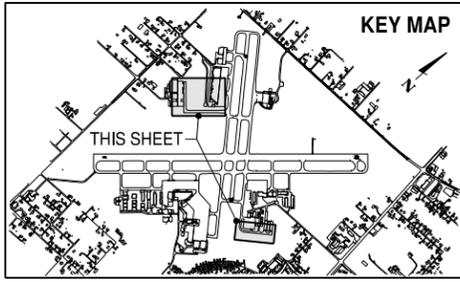
NOTES: REFER TO LIGHTING PLAN - SHEET 1 FOR LEGEND AND NOTES



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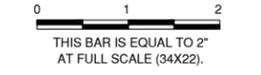
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NOTES: REFER TO LIGHTING PLAN - SHEET 1 FOR LEGEND AND NOTES

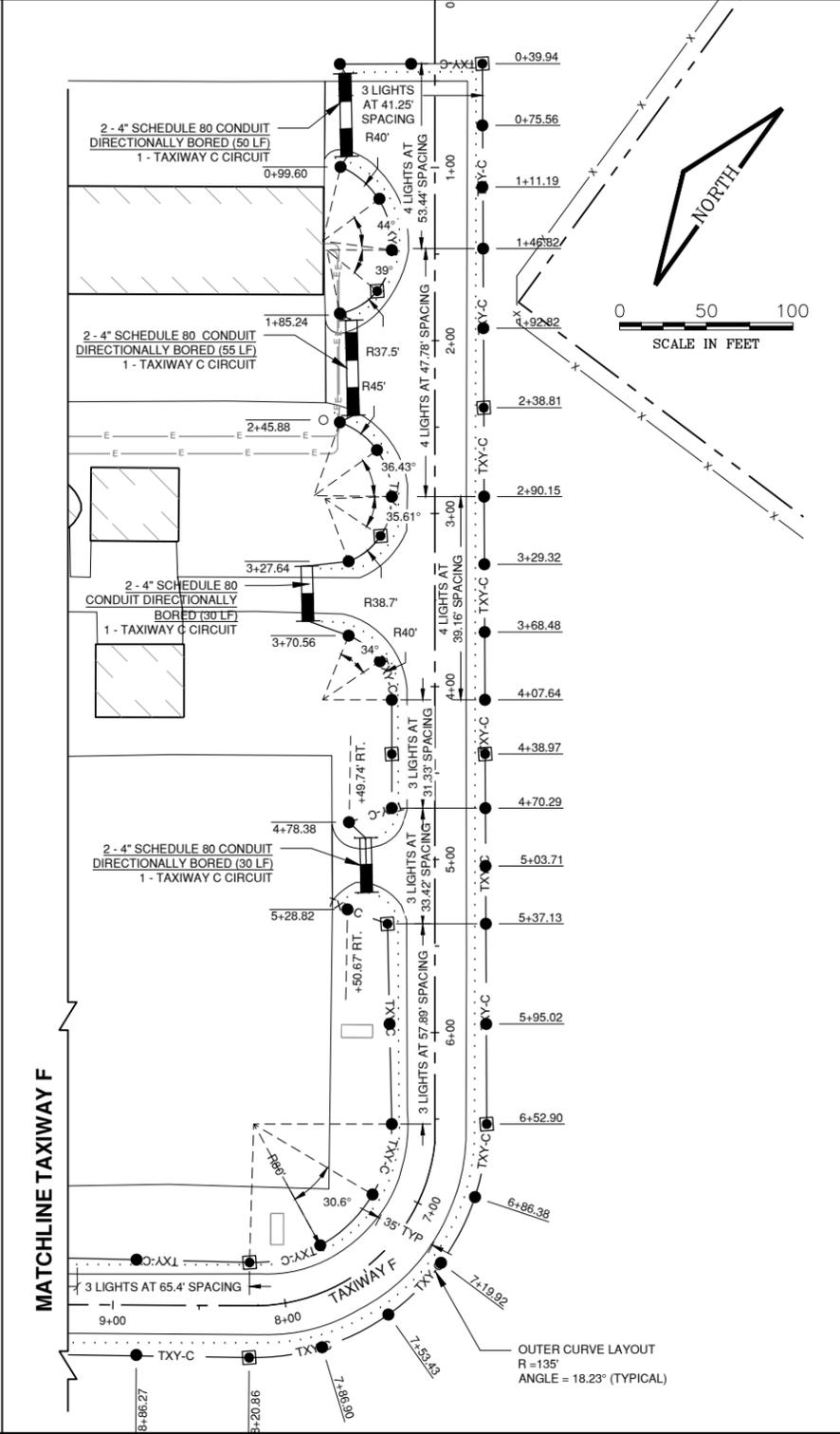
IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

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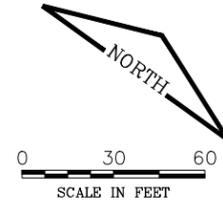
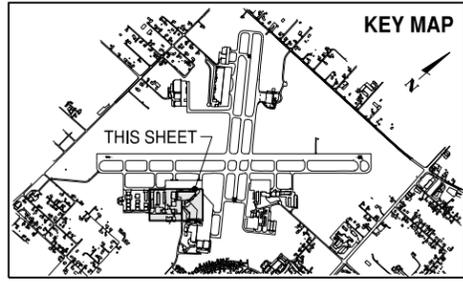
**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS**
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS

LIGHTING PLAN - SHEET 9

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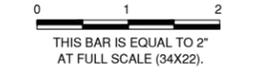
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SHEET 40 OF 61 SHEETS	



IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS		
NUMBER	BY	DATE



**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

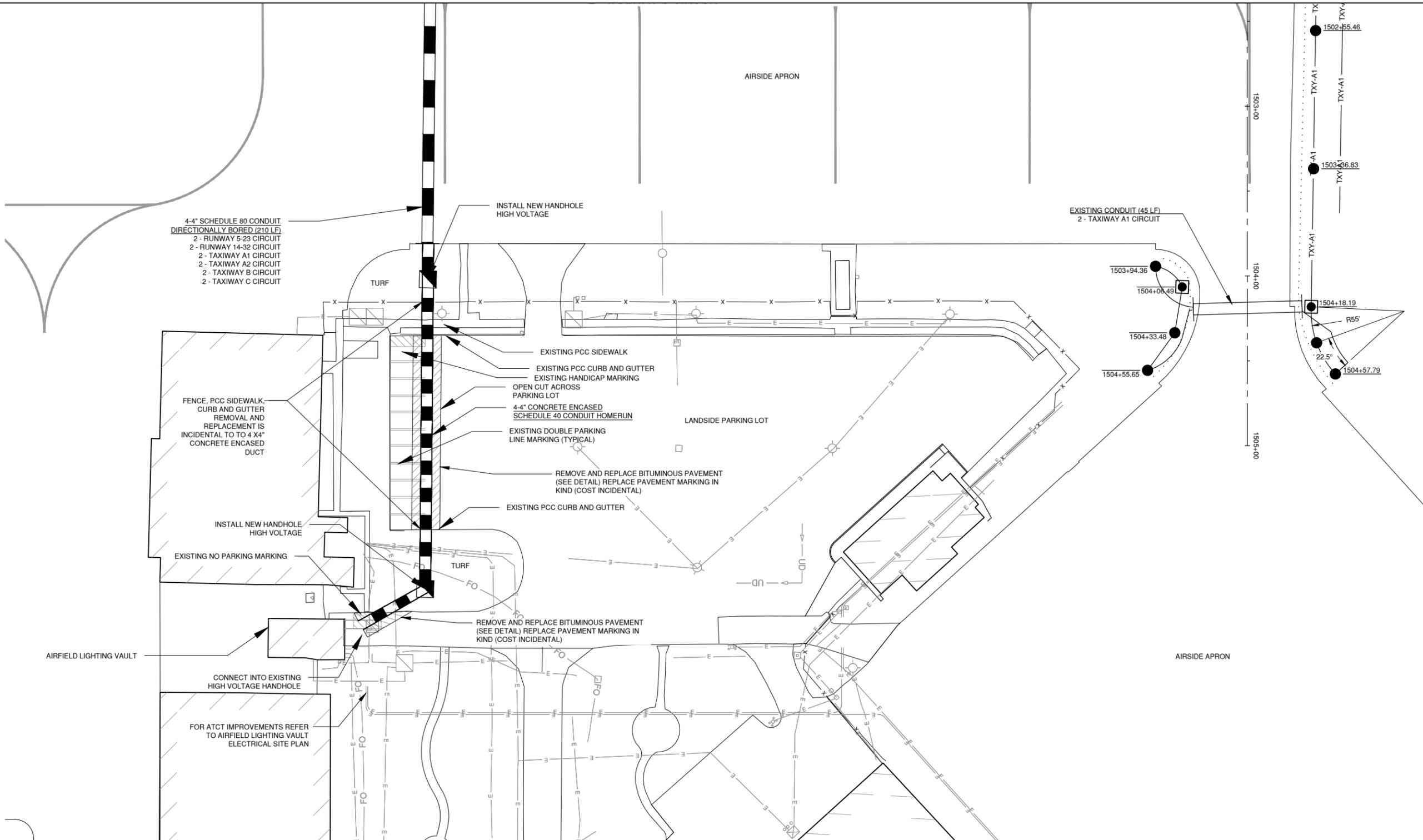
LIGHTING PLAN - SHEET 10

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SHEET 41 OF 61 SHEETS	

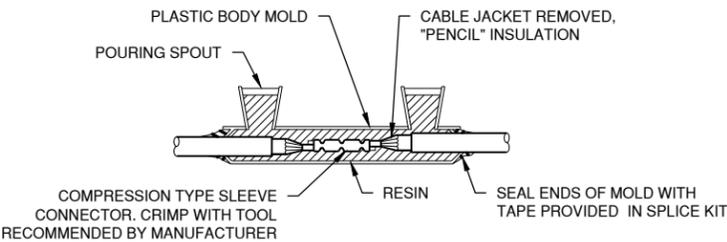
NOTES: REFER TO LIGHTING PLAN - SHEET 1 FOR LEGEND AND NOTES



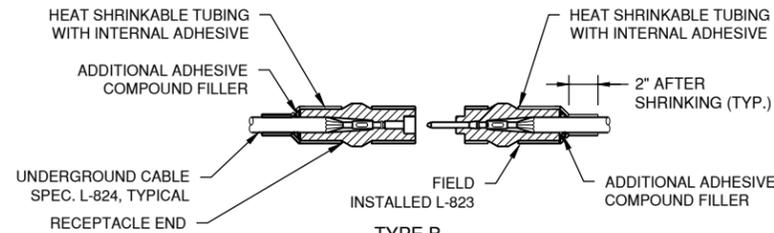
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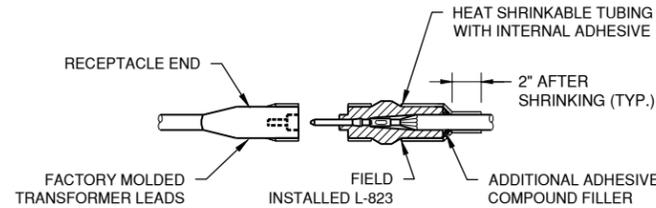
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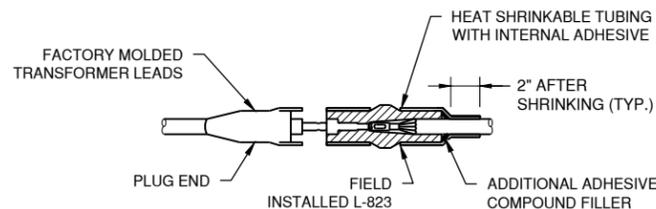
TYPE A
FOR SPLICES IN HOMERUNS AND FOR EXTENSIONS TO EXISTING CABLES ONLY



TYPE B
NOT TO BE USED UNLESS DIRECTED BY ENGINEER



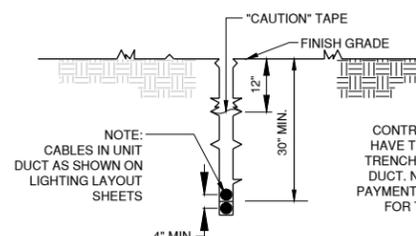
TYPE C
FOR SPLICES AT RUNWAY LIGHTS, TAXIWAY LIGHT AND SIGNS



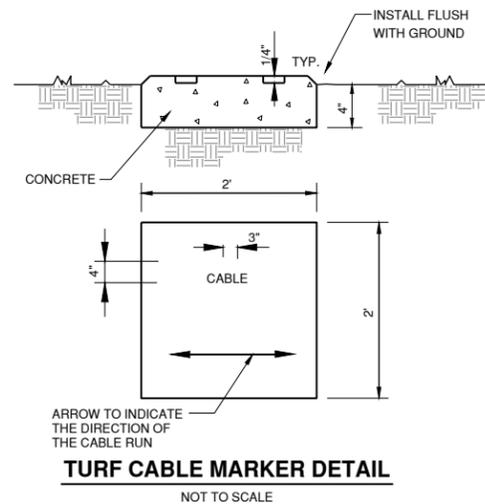
TYPE D
FOR SPLICES AT RUNWAY LIGHTS, TAXIWAY LIGHT AND SIGNS

NOTES:

1. MATCH THE OUTSIDE DIAMETER OF CABLE INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY
2. WRAP WITH AT LEAST ONE LAYER OF RUBBER OR TAPE, ONE-HALF LAPPED, EXTENDING AT LEAST 1-1/2 INCHES ON EACH SIDE OF JOINT.
3. IN LIEU OF HEAT SHRINK SPLICE CONTRACTOR MAY INSTALL APPROVED L-823 "COMPLETE KIT".
4. THE CONTRACTOR SHALL HAVE A MINIMUM OF FIVE (5) TYPE A SPLICE KITS ON THE JOB SITE AT ALL TIMES FOR EMERGENCY REPAIRS.
5. THE COST OF FURNISHING AND INSTALLING ALL SPLICE MATERIALS SHALL BE INCIDENTAL TO THE ASSOCIATED CABLE ITEMS.
6. THE CONTRACTOR MAY INSTALL "COMPLETE KIT" IN LIEU OF L-823 SPLICE WITH HEAT SHRINK.



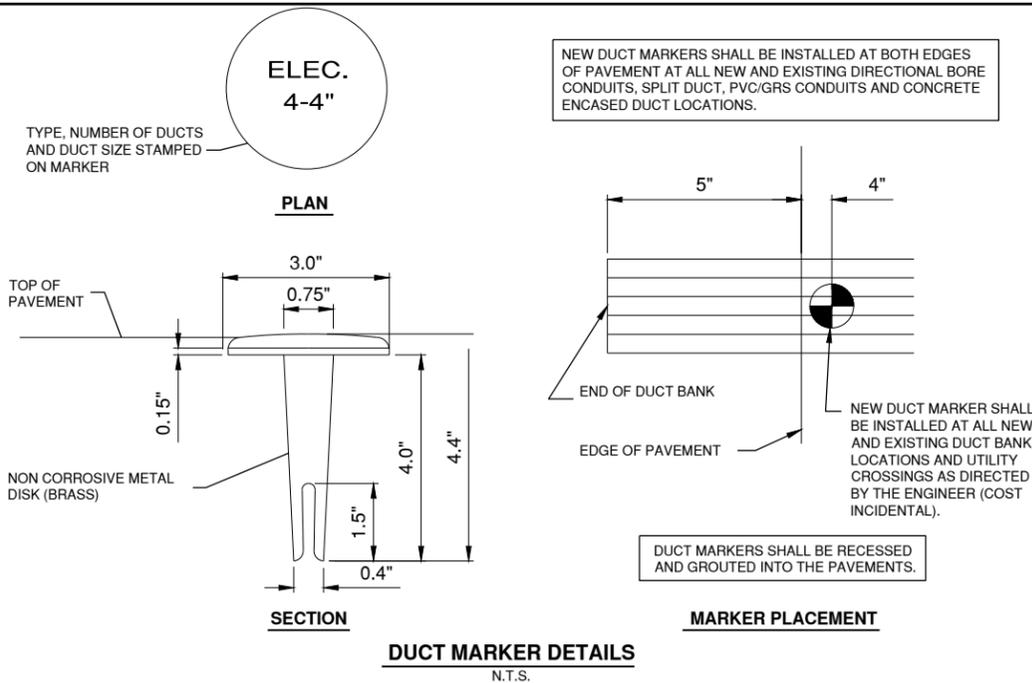
CABLE IN UNIT DUCT - PLOWED
NOT TO SCALE



TURF CABLE MARKER DETAIL
NOT TO SCALE

NOTES:

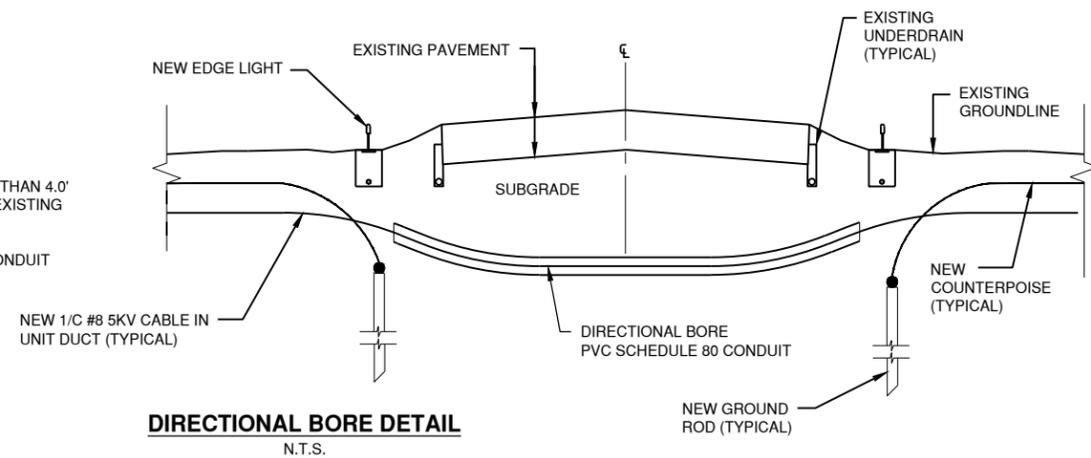
1. CABLE MARKERS SHALL BE INSTALLED AT ALL BENDS AND EVERY 200' ALONG THE CABLE RUN.
2. P-610 CONCRETE SHALL BE USED.
3. ALL EXPOSED EDGES SHALL BE EDGED WITH A 1/4" RADIUS TOOL.
4. THE COST OF FURNISHING AND INSTALLING NEW MARKERS SHALL BE INCIDENTAL TO THE ASSOCIATED CABLE ITEMS.
5. 0.049 CU. YD. CONCRETE PER MARKER.



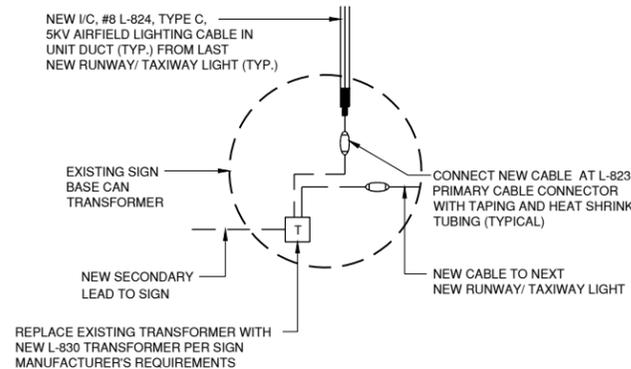
DUCT MARKER DETAILS
N.T.S.

NOTES

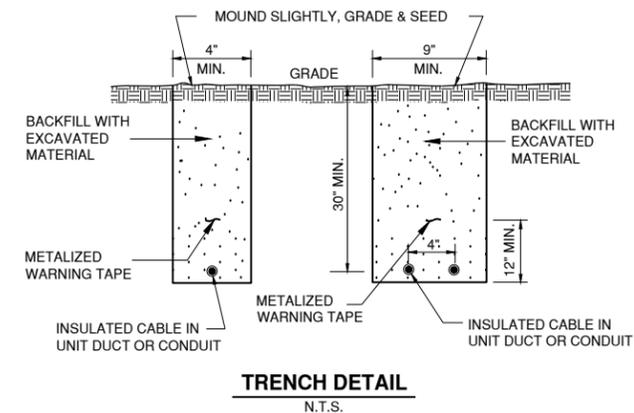
1. THE DEPTH OF THE DIRECTIONAL BORE SHALL BE NO LESS THAN 4.0' FROM THE PAVEMENT SURFACE AND SHALL NOT DISTURB EXISTING UNDERDRAINS/UTILITIES OR NEW LIGHTS/CABLING.
2. REFER TO LIGHTING PLANS FOR ADDITIONAL CABLE AND CONDUIT INFORMATION.



DIRECTIONAL BORE DETAIL
N.T.S.



EXISTING AIRFIELD SIGN - REPLACE ISOLATION TRANSFORMER DETAIL
NOT TO SCALE



TRENCH DETAIL
N.T.S.

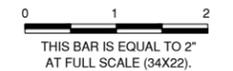
NOTES

1. TRENCHES WITH MORE THAN 2 CABLES SHALL BE INCREASED 3" IN WIDTH FOR EACH ADDITIONAL CABLE. IF SPECIFIED ON PLANS, TWO PARALLEL TRENCHES MAY BE CONSTRUCTED.
2. DEPTH OF TRENCHES SHALL BE AS SHOWN ABOVE UNLESS OTHERWISE SPECIFIED ON THE PLANS.
3. SAND BACKFILL SHALL BE USED IF THE EXISTING SOIL DOES NOT MEET THE BACKFILL REQUIREMENTS.
4. ALL DISTURBED SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. COST IS INCIDENTAL TO ITEM 108.
5. COUNTERPOISE SHALL BE INSTALLED PER THE SPECIFICATIONS AND COUNTERPOISE LOCATION DETAIL.

IL CONTRACT: **WA075**
IL LETTING ITEM: **06A**
IL PROJECT: **UGN-4824**
S.B.G. PROJECT: **3-17-SBGP-XXX**

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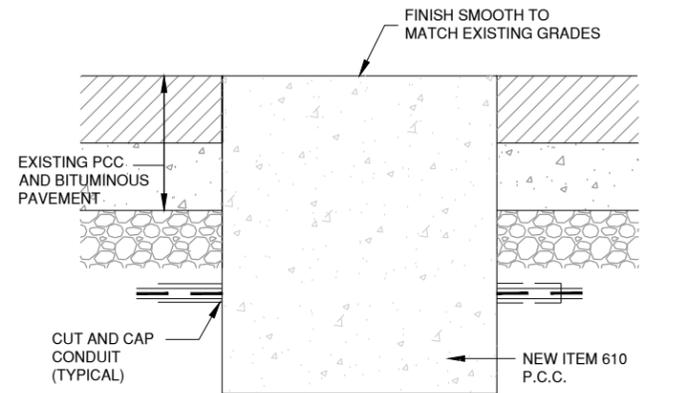
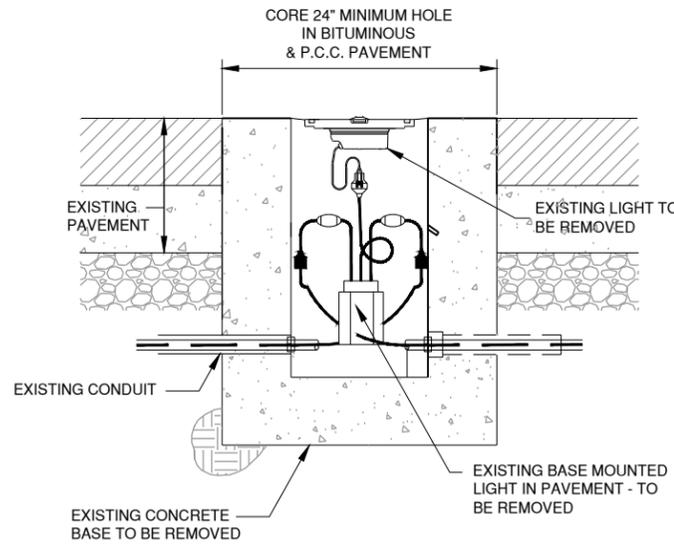
**WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

ELECTRICAL DETAILS - SHEET 1

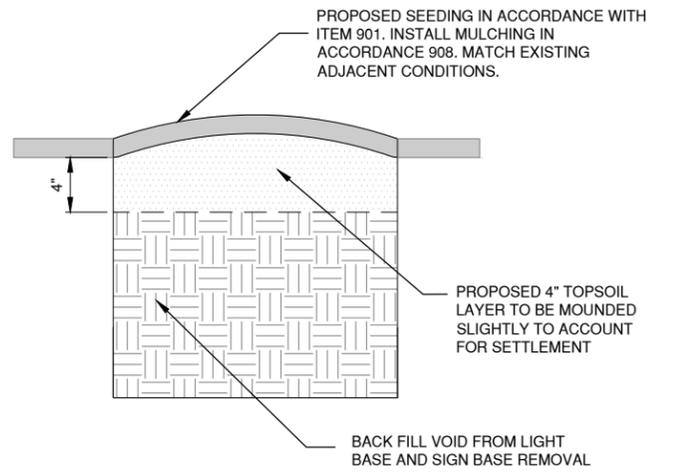
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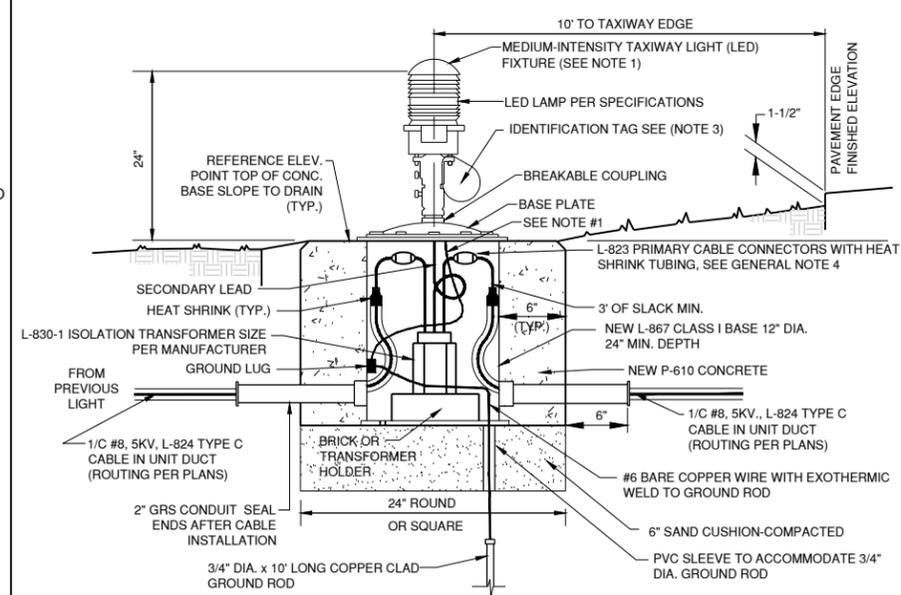


IN-PAVEMENT MOUNTED RUNWAY EDGE LIGHT REMOVAL DETAIL
N.T.S.



COMPLETED STAKE MOUNTED LIGHT, BASE MOUNTED LIGHT AND SIGN REMOVAL
N.T.S.

NOTE: COST OF BACKFILL AND RESTORATION SHALL BE INCIDENTAL TO THE CONTRACT.



BASE MOUNTED MEDIUM INTENSITY TAXIWAY LIGHT - LED
NOT TO SCALE

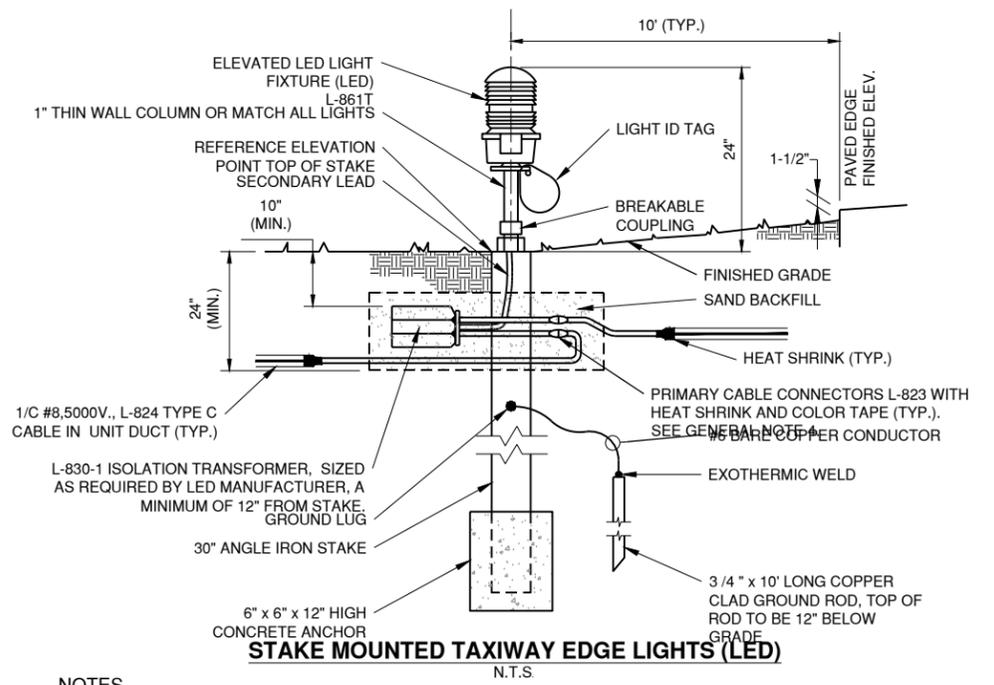
1. THE LIGHT FIXTURE SHALL BE BONDED TO THE LIGHT BASE INTERNAL GROUND LUG VIA A #6 AWG STRANDED COPPER WIRE RATED FOR 600 VOLTS WITH GREEN XHHW INSULATION. THE GROUND WIRE LENGTH SHALL BE SUFFICIENT TO ALLOW THE REMOVAL OF THE LIGHT FIXTURE FROM THE LIGHT BASE FOR ROUTINE MAINTENANCE. SEE THE LIGHT FIXTURE MANUFACTURER'S INSTRUCTIONS FOR PROPER METHODS OF ATTACHING THIS BONDING WIRE.
2. LED LIGHT FIXTURES SHALL BE L-861T AS INDICATED ON THE PLANS AND SPECIFICATIONS.
3. AFTER INSTALLATION OF CABLE IN UNIT DUCT, SEAL END OF CONDUIT TO MAKE WATERTIGHT.
4. PRECAST BASE MAY BE USED.

GENERAL NOTES

1. TRANSFORMER HOLDER MAY BE ANY COMMERCIALY AVAILABLE BRICK.
2. BREAKING GROOVE COUPLINGS SHALL NOT BE OVER 1" ABOVE GROUND LINE.
3. ISOLATION TRANSFORMERS SHALL HAVE A FACTORY INSTALLED PLUG (TYPE 1, CLASS A, STYLE 2) AND RECEPTACLE (TYPE 1, CLASS A, STYLE 9). A TYPE 1, CLASS B, STYLE 3 PLUG AND TYPE 1, CLASS B, STYLE 10 RECEPTACLE SHALL BE INSTALLED ON THE 1/2, No. 8, 5000 V., L-824 TYPE C CABLES FOR CONNECTION TO EACH TRANSFORMER.
4. TO FURTHER REDUCE THE POSSIBILITY OF WATER/MOISTURE ENTRANCE INTO THE CONNECTOR BETWEEN THE CABLE AND THE FIELD ATTACHED CONNECTOR, IT IS REQUIRED THAT A HEAT SHRINKABLE TUBING WITH INTERNAL ADHESIVE BE APPLIED OVER THE ENTIRE CABLE CONNECTOR.
5. AT THE CONTRACTOR'S OPTION, IN LIEU OF TAPE AND HEAT SHRINKABLE TUBING, A SELF-SEALING STYLE CONNECTOR L-823 "COMPLETE KITS" OR FAA APPROVED EQUAL MAY BE USED.
6. LAMP FOR FIXTURES SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS. ISOLATION TRANSFORMERS SHALL BE SIZED PER THE FIXTURE MANUFACTURER, 6.6 AMP.
7. THE CONCRETE BASE FOR BASE MOUNTED LIGHTS AND SIGNS SHALL BE TROWEL FINISHED WITH A 45° BEVELED EDGE AND SLOPED TO DRAIN.

NOTES

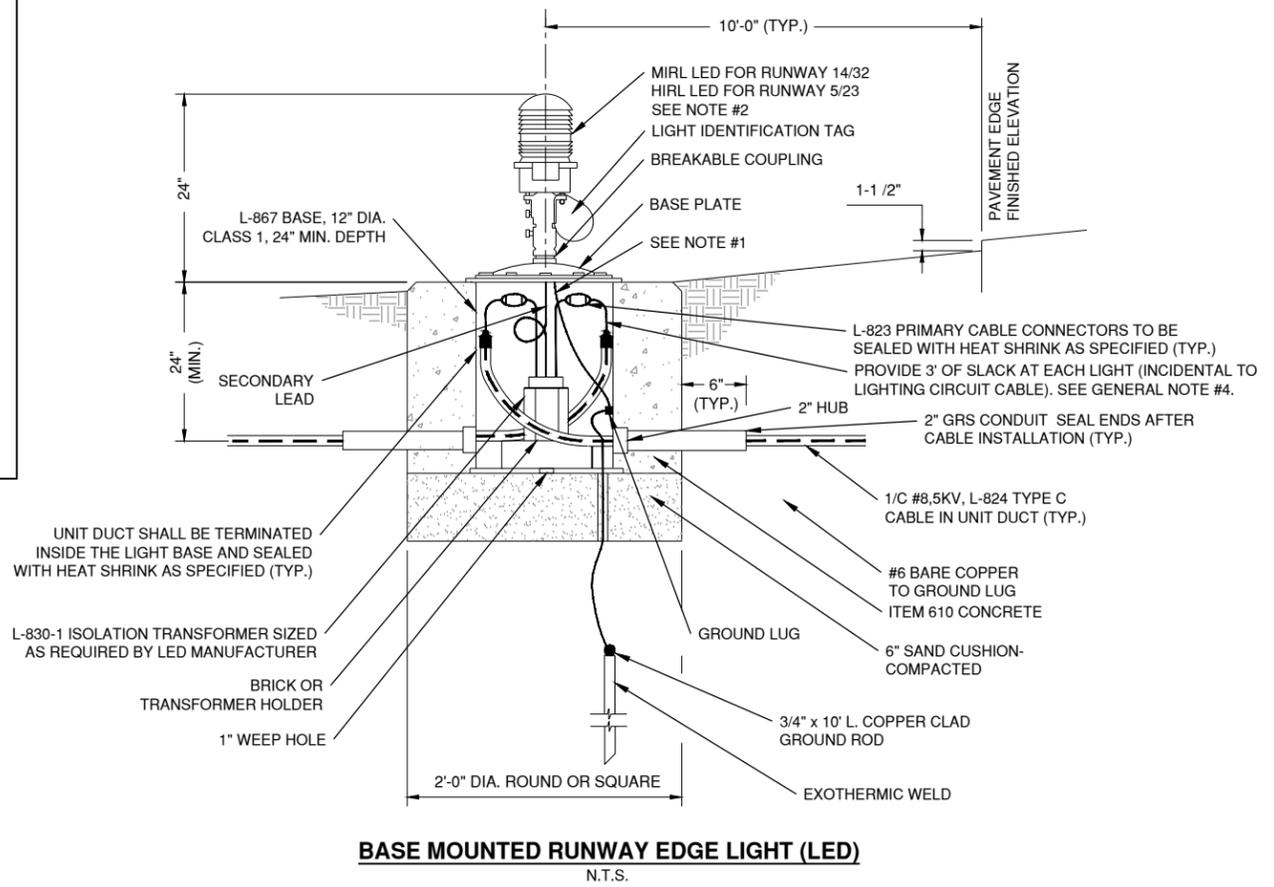
1. THE LIGHT FIXTURE SHALL BE BONDED TO THE LIGHT BASE INTERNAL GROUND LUG VIA A #6 AWG STRANDED COPPER WIRE RATED FOR 600 VOLTS WITH GREEN XHHW INSULATION. THE GROUND WIRE LENGTH SHALL BE SUFFICIENT TO ALLOW THE REMOVAL OF THE LIGHT FIXTURE FROM THE LIGHT BASE FOR ROUTINE MAINTENANCE. SEE THE LIGHT FIXTURE MANUFACTURER'S INSTRUCTIONS FOR PROPER METHODS OF ATTACHING THIS BONDING WIRE.
2. LED LIGHT FIXTURES SHALL BE L-861E, L-861, L-862E OR L-862 AS INDICATED ON THE PLANS AND SPECIFICATIONS.
3. AFTER INSTALLATION OF CABLE IN UNIT DUCT, SEAL END OF CONDUIT TO MAKE WATERTIGHT.
4. PRECAST BASES MAY BE USED.



STAKE MOUNTED TAXIWAY EDGE LIGHTS (LED)
N.T.S.

NOTES

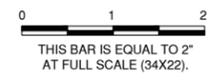
1. CABLES SHALL NOT BE LESS THAN 24" DEEP. ENCASE ISOLATION TRANSFORMER, L-823 CONNECTORS, AND 2 FOOT MINIMUM OF L-824 CABLE SLACK IN SAND BACKFILL.
2. UNIT DUCT, WHERE INSTALLED, SHALL BE TERMINATED AT L-823 CONNECTORS AND SEALED TO MAKE WATERTIGHT.
3. DO NOT INSTALL ANGLE IRON STAKE BY DRIVING. MAKE ELECTRICAL CONNECTIONS AND BACKFILL AROUND THE STAKE WITH EARTH PASSING THE 1-INCH SIEVE. COMPACT AS REQUIRED TO PROVIDE FIRM SUPPORT FOR STAKE, AND TO THE SATISFACTION OF THE RESIDENT ENGINEER.



BASE MOUNTED RUNWAY EDGE LIGHT (LED)
N.T.S.

IL CONTRACT: **WA075**
IL LETTING ITEM: **06A**
IL PROJECT: **UGN-4824**
S.B.G. PROJECT: **3-17-SBGP-XXX**

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WAUKEGAN, ILLINOIS
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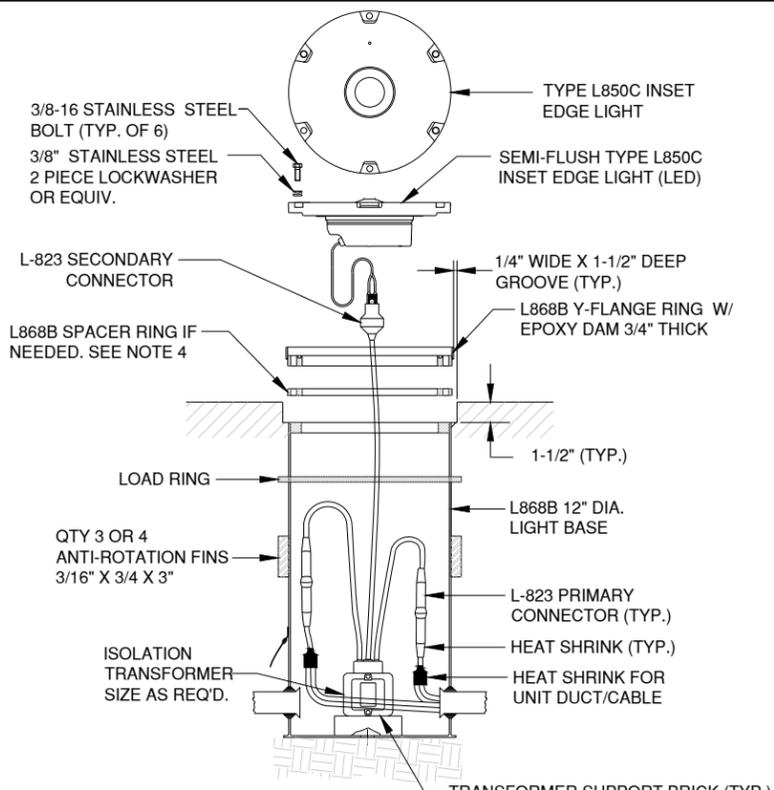
ELECTRICAL DETAILS - SHEET 2

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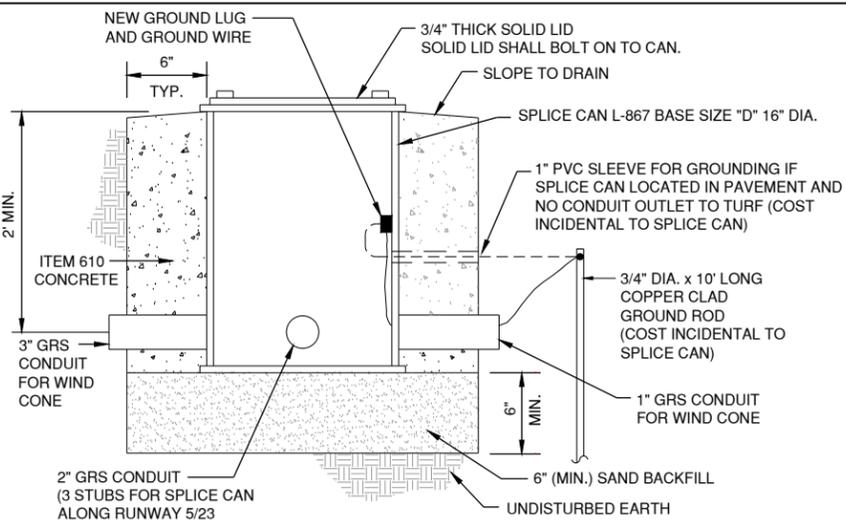


IN-PAVEMENT FIXTURE INSTALLATION DETAIL

NOT TO SCALE

IN-PAVEMENT LIGHT DETAIL NOTES:

1. LIGHT BASES SHALL BE INSTALLED WITH CARE TO ASSURE VERTICAL & AZIMUTH ALIGNMENT OF FIXTURE. SEE PAVEMENT OR CAN DETAIL FOR CONCRETE REQUIREMENTS.
2. PROVIDE 3" CABLE SLACK WITHIN LIGHT BASE TO ALLOW TRANSFORMER SERVICING.
3. BOLTS AND WASHERS USED DURING INSTALLATION OF BASE, CABLE AND TRANSFORMERS SHALL BE REPLACED WITH NEW FOR FINAL BASE IS 0.5".
4. AS REQUIRED TO MAINTAIN +0/-1/16" BELOW GRADE FAA INSTALLATION TOLERANCE. A MAXIMUM OF THREE SPACER RINGS MAY BE STACKED TOGETHER.
5. INSTALL 1/C #6 AWG BARE COPPER GROUND JUMPER CONNECTED TO GROUND LUG INSIDE BASE CAN AND EXOTHERMICALLY WELDED TO GROUND ROD (COST INCIDENTAL).
6. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO ADJACENT PAVEMENT OCCURRED WHILE CORING THE HOLE OR REMOVING THE CORE.

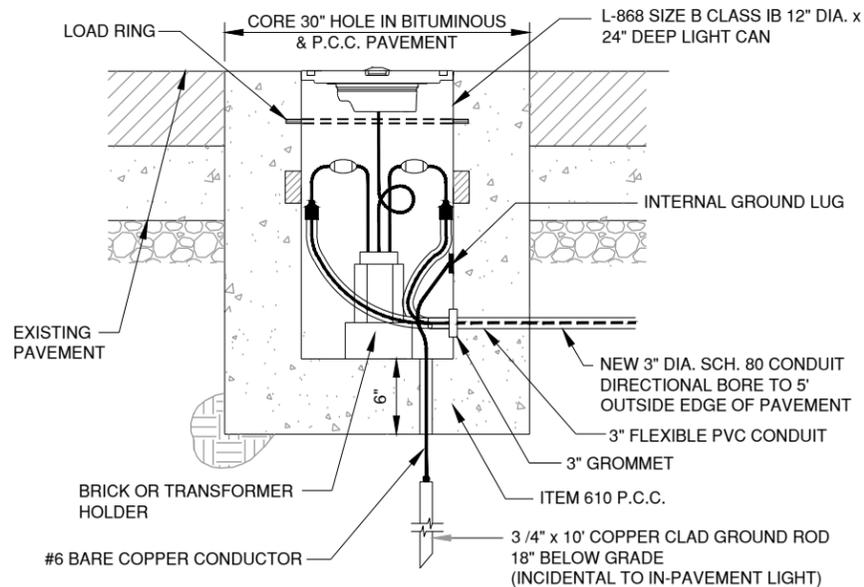


SPLICE CAN DETAIL

NOT TO SCALE

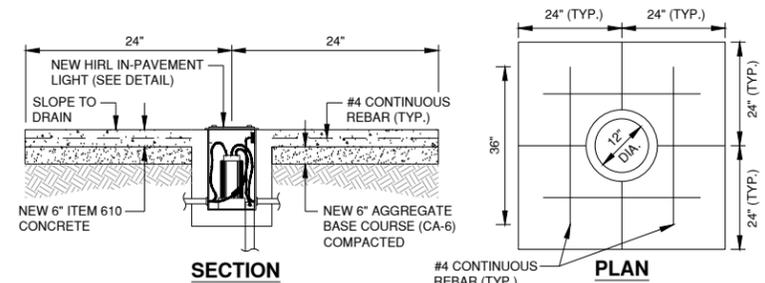
NOTES

1. INSTALL 1/C #6 AWG BARE COPPER GROUND JUMPER CONNECTED TO GROUND LUG INSIDE BASE CAN AND EXOTHERMICALLY WELDED TO GROUND ROD (COST INCIDENTAL).
2. SPLICE CAN IS INCIDENTAL TO NEW SUPPLEMENTAL WIND CONE.
3. COST OF SPLICE CAN SHALL BE CONSIDERED INCIDENTAL TO LIGHTED WIND CONE PAY ITEM.



IN-PAVEMENT LIGHT DETAIL

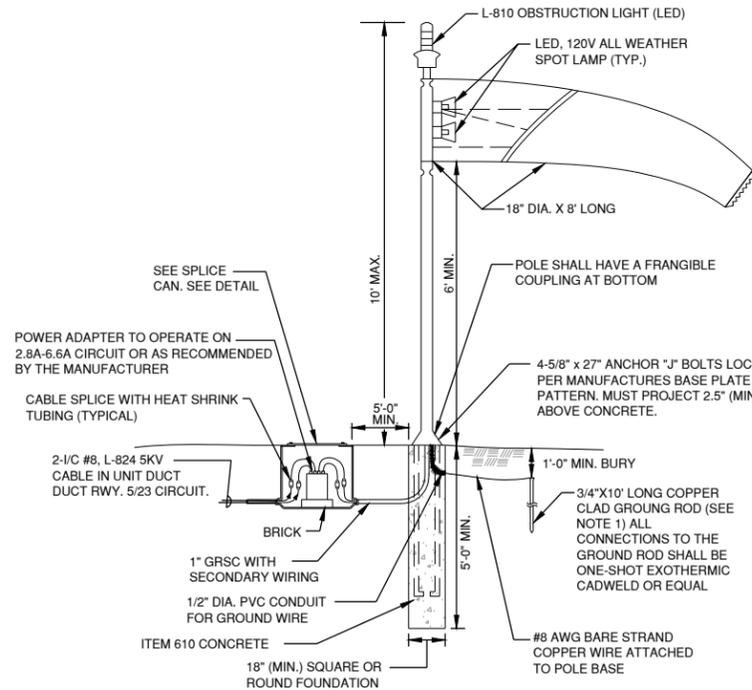
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PCC APRON FOR FLUSH MOUNTED LIGHT PARTIALLY IN TURF

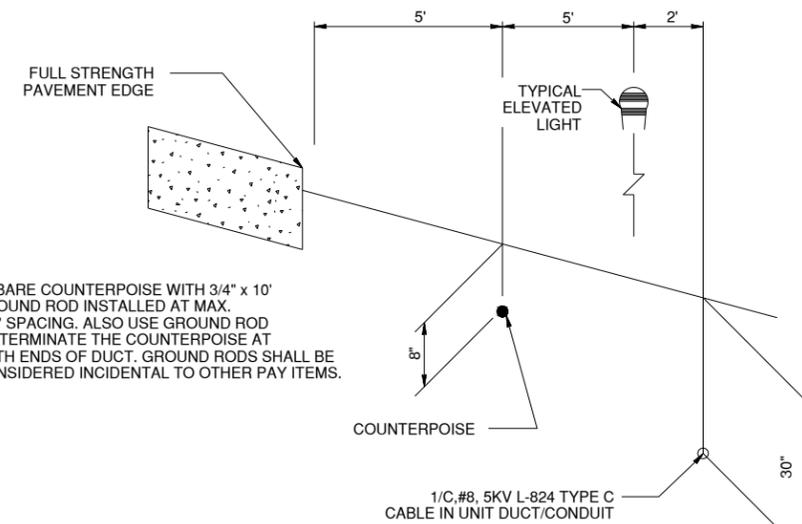
NOT TO SCALE

NOTE: COST OF PCC APRON SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.



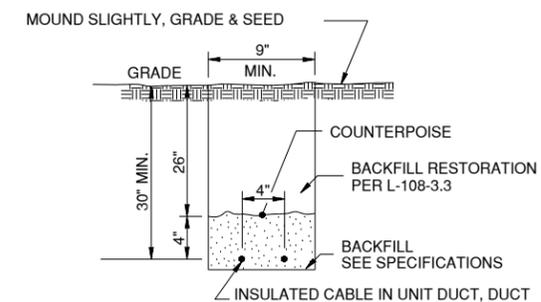
INTERNALLY LIGHTED WIND CONE L-806 AND BASE DETAIL

NOT TO SCALE



COUNTERPOISE LOCATION DETAIL

NOT TO SCALE



COUNTERPOISE LOCATION DETAIL (NOT ADJACENT TO PAVEMENT)

NOT TO SCALE

COUNTERPOISE NOTES:

1. CABLES SHALL NOT BE PLACED LESS THAN 30" DEEP IN ANY ONE TRENCH. CABLES WITH DIFFERENT VOLTAGE RATINGS SHALL NOT BE INSTALLED IN THE SAME TRENCH.
2. CONTRACTOR MAY INSTALL CABLE IN UNIT DUCT BY PLOWING METHOD.

IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

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0 1 2
 THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

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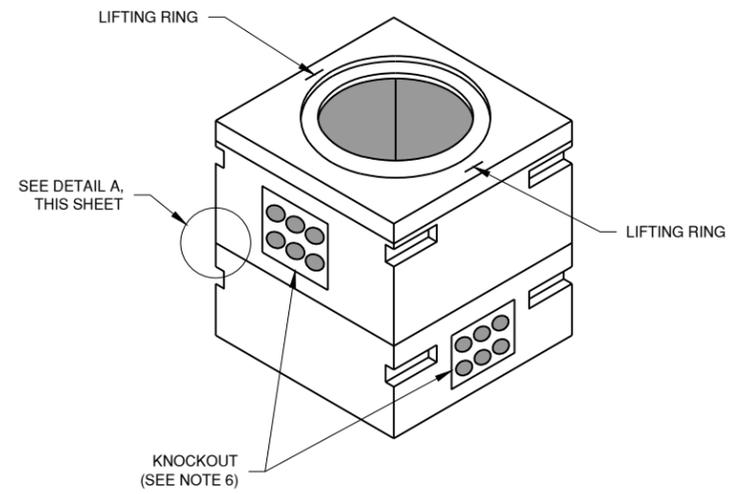
ELECTRICAL DETAILS - SHEET 3

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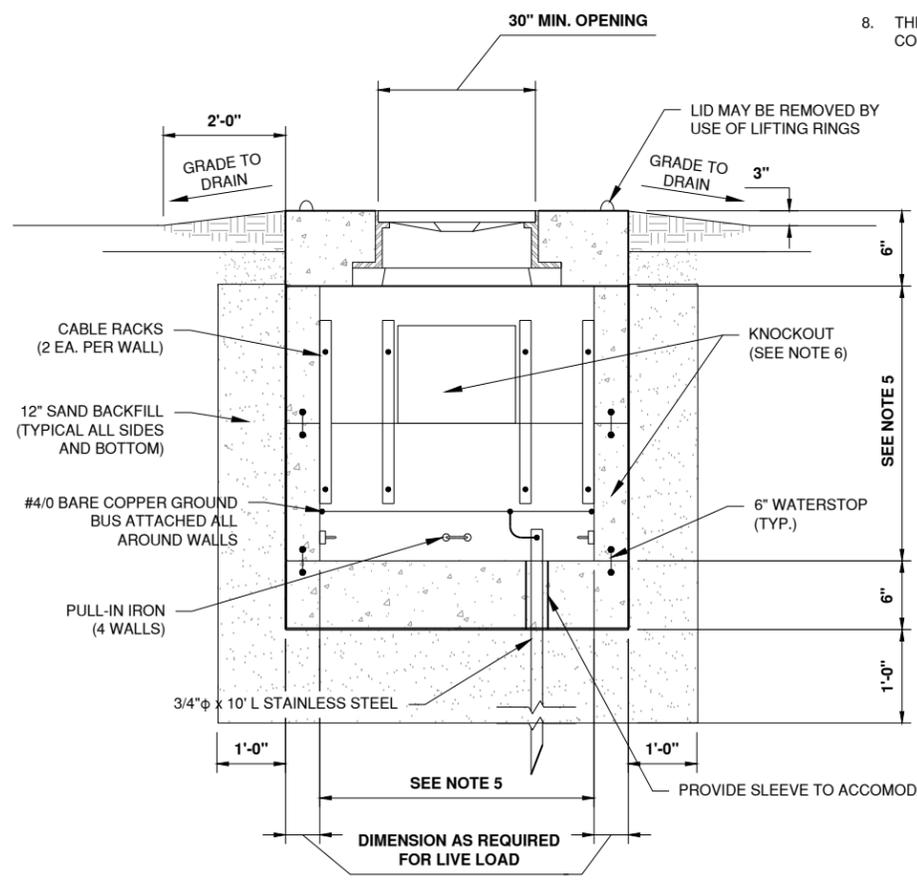
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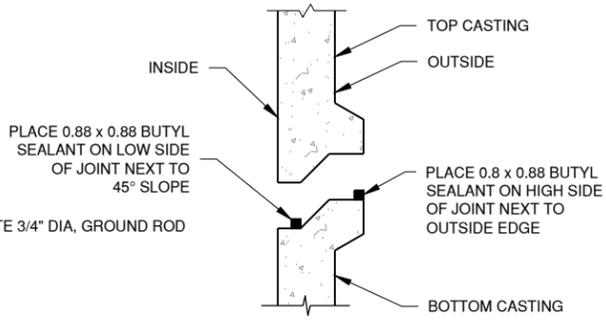


ELEVATION VIEW

- NOTES**
1. THE HANDHOLE/GRADE RING/HANDHOLE LID ASSEMBLY SHALL BE CONSTRUCTED TO MEET OR EXCEED THE FOLLOWING LOADINGS:
 A. EARTHLOAD = 2 FEET FILL AT 130 LBS/FT .
 B. SURCHARGE = 2 FEET FILL AT 130 LBS/FT .
 C. LIVE LOAD = A.A.S.H.T.O. HS-20 TRUCK WITH 20% IMPACT
 D. $f_c = 4,500$ P.S.I.
 E. $f_y = 60,000$ P.S.I.
 F. ULTIMATE STRENGTH DESIGN METHOD
 THE SUPPLIER SHALL PROVIDE CERTIFICATION THAT THE HANDHOLES MEET OR EXCEED THESE REQUIREMENTS PRIOR TO INSTALLATION.
 2. THE HANDHOLE CONSTRUCTION AND INSTALLATION SHALL BE WATERTIGHT. ALL CONSTRUCTION JOINTS AND DUCTS SHALL BE SEALED TO PREVENT WATER ENTRY. ALL UNUSED DUCT BANK OPENINGS IN HANDHOLE SHALL BE SEALED WITH METAL PLATES TREATED FOR CORROSION RESISTANCE AND BOLTED INTO PLACE. MATING SURFACES SHALL BE SEALED USING BUTYL SEALANT.
 3. THE HANDHOLE LID ASSEMBLY SHALL BE INSTALLED SLIGHTLY ABOVE THE SURROUNDING FINAL GRADE AND THE EARTH SHALL BE GRADED TO IT.
 4. THE HANDHOLE COVER SHALL BE LOCKABLE UTILIZING A PENTAGON BOLT ASSEMBLY.
 5. PROPOSED ELECTRICAL HANDHOLE SHALL BE THE FOLLOWING INTERIOR DIMENSIONS: 4' L x 4' W x 4' H
 6. SINGLE HANDHOLES: KNOCKOUTS SHALL BE CENTERED IN THE HANDHOLE WALL AND SHALL BE SIZED AS REQUIRED FOR PROPOSED DUCT BANK.
 7. HANDHOLES THAT MAKE UP A HANDHOLE PLAZA: THE WALL KNOCKOUTS FOR THE NORTH/SOUTH WALLS SHALL BE PLACED AT HIGHER OR LOWER ELEVATIONS THAN THE WALL KNOCKOUTS FOR THE EAST/WEST WALLS TO ALLOW THE DUCTS TO CROSS. KNOCKOUTS SHALL BE SIZED AS REQUIRED FOR PROPOSED DUCT BANK.
 8. THE HANDHOLE CONCRETE TOP LID SHALL BE SET THAT IF DESIRED, THE CONCRETE TOP LID MAY BE REMOVED BY USE OF THE LIFTING RINGS.



SECTION VIEW

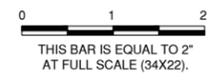


DETAIL A

ELECTRICAL HANDHOLE HIGH VOLTAGE DETAILS
 N.T.S.

REVISIONS

NUMBER	BY	DATE



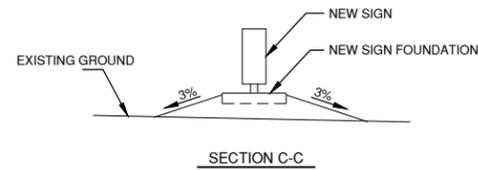
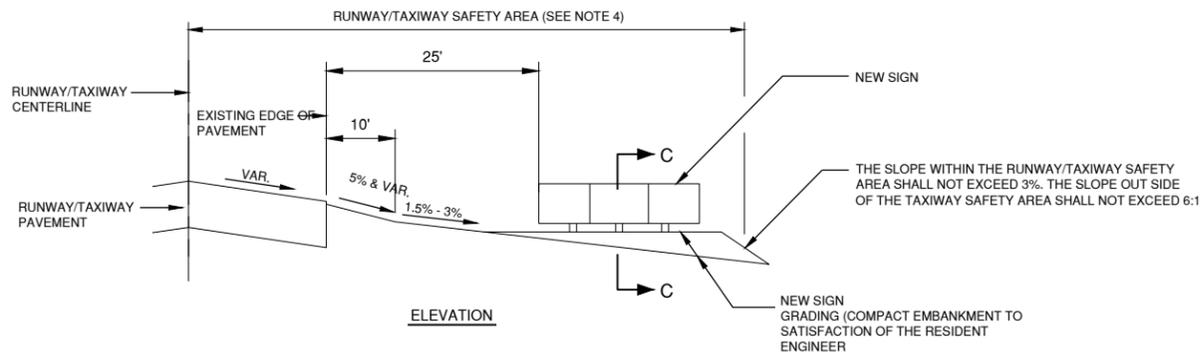
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 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

ELECTRICAL DETAILS - SHEET 4

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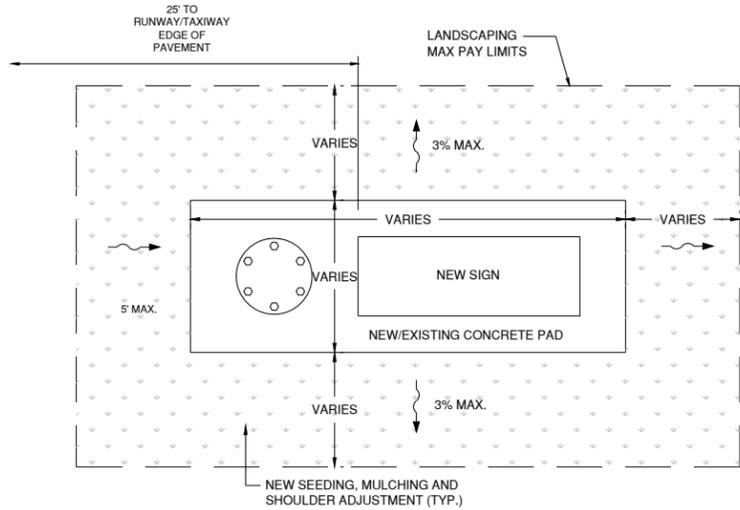
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SHEET	45 OF 61 SHEETS

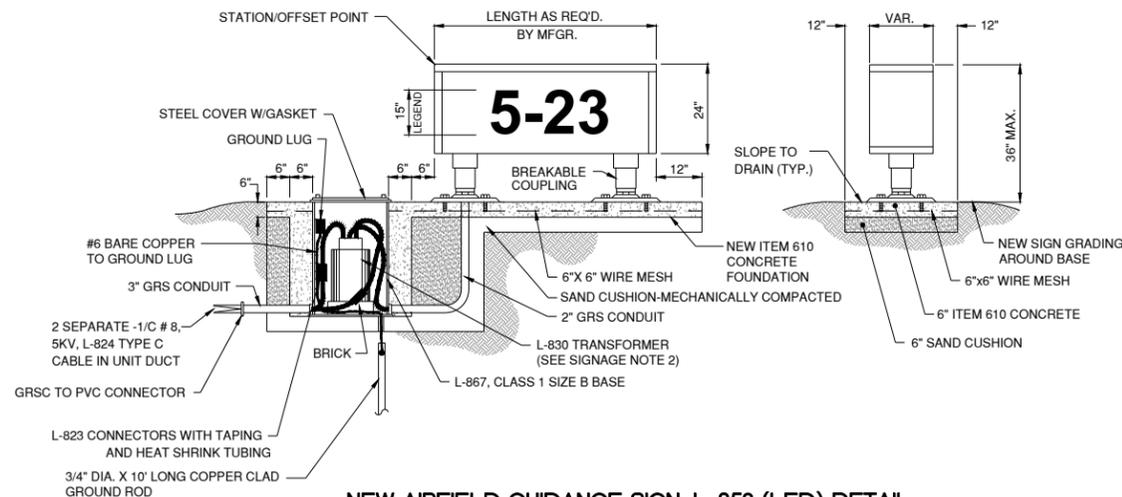


NOTES:

- SLOPES SHOWN ARE FROM FAA STANDARDS AND MAY NOT REFLECT THE ACTUAL GRADES/SLOPES IN THE FIELD
- IT IS ESTIMATED THAT 2 C.Y. OF EMBANKMENT MAY BE REQUIRED TO CONSTRUCT THE SIGN BASE FOUNDATIONS. ALL MATERIAL USED TO CONSTRUCT THE EMBANKMENT SHALL BE APPROVED BY THE RESIDENT ENGINEER. ALL OFFSITE MATERIAL USED TO CONSTRUCT THE EMBANKMENT SHALL BE CATEGORIZED AS CLEAN CONSTRUCTION OR DEMOLITION DEBRIS IN ACCORDANCE WITH SECTION 905-1.2 OF THE SPECIAL PROVISIONS. COSTS TO CONSTRUCT THE EMBANKMENT SHALL BE INCIDENTAL TO THE SIGN PAY ITEM. ESTIMATED QUANTITY OF EMBANKMENT IS FOR INFORMATION ONLY AND NO ADDITIONAL COMPENSATION SHALL BE MADE FOR ANY ADDITIONAL EMBANKMENT NEEDED.
- ACTUAL LOCATION OF THE SIGN WITHIN THE RUNWAY AND TAXIWAY SAFETY AREA WILL VARY DUE TO PAVEMENT WIDTHS AND VARIANCES IN SIGN FOUNDATION LENGTHS.
- TAXIWAY SAFETY AREA DIMENSIONS:
RUNWAY 5/23 = 25'
RUNWAY 14/32 = 75'
TAXIWAYS = 59'



TYPICAL TURFING FOR NEW SIGN
NOT TO SCALE



SIGNAGE NOTES

- ALL SIGNS ARE 2-SIDED LED SIGNS, SIZE 2, STYLE 3, L-858 CLASS 2. SIGNS SHALL BE CAPABLE OF BEING CONNECTED TO A 3-STEP OR 5-STEP REGULATOR.
- TRANSFORMER WATTAGE AS RECOMMENDED BY MANUFACTURER FOR LED SIGNS.
- LIGHTED SIGNS SHALL BE BASE MOUNTED ONLY.
- THE NUMBER OF MODULES PER SIGN SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
- CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWINGS INCLUDING SIGN, COLOR, SIZE AND PROPOSED LEGEND, IN ENOUGH DETAIL TO DETERMINE PROPOSED SPACING AND OTHER INFORMATION REQUIRED BY THE SPECIAL PROVISIONS.
- CONTRACTOR TO VERIFY PROPOSED SIGN LOCATIONS AND ORIENTATIONS WITH RESIDENT ENGINEER PRIOR TO INSTALLATION.
- SEE GENERAL NOTES ON ELECTRICAL DETAILS - SHEET 2 FOR ADDITIONAL NOTES.

AIRFIELD SIGNAGE SCHEDULE

SIGN NUMBER	NUMBER OF CHARACTERS	SIDE	NEW SIGN LEGEND	SIGN TYPE	SIGN LOCATION
1	3	N S	[V] [A1 S]	Y/B Y/B, W/R	STA. 104+83.85 O/S 277.95' RT 5-23 CENTERLINE
2	3	W E	[A1]	B B/Y	STA. 106+71.42 O/S 100' RT 5-23 CENTERLINE
3	3	W E	[2V]	B/Y B	STA. 110+32.77 O/S 100' RT 5-23 CENTERLINE
4	6	N S	[2V] [A2 5-23]	Y/B Y/B, W/R	STA. 110+52.42 O/S 250' RT 5-23 CENTERLINE
5	3	W E	[A2]	B B/Y	STA. 111+66.87 O/S 100' RT 5-23 CENTERLINE
6	3	W E	[2V]	B/Y B	STA. 115+57.89 O/S 100' RT 5-23 CENTERLINE
7	6	N S	[2V] [A3 5-23]	Y/B Y/B, W/R	STA. 115+74.65 O/S 250' RT 5-23 CENTERLINE
8	3	W E	[A3]	B B/Y	STA. 116+91.76 O/S 100' RT 5-23 CENTERLINE
9	3	W E	[2V]	B/Y B	STA. 121+44.17 O/S 100' RT 5-23 CENTERLINE
10	6	N S	[2V] [A4 5-23]	Y/B Y/B, W/R	STA. 121+44.17 O/S 250' RT 5-23 CENTERLINE
11	3	W E	[A4]	B B/Y	STA. 122+60.96 O/S 100' RT 5-23 CENTERLINE
12	2	W E	[B]	B/Y B	STA. 132+48.07 O/S 100' RT 5-23 CENTERLINE
13	5	N S	[B] [5-23]	Y/B Y/B, W/R	STA. 132+68.97 O/S 250' RT 5-23 CENTERLINE
14	5	N S	[B] [5-23 B]	Y/B W/R, Y/B	STA. 134+00.51 O/S 250' RT 5-23 CENTERLINE
15	2	W E	[B]	B B/Y	STA. 134+50.97 O/S 100' RT 5-23 CENTERLINE
16	4	N S	[V] [5-23]	B/Y W/R	STA. 135+14.40 O/S 250' RT 5-23 CENTERLINE
17	4	N S	[V] [5-23]	B/Y W/R	STA. 136+52.45 O/S 250' RT 5-23 CENTERLINE
18	2	W E	[B]	B/Y B	STA. 136+54.64 O/S 100' RT 5-23 CENTERLINE
19	5	N S	[C] [5-23]	Y/B Y/B, W/R	STA. 137+63.89 O/S 250' RT 5-23 CENTERLINE
20	5	N S	[C] [5-23 C]	Y/B W/R, Y/B	STA. 139+03.31 O/S 250' RT 5-23 CENTERLINE
21	2	W E	[C]	B B/Y	STA. 139+25.47 O/S 100' RT 5-23 CENTERLINE
22	3	W E	[2V]	B/Y B	STA. 143+44.19 O/S 100' RT 5-23 CENTERLINE
23	6	N S	[2V] [A5 5-23]	Y/B Y/B, W/R	STA. 143+58.41 O/S 250' RT 5-23 CENTERLINE
24	3	W E	[A5]	B B/Y	STA. 144+78.29 O/S 100' RT 5-23 CENTERLINE
25	3	W E	[2V]	B/Y B	STA. 150+09.69 O/S 100' RT 5-23 CENTERLINE
26	6	N S	[2V] [A6 5-23]	Y/B Y/B, W/R	STA. 150+10.29 O/S 250' RT 5-23 CENTERLINE
27	3	W E	[A6]	B B/Y	STA. 151+43.83 O/S 100' RT 5-23 CENTERLINE
28	3	W E	[2V]	B/Y B	STA. 160+99.79 O/S 100' RT 5-23 CENTERLINE
29	6	N S	[2V] [A7 5-23]	Y/B Y/B, W/R	STA. 161+72.10 O/S 250' RT 5-23 CENTERLINE
30	3	W E	[A7]	B/Y B	STA. 163+24.34 O/S 100' RT 5-23 CENTERLINE
31	4	N S	[B] [A8 23]	Y/B Y/B, W/R	STA. 164+14.40 O/S 239.31' RT 5-23 CENTERLINE
32	2	W E	[C]	B B/Y	STA. 139+32.75 O/S 100' LT 5-23 CENTERLINE
33	5	N S	[C] [C]	Y/B, W/R Y/B	STA. 139+34.96 O/S 250' LT 5-23 CENTERLINE
34	2	W E	[C]	B/Y B	STA. 137+67.31 O/S 100' LT 5-23 CENTERLINE
35	4	N S	[23-5]	W/R B	STA. 136+95.84 O/S 250' LT 5-23 CENTERLINE
36	2	W E	[B]	B B/Y	STA. 134+73.99 O/S 100' LT 5-23 CENTERLINE
37	5	N S	[23-5] [B]	Y/B, W/R Y/B	STA. 134+34.63 O/S 250' LT 5-23 CENTERLINE
38	2	W E	[B]	B/Y B	STA. 132+69.16 O/S 100' LT 5-23 CENTERLINE

SIGN TYPE LEGEND

- B BLANK PANEL
- W/R WHITE INSCRIPTION WITH BLACK BORDER ON RED BACKGROUND
- Y/B YELLOW INSCRIPTION ON BLACK BACKGROUND
- B/Y BLACK INSCRIPTION ON YELLOW BACKGROUND

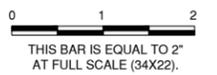
NOTE

- GUIDANCE SIGN PANEL SIZE WILL BE BASED ON THE MANUFACTURER'S RECOMMENDATION.
- INSTALL NEW ISOLATION TRANSFORMERS FOR ALL EXISTING SIGNS TO REMAIN.

IL CONTRACT: **WA075**
IL LETTING ITEM: **06A**
IL PROJECT: **UGN-4824**
S.B.G. PROJECT: **3-17-SBGP-XXX**

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NUMBER	BY	DATE



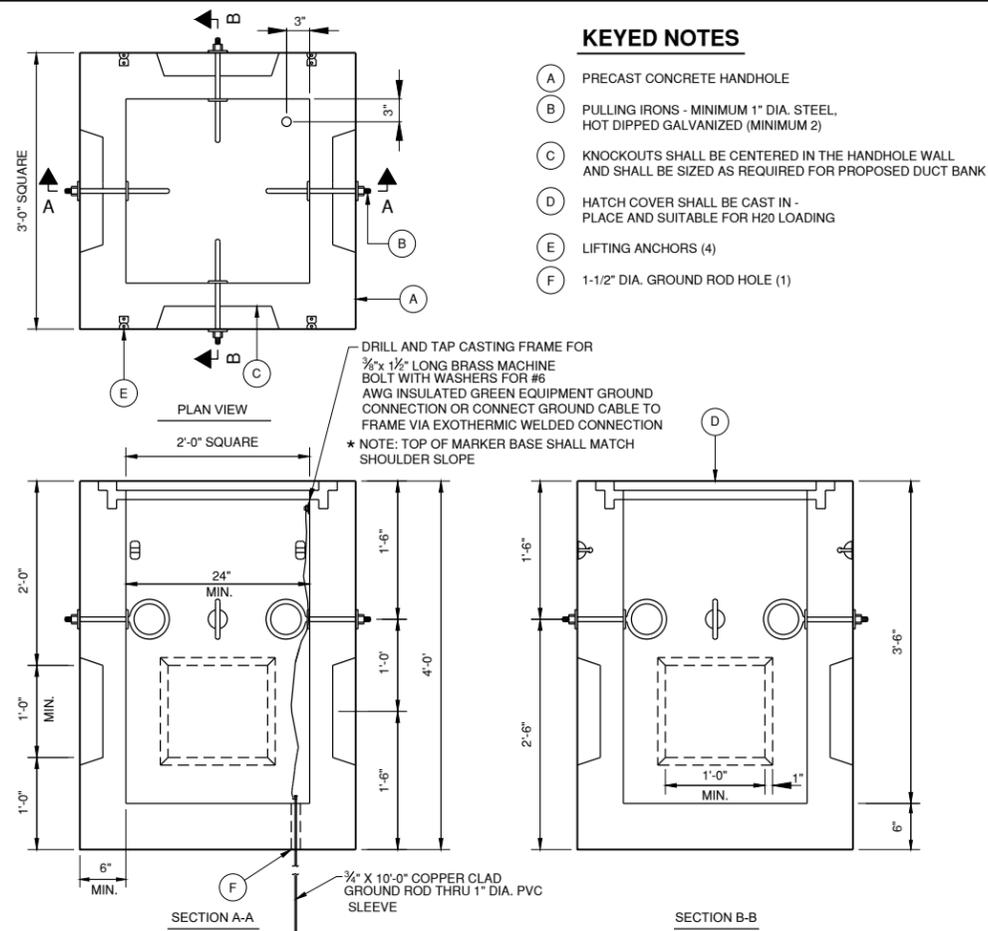
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ELECTRICAL DETAILS - SHEET 5

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KEYED NOTES

- (A) PRECAST CONCRETE HANDHOLE
- (B) PULLING IRONS - MINIMUM 1" DIA. STEEL, HOT DIPPED GALVANIZED (MINIMUM 2)
- (C) KNOCKOUTS SHALL BE CENTERED IN THE HANDHOLE WALL AND SHALL BE SIZED AS REQUIRED FOR PROPOSED DUCT BANK
- (D) HATCH COVER SHALL BE CAST IN PLACE AND SUITABLE FOR H2O LOADING
- (E) LIFTING ANCHORS (4)
- (F) 1-1/2" DIA. GROUND ROD HOLE (1)

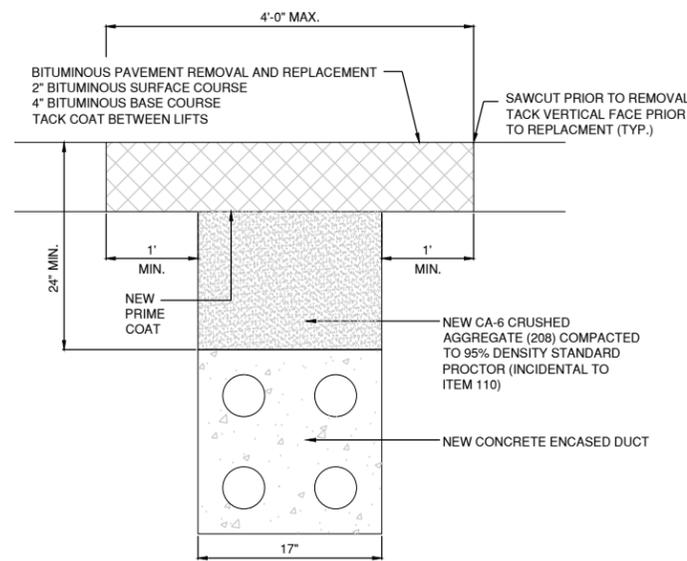
AIRFIELD ELECTRICAL HANDHOLE (LOW VOLTAGE)

NOTE

1. CONCRETE SHALL MEET THE REQUIREMENTS OF ITEM P-610.
2. REBAR MEETING ASTM A-706, GRADE 60, SHALL BE INSTALLED ON 8 INCH CENTERS BOTH WAYS. REBAR SHALL BE MINIMUM #4 BARS. 3" CLEARANCE SHALL BE MAINTAINED BETWEEN THE REBAR AND THE FINISHED FACE OF THE CONCRETE.
3. A 6-INCH BED OF CA-7 OR CA-11 SHALL BE PLACED BENEATH THE HANDHOLE.
4. INSTALL GROUND ROD IN EACH HANDHOLE
5. ANY UNUSED DUCT OPENINGS SHALL BE FITTED WITH APPROVED PLUGS PRIOR TO BACKFILLING.
6. HANDHOLES SHALL HAVE A WEEP HOLE CONSTRUCTED IN THE BOTTOM OF HANDHOLE.
7. HANDHOLE COVER SHALL BE LABELED "COMMUNICATION".
8. 4-WAY DIRECTIONAL BORE SHALL BE CONNECTED IN HANDHOLES IN MANNER THAT CREATES A SINGLE 4-WAY DUCT BANK.

MANHOLE AND HANDHOLE WIRING NOTES

- 1.) ALL WIRING IN MANHOLES AND HANDHOLES SHALL BE LABELED INSIDE MANHOLES AND HANDHOLES. LABELING MATERIALS SHALL BE SUITABLE FOR USE IN THE ENVIRONMENT AND SHALL BE WATERPROOF. LABELS SHALL IDENTIFY EACH 480V, 240V AND 120V AND MONITOR CIRCUIT PER MASTER CIRCUIT LABELING SCHEDULE DEVELOPED BY ELECTRICAL CONTRACTOR.
- 2.) WHEREVER POSSIBLE, WIRING TO INDIVIDUAL STRUCTURES AND PIECES OF EQUIPMENT SHALL BE GROUPED TOGETHER IN MANHOLES AND HANDHOLES (SEE NOTE #3, BELOW, FOR ADDITIONAL REQUIREMENTS). MULTIPLE CONDUCTORS OF INDIVIDUAL CIRCUITS SHALL BE TIE-WRAPPED TOGETHER AND LABELED.
- 3.) WHEREVER POSSIBLE, 480V WIRING, 120V/240V WIRING AND MONITOR/ALARM WIRING SHALL BE SEPARATED FROM EACH OTHER IN MANHOLES AND HANDHOLES. MONITOR WIRING SHALL BE ROUTED ABOVE 120V/240V WIRING WHICH, IN TURN, SHALL BE ROUTED ABOVE 480V WIRING.
- 4.) ALL WIRING THROUGH MANHOLES SHALL BE ATTACHED TO CABLE RACKS.

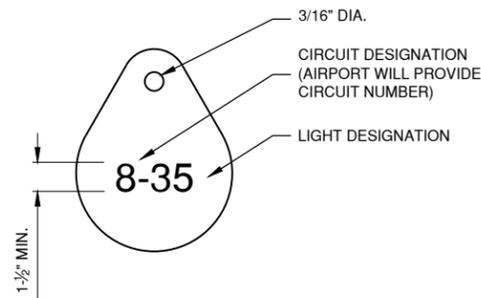


PAVEMENT REMOVAL AND REPLACEMENT FOR DUCT BANK INSTALLATION

NOT TO SCALE

NOTE

1. THE CONTRACTOR SHALL VERIFY THE THICKNESS OF MATERIAL TO BE REMOVED. NO EXTRA COMPENSATION SHALL BE ALLOWED FOR ANY VARIATION IN THE PAVEMENT SECTIONS ACTUALLY ENCOUNTERED.
2. COUNTERPOISE SHALL BE INSTALLED AS SHOWN ON COUNTERPOISE DETAILS.

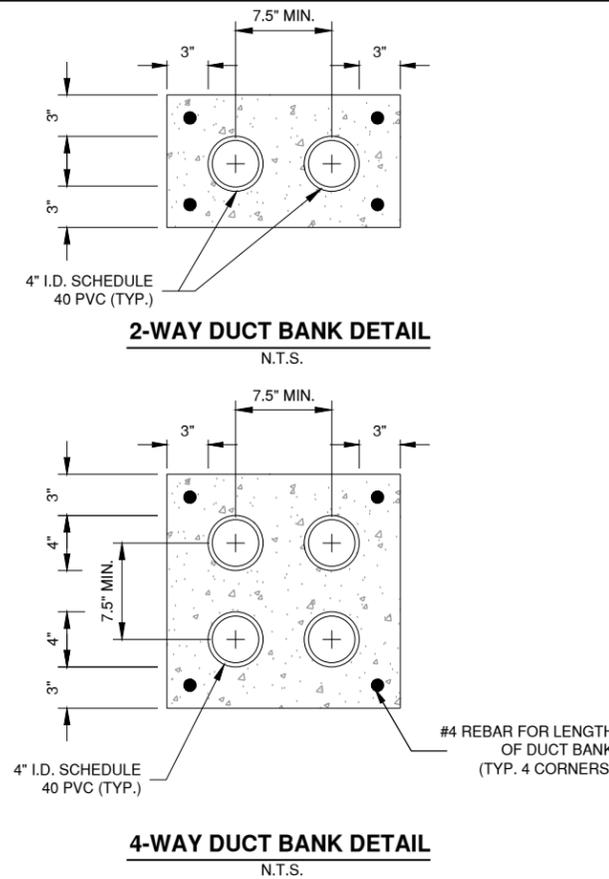


LIGHT IDENTIFICATION DETAIL

N.T.S.

NOTES

1. INSTALL A NONCORROSIVE DISC OF 2" MINIMUM DIAMETER WITH THE NUMBER PERMANENTLY STAMPED, CUT OUT, OR ENGRAVED UNDER THE HEAD OF THE BASE PLATE BOLT OR ATTACHED TO LIGHT FLANGE WITH SET SCREW.
2. LEGENDS SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. CONTRACTOR TO COORDINATE LEGEND WITH AIRPORT.
3. THE CONTRACTOR SHALL NUMBER THE EXISTING/ PROPOSED LIGHTS AND SIGNS IN EACH CIRCUIT STARTING AT THE HOMERUN CONTINUING AROUND THE ENTIRE CIRCUIT BACK TO THE HOMERUN.
4. AIRFIELD SIGNS SHALL BE TAGGED & NUMBERED.



2-WAY DUCT BANK DETAIL

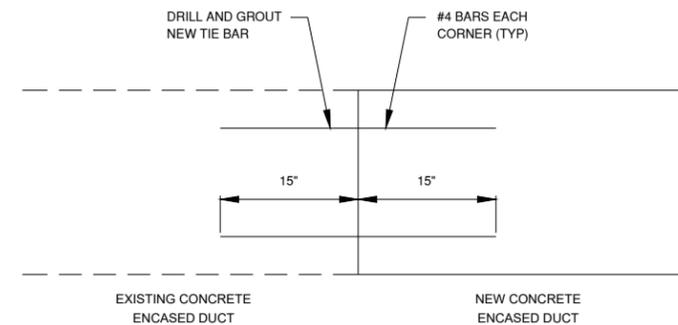
N.T.S.

4-WAY DUCT BANK DETAIL

N.T.S.

NOTES

1. DIMENSIONS SHOWN ARE MINIMUM.
2. TOP OF CONCRETE ENCASMENT TO BE NOT LESS THAN 24" BELOW FINISHED SUBGRADE.
3. DUCT CONCRETE SHALL BE ITEM 610 STRUCTURAL P.C.C. CONCRETE.
4. ALL DUCT SHALL BE 4" INSIDE DIAMETER.
5. LOCATIONS SHOWN ARE APPROXIMATE. DUCT BANKS SHALL BE INSTALLED AT LOCATIONS DESIGNATED BY THE ENGINEER.
6. CONTRACTOR SHALL INSTALL DUCT BANKS AT A DEPTH WHICH WILL NOT CONFLICT WITH ELEVATION SENSITIVE UTILITIES.
7. A PULL WIRE SHALL BE PROVIDED IN EACH UNUSED CONDUIT. UNUSED DUCT SHALL BE SEALED WITH PVC PLUGS/CAPS TO THE SATISFACTION OF THE ENGINEER.
8. DUCT BANKS SHALL EXTEND A MINIMUM OF 5' BEYOND THE NEW EDGE OF PAVEMENT.
9. COUNTERPOISE SHALL BE INSTALLED AS SHOWN ON COUNTERPOISE DETAILS.



EXTENSION OF EXISTING DUCT

NOT TO SCALE

NOTE: COST OF CONNECTION SHALL BE CONSIDERED INCIDENTAL TO NEW DUCT.

IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

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0 1 2
 THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

ELECTRICAL DETAILS - SHEET 6

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UGN 20022602-00 BASE DRAWING.dwg
 UGN 20022602-00 C-UTL
 UGN 20022602-00 Main AP_Termin.dwg
 UGN 20022602-00 TBOULNT.dwg

CMT_3C.dwg
 Waukegan Airport Logo.png

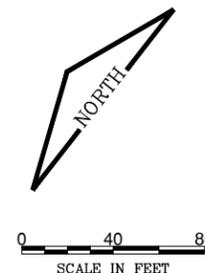
DATE: Thursday, May 6, 2024 3:20:04 PM
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 PH: 2 Draw Sheet 20222602-00 Electrical-Vault Site Plan.dwg

KEYED NOTES

- 1. NEW 1-12 STRAND SINGLE MODE FIBER OPTIC CABLE (ALCMS) IN 1-2" PVC SCH. 80 CONDUIT, DIRECT BURIED.
- 2. NEW 1-12 STRAND SINGLE MODE FIBER OPTIC CABLE (ALCMS) IN 1-2" PVC SCH. 80 CONDUIT, DIRECTIONALLY BORED.
- 3. NEW 1-12 STRAND SINGLE MODE FIBER OPTIC CABLE (ALCMS) IN EXISTING DUCTS.
- 4. NEW 12-1/C #8 5KV L-824 TYPE C IN 4-4" PVC SCH. 80 CONDUIT. (RUNWAY AND TAXIWAY HOMERUN CIRCUITS)(NOT SHOWN)
- 5. NEW 2"x2' ELECTRICAL LOW VOLTAGE HANDHOLE. LID SHALL BE STAMPED "COMMUNICATION"
- 6. NEW 4-600KCMIL, XHHW-2 AND 1 #4/0 GND. IN 1- 4" PVC SCH. 40 CONCRETE ENCASED DUCT (NOTE 10).
- 7. NEW 2-4" PVC SCH. 40 WITH PULL STRING (NOTE 10).

NOTES :

- 1. EXISTING UTILITIES ARE SHOWN FOR INFORMING ONLY. CONTRACTOR SHALL LOCATE AND PROTECT EXISTING UTILITIES.
- 2. REMOVE EXISTING L-821 CONTROL CABLE FROM EXISTING DUCTBANK. INSTALL NEW FIBER OPTIC CABLE IN EXISTING DUCTBANK.
- 3. CONNECT NEW 2" PVC SCH. 80 CONDUIT TO EXISTING HANDHOLE/MANHOLE.
- 4. REFER TO ATCT PLAN FOR ATCT MODIFICATIONS.
- 5. REFER TO VAULT PLANS FOR VAULT MODIFICATIONS.
- 6. CONTRACTOR SHALL FURNISH AND INSTALL CONCRETE PAD FOR COMED TRANSFORMER. INSTALL SECONDARY CONDUITS. COORDINATE ALL WORK WITH COMED.
- 7. NEW ELECTRIC SERVICE SHALL BE 400A, 480/277V, 3-PHASE, 4-WIRE.
- 8. USE EXISTING OLD VAULT FOR TEMPORARY 5/23 REGULATOR. CONTACT COMED TO ENERGIZE EXISTING SERVICE. INSTALL CIRCUIT BREAKER AND RADIO CONTROLLER. INSTALL JUMPERS TO EXISTING HANDHOLE TO FEED RUNWAY 5/23 CIRCUIT (COST INCIDENTAL).
- 9. EXISTING AIRCRAFT MONUMENT SITE SHALL BE PROTECTED AND SHALL NOT BE DISTURBED.
- 10. EXACT LOCATION OF ROUTING OF COMED TRANSFORMER AND PRIMARY CONDUITS SHALL BE COORDINATED WITH COMED. THE COST OF TRANSFORMER PAD, PRIMARY CONDUITS AND SECONDARY CABLES/CONDUIT SHALL BE INCLUDED IN LUMP SUM PAY ITEM "AR 109210 VAULT MODIFICATIONS".
- 11. CONTRACTOR SHALL REMOVE AND REPLACE PCC CONCRETE BARRIER CURB AND AGGREGATE WALKWAY IN KIND. COST IS INCIDENTAL TO THE CONTRACT.



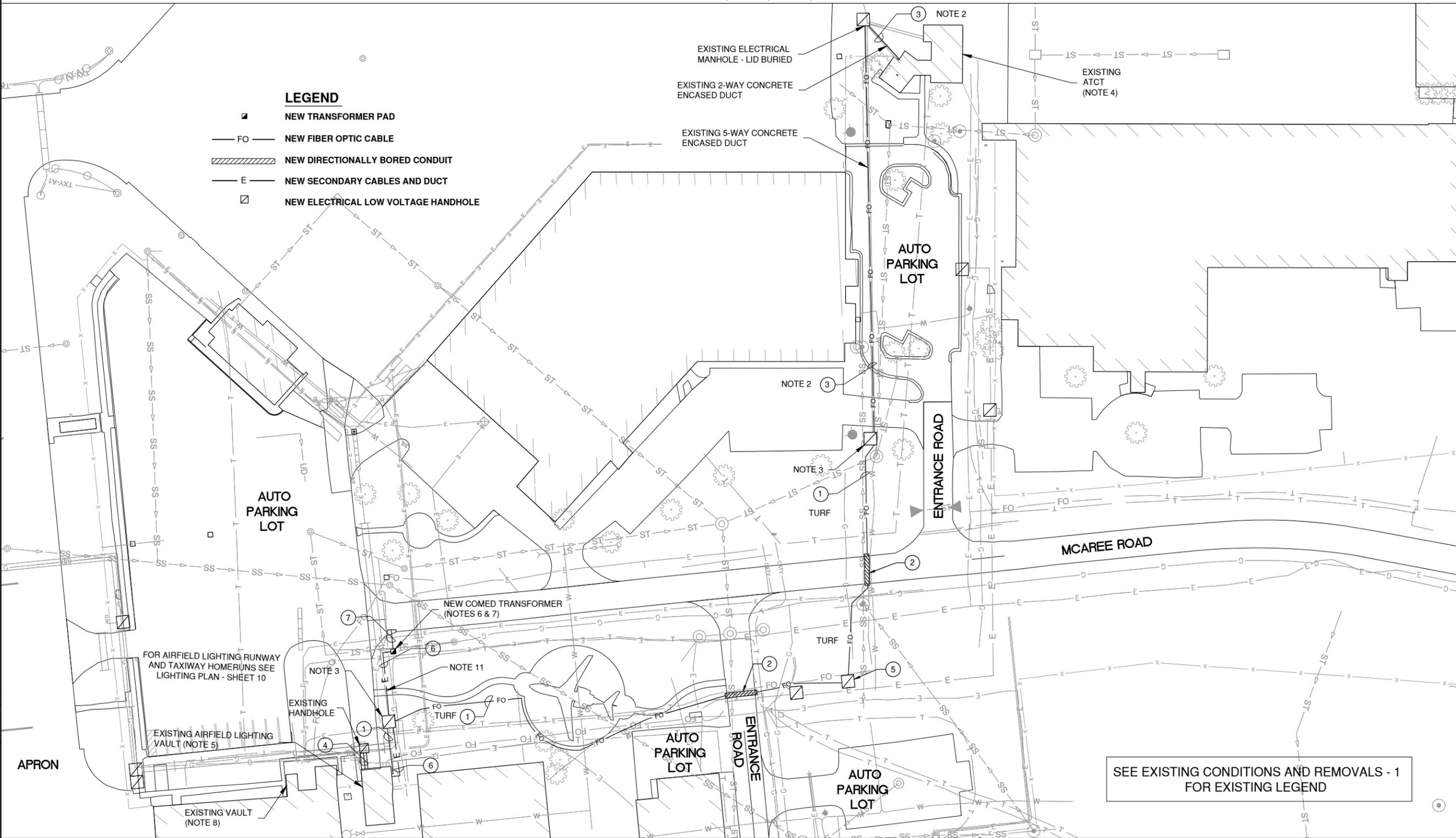
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LEGEND

	NEW TRANSFORMER PAD
	NEW FIBER OPTIC CABLE
	NEW DIRECTIONALLY BORED CONDUIT
	NEW SECONDARY CABLES AND DUCT
	NEW ELECTRICAL LOW VOLTAGE HANDHOLE



SEE EXISTING CONDITIONS AND REMOVALS - 1 FOR EXISTING LEGEND

**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS
 AIRFIELD LIGHTING VAULT ELECTRICAL SITE PLAN**

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SHEET 48 OF 61 SHEETS	

EXISTING LIGHTING PANEL SCHEDULE			
CKT. NO.	POLE	BREAKER SIZE	USAGE
L1	1	15A, 1P	BATTERY CHARGER
L2	2	15A, 1P	L-854
L3	3	15A, 1P	GEN. CONTROL PANEL
L4	4	15A, 1P	RELAY "Q" - RADIO INTERFACE CABINET
L5	5	15A, 1P	GEN. ROOM LOUVER
L6	6	15A, 1P	RELAYS "L", "M", "N" - RADIO INTERFACE CABINET
L7	7	15A, 1P	GEN. ROOM LIGHTS
L8	8	15A, 1P	TD RELAY "J" - RADIO INTERFACE CABINET
L9	9	15A, 1P	REG. ROOM LIGHTS
L10	10	15A, 1P	TD RELAY "I" - RADIO INTERFACE CABINET
L11	11	15A, 1P	FURNACE FAN
L12	12	15A, 1P	RELAY "G" - RADIO INTERFACE CABINET
L13	13	15A, 1P	REG. ROOM VENT FAN
L14	14	15A, 1P	RELAY "R" - RADIO INTERFACE CABINET
L15	15	20A, 1P	GEN. ROOM RECEPT'S
L16	16	15A, 1P	TD RELAY "P" - RADIO INTERFACE CABINET
L17	17	20A, 1P	REG. ROOM N & E RECEPT'S
L18	18	15A, 1P	PHOTOCELL
L19	19	20A, 1P	REG. ROOM S & W RECEPT'S
L20	20	15A, 1P	TRANSFER RELAY CABINET #1
L21	21	15A, 1P	EXTERIOR LIGHTS
L22	22	15A, 1P	TRANSFER RELAY CABINET #2
L23	23, 25	20A, 2P	ENTRANCE ROAD LIGHTS
L24	24	15A, 1P	REGULATORS LOCAL SWITCHES
L25	26	15A, 1P	WIND TEE
L26	27, 29	20A, 2P	ENTRANCE ROAD LIGHTS
L27	28, 30	20A, 2P	PARKING LOT LIGHTS
L28	32, 34	20A, 2P	PARKING LOT LIGHTS
L29	31	20A, 1P	DIESEL TANK PETROMETER
L30	33	20A, 1P	DIESEL TANK INTERSTITIAL MONITOR
L31	35	20A, 1P	J.W HEATER
L32	36	20A, 1P	SPARE
L33	37	20A, 1P	SPARE
L34	38	20A, 1P	SPARE
L35	39	20A, 1P	SPARE
L36	40	20A, 1P	SPARE
	41-42	-	BLANK

120/240, 1Ø, 3W, 42 CKTS

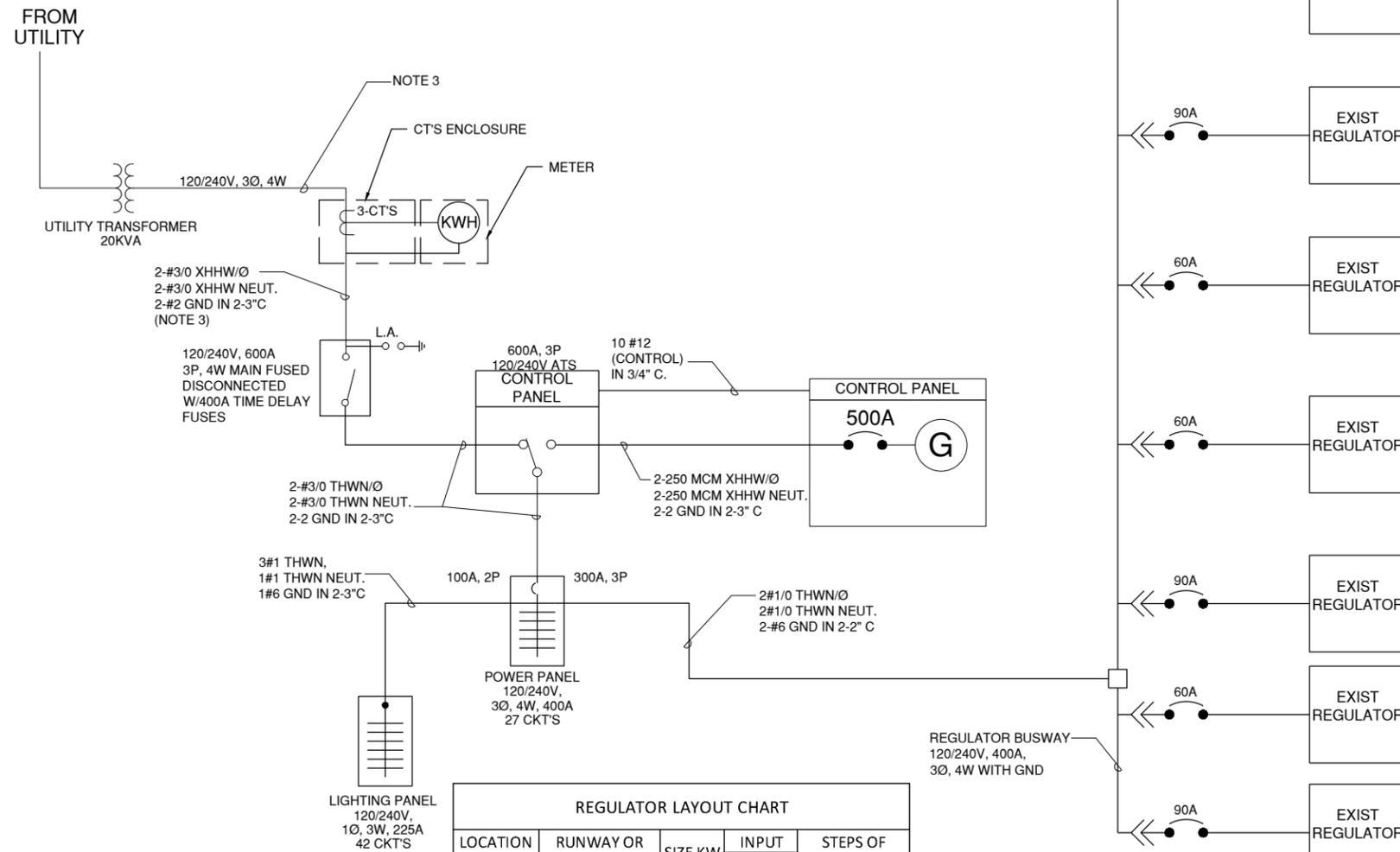
EXISTING POWER PANEL SCHEDULE			
CKT. NO.	POLE	BREAKER SIZE	USAGE
P1	1,3	100A, 2P	LIGHTING PANEL
P2	2, 4, 6	300A, 3P	OVERHEAD BUSWAY
P3	5	-	BLANK
P4	7, 9, 11	20A, 3P	SPARE
P5	8, 10, 12	20A, 3P	SPARE
P6	13, 15, 17	20A, 3P	SPARE
P7	14, 16, 18	20A, 3P	SPARE
	19-27	-	BLANKS

120/240, 3Ø, 4W, 27 CKTS WITH 400A MAIN BREAKER

EXISTING PANEL C SCHEDULE			
CKT. NO.	POLE	BREAKER SIZE	USAGE
L1	1,3	100A, 2P	BLANK
L2	2,4	30A, 2P	VEHICLE ACCESS GATE TO SOUTH RAMP
L3	5,7	15A, 1P	VEHICLE GATE TO W.W. GRAINGER HANGER
L4	6	20A, 1P	PEDESTRIAN ACCESS GATE
L5	8	15A, 1P	SPARE
L6	9,11	30A, 2P	VEHICLE ACCESS GATE SRE BUILDING
L7	10,12	30A, 2P	VEHICLE ACCESS GATE TO MAIN RANGE FROM MAIN
L8	13,15	30A, 2P	SPARE
L9	14,16	30A, 2P	VEHICLE ACCESS GATE TO MAIN RAMP FROM LAND
L10	17	15A, 1P	BLANK
L11	18,20	15A, 1P	BLANK
L12	19	15A, 1P	BLANK
L13	21-42	-	BLANK

120/240, 1Ø, 3W, 42 CKTS

- NOTES:**
- EXISTING PANEL SCHEDULES ARE SHOWN FOR INFORMATION ONLY. CONTRACTOR SHALL RE-CONNECT EXISTING CIRCUITS TO REMAIN TO NEW PANELS.
 - EXISTING ONE-LINE AND REGULATORS ARE SHOWN FOR INFORMATION ONLY. CONTRACTOR SHALL REMOVE ALL EXISTING EQUIPMENT AND ASSOCIATED CONDUITS AND CONDUCTORS AS SHOWN ON EXISTING VAULT PLAN.
 - REMOVE EXISTING SECONDARY CONDUCTORS, ABANDON CONDUIT IN PLACE. COORDINATE REMOVAL OF EXISTING SERVICE WITH COMED.



REGULATOR LAYOUT CHART					
LOCATION (CKT.)	RUNWAY OR TAXIWAY	SIZE KW	INPUT OUTPUT	STEPS OF BRIGHTNESS	
#1	RNWX 5-23	30	240V 6.6A	5	
#2	RNWX 14-32	7.5	240V 6.6A	3	
#3	TXY E-"A"	15	240V 6.6A	3	
#4	TXY W-"A"	10	240V 6.6A	3	
#5	TXY "C"	10	240V 6.6A	3	
#6	TXY "B"	15	240V 6.6A	3	
#7	SPARE	7.5	240V 6.6A	3	
#8	TAXIWAY D	7.5	240V 6.6A	3	
#9	SIGNS	10	240V 6.6A	3	

IL. CONTRACT: **WA075**
 IL. LETTING ITEM: **06A**
 IL. PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

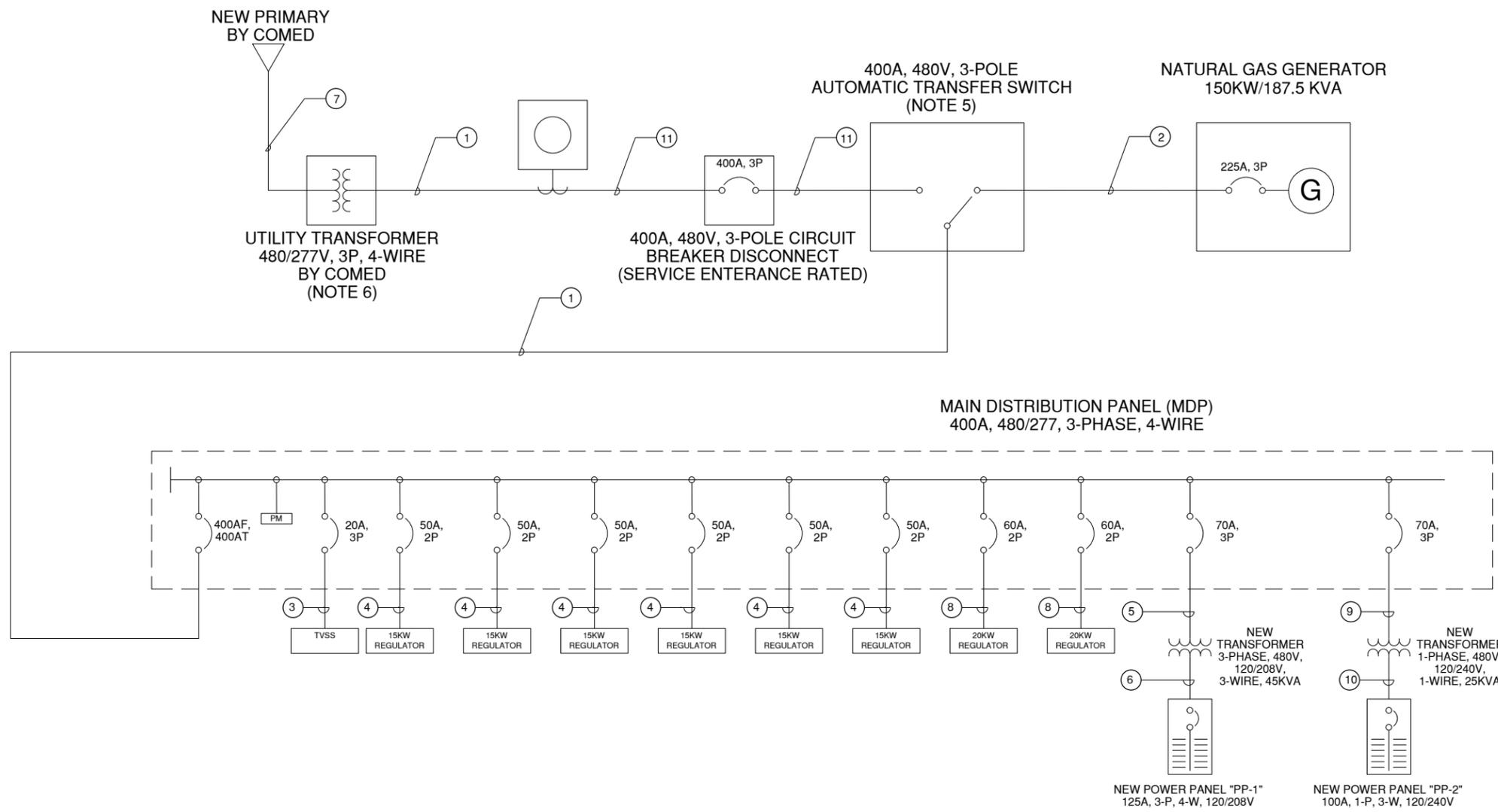
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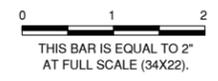
WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS
EXISTING ONE LINE DIAGRAM

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**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

NEW ONE LINE DIAGRAM

KEYED NOTES:

1. NEW 4 - 600KCMIL XHHW-2, 1 #4/0 GND. IN 1 - 4" PVC SCH. 40 CONCRETE ENCASED DUCT.
2. NEW 4 #4/0 THWN, 1 #2 GND. IN EXISTING CONDUIT.
3. NEW 2 #10 THWN, 1 #10 GND. IN 1" CONDUIT.
4. NEW 2 #8 THWN, 1 #8 GND. IN 1" CONDUIT.
5. NEW 3 #4 THWN, 1 #8 GND. IN 2" CONDUIT.
6. NEW 4 #1 THWN, 1 #4 GND. IN 2" CONDUIT.
7. NEW 2-4" PVC SCH. 40 CONDUIT WITH PULL STRING.
8. NEW 2 #4 THWN, 1/#8 GND. IN 1 1/4" CONDUIT.
9. NEW 2 #4 THEN, 1 #8 GND. 1 1/4" IN CONDUIT.
10. NEW 2 #2 THEWVN, 1 #6 GND. IN 1 1/2" CONDUIT.
11. NEW 4 - 600 KCMIL XHHW-2, 1 #4/0 GND IN 1 - 4" GRS.

NOTES:

1. INSTALL CIRCUIT AND EQUIPMENT IDENTIFICATION (NAME PLATE) FOR ALL EQUIPMENT.
2. ALL PARALLEL CONDUCTORS FOR EACH FEEDER SHALL BE OF EXACT SAME LENGTH IN COMPLIANCE WITH NATIONAL ELECTRIC CODE.
3. CONTRACTOR SHALL PROVIDE SHORT CIRCUIT ANALYSIS AND PROTECTIVE DECVICE COORDINATION STUDY.
4. GENERATOR AUTOMATIC STARTING AND SWITCHING SHALL BE CAPABLE OF SUPPLYING THE RATED LOAD WITHIN 15 SECONDS OF POWER FAILURE.
5. COORDINATE LOCATION OF EXISTING CONDUITS AT NEW ATS. CONNECT EXISTING CONDUITS TO NEW ATS.
6. CONTRACTOR SHALL INSTALL CONCRETE PAD FOR COMED TRANSFORMER PER COMED'S REQUIREMENTS.

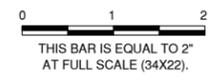
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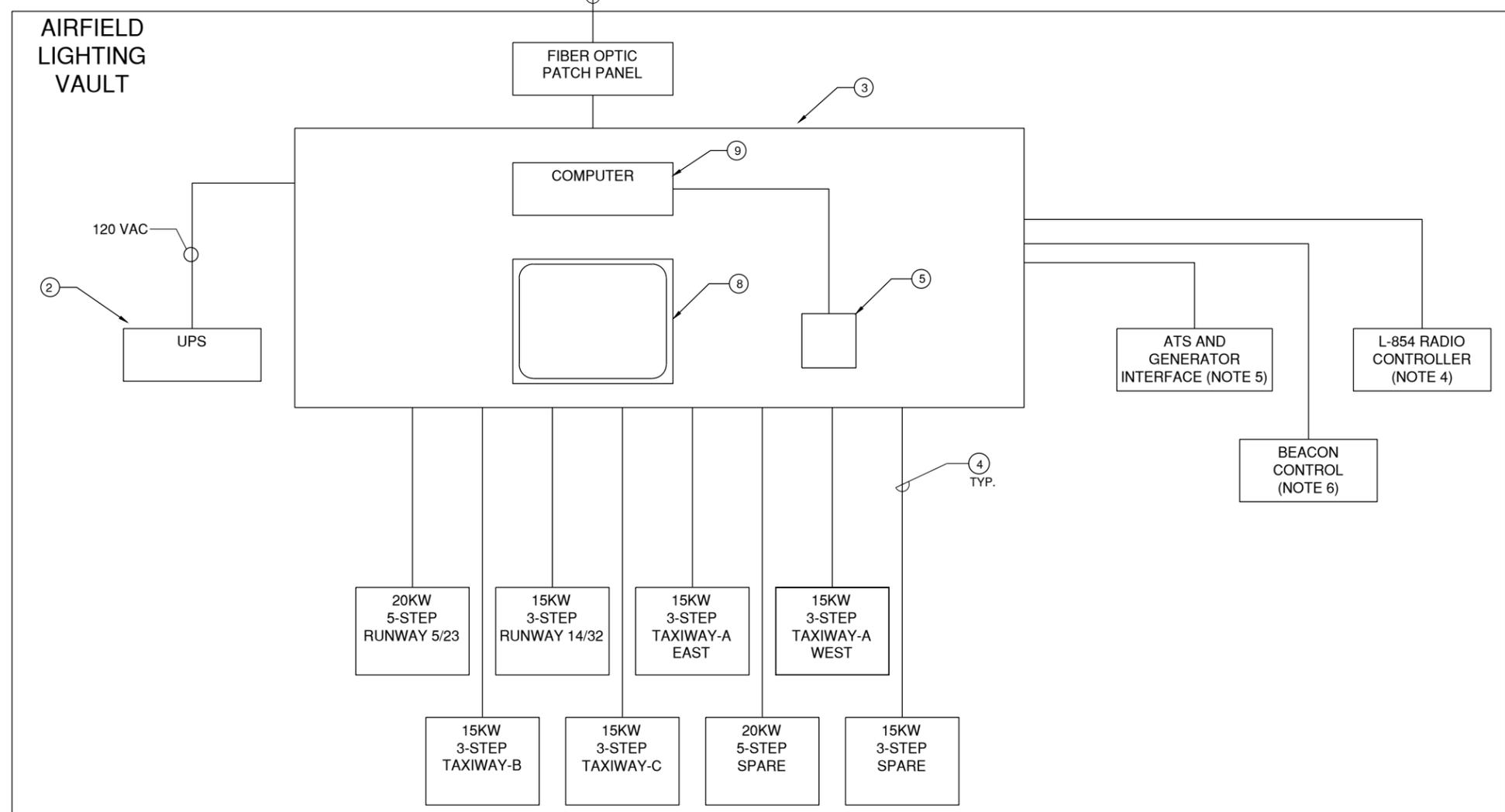
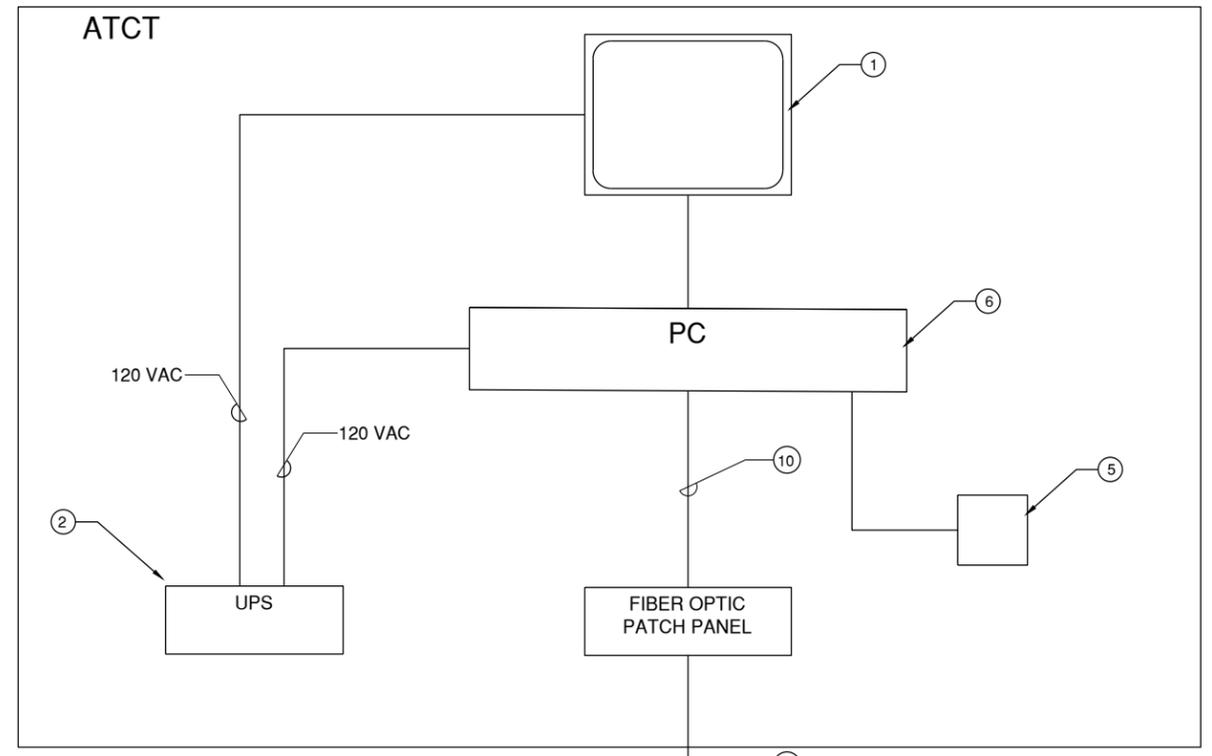


KEYED NOTES:

- ① 19" TOUCH SCREEN, LOCATED IN ATCT CAB
- ② 1KVA UNINTERRUPTIBLE POWER SUPPLY (UPS)
- ③ VAULT PC ENCLOSURE WITH TOUCHSCREEN AND UPS.
- ④ ALCMS REDUNDANT DIGITAL INTERFACE CABLE AS REQUIRED BY ALCMS MANUFACTURER.
- ⑤ INTERFACE EXISTING BEACON CONTROL. (NOTE 2)
- ⑥ ALCMS COMPUTER, LOCATED IN ATCT ALCMS ENCLOSURE
- ⑦ 1-12 STRAND SINGLE-MODE FIBER OPTIC CABLE
- ⑧ 19" MONITOR, LOCATED IN VAULT ALCMS ENCLOSURE.
- ⑨ ALCMS COMPUTER, LOCATED IN VAULT ALCMS ENCLOSURE
- ⑩ DATA CABLES IN EXISTING CABLE CHASE.

NOTES:

- 1. CONTRACTOR SHALL PROVIDE MINIMUM OF (8) HOURS OF TRAINING BY ALCMS MANUFACTURER TO AIRPORT PERSONNEL. TRAINING SHALL INCLUDE MAINTENANCE LEVEL AND SUPERVISOR LEVEL. BACK-UP SOFTWARE MUST BE PROVIDED TO THE AIRPORT WHEN SOFTWARE IS REQUIRED AS PART OF A DESIGN.
- 2. CONTRACTOR SHALL INTERFACE AND PROVIDE PROVISION FOR EXISTING BEACON TO BE CONTROLLED AND MONITORED BY ALCMS
- 3. L-890 ALCMS AND L-829 REGULATOR SHALL BE OF THE SAME MANUFACTURER.
- 4. PROVIDE MONITORING AND CONTROL INTERFACE WITH L-854 RADIO CONTROLLER.
- 5. PROVIDE MONITORING INTERFACE WITH GENERATOR AND ATS FOR UTILITY STATUS.
- 6. PROVIDE INTERFACE TO EXISTING BEACON CONTROL RELAY.



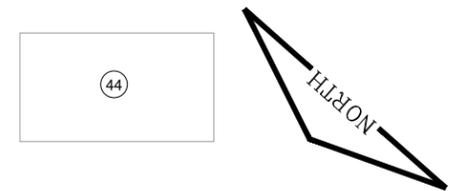
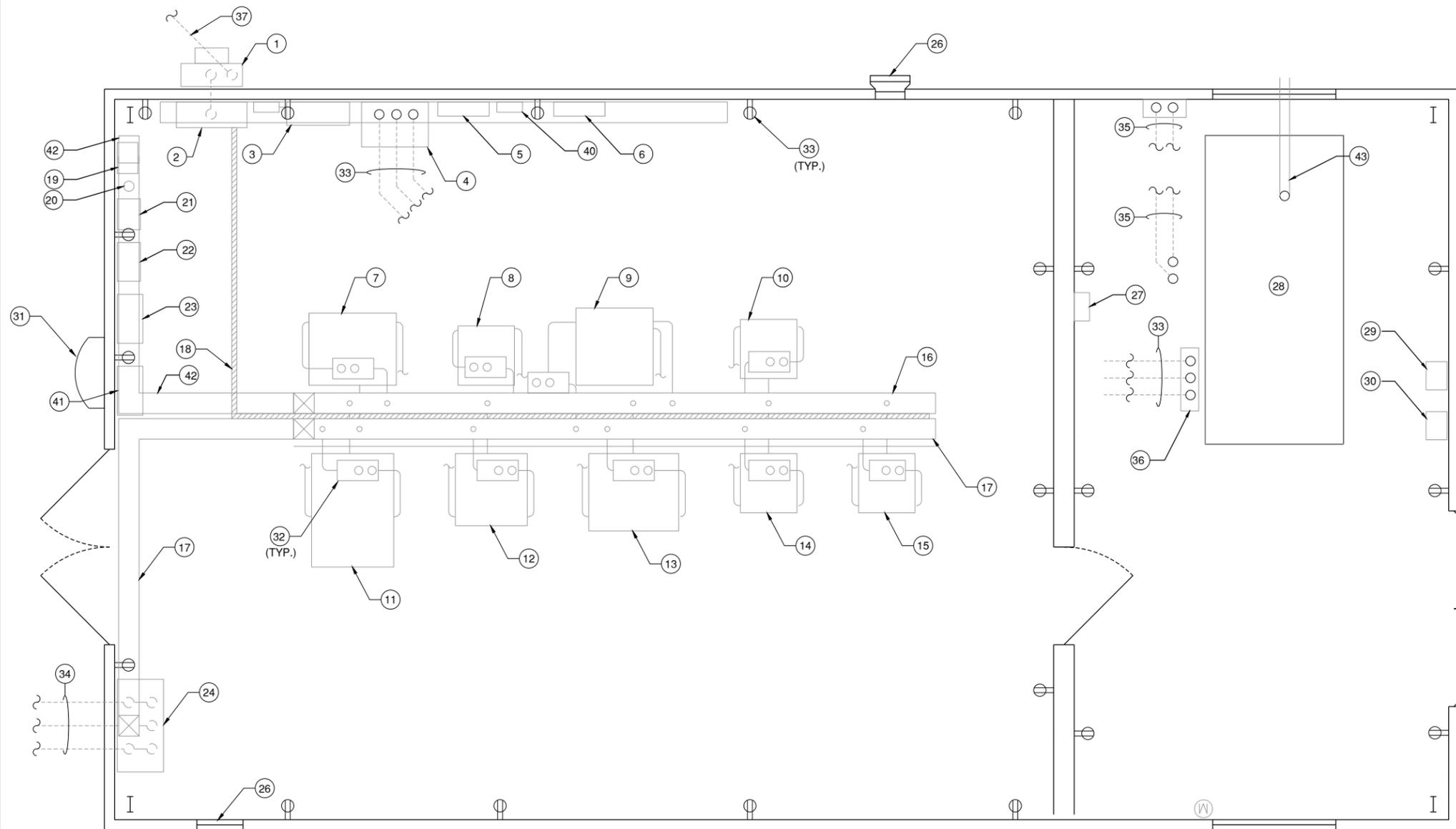
**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS
 NEW ALCMS SCHEMATIC**

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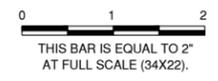
VAULT SHALL ONLY BE OUT OF SERVICE DURING PHASE 2 TAXIWAY A LIGHTING IMPROVEMENTS.



- NOTES:**
- EQUIPMENT NOT CALLED OUT TO BE REMOVED SHALL REMAIN UNLESS NOTED OTHERWISE.
 - EXISTING EQUIPMENT, FUEL PIPING, CONDUCTORS AND CONDUIT TO BE REMOVED SHALL BE DISPOSED OF OFF-SITE. FUEL PIPING CONDUCTORS AND CONDUIT SHALL NOT BE SALVAGED BY OWNER AND SHALL BE LEGALLY DISPOSED OF AS SCRAP AND NOT FOR RE-USE.
 - EXISTING CONDUCTORS AND CONDUIT SHALL BE REMOVED WITH THE EXISTING EQUIPMENT TO BE REMOVED. UNDERGROUND CONDUITS SHALL BE RE-USED UNLESS NOTED OTHERWISE.
 - ALL SALVAGED ITEMS SHALL BE REMOVED AND TURNED OVER TO THE AIRPORT. ITEMS SHALL BE TRANSPORTED BY THE CONTRACTOR TO THE LOCATION DESIGNATED BY THE AIRPORT. IF THE AIRPORT DOES NOT WANT ANY OF THE REMOVED MATERIALS THEN THE CONTRACTOR SHALL DISPOSE OF OFF AIRPORT PROPERTY AT NO ADDITIONAL COST TO THE CONTRACT.
 - EXISTING VAULT GROUNDING SYSTEM SHALL REMAIN AND SHALL BE PROTECTED FROM ANY DAMAGE DURING CONSTRUCTION.
 - EXISTING AIRFIELD LIGHTING CIRCUITS AND REGULATORS SHALL REMAIN OPERATIONAL UNTIL NEW EQUIPMENT IS READY TO BE INSTALLED CONTRACTOR SHALL RELOCATE RUNWAY 5/23 TO OLD VAULT AND PROVIDE TEMPORARY ELECTRIC SERVICE TO FEED RUNWAY 5/23 REGULATOR DURING CONSTRUCTION.
 - CONNECT EXISTING BEACON CONTROLS TO NEW ALCMS.

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**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

EXISTING VAULT PLAN

EXISTING ELECTRICAL VAULT

NOT TO SCALE

VAULT ELECTRICAL EQUIPMENT NOMENCLATURE

- | | | | |
|--|---|--|--|
| <p>1. EXISTING CT CABINET AND METER TO BE REMOVED.</p> <p>2. EXISTING 600A, 120/240V, 3-POLE DISCONNECT TO BE REMOVED AND SALVAGED.</p> <p>3. EXISTING 400A, 120/240V, 3-PHASE MAIN DISTRIBUTION PANEL TO BE REMOVED AND SALVAGED.</p> <p>4. EXISTING 600A, AUTOMATIC TRANSFER SWITCH TO BE REMOVED AND SALVAGED.</p> <p>5. EXISTING POWER PANEL TO BE REMOVED.</p> <p>6. EXISTING LIGHTING PANEL TO BE REMOVED.</p> <p>7. EXISTING 15KW TAXIWAY "B" REGULATOR TO BE REMOVED AND SALVAGED.</p> <p>8. EXISTING 7.5KW TAXIWAY "D" REGULATOR TO BE REMOVED AND SALVAGED.</p> <p>9. EXISTING 15KW SIGNS REGULATOR TO BE REMOVED AND SALVAGED.</p> <p>10. EXISTING SPARE REGULATOR TO BE REMOVED AND SALVAGED.</p> <p>11. EXISTING 30KW RUNWAY "5/23" REGULATOR TO BE REMOVED AND SALVAGED. (NOTE 7)</p> <p>12. EXISTING 7.5KW RUNWAY "14/32" REGULATOR TO BE REMOVED AND SALVAGED.</p> | <p>13. EXISTING 15KW TAXIWAY "A-NORTHEAST" REGULATOR TO BE REMOVED AND SALVAGED.</p> <p>14. EXISTING 10KW TAXIWAY "A-SOUTHWEST" REGULATOR TO BE REMOVED AND SALVAGED.</p> <p>15. EXISTING 10KW TAXIWAY "C" REGULATOR TO BE REMOVED AND SALVAGED.</p> <p>16. EXISTING LOW VOLTAGE WIREWAY TO REMAIN.</p> <p>17. EXISTING HIGH VOLTAGE WIREWAY TO REMAIN.</p> <p>18. EXISTING 400A BUS DUCT TO BE REMOVED.</p> <p>19. EXISTING L-854 PANEL TO BE REMOVED AND SALVAGED.</p> <p>20. EXISTING 4" C FROM TERMINAL BLDG AND A.T.C.T TO REMAIN. REMOVE CONTROL CONDUCTORS.</p> <p>21. EXISTING RADIO INTERFACE CABINET TO BE REMOVED. (NOTE 7)</p> <p>22. EXISTING TRANSFER RELAY CABINETS TO BE REMOVED.</p> <p>23. EXISTING TERMINAL BLOCK CABINET TO BE REMOVED.</p> <p>24. EXISTING HIGH VOLTAGE HOMERUN JUNCTION BOX TO BE REMOVED. RE-USE AND RE-CONFIGURED EXISTING WIREWAY TO HIGH VOLTAGE WIREWAY.</p> | <p>25. EXISTING NATURAL GAS METER TO REMAIN.</p> <p>26. EXISTING EXHAUST FAN AND LOUVER TO REMAIN.</p> <p>27. EXISTING BATTERY CHARGER TO BE REMOVED.</p> <p>28. EXISTING 150KW DIESEL GENERATOR AND ASSOCIATED EQUIPMENT TO BE REMOVED AND SALVAGED. RE-USE EXISTING CONCRETE PAD AND MODIFY IF NEEDED FOR NEW GENERATOR.</p> <p>29. EXISTING FUEL TANK INTERSTITIAL MONITOR TO BE REMOVED.</p> <p>30. EXISTING PETROMETER TO BE REMOVED.</p> <p>31. EXISTING EXTERIOR HIGH PRESSURE SODIUM LIGHT TO BE REMOVED.</p> <p>32. EXISTING CUT-OUT ISOLATION TRANSFORMER AND INDICATOR LIGHT JUNCTION BOX TO BE REMOVED.</p> <p>33. REMOVE EXISTING CONDUCTORS TO ATS. EXISTING 2-4" AND 1-3/4" CONDUIT TO REMAIN RE-USED.</p> <p>34. REMOVE EXISTING HOMERUNS. EXISTING 6-4" CONDUITS TO HANDHOLE SHALL REMAIN AND RE-USED.</p> <p>35. EXISTING CONDUITS AND CONDUCTORS FOR GENERATOR LOUVER TO RE-USE AND RE-CONNECT TO NEW GENERATOR.</p> <p>36. EXISTING UNIT STRUT MOUNTED DISCONNECT TO BE REMOVED.</p> | <p>37. EXISTING CONDUCTORS TO BE REMOVED AND ABANDON CONDUIT IN PLACE.</p> <p>38. NOT USED</p> <p>39. NOT USED</p> <p>40. EXISTING LIGHTING CONTACTORS TO BE REMOVED.</p> <p>41. EXISTING BEACON CONTROL RELAY TO REMAIN. (NOTE 7)</p> <p>42. EXISTING SIGN LIGHTING RELAY TO REMAIN.</p> <p>43. EXISTING GENERATOR EXHAUST TO BE REMOVED. USE EXISTING OPENING OR PATCH HOLE.</p> <p>44. EXISTING DIESEL TANK AND ASSOCIATED PIPING TO BE REMOVED. SALVAGE TANK, IN COMPLIANCE WITH IEPA.</p> |
|--|---|--|--|

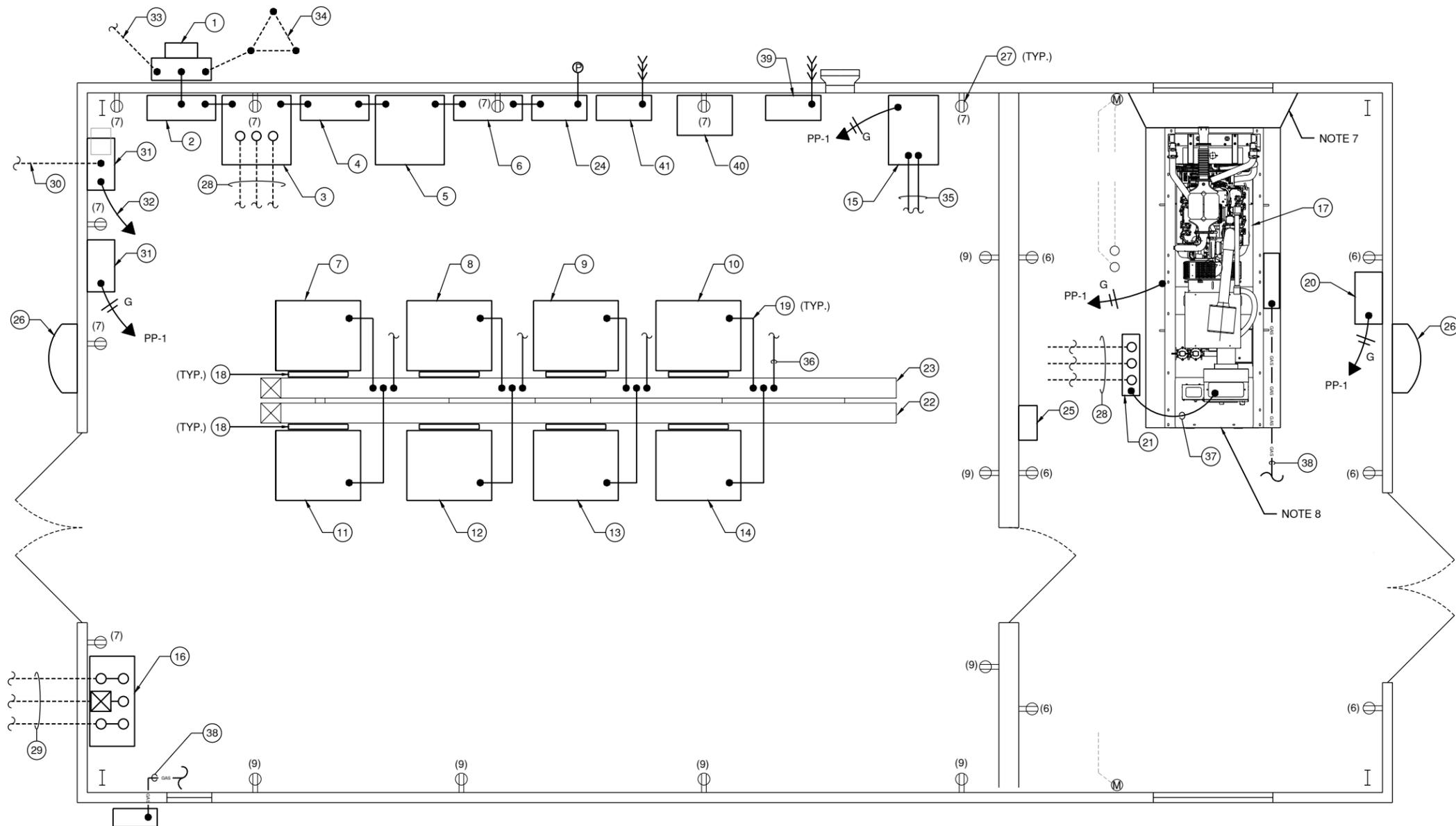
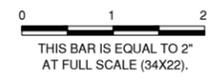
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REVISIONS		
NUMBER	BY	DATE



- NOTES:**
- EXISTING EQUIPMENT TO REMAIN IS SHOWN FOR INFORMATION ONLY. NEW WORK IS SHOWN IN BOLD.
 - INSTALL LAMACOID NAMEPLATES ON ALL EQUIPMENT.
 - ALL EXISTING GROUNDING TO REMAIN. CONNECT GROUND TO NEW PANELS AND REGULATORS.
 - ALL EXISTING LIGHTING TO REMAIN UNLESS OTHERWISE NOTED.
 - ALL EXISTING 120VAC RECEPTACLES AND LIGHTING CIRCUITS TO REMAIN. CONNECT ALL EXISTING CIRCUITS TO REMAIN TO NEW POWER PANEL "PP-1".
 - CONTRACTOR SHALL RELOCATE RUNWAY 5 - 23 REGULATOR TO OLD VAULT ENERGIZE DURING CONSTRUCTION OF VAULT. UTILIZE EXISTING L-854 RADIO CONTROLLER FOR PILOT CONTROLLED LIGHTING CONTROLS.
 - INSTALL NEW AIR SUPPLY DUCT CONNECTED TO NEW GENERATOR AND LOUVER AS REQUIRED BY GENERATOR MANUFACTURER.
 - INSTALL NEW VIBRATION ISOLATORS AND EXHAUST SYSTEM PER GENERATOR MANUFACTURER'S RECOMMENDATIONS.

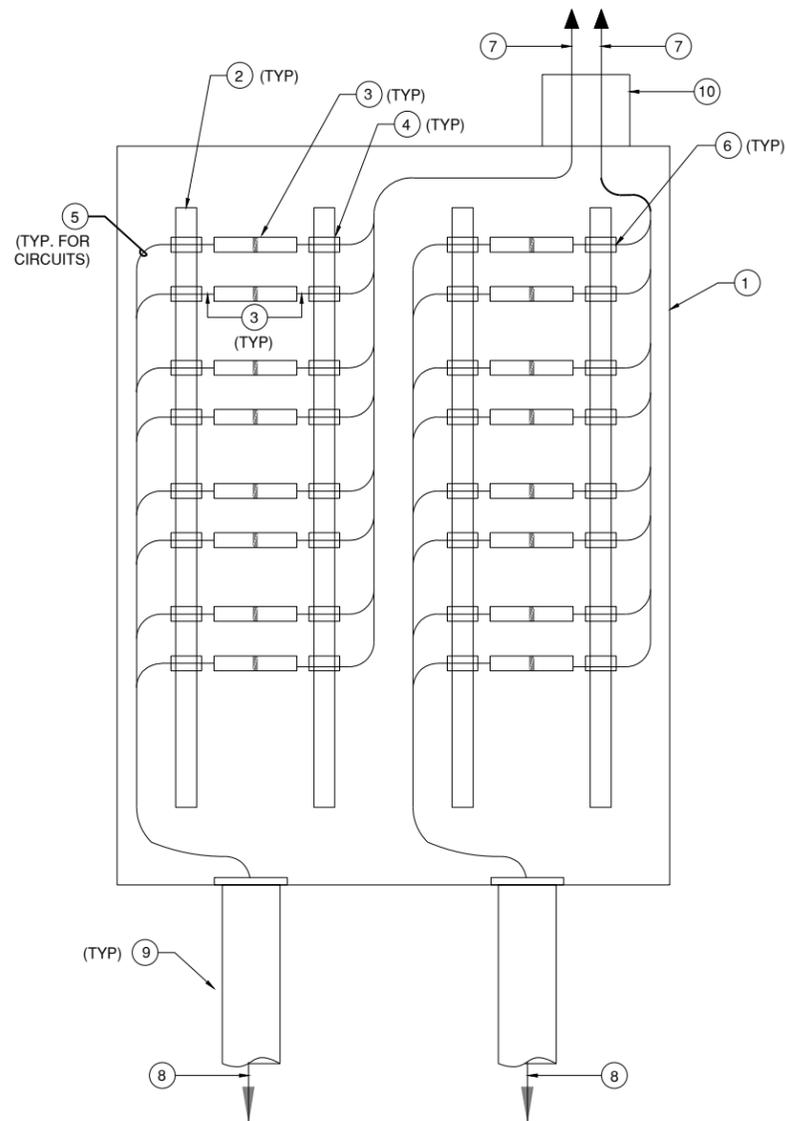
ELECTRICAL VAULT PLAN

VAULT ELECTRICAL EQUIPMENT NOMENCLATURE

- | | | | |
|--|--|--|---|
| <p>1. NEW 400A, 480/277V 3-PHASE, 4-WIRE CT CABINET AND UTILITY METER, NEMA 3R.</p> <p>2. NEW 400A, 480V 3-POLE NEMA 1 CIRCUIT BREAKER DISCONNECT.</p> <p>3. NEW 400A, 480V 3-POLE AUTOMATIC TRANSFER SWITCH (ATS).</p> <p>4. NEW 400A, 480/277V, 3-PHASE, 4-WIRE MAIN DISTRIBUTION PANEL "MDP" WITH 400A MAIN CIRCUIT BREAKER.</p> <p>5. NEW 45KVA, 480-120/208V, 3-PHASE TRANSFORMER.</p> <p>6. NEW 125A, 120/208V, 3-PHASE, 4-WIRE POWER PANEL "PP-1".</p> <p>7. NEW 20KW, 480V, 5-STEP L-829 REGULATOR FOR "RUNWAY 5/23" EDGE LIGHTING CIRCUIT.</p> <p>8. NEW 15KW, 480V, 3-STEP L-829 REGULATOR FOR "RUNWAY 14/32" EDGE LIGHTING CIRCUIT.</p> <p>9. NEW 15KW, 480V, 3-STEP L-829 REGULATOR FOR "TAXIWAY A-EAST" EDGE LIGHTING CIRCUIT.</p> <p>10. NEW 15KW, 480V, 3-STEP L-829 REGULATOR FOR "TAXIWAY A-WEST" EDGE LIGHTING CIRCUIT.</p> <p>11. NEW 15KW, 480V, 3-STEP L-829 REGULATOR FOR "TAXIWAY B" EDGE LIGHTING CIRCUIT.</p> | <p>12. NEW 15KW, 480V, 3-STEP L-829 REGULATOR FOR "TAXIWAY C" EDGE LIGHTING CIRCUIT.</p> <p>13. NEW 20KW, 480V, 5-STEP L-829 SPARE REGULATOR.</p> <p>14. NEW 15KW, 480V, 3-STEP L-829 SPARE REGULATOR.</p> <p>15. NEW L-890 AIRFIELD LIGHTING CONTROL AND MONITORING SYSTEM (ALCMS) CABINET.</p> <p>16. NEW L-823 CONNECTOR CABINET, SEE DETAILS.</p> <p>17. NEW 150KW/187.5 KVA, 480/277V, 3-PHASE, 4-WIRE NATURAL GAS GENERATOR.</p> <p>18. NEW EQUIPMENT MOUNTING PLATE (TYPICAL OF 8) SEE DETAILS.</p> <p>19. NEW REGULATOR POWER IN FLEX CONDUIT TO LOW VOLTAGE WIREWAY (TYPICAL FOR ALL REGULATORS).</p> <p>20. NEW GENERATOR BATTERY CHARGER. INSTALL NEW CIRCUIT TO "PP-1".</p> <p>21. NEW 225A, 3-POLE CIRCUIT BREAKER FOR GENERATOR. CONNECT EXISTING CONDUITS.</p> <p>22. EXISTING HIGH VOLTAGE WIREWAY.</p> <p>23. EXISTING LOW VOLTAGE WIREWAY.</p> | <p>24. NEW (4) 2-POLE LIGHTING CONTACTORS WITH H-O-A SELECTOR SWITCH AND PHOTOCCELL. CONNECT EXISTING PARKING LOT AND ROADWAY LIGHTING CIRCUITS.</p> <p>25. NEW GENERATOR ANNUNCIATOR PANEL.</p> <p>26. NEW LED OUTDOOR LIGHT, LED WALLPACK MINIMUM 6000 LUMENS.</p> <p>27. EXISTING 120V RECEPTACLES. RECONNECT EXISTING CIRCUITS TO NEW "PP-1".</p> <p>28. INSTALL NEW GENERATOR POWER AND ATS CONTROLS CONDUCTORS IN EXISTING CONDUITS. REFER TO ONE-LINE DIAGRAM.</p> <p>29. INSTALL NEW (12) 1/C #8 5KV, L-824 (6 HOMERUNS) IN EXISTING CONDUITS TO HANDHOLE.</p> <p>30. INSTALL NEW 1-12 STRAND SINGLE MODE FIBER OPTIC CABLE IN EXISTING CONDUIT TO HANDHOLE.</p> <p>31. INSTALL NEW 24"x24"x12" NEMA 1 JUNCTION BOX. CONNECT EXISTING CONDUIT.</p> <p>32. NEW 1-12 STRAND SINGLE MODE FIBER OPTIC CABLE IN 1-1/2" CONDUIT TO ALCMS CABINET.</p> <p>33. NEW 4-600 KCMIL, XHHW, 1 #4/0 GND. IN 4" GRS AND CONCRETE ENCASED CONDUIT TO COMED TRANSFORMER.</p> | <p>34. NEW GROUNDING GRID, SEE DETAILS.</p> <p>35. NEW ALCMS DATA CABLES (2-CHANNEL) IN (2) 1-1/2" GRS CONDUITS, SEE DETAILS.</p> <p>36. NEW REGULATOR POWER CONDUCTORS FROM MDP IN 6 - 2" GRS CONDUITS INSTALL 2 CKTS IN EACH CONDUIT. REFER TO ONE-LINE.</p> <p>37. INSTALL NEW GENERATOR POWER AND CONTROLS IN NEW 1 - 3" AND 1 - 1" FLEX CONDUIT.</p> <p>38. INSTALL NEW GAS LINE AND NATURAL GAS REGULATOR FROM EXISTING GAS SERVICE. GAS LINE SHALL BE SIZED PER MANUFACTURER REQUIREMENTS.</p> <p>39. NEW L-854 RADIO CONTROLLER AND ANTENNA. MOUNT ANTENNA 10' - 0" ABOVE ROOF.</p> <p>40. NEW 25KVA 480 - 120/240V TRANSFORMER.</p> <p>41. NEW 100A, 120/240V, 1PH, 3W PANEL "PP-2". RECONNECT EXISTING CIRCUITS FROM PANEL "C".</p> <p>42. EXISTING SIGN LIGHTING RELAY, CONNECT TO NEW PANEL "PP-2".</p> |
|--|--|--|---|

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WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS
VAULT IMPROVEMENT PLAN

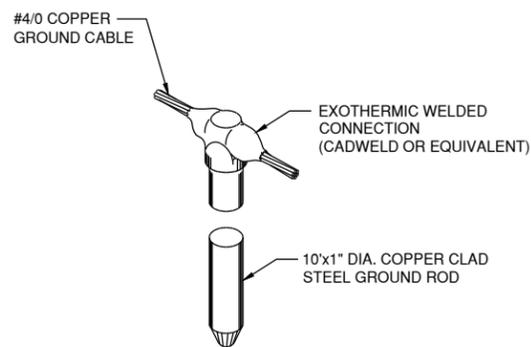
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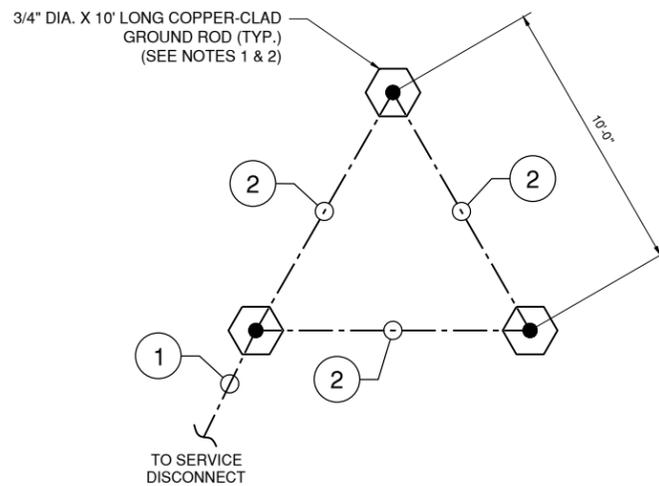
NEW L-823 SPLICE ENCLOSURE
N.T.S

L-823 SPLICE ENCLOSURE NOTES

1. 48"W x 48"H x 12"D (MIN.) HINGED ENCLOSURE WITH MOUNTING PANEL, NEMA 1. MOUNTED ON WALL ABOVE EXISTING UNDERFLOOR HOMERUN CONDUITS INSTALL LABEL: L-823 SPLICE ENCLOSURE.
2. UNISTRUT, MOUNTED ON MOUNTING PANEL.
3. L-823 SPLICE, TYPICAL FOR ALL CIRCUITS LABEL EACH CIRCUIT.
4. 1 1/2" PVC SCH. 40 CONDUIT (MIN 2" LONG) ATTACHED TO UNITSTRUT.
5. CIRCUIT TAG, BRASS CIRCLE ENGRAVED WITH CIRCUIT DESIGNATION ATTACHED TO HOMERUN CABLES BOTH SIDES OF L-823 SPLICE.
6. 1/C #8 5KV, L-824 HOMERUN AND REGULATOR CABLES.
7. 16-1/C #8 5KV L-824 CABLES FROM MOUNTING PANEL THROUGH EXISTING WIREWAY. INSTALL NEW CABLES FOR EACH CIRCUIT.
8. 16-1/C #8 5KV L-824 HOMERUN CABLES FROM AIRFIELD HANDHOLE IN EXISTING CONDUITS RECONNECT TO NEW ENCLOSURE PULL INTO L-823 SPLICE ENCLOSURE FOR LENGTH AND SLACK REQUIRED.
9. EXISTING 6-4" GRS CONDUITS.
10. CONNECT TO EXISTING HIGH VOLTAGE WIREWAY FOR AIRFIELD LIGHTING CIRCUITS.



TYPICAL GROUND ROD DETAIL
N.T.S



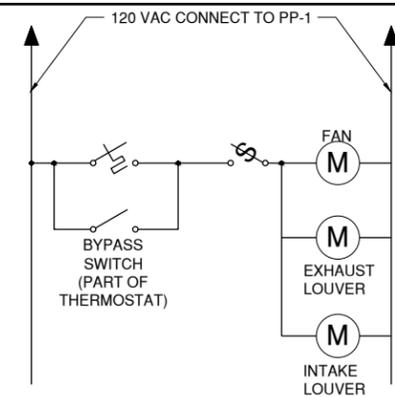
GROUND GRID LAYOUT DETAIL
N.T.S

NOTES

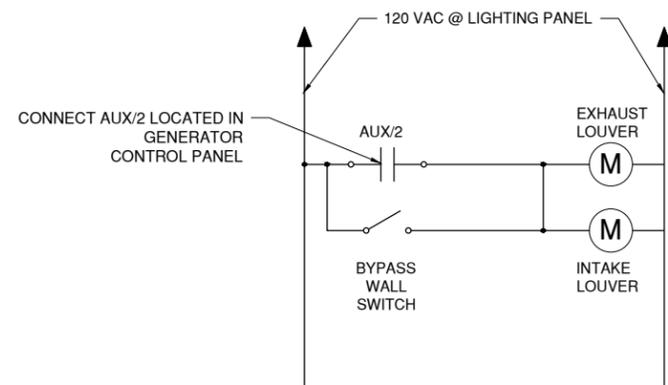
1. GROUND WELLS SHALL BE INSTALLED AT ALL GROUND RODS AND SHALL BE PLACE 10 FEET APART IN THE CONFIGURATION AS SHOWN ON THE PLANS.
2. EXOTHERMIC WELD SHALL BE PER MANUFACTURES SPECIFICATIONS.

CABLE/CONDUIT NOMENCLATURE

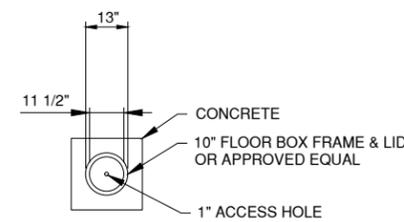
- 1 1-1/C #4/0 BARE COPPER GROUNDING CONDUCTOR IN 1" PVC SCHEDULE 40 CONDUIT
- 2 1-1/C #4/0 BARE COPPER GROUNDING CONDUCTOR



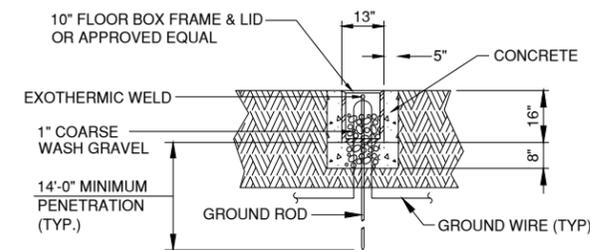
EXISTING REGULATOR ROOM VENT FAN SCHEMATIC
N.T.S



EXISTING REGULATOR ROOM LOUVER MOTORS SCHEMATIC
N.T.S



GROUND WELL PLAN DETAIL
N.T.S



GROUND WELL ELEVATION DETAIL
N.T.S

IL. CONTRACT: **WA075**
IL. LETTING ITEM: **06A**
IL. PROJECT: **UGN-4824**
S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2"
AT FULL SCALE (34X22).

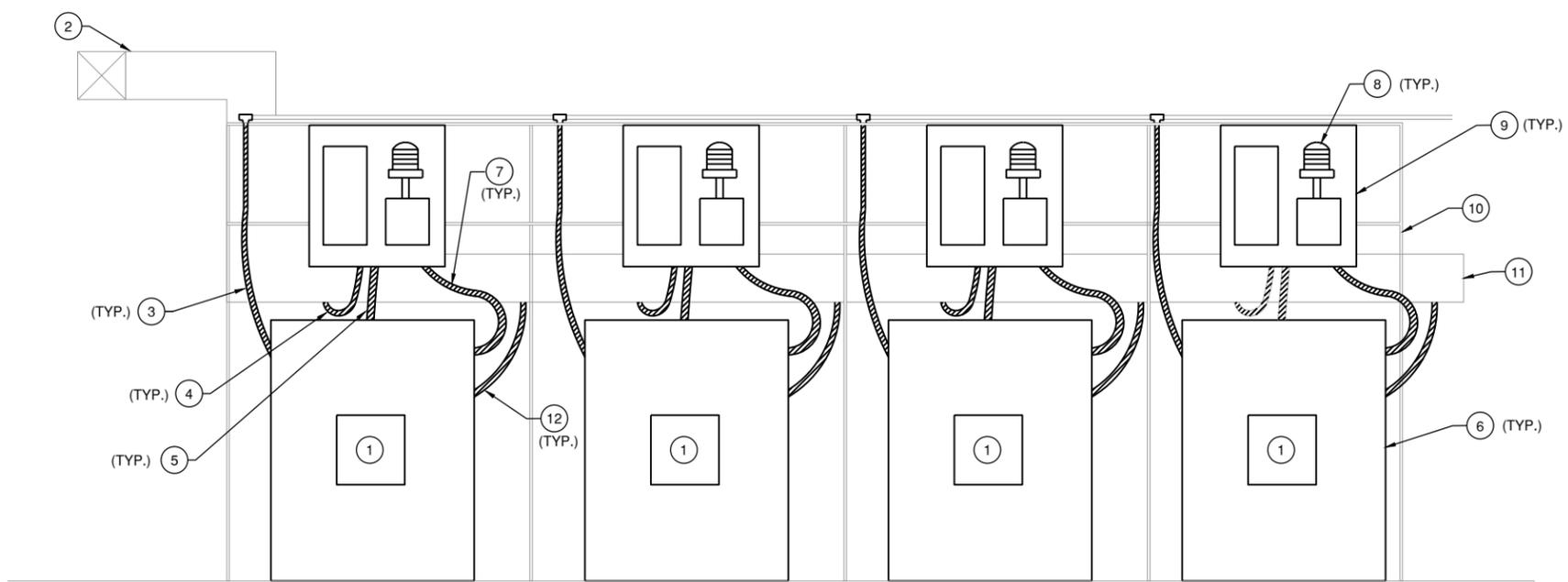
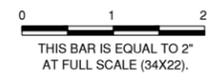
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REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS
ELECTRICAL VAULT IMPROVEMENT DETAILS - SHEET 1

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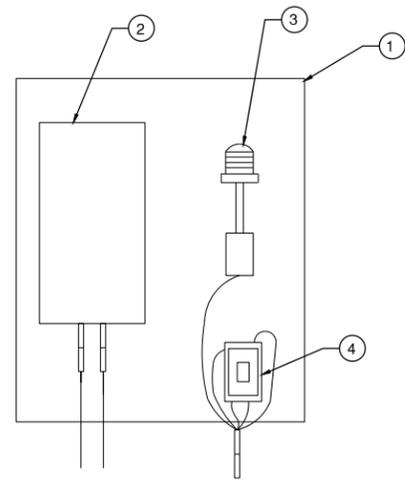
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 APPROVED BY: AB
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FINAL
 SHEET 54 OF 61 SHEETS

REVISIONS		
NUMBER	BY	DATE



Vault Electrical Equipment
 NOT TO SCALE



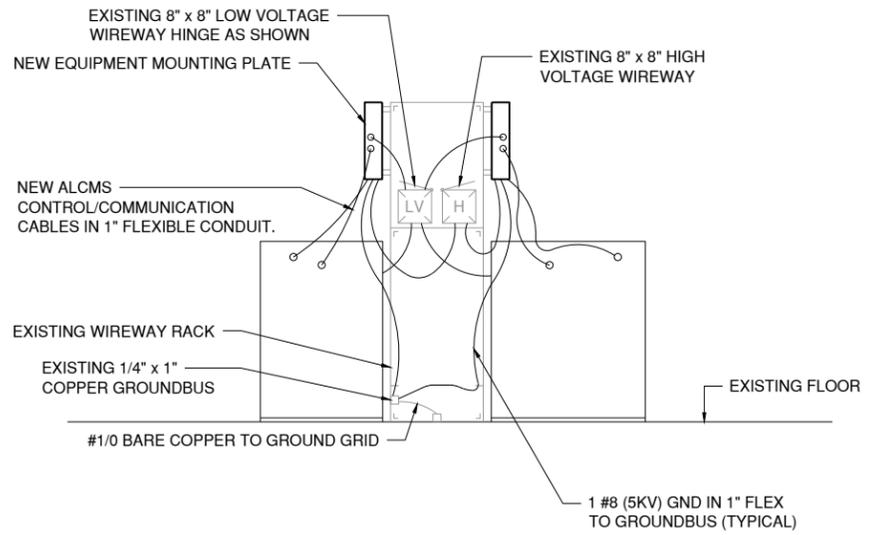
MOUNTING PLATE LAYOUT
 NOT TO SCALE

MOUNTING PLATE NOTES

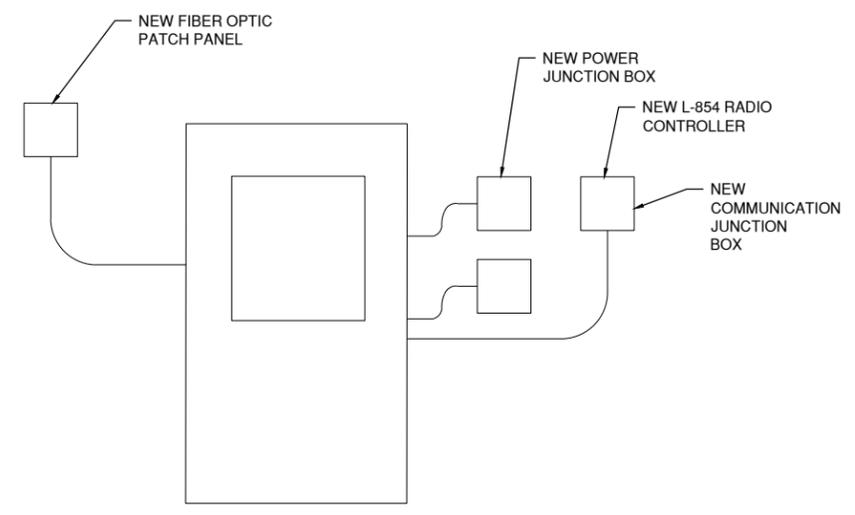
- ① NEW EQUIPMENT MOUNTING PLATE.
- ② NEW REGULATOR DISCONNECT SWITCH.
- ③ NEW RUNWAY/TAXIWAY INDICATOR LIGHT (LED).
- ④ S-1 PLUG CUT-OUT

Vault Electrical Equipment Nomenclature

- ① NEW ALCMS INTERFACE UNIT BUILT-IN WITH NEW REGULATORS.
- ② EXISTING 8" X 8" HOMERUN WIREWAY TO L-823 CONNECTOR CABINET. INSTALL NEW CIRCUITS.
- ③ NEW CONTROL/ COMMUNICATION CABLES IN 1" FLEX CONDUIT AS RECOMMENDED BY ALCMS MANUFACTURER.
- ④ NEW 2-1/C #8 (5KV) IN 1 1/2" FLEX TO HOMERUN WIREWAY.
- ⑤ NEW 1#8 (GND) IN 1" FLEX TO GROUND BUS.
- ⑥ NEW L-829 AIRFIELD LIGHTING REGULATOR.
- ⑦ 2#8 (5KV) IN 1 1/2" FLEX TO S-1 CUTOUTS ENCLOSURE.
- ⑧ LED INDICATING LIGHT (MATCH AIRFIELD LIGHTING CIRCUIT).
- ⑨ NEW 24"x24" WHITE MOUNTING PLATE, MOUNTED ON EXISTING UNITSTRUT FRAME. SEE DETAIL.
- ⑩ EXISTING UNITSTRUT WIREWAY RACK.
- ⑪ EXISTING HIGH VOLTAGE WIREWAY.
- ⑫ NEW REGULATOR POWER IN 1 1/2" FLEX CONDUIT TO LOW VOLTAGE WIREWAY. SEE ONE LINE DIAGRAM FOR REGULATOR WIRE SIZE.



Vault Electrical Equipment Installation
 NOT TO SCALE



Vault ALCMS Rack Elevation
 NOT TO SCALE

**WAUKEGAN NATIONAL AIRPORT
 WAUKEGAN, ILLINOIS
 REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

ELECTRICAL VAULT IMPROVEMENT DETAILS - SHEET 2

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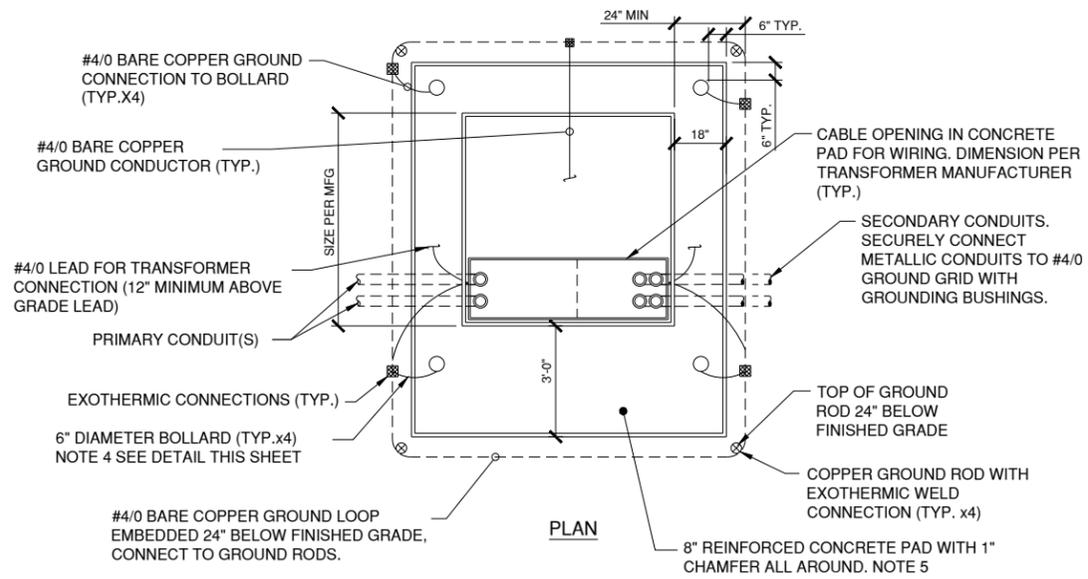


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JOB No:	20022602-00

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REVISIONS

NUMBER	BY	DATE

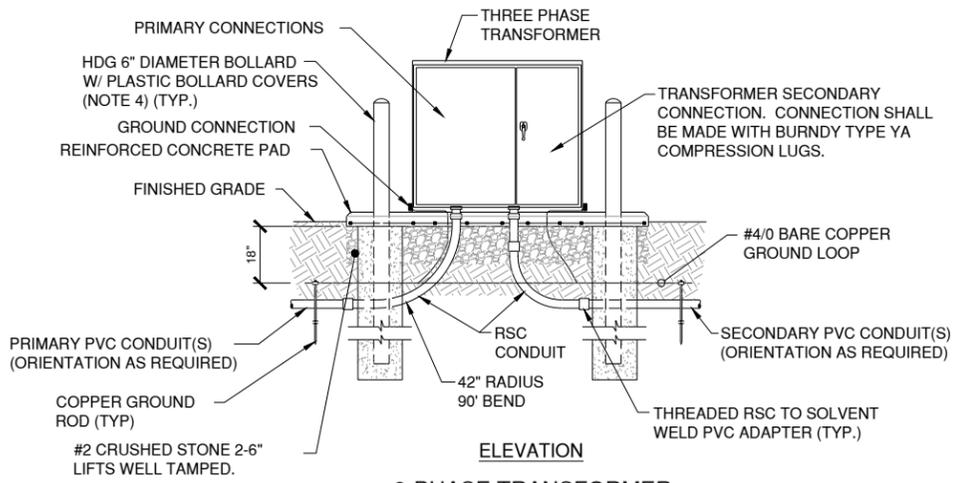


3-PHASE TRANSFORMER INSTALLATION DETAIL

NOT TO SCALE

NOTES:

- EQUIPMENT PAD DIMENSIONS SHOWN FOR REFERENCE ONLY. REFER TO APPROVED SHOP DRAWINGS FOR EXACT DIMENSIONS OF TRANSFORMER AND TRANSFORMER PAD OPENING PRIOR TO INSTALLATION OF CONCRETE EQUIPMENT PAD. CABLE OPENING IN CONCRETE EQUIPMENT PAD SHALL BE SIZED AS PER THE TRANSFORMER MANUFACTURERS RECOMMENDATION AND PER COMED SPECIFICATIONS. DO NOT GROUT.
- PROVIDE EXOTHERMIC WELD TYPE GROUND CONNECTION FOR NEW GROUND RODS, BOLLARDS AND GROUND CABLE TO CABLE CONNECTIONS.
- GROUT CABLE/CONDUIT OPEN IN CONCRETE PAD WITH 1500 PSI CONCRETE TO PREVENT RODENT ACCESS. CAP ALL CONDUITS PRIOR TO GROUTING.
- ALL SHOWN AS NEW.
- BOLLARDS SHALL BE PAINTED YELLOW.
- SECURELY FASTEN TRANSFORMER TO CONCRETE EQUIPMENT PAD. REFER TO TYPICAL ANCHOR BOLT DETAIL, THIS SHEET.



3-PHASE TRANSFORMER

ELEVATION INSTALLATION DETAIL

NOT TO SCALE

NOTES:

- CONCRETE SHALL BE 4000 PSI AT 28 DAYS.
- TOP SURFACE SHALL BE TROWEL FINISHED WITH 1" CHAMFER ON ALL EXPOSED EDGES.

WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS

TRANSFORMER DETAILS

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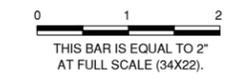
IL CONTRACT: **WA075**
 IL LETTING ITEM: **06A**
 IL PROJECT: **UGN-4824**
 S.B.G. PROJECT: **3-17-SBGP-XXX**

PANELBOARD SCHEDULE																	
PANEL DESIGNATION: MDP						BOND NEUTRAL AND GROUND BAR: YES						POLE: AS SHOWN					
LOCATION: ELECTRICAL VAULT						NEUTRAL BUS RATING: 100%						SHORT CIRCUIT RATING: 65KAIC					
MFR & TYPE: SQUARE D NQ, OR EQUIV.						SERVICE ENTRANCE RATED: NO						SERIES OR FULLY RATED: SERIES					
						TVSS & DISCONNECT REQUIRED: YES											
VOLTS: 277/480V			MOUNTING: SURFACE			BUS RATING (AMPS): 400A			BUS: COPPER			MAIN CIRCUIT BREAKER: AMP/POLE 400/3					
PHASE: 3			ENCL RATING: NEMA 1														
WIRE: 4																	
CKT NO.	LOAD	BREAKER SIZE	LOAD AMPS	USAGE FACTOR	PHASE AMPS (USAGE)			POLE NO.	PHASE AMPS (USAGE)			USAGE FACTOR	LOAD AMPS	BREAKER SIZE	CKT NO.		
1	TVSS	20A/3P	15	0	0	0	0	1	2	75	75	1	75	70A/3P	2		
3			15	0				3	4		75	1	75		4		
5			15	0				5	6		75	1	75		6		
7	RUNWAY 5/23 20KW REGULATOR	60A/2P	20	0.5	10			1	2	10		0.5	20	50A/2P	8		
9			20	0.5				3	4			0.5	20		10		
11	TAXWAY A-EAST 15KW REGULATOR	50A/2P	20	0.5	10			5	6	10		0.5	20	50A/2P	12		
13			20	0.5				7	8	10		0.5	20		14		
15	TAXWAY B 15KW REGULATOR	50A/2P	30	0.5	15			9	10	15		0.5	30	50A/2P	16		
17			30	0.5				11	12	15		0.5	30		18		
19	SPARE 20KW REGULATOR	60A/2P	30	0.5	15			13	14	15		0.5	30	50A/2P	20		
21			30	0.5				15	16	15		0.5	30		22		
23	SPARE	30A/2P	20	0	0			17	18	0		0	30	70A/2P	24		
25			20	0	0			19	20	0		0	30		26		
27	SPARE	30A/2P	20	0	0			21	22	0		0	30	50A/2P	28		
29			20	0	0			23	24	0		0	30		30		
31	SPACE				0			25	26	0					32		
33					0			27	28	0					34		
35	SPACE				0			29	30	0					36		
37					0			25	26	0					38		
39	SPACE				0			27	28	0					40		
41					0			29	30	0					42		
SECTION TOTAL:					35	40	25			110	115	100					
					PHASE TOTAL AMPS:			TOTAL USAGE LOAD:						117725 VA			
					A			A									
					B			B									
					C			C									
					40165			42935			34625						

PANELBOARD SCHEDULE																	
PANEL DESIGNATION: PP-1						BOND NEUTRAL AND GROUND BAR: YES						POLE: 42					
LOCATION: ELECTRICAL VAULT						NEUTRAL BUS RATING: 100%						SHORT CIRCUIT RATING: 22KA					
MFR & TYPE: SQUARE D NQ, OR EQUIV.						SERVICE ENTRANCE RATED: NO						SERIES OR FULLY RATED: SERIES					
						TVSS & DISCONNECT REQUIRED: NO											
VOLTS: 208Y/120V			MOUNTING: SURFACE			BUS RATING (AMPS): 125			BUS: COPPER			MAIN CIRCUIT BREAKER: AMP/POLE 125/3					
PHASE: 3			ENCL RATING: NEMA 1														
WIRE: 4																	
CKT NO.	LOAD	BREAKER SIZE	LOAD AMPS	USAGE FACTOR	PHASE AMPS (USAGE)			POLE NO.	PHASE AMPS (USAGE)			USAGE FACTOR	LOAD AMPS	BREAKER SIZE	CKT NO.		
1	GEN. ROOM LOUVER	20A/1P	5	1	5			1	2	1.8		1	1.8	20A/1P	2		
3	REG. ROOM LIGHTS	20A/1P	1	1				3	4		1	1	20A/1P	4			
5	REG. ROOM VENT FAN	20A/1P	5	1				5	6		4	8	0.5	20A/1P	6		
7	REG. ROOM N&E RECEPPTS	20A/1P	5	1	5			7	8	2		4	0.5	20A/1P	8		
9	REG. ROOM S&W RECEPPTS	20A/1P	5	1				9	10		0.5	0.5	1	20A/1P	10		
11	J.W. HEATER	20A/1P	1	0.5				11	12		0.5	0.5	1	15A/1P	12		
13	AIR CONDITIONING	20A/1P	3	0.5	1.5			13	14	0.4		0.4	1	20A/1P	14		
15	GEN. ANNUNCIATOR PANEL	20A/1P	5	0.5				15	16		0.5	0.5	1	20A/1P	16		
17	L-890 ALCMS	20A/1P	5	0.5				17	18					20A/1P	18		
19	L-854 RADIO CONTROLLER	20A/1P	5	1	5			19	20					20A/1P	20		
21	SPARE	20A/1P						21	22						22		
23	SPARE	20A/1P						23	24						24		
25								25	26						26		
27								27	28						28		
29								29	30						30		
31								31	32						32		
33								33	34						34		
35								35	36						36		
37								37	38						38		
39								39	40						40		
41								41	42						42		
SECTION TOTAL:					16.5	8.5	8			4.2	2	4.5					
					PHASE TOTAL AMPS:			TOTAL USAGE LOAD:						5244 VA			
					A			A									
					B			B									
					C			C									
					20.7			10.5			12.5						
					A			A									
					B			B									
					C			C									
					2484			1280			1500						

PANELBOARD SCHEDULE																	
PANEL DESIGNATION: PP-1						BOND NEUTRAL AND GROUND BAR: YES						POLE: 12					
LOCATION: ELECTRICAL VAULT						NEUTRAL BUS RATING: 100%						SHORT CIRCUIT RATING: 22KA					
MFR & TYPE: SQUARE D NQ, OR EQUIV.						SERVICE ENTRANCE RATED: NO						SERIES OR FULLY RATED: SERIES					
						TVSS & DISCONNECT REQUIRED: NO											
VOLTS: 120/240V			MOUNTING: SURFACE			BUS RATING (AMPS): 125			BUS: COPPER			MAIN CIRCUIT BREAKER: AMP/POLE 100/2					
PHASE: 1			ENCL RATING: NEMA 1														
WIRE: 3																	
CKT NO.	LOAD	BREAKER SIZE	LOAD AMPS	USAGE FACTOR	PHASE AMPS (USAGE)			POLE NO.	PHASE AMPS (USAGE)			USAGE FACTOR	LOAD AMPS	BREAKER SIZE	CKT NO.		
1	PARKING LOT LIGHTS	20A/2P	1	1	1			1	2	0.25		1	0.25	20A/2P	2		
3			1	0.5				3	4		0				4		
5								5	6						6		
7								7	8	0				20A/2P	8		
9								9	10						10		
11								11	12						12		
13								13	14						14		
15								15	16						16		
17								17	18						18		
19								19	20						20		
21								21	22						22		
23								23	24						24		
25								25	26						26		
27								27	28						28		
29								29	30						30		
SECTION TOTAL:										1	0.5						
					PHASE TOTAL AMPS:			TOTAL USAGE LOAD:						420 VA			
					A			A									
					B			B									
					1.25			0.5									
					A			A									
					B			B									
					300			120									

REVISIONS		
NUMBER	BY	DATE



WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS
ELECTRICAL PANEL SCHEDULE

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DRAWN BY: **LBN**

CHECKED BY: **AB**

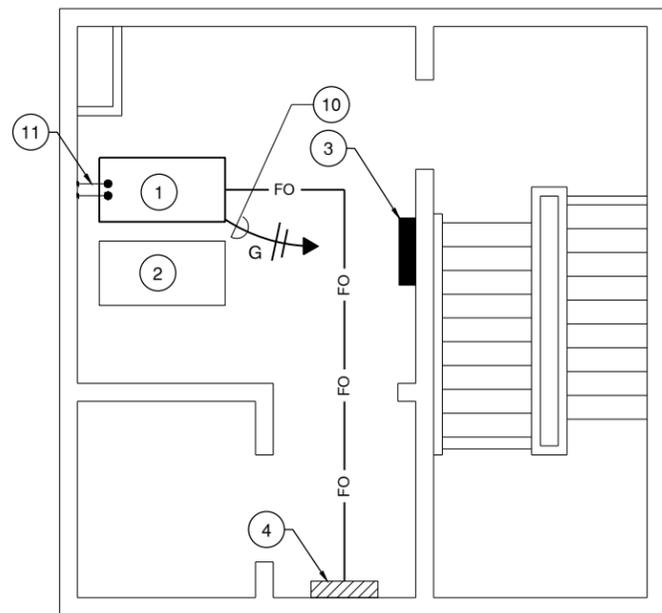
APPROVED BY: **AB**

DATE: **4/16/2021**

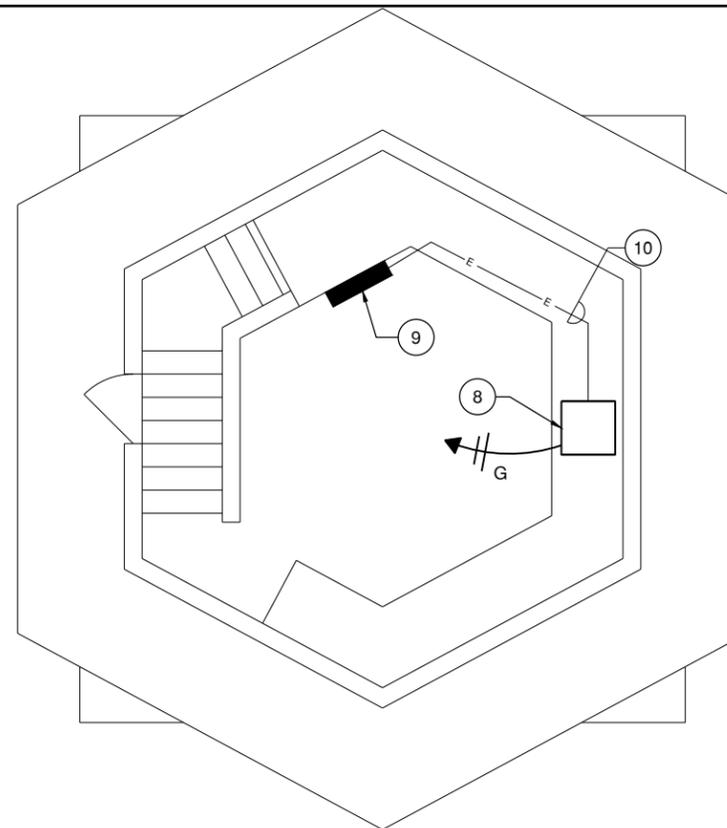
JOB No: **20022602-00**

FINAL

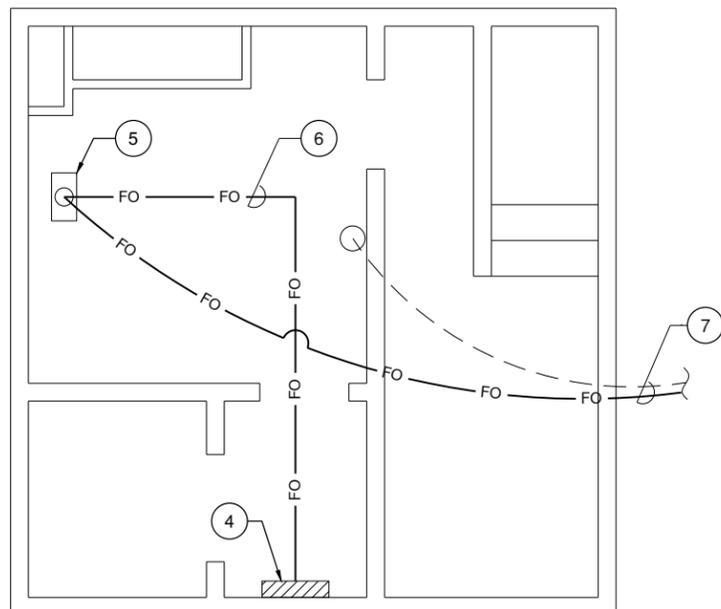
SHEET **57** OF **61** SHEETS



ATCT LEVEL-2 PLAN
 NOT TO SCALE



ATCT CAB PLAN
 NOT TO SCALE



ATCT LEVEL-1 PLAN
 NOT TO SCALE

NOTES

1. CONTRACTOR SHALL COORDINATE ALL WORK WITH FAA. PROVIDE MINIMUM 2 WEEKS ADVANCED NOTICE TO FAA PRIOR TO SCHEDULING ANY WORK IN ATCT.
2. COORDINATE ALL WORK IN ATCT CAB WITH FAA. PROVIDE NEW COUNTER TOP TO MAKE TOUCHSCREEN FLUSH WITH EXISTING COUNTER PER SATISFACTION TO FAA.
3. REMOVE EXISTING CONTROL CABLES INSTALL NEW FIBER OPTIC CABLE IN EXISTING CONDUIT. THROUGH AND CHASE.
4. NEW ALCMS CABINET SHALL BE MOUNTED TO FLOOR AND ATTACHED TO WALL WITH (2) UNIT STRUTS.

ATCT EQUIPMENT NOMENCLATURE

1. NEW L-890 AIRPORT LIGHTING CONTROL AND MONITORING SYSTEM (ALCMS) CABINET. (NOTE 4)
2. EXISTING FAA WEATHER SERVER TO REMAIN.
3. EXISTING 120/208V, 3-PHASE POWER PANEL. INSTALL 1-20A, 1-POLE CIRCUIT BREAKER FOR ALCMS.
4. EXISTING COMMUNICATION CHASE. INSTALL NEW 1-12 STRAND SINGLE MODE FIBER OPTIC CABLE AND DATA CABLES AS REQUIRED FOR ALCMS (NOTE 3).
5. EXISTING L-821 JUNCTION BOX TO REMAIN. RE-USE JUNCTION BOX FOR ALCMS FIBER OPTIC CABLE.
6. NEW 12-STRAND SINGLE-MODE FIBER OPTIC CABLE IN EXISTING TROUGH (NOTE 3).
7. EXISTING 2-4" CONDUITS TO EXISTING MANHOLE. INSTALL NEW FIBER OPTIC CABLE (NOTE 3).
8. REMOVE EXISTING L-821 PANEL. INSTALL NEW ALCMS TOUCH SCREEN, FLUSH WITH EXISTING COUNTERTOP (NOTE 2).
9. EXISTING 120/208V, 3-PHASE POWER PANEL. INSTALL 1-20A, 1-POLE CIRCUIT BREAKER FOR TOUCH SCREEN.
10. NEW 2 #12 THWN, 1 #12 GND. IN 3/4" CONDUIT.
11. ATTACH ALCMS CABINET TO WALL WITH UNIT STRUTS.

REVISIONS		
NUMBER	BY	DATE



WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS
ELECTRICAL ATCT ALCMS PLAN

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DATE:	4/16/2021
JOB No:	20022602-00

FINAL

STORM WATER POLLUTION PREVENTION PLAN

THE FOLLOWING PLAN IS ESTABLISHED AND INCORPORATED IN THE PROJECT TO DIRECT THE CONTRACTOR IN THE PLACEMENT OF TEMPORARY EROSION CONTROL SYSTEMS AND TO PROVIDE A STORM WATER POLLUTION PREVENTION PLAN FOR COMPLIANCE WITH NPDES.

THE PURPOSE OF THIS PLAN IS TO MINIMIZE EROSION WITHIN THE CONSTRUCTION SITE AND TO LIMIT SEDIMENTS FROM LEAVING THE SITE BY UTILIZING PROPER TEMPORARY EROSION CONTROL SYSTEMS AND PROVIDING GROUND COVER WITHIN A REASONABLE AMOUNT OF TIME.

CERTAIN EROSION CONTROL FACILITIES SHALL BE INSTALLED BY THE CONTRACTOR AT THE BEGINNING OF CONSTRUCTION. OTHER ITEMS SHALL BE INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER ON A CASE BY CASE SITUATION DEPENDING ON THE CONTRACTOR'S SEQUENCE OF ACTIVITIES, TIME OF YEAR, AND EXPECTED WEATHER CONDITIONS.

THE CONTRACTOR SHALL INSTALL PERMANENT EROSION CONTROL SYSTEMS AND SEEDING WITHIN A TIMEFRAME SPECIFIED HEREIN AND AS DIRECTED BY THE ENGINEER, THEREFORE MINIMIZING THE AMOUNT OF AREA SUSCEPTIBLE TO EROSION AND REDUCING THE AMOUNT OF TEMPORARY SEEDING, WHICH WILL BE THE CONTRACTOR'S COST. THE ENGINEER WILL DETERMINE IF ANY TEMPORARY EROSION CONTROL SYSTEMS SHOWN IN THE PLAN CAN BE DELETED AND IF ANY ADDITIONAL TEMPORARY EROSION CONTROL SYSTEMS, WHICH ARE NOT INCLUDED IN THIS PLAN, SHALL BE ADDED. THE CONTRACTOR SHALL PERFORM ALL WORK AS DIRECTED BY THE ENGINEER AND AS SHOWN ON THE PLANS.

SITE DESCRIPTION

THE FOLLOWING IS A DESCRIPTION OF THE CONSTRUCTION ACTIVITY WHICH IS THE SUBJECT OF THIS PLAN:

THIS PROJECT CONSISTS OF CONSTRUCTING A NEW 10' SECURITY FENCE WITH AIRFIELD LIGHTS, BURIED CABLES, DUCT CROSSINGS AND AIRFIELD ELECTRICAL VAULT AT WAUKEGAN NATIONAL AIRPORT.

THE FOLLOWING IS A DESCRIPTION OF THE INTENDED SEQUENCE OF MAJOR ACTIVITIES WHICH WILL DISTURB SOILS FOR MAJOR PORTIONS OF THE CONSTRUCTION SITE, SUCH AS EXCAVATION AND GRADING:

1. INSTALL AND MAINTAIN TEMPORARY EROSION CONTROL MEASURES.
2. REMOVE EXISTING LIGHTS.
3. INSTALL NEW DUCT CROSSING.
4. INSTALL AIRFIELD POWER CABLES.
5. INSTALL AIRFIELD LIGHTS.
6. COMPLETE ELECTRICAL CONNECTIONS.
7. BACKFILL WITH EXCAVATED MATERIAL AND GRADE.
8. PLACEMENT OF PERMANENT EROSION CONTROL, SUCH AS SEEDING AND BLANKET.

AREA OF CONSTRUCTION SITE

THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE 15 ACRES OF WHICH 3 ACRES WILL BE DISTURBED BY EXCAVATION, GRADING AND OTHER ACTIVITIES.

OTHER REPORTS, STUDIES AND PLANS WHICH AID IN THE DEVELOPMENT OF THE STORM WATER POLLUTION PREVENTION PLAN AS REFERENCED DOCUMENTS:

1. INFORMATION OF THE SOILS AND TERRAIN WITHIN THE SITE WAS OBTAINED FROM TOPOGRAPHIC SURVEYS AND SOIL BORINGS THAT WERE UTILIZED FOR THE DEVELOPMENT OF THE PROPOSED TEMPORARY EROSION CONTROL SYSTEMS.
2. PROJECT PLAN DOCUMENTS, SPECIFICATION AND SPECIAL PROVISIONS, AND PLAN DRAWINGS INDICATING DRAINAGE PATTERNS AND APPROXIMATE SLOPES ANTICIPATED AFTER GRADING ACTIVITIES WERE UTILIZED FOR THE PROPOSED PLACEMENT OF THE TEMPORARY EROSION CONTROL SYSTEMS.

DRAINAGE TRIBUTARIES AND SENSITIVE AREAS RECEIVING RUNOFF FROM THIS CONSTRUCTION SITE:

THE CONSTRUCTION LOCATED IN DES PLAINES RIVER WATERSHED. THE SITE DRAINS THROUGH A SERIES OF OVERLAND FLOW ROUTES/STORM SEWER INTO THE SUBURBAN COUNTRY CLUB TRIBUTARY THAT OUTLET INTO ULTIMATELY THE DES PLAINES RIVER.

SEDIMENTATION AND EROSION CONTROL NOTES

THE SOIL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER 1/2 INCH OF RAIN OR MORE BY THE RESIDENT ENGINEER.

ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE REFERENCED FROM THE ILLINOIS URBAN MANUAL, UNLESS OTHERWISE STATED.

THE DRAWINGS, SPECIFICATIONS AND SPECIAL PROVISIONS WILL ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE AND DISTURBED PORTIONS OF THE SITE WILL BE STABILIZED. STABILIZATION PRACTICES INCLUDE SEEDING AND MULCHING AS DIRECTED BY THE ENGINEER. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

AS SOON AS REASONABLE ACCESS IS AVAILABLE TO ALL LOCATIONS WHERE WATER DRAINS AWAY FROM THE PROJECT, INLET PROTECTION AND PERIMETER SILT FENCE SHALL BE INSTALLED AS CALLED OUT IN THE PLANS OR AS DIRECTED BY THE ENGINEER.

THIS PLAN HAS BEEN PREPARED TO COMPLY WITH THE PROVISIONS OF THE NPDES PERMIT NUMBER ILR10, ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITE ACTIVITIES.

DESCRIPTION OF STABILIZATION PRACTICES DURING CONSTRUCTION:

DURING CONSTRUCTION, AREAS OUTSIDE THE CONSTRUCTION LIMITS AS OUTLINED PREVIOUSLY HEREIN SHALL BE PROTECTED. THE CONTRACTOR SHALL NOT USE THIS AREA FOR STAGING (EXCEPT AS DESCRIBED ON THE PLANS AND DIRECTED BY THE ENGINEER), PARKING OF VEHICLES OR CONSTRUCTION EQUIPMENT, STORAGE OF MATERIALS, OR OTHER CONSTRUCTION RELATED ACTIVITIES.

1. WITHIN THE CONSTRUCTION LIMITS, AREAS WHICH MAY BE SUSCEPTIBLE TO EROSION AS DETERMINED BY THE ENGINEER SHALL REMAIN UNDISTURBED UNTIL FULL SCALE CONSTRUCTION IS UNDERWAY TO PREVENT UNNECESSARY SOIL EROSION.
2. EARTH STOCKPILES SHALL BE TEMPORARILY SEEDED, AT THE CONTRACTORS EXPENSE, IF THEY ARE TO REMAIN UNUSED FOR MORE THAN FOURTEEN DAYS.
3. AS CONSTRUCTION PROCEEDS, THE CONTRACTOR SHALL INSTITUTE THE FOLLOWING AS DIRECTED BY THE ENGINEER:
 - A. PLACE TEMPORARY EROSION CONTROL FACILITIES AT LOCATIONS SHOWN ON THE PLANS.
 - B. EXCAVATED AREAS AND EMBANKMENT AREAS SHALL BE PERMANENTLY SEEDED IMMEDIATELY AFTER FINAL GRADING. IF NOT, THEY SHALL BE TEMPORARILY SEEDED, AT THE CONTRACTOR'S COST, IF NO CONSTRUCTION ACTIVITY IN THE AREA IS PLANNED FOR SEVEN DAYS.
4. CONSTRUCTION EQUIPMENT SHALL BE STORED AND FUELED ONLY AT DESIGNATED LOCATIONS. ALL NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR POLLUTANT IN ACCORDANCE WITH EPA WATER QUALITY REGULATIONS. LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.
5. SEDIMENT COLLECTED DURING CONSTRUCTION OF THE VARIOUS TEMPORARY EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF ON SITE ON A REGULAR BASIS AS DIRECTED BY THE ENGINEER. THE COST OF THIS MAINTENANCE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR UNCLASSIFIED EXCAVATION AND EROSION CONTROL ITEMS.
6. THE TEMPORARY EROSION CONTROL SYSTEMS SHALL BE REMOVED AS DIRECTED BY THE ENGINEER AFTER USE IS NO LONGER NEEDED OR NO LONGER FUNCTIONING. THE COST OF THIS REMOVAL SHALL BE INCLUDED IN THE UNIT BID PRICE FOR VARIOUS TEMPORARY EROSION CONTROL PAY ITEMS.

DESCRIPTION OF STRUCTURAL PRACTICES AFTER FINAL GRADING:

TEMPORARY EROSION CONTROL SYSTEMS SHALL BE LEFT IN PLACE WITH PROPER MAINTENANCE UNTIL PERMANENT EROSION CONTROL IS IN PLACE AND WORKING PROPERLY AND ALL PROPOSED TURF AREAS ARE SEEDED AND ESTABLISHED.

ONCE PERMANENT EROSION CONTROL SYSTEMS AS PROPOSED IN THE PLANS ARE FUNCTIONAL AND ESTABLISHED, TEMPORARY ITEMS SHALL BE REMOVED, CLEANED UP, AND DISTURBED TURF RESEEDED.

MAINTENANCE AFTER CONSTRUCTION

CONSTRUCTION IS COMPLETE AFTER FINAL ACCEPTANCE BY THE ILLINOIS DIVISION OF AERONAUTICS. MAINTENANCE UP TO THIS DATE WILL BE REQUIRED BY THE CONTRACTOR.

CONTRACTORS

1. THE STORM WATER POLLUTION PREVENTION PLAN MUST CLEARLY IDENTIFY FOR EACH MEASURE IDENTIFIED IN THE PLAN, THE CONTRACTOR(S) OR SUBCONTRACTOR(S) THAT WILL IMPLEMENT THE MEASURE. ALL CONTRACTORS AND SUBCONTRACTORS IDENTIFIED IN THE PLAN MUST SIGN A COPY OF THE CERTIFICATION STATEMENT IN PARAGRAPH 2 BELOW IN ACCORDANCE WITH PART VI.G (SIGNATORY REQUIREMENTS) OF THIS PERMIT. ALL CERTIFICATIONS MUST BE INCLUDED IN THE STORM WATER POLLUTION PREVENTION PLAN EXCEPT FOR OWNERS THAT ARE ACTING AS CONTRACTOR.
2. CERTIFICATION STATEMENT. ALL CONTRACTORS AND SUBCONTRACTORS IDENTIFIED IN A STORM WATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH PARAGRAPH 1 ABOVE SHALL SIGN A COPY OF THE FOLLOWING CERTIFICATION STATEMENT BEFORE CONDUCTING ANY PROFESSIONAL SERVICE AT THE SITE IDENTIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN:

"I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (ILR10) THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION."

THE CERTIFICATION MUST INCLUDE THE NAME AND TITLE OF THE PERSON PROVIDING THE SIGNATURE IN ACCORDANCE WITH PART VI.G OF THIS PERMIT; THE NAME, ADDRESS AND TELEPHONE NUMBER OF THE CONTRACTING FIRM; THE ADDRESS (OR OTHER IDENTIFYING DESCRIPTION) OF THE SITE; AND THE DATE THE CERTIFICATION IS MADE.

CONTRACTOR CERTIFICATION STATEMENT

THIS CERTIFICATION STATEMENT IS A PART OF THE STORM WATER POLLUTION PREVENTION PLAN FOR THE PROJECT DESCRIBED BELOW IN ACCORDANCE WITH NPDES PERMIT NO. ILR10 ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY.

PROJECT INFORMATION:

ROUTE: WAUKEGAN NATIONAL AIRPORT MARKED: REHABILITATE AIRFIELD LIGHTING PHASE 1 AND 2

SECTION: 31 PROJECT NUMBER: UGN-4824

COUNTY: LAKE CONTRACT NUMBER: 3-17-SBGP-156/152

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT (ILR10) THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION.

SIGNATURE: _____ DATE: _____

PRINTED NAME: _____ TITLE: _____

NAME OF FIRM: _____

STREET ADDRESS: _____

CITY, STATE, ZIP: _____

PHONE NUMBER: _____

THE INFORMATION WITHIN THIS BOX SHALL BE COMPLETED BY THE CONTRACTOR AFTER THE AWARD OF THE CONTRACT TO OBTAIN THE REQUIRED NPDES PERMIT FROM IEPA. COMPLETION OF THIS IS A CONTRACT REQUIREMENT.

ADDITIONAL NOTES

1. PRIOR TO COMMENCING DEWATERING ACTIVITIES AND LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED TO, ADDITIONAL PHASES OF DEVELOPMENT AND OFF-SITE BORROW OR WASTE AREAS) A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED TO THE OWNER FOR REVIEW AND INCLUSION INTO SWPPP.
2. DURING DEWATERING OPERATION, WATER SHALL BE PUMPED FROM A SUMP PIT INTO SEDIMENT BASINS OR SILT TRAPS OR OTHER APPROVED BMP. COSTS OF SUMP PITS, SEDIMENT BASINS AND SILT TRAPS AND OTHER BMP ARE INCIDENTAL TO THE DEWATERING PAY ITEM. DEWATERING DIRECTLY INTO FIELD TILES OR STORMWATER STRUCTURES IS PROHIBITED.
3. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL CURRENT EDITION FOUND AT ILLINOISMANUAL.ORG.
4. WINTER SHUTDOWN SHALL BE ADDRESSED EARLY IN THE FALL GROWING SEASON SO THAT SLOPES AND OTHER BARE EARTH AREAS MAY BE STABILIZED WITH TEMPORARY AND OR PERMANENT VEGETATIVE COVER FOR PROPER EROSION AND SEDIMENT CONTROL. TEMPORARY SEEDING (156) SHALL BE PAID FOR ONLY WHEN NEEDED FOR WINTERIZATION OF THE SITE AT THE LOCATIONS NOTED BY THE ENGINEER. ALL OTHER APPLICATIONS OF TEMPORARY SEED NEEDED FOR COMPLIANCE FOR THE NPDES PERMIT SHALL BE INCIDENTAL TO THE CONTRACT.

LAKE COUNTY STORMWATER MANAGEMENT COMMISSION SOIL EROSION AND SEDIMENT CONTROL CONSTRUCTION NOTES

- A. SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.
- B. FOR THOSE DEVELOPMENTS THAT REQUIRE A DESIGNATED EROSION CONTROL INSPECTOR (DECI), INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:
 - UPON COMPLETION OF SEDIMENT AND RUNOFF CONTROL MEASURES (INCLUDING PERIMETER CONTROLS AND DIVERSIONS), PRIOR TO PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING.
 - AFTER EVERY SEVEN (7) CALENDAR DAYS OR STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.
- C. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE PERMITTEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
- D. A STABILIZED MAT OF CRUSHED STONE MEETING IDOT GRADATION CA 1 UNDERLAIN WITH FILTER FABRIC AND IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL, OR OTHER APPROPRIATE MEASURE(S) AS APPROVED BY THE ENFORCEMENT OFFICER, SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT OF WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
- E. TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN.
- F. DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING THE END OF ACTIVE HYDROLOGIC DISTURBANCE OR REDISTURBANCE.
- G. ALL STOCKPILES SHALL HAVE APPROPRIATE MEASURES TO PREVENT EROSION. STOCKPILES SHALL NOT BE PLACED IN FLOOD PRONE AREAS OR WETLANDS AND DESIGNATED BUFFERS.
- H. SLOPES STEEPER THAN 3H:1V SHALL BE STABILIZED WITH APPROPRIATE MEASURES APPROVED BY THE ENFORCEMENT OFFICER.
- I. APPROPRIATE EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL INTERIOR DETENTION BASIN SIDE SLOPES BETWEEN THE NORMAL WATER LEVEL AND HIGH WATER LEVEL.
- J. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY AN APPROPRIATE SEDIMENT CONTROL MEASURE.
- K. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DISCHARGES SHALL BE ROUTED THROUGH AN APPROVED ANIONIC POLYMER DEWATERING SYSTEM OR A SIMILAR MEASURE AS APPROVED BY THE ENFORCEMENT OFFICER. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE ENFORCEMENT OFFICER, OR APPROVED REPRESENTATIVE, MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES. IF INSTALLED SOIL EROSION AND SEDIMENT CONTROL MEASURES DO NOT MINIMIZE SEDIMENT LEAVING THE DEVELOPMENT SITE, ADDITIONAL MEASURES SUCH AS ANIONIC POLYMERS OR FILTRATION SYSTEMS MAY BE REQUIRED BY THE ENFORCEMENT OFFICER.
- L. IF INSTALLED SOIL EROSION AND SEDIMENT CONTROL MEASURES DO NOT MINIMIZE SEDIMENT LEAVING THE DEVELOPMENT SITE, ADDITIONAL MEASURES SUCH AS ANIONIC POLYMERS OR FILTRATION SYSTEMS MAY BE REQUIRED BY THE ENFORCEMENT OFFICER.
- M. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE PROPERTY OWNER SHALL BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND REPAIR.
- N. ALL TEMPORARY SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
- O. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, ENFORCEMENT OFFICER, OR OTHER GOVERNING AGENCY.

IL CONTRACT: **WA075**

IL LETTING ITEM: **06A**

IL PROJECT: **UGN-4824**

S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS

NUMBER	BY	DATE

0 1 2
THIS BAR IS EQUAL TO 2"
AT FULL SCALE (34X22).

WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS

STORMWATER POLLUTION PREVENTION PLAN

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CRAWFORD, MURPHY & TILLY, INC.
CONSULTING ENGINEERS
License No. 184-000613



DESIGN BY: **ARM**

DRAWN BY: **JRO**

CHECKED BY: **ARM**

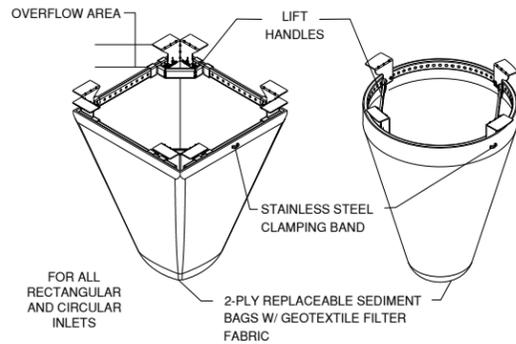
APPROVED BY: **DKP**

DATE: 4/16/2021

JOB No: 20022602-00

FINAL

SHEET 60 OF 61 SHEETS

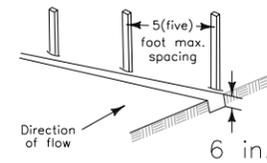


**INLET PROTECTION - SILT BASKET
(PAVEMENT AND TURF)**

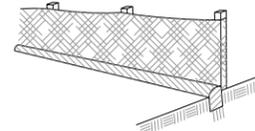
NOTES

- CONTRACTOR SHALL CLEAR DEBRIS PER THE MANUFACTURER'S RECOMMENDATIONS BUT NOT LESS THAN WHEN THE CAPACITY FOR SEDIMENT STORAGE HAS BEEN REDUCED BY HALF.
- FILTER FABRIC SHALL MEET THE MATERIAL REQUIREMENTS OF SPECIFICATION 592, TABLE 1, CLASS 2 OF THE ILLINOIS URBAN MANUAL.

- Set posts and excavate or slit-trench a 6-inch deep trench upslope along the line of the post
- Attach the geotextile filter fabric to each post with a minimum of 3 (three) fasteners per post and extend to the bottom of the trench. Acceptable fasteners include staples, zip ties, or wire ties
- Backfill and compact the excavated spoil materials



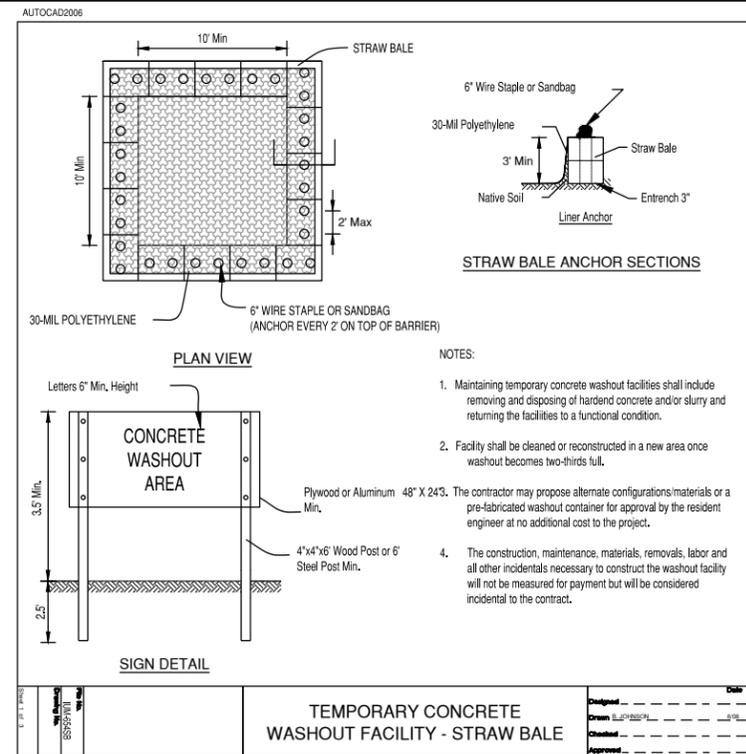
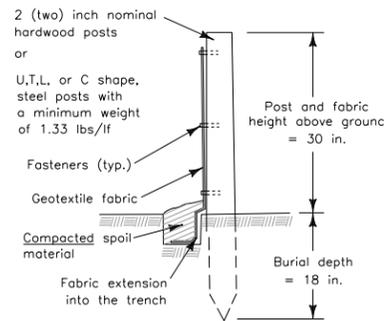
- Backfill and compact the excavated spoil materials



Geotextile Requirement	Test Method	MARV
Grab strength = Machine direction	ASTM D 4832	550 N
= X-machine direction		450 N
Permittivity	ASTM D 4491	0.05 sec-1
Apparent opening size*	ASTM D 4751	0.80 mm
Ultraviolet stability (retained strength)	ASTM D 4355	70% after 500 hours

Note: Value for apparent opening size represents maximum average roll value.

**SILT FENCE DETAIL
NOT TO SCALE**



- STRAW BALE ANCHOR SECTIONS**
- NOTES:
- Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and/or slurry and returning the facilities to a functional condition.
 - Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.
 - The construction, maintenance, materials, removals, labor and all other incidentals necessary to construct the washout facility will not be measured for payment but will be considered incidental to the contract.

**TEMPORARY CONCRETE
WASHOUT FACILITY - STRAW BALE**

Designed	---	---
Drawn	---	---
Checked	---	---
Approved	---	---

MULCH TYPE	
LIGHT-DUTY HYDRAULIC	APPLIED PER MANUFACTURER'S RECOMMENDATION (2000 LB/ACRE MINIMUM)

FERTILIZER MIX	
NUTRIENT	PLAT (LB/ACRE)
NITROGEN	135
PHOSPHORUS	45
POTASSIUM	90

SEED TABLE					
CLASS - TYPE	SEED MIXTURE	MINIMUM SEED PURITY	MINIMUM GERMINATION	APPLICATION RATE (LB/ACRE)	APPLICATION WINDOW
IDOT AERONAUTICS (PERMANENT SEEDING)	*TALL FESCUE ANNUAL RYEGRASS *RED FESCUE *HARD FESCUE	98% 98% 98% 96%	90% 90% 85% 85%	60 20 30 30	APRIL 1 THRU JUNE 1 SEPTEMBER 1 THRU NOVEMBER 1
TEMPORARY EROSION CONTROL SEEDING I	OATS	100 LB/ACRE		100 LB/ACRE	MARCH 1 THRU JULY 31 *
TEMPORARY EROSION CONTROL SEEDING II	WINTER WHEAT	100 LB/ACRE		100 LB/ACRE	AUGUST 1 THRU NOVEMBER 15 *

+ NOTE: SEED SHALL BE OF A VARIETY BRED TO CONTAIN HIGH LEVELS OF ENDOPHYTE.
* NOTE: WHEN TEMPORARY SEEDING CAN NOT BE COMPLETED DUE TO APPLICATION WINDOW RESTRICTIONS CONTRACTOR SHALL APPLY A LIGHT-DUTY HYDRAULIC MULCH (1000 LB/ACRE MINIMUM) IN ITS PLACE. CONTRACTOR SHALL REAPPLY HYDRAULIC MULCH, AS NECESSARY, TO MINIMIZE EROSION. COST INCIDENTAL.

DIRECTIONAL DRILLING CONTINGENCY PLAN

IN THE INSTANCE OF A FRAC OUT, THE CONTRACTOR SHALL STOP DRILLING IMMEDIATELY AND WORK TO CONTAIN THE DRILLING MUD. THE BEST METHOD OF CONTAINMENT IS WITH USE OF A BARRIER. THE BARRIER USED SHALL BE SUFFICIENT IN CONTAINMENT AND MUST BE APPROVED BY THE AIRPORT AND THE RESIDENT ENGINEER.

WHEN WORKING NEAR WETLANDS OR OPEN WATER AND A FRAC OUT OCCURS AND INFILTRATES A WETLAND OR OPEN WATER, THE USE OF A TURBIDITY CURTAIN OR CONTAINMENT BOX WILL BE REQUIRED TO CONTAIN THE FRAC OUT. CONTAINED WATER SHALL BE REMOVED USING EITHER A VACUUM TRUCK OR COMBINATION OF ANIONIC POLYMERS AND VACUUM TRUCK.

CONTRACTOR SHALL BE REQUIRED TO UPDATE THE CONTINGENCY PLAN FOR APPROVAL BY RE & SMC.

GENERAL INFORMATION REQUIREMENTS

- CONTRACTOR SHALL PROVIDE THE NAME, ADDRESS, AND PHONE NUMBER OF THE ONSITE DRILLING COMPANY REPRESENTATIVE TO THE SMC AND THE AIRPORT PRIOR TO DRILLING.
- MATERIAL SAFETY DATA SHEETS (MSDS) FOR DRILLING MUD CONSTITUENTS SHALL BE PROVIDED BY THE CONTRACTOR.
- THE NAME, ADDRESS AND PHONE NUMBER OF THE ANIONIC POLYMER VENDOR SHALL BE PROVIDED TO THE SMC AND THE AIRPORT.
- CATALOG CUT SHEETS FOR EACH RECOMMENDED POLYMER WITH DIRECTIONS FOR USE AND ANY LIMITATIONS WILL BE REQUIRED TO BE PROVIDED BY THE CONTRACTOR.
- CONTRACTOR SHALL BE REQUIRED TO PROVIDE A METHOD OF COMPLETION TO BE ACCEPTED BY THE SMC, AIRPORT, AND RESIDENT ENGINEER IN WHICH LIKELY PROBLEM LOCATIONS AND THE PROPOSED METHODS OF DIRECTIONAL DRILLING TO ENSURE THAT FRAC OUTS DO NOT OCCUR OR ARE PROPERLY CONTAINED.

MINIMUM OPERATIONAL REQUIREMENTS

- AT LEAST ONE VACUUM TRUCK MUST BE ONSITE DURING ALL DRILLING OPERATIONS AND AT LEAST ONE ADDITIONAL VACUUM TRUCK SHALL BE READILY AVAILABLE OR ON STAND-BY AT A NEARBY LOCATION, AS APPROPRIATE
- CONTRACTOR SHALL BE REQUIRED TO HAVE AT LEAST ONE (1) FULL TIME PERSON TO WALK THE DRILLING ROUTE AND IDENTIFY FRAC OUTS AND COORDINATE REMEDIATION.
- CONTRACTOR SHALL BE REQUIRED TO PROVIDE VERIFICATIONS OF ADEQUATE POLYMER STORED ONSITE TO TREAT AT LEAST ONE RELEASE INTO WETLANDS OR STREAMS WITH THE UNDERSTANDING THAT ADDITIONAL POLYMER WILL BE PROCURED IF THE FIRST IS USED.
- THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE A WEEKLY REPORT TO THE SMC DETAILING THE AMOUNT OF DRILLING MUD RELEASED, THE METHOD OF CONTAINMENT, THE REMEDIATION METHOD USED, AND ANY ADDITIONAL INFORMATION.
- CONTRACTOR SHALL NOTIFY THE SMC OF ANY FRAC OUT IN WHICH A WETLAND IS AFFECTED. THIS INFORMATION WILL BE REQUIRED TO BE SUMMARIZED IN THE WEEKLY REPORT DETAILED IN NOTE FOUR (4).
- IF THE CONTRACTOR FAILS TO TAKE IMMEDIATE CORRECTIVE ACTION TO REMEDY A FRAC OUT, THE OWNER SHALL CLEANUP OR STABILIZE THE IMPACTED AREAS. ALL MONIES EXPENDED BY THE OWNER TO CLEAN-UP AND STABILIZE THE IMPACTED AREAS SHALL BE HELD FROM THE MONIES DUE TO THE CONTRACTOR.

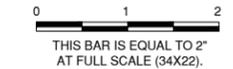
DEWATERING - FILTRATION BAG NOTES:

- THE SEDIMENT FILTER BAG SHALL BE SIZED PER MANUFACTURER RECOMMENDATIONS AND BASED ON THE SIZE OF THE PUMP HOWEVER, THE MINIMUM BAG SIZE SHALL BE 10 FEET X 15 FEET WITH A USABLE SURFACE DRAINAGE AREA OF 300 SQUARE FEET (10 X 15 X 2) SIDES, TOP & BOTTOM.
- THE LARGEST DIAMETER SIZE PUMP HOSE TO BE USED WITH A SEDIMENT FILTRATION BAG IS 4-INCH. MULTIPLE HOSES/PIPES SHALL NOT BE ATTACHED TO A SINGLE FILTRATION BAG INLET SLEEVE.
- BAG FABRIC SHALL MEET ONE OF THE FOLLOWING:
 - WOVEN GEOTEXTILE SHALL MEET THE MATERIAL SPECIFICATIONS OF TABLE 1, CLASS 4 OF THE ILLINOIS URBAN MANUAL
 - NONWOVEN GEOTEXTILE SHALL MEET THE MATERIAL SPECIFICATIONS OF TABLE 2, CLASS I OF THE ILLINOIS URBAN MANUAL EXCEPT IT WILL HAVE A MINIMUM TENSILE STRENGTH OF 200 POUNDS.
- SEDIMENT FILTRATION BAGS SHALL BE PLACED ON A STABILIZED SURFACE AREA.
- SEDIMENT FILTRATION BAGS SHALL NOT BE PLACED, WHOLE OR PARTIALLY, WITHIN 50-FEET OF AQUATIC AREAS (WETLANDS, STREAMS, ETC.), OR WATER CONVEYANCE FEATURES (DITCHES, SWALES, ETC.).
- SEDIMENT FILTRATION BAGS SHALL BE RAISED ABOVE THE SUPPORTING GROUND ON A SURFACE, OR MATERIAL, THAT ALLOWS WATER TO FLOW OUT OF THE BOTTOM OF THE BAG AT THE RESPECTIVE DESIGN DISCHARGE RATE FOR THE SEDIMENT FILTER BAG SELECTED. THE CONTRACTOR MAY PLACE THE BAG ON CLEAN OPEN AGGREGATE (6" MINIMUM THICKNESS), STRAW BALES OR OTHER POROUS SURFACE APPROVED BY THE RESIDENT ENGINEER.
- THE CONSTRUCTION, MAINTENANCE, MATERIALS, REMOVALS AND DISPOSAL AND ALL OTHER INCIDENTALS NECESSARY TO CONSTRUCT THE DEWATERING FACILITY WILL NOT BE MEASURED FOR PAYMENT BUT WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

IL CONTRACT: **WA075**
IL LETTING ITEM: **06A**
IL PROJECT: **UGN-4824**
S.B.G. PROJECT: **3-17-SBGP-XXX**

REVISIONS

NUMBER	BY	DATE



**WAUKEGAN NATIONAL AIRPORT
WAUKEGAN, ILLINOIS
REHABILITATE AIRFIELD LIGHTING PHASE 1 & 2 AND ALCMS**

STORMWATER POLLUTION PREVENTION PLAN DETAILS

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DESIGN BY:	ARM
DRAWN BY:	JRO
CHECKED BY:	ARM
APPROVED BY:	DKP
DATE:	4/16/2021
JOB No:	20022602-00
FINAL	
SHEET	61 OF 61 SHEETS