

CHICAGO EXECUTIVE AIRPORT WHEELING/PROSPECT HEIGHTS, ILLINOIS

CONSTRUCTION PLANS FOR CHICAGO EXECUTIVE AIRPORT



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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.

ILLINOIS PROJECT: PWK-4287
S.B.G. PROJECT: 3-17-0018-B50

DATE: APRIL 19, 2013
LATEST REVISION : MAY 8, 2013

PROJECT INFORMATION

CONTRACTOR:
RESIDENT ENGINEER:
ORIGINAL CONTRACT AMOUNT:
FINAL CONSTRUCTION COST:
IDOT LETTING DATE:
IDOT AWARD DATE:
NOTICE TO PROCEED:
START OF CONSTRUCTION:
SUBSTANTIAL COMPLETION:

LOCAL AGENCY CONTACT INFORMATION

VILLAGE OF WHEELING - 847.459.2600
CITY OF PROSPECT HEIGHTS - 847.398.6070
CHICAGO EXECUTIVE AIRPORT - 847.537.2580
ADS-B ANTENNA NETWORK OPERATIONS - 888.461.7277

ENGINEER'S PROJECT PERMIT LOG

FAA AIRSPACE # 2013-AGL-0009 TO 0013-NRA
2013-AGL-0020 TO 0028-NRA
VILLAGE APP FOR CONSTRUCTION PERMIT #
VILLAGE FLOODPLAIN PERMIT #
CONTRACTORS REGISTRATION WITH VILLAGE
CITY APPLICATION FOR PERMIT #
CITY FLOODPLAIN PERMIT #
CONTRACTORS REGISTRATION WITH CITY

CHICAGO EXECUTIVE AIRPORT

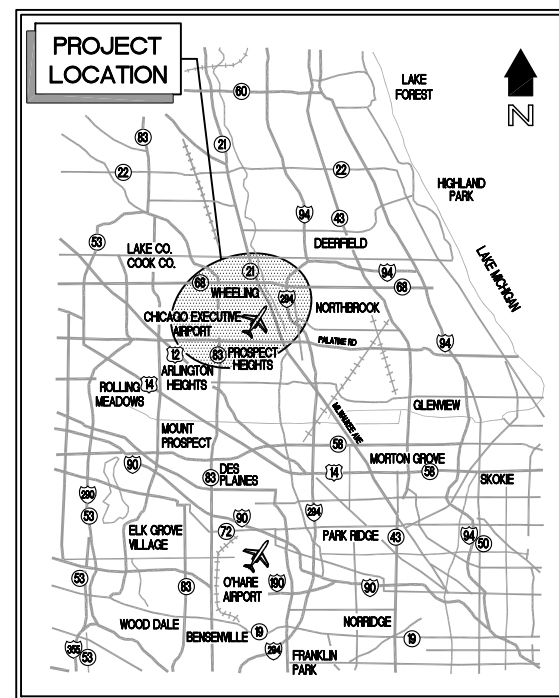
TOWNSHIP: 42 NORTH WHEELING TOWNSHIP
RANGE: 11 EAST (SECTION: 13)
COOK COUNTY

CMT 11290-03-00
CRAWFORD MURPHY & TILLY, INC.
CONSULTING ENGINEERS

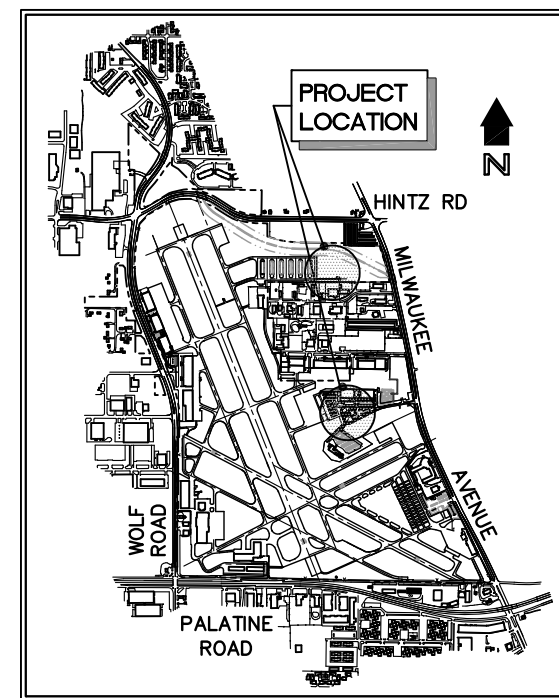
SUBMITTED BY JEREMY R. LINKE, P.E.
DATE 3/21/2013

CHICAGO EXECUTIVE AIRPORT

APPROVED *Dennis G. Rouleau* AIRPORT MANAGER
DENNIS G. ROULLEAU
DATE 3/21/13



LOCATION MAP



SITE PLAN

INDEX TO SHEETS

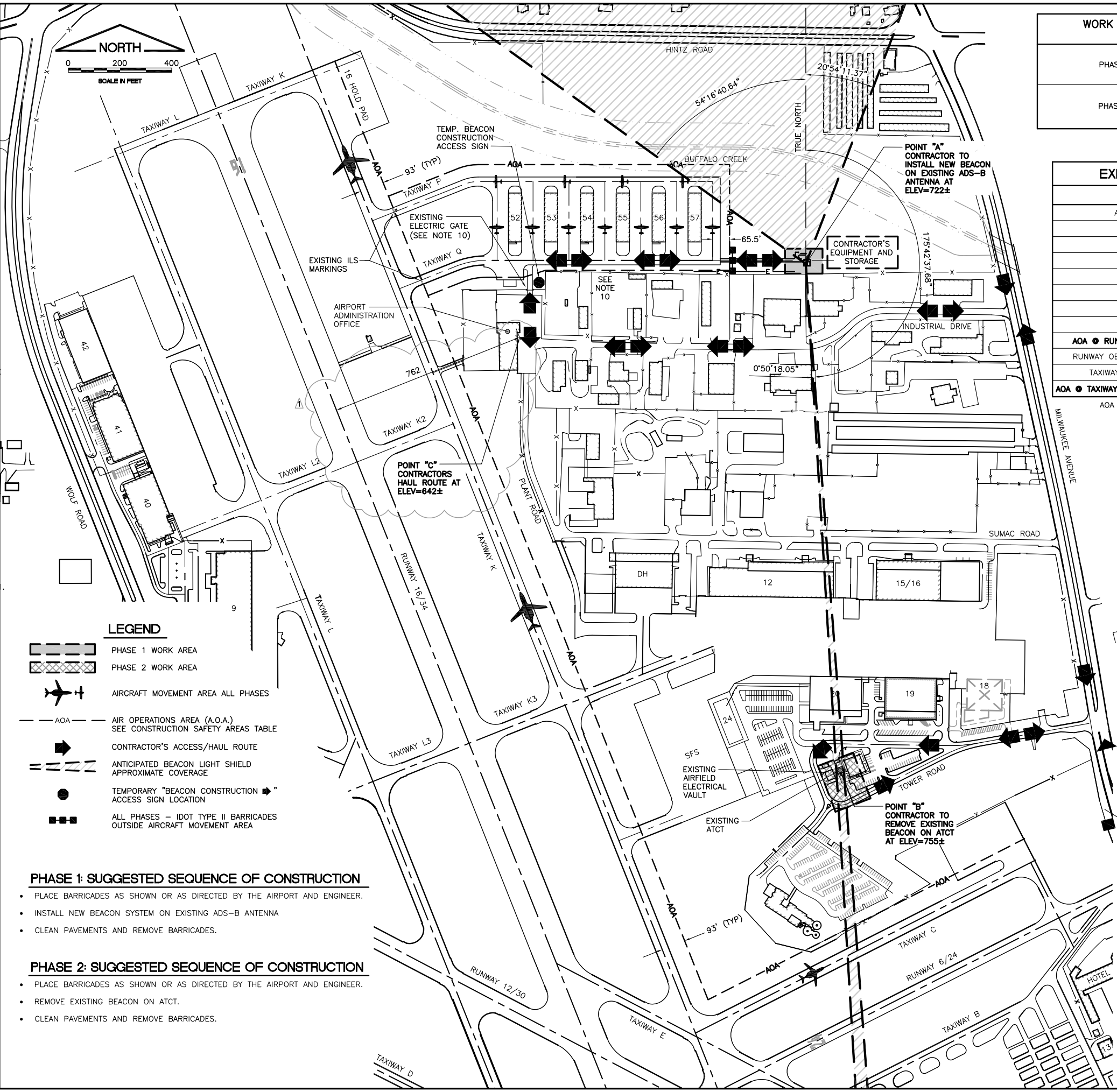
- COVER SHEET/SUMMARY OF QUANTITIES/INDEX TO SHEETS
- SITE PLAN/PROJECT CONTROL PLAN
- SEQUENCE OF CONSTRUCTION PER AC 150/5370-2F (LATEST EDITION)
- SEQUENCE OF CONSTRUCTION GENERAL NOTES AND DETAILS
- BEACON LOCATION PLAN
- ELECTRICAL DETAIL - SHEET 1
- ELECTRICAL DETAIL - SHEET 2

SUMMARY OF QUANTITIES

BASE BID CONSTRUCTION

ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	RECORD QUANTITY
AR101510	AIRPORT ROTATING BEACON	EACH	1	
AR101900	BEACON REMOVAL	EACH	1	

DATE: Wednesday, May 08, 2013 2:26:11 PM
 FILE: K:\Chicago\Beacon\12290-06-00_Relocate Beacon\Draw\Sheet\Beacon_SEQUENCE.dwg
 UPDATE BY: Jeremy Linke
 LAYOUT: 3 BEACON_SEQUENCE
 REF: DIMS: gds-foase.dwg
 IMAGE FILES: dwg\maw\ogc_gca-4-color-stm.dwg



WORK AREA	ALLOWABLE WORK PERIODS	OPERATIONAL STATUS/RESTRICTIONS
PHASE 1	THE CONTRACTOR SHALL HAVE THREE EIGHT HOUR WORKING DAYS TO WORK ON TOP OF THE ADS-B ANTENNA.	SEE ANTENNA ACCESS NOTES ON SITE PLAN FOR COORDINATING WORK ON ADS-B ANTENNA.
PHASE 2	FAA ATCT IS OPEN FROM 6AM - 10PM.	PHASE 2 CAN BEGIN ONCE THE NEW BEACON IS APPROVED AND OPERATIONAL. SEE PHASING NOTES BELOW.

EXISTING CRITICAL AIRCRAFT AND REQUIRED SAFETY AREAS			
RUNWAY	16/34	12/30	6/24
APPROACH CATEGORY	D	B	B
DESIGN GROUP	III	II	I
DESIGN AIRCRAFT	GULFSTREAM 550	KING AIR B200	CESSNA 421
APPROACH SPEED	141 KNOTS	103 KNOTS	96 KNOTS
WINGSPAN	94 FEET	55 FEET	42 FEET
TAIL HEIGHT	25.8 FEET	15.0 FEET	11.6 FEET
STRENGTH (MGTW)	90,500 LBS.	12,500 LBS.	7,450 LBS.
LENGTH	97 FEET	44 FEET	37 FEET
AOA ● RUNWAY SAFETY AREA WIDTH (RSA)	500	150	120
RUNWAY OBJECT FREE AREA WIDTH (ROFA)	800	500	400
TAXIWAY SAFETY AREA WIDTH (TSA)	118	79	49
AOA ● TAXIWAY OBJECT FREE AREA WIDTH (TOFA)	186	131	89

AOA = AIRCRAFT OPERATIONS AREA DATA FROM 2009 CEA APPROVED ALP

PHASING NOTES (ALL PHASES)

- THE INTENT OF THE PHASING PLANS IS TO MINIMIZE THE IMPACT OF CONSTRUCTION ON THE OPERATION OF THE AIRPORT. THE CONTRACTOR SHALL CONSTRUCT THE PROJECT IN CONSECUTIVE PHASES AS OUTLINED IN THE PLANS UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- PRIOR TO REOPENING A CLOSED TAXIWAY, THE ENTIRE SAFETY AREA FROM CENTERLINE MUST MEET FAA CRITERIA. FAA CRITERIA REQUIRES THAT THERE BE NO OPEN EXCAVATIONS OR TRENCHES, THE MAXIMUM PAVEMENT DROPOFF BE 3 INCHES, AND ALL GRADES IN ANY DIRECTION BE LESS THAN 3 PERCENT. STEEL PLATES, TEMPORARY WEDGING OF BASE COURSE AND BITUMINOUS CONCRETE MAY BE REQUIRED TO MEET CRITERIA. ALL NECESSARY TEMPORARY MEASURES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SCHEDULE. STRICT ADHERENCE TO THE APPROVED SCHEDULE WILL BE ENFORCED TO AVOID CONFLICTS WITH OTHER CONSTRUCTION ACTIVITIES ON THE AIRPORT AND THE ADVERSE EFFECTS THEY COULD HAVE ON AIRPORT OPERATIONS.
- THE CONTRACTOR SHALL COORDINATE CLOSELY WITH THE AIRPORT STAFF TO SCHEDULE ANY AND ALL TAXIWAY CLOSURES. ITEMS SUCH AS THE EXTENDED WEATHER FORECAST, MATERIAL AVAILABILITY, EQUIPMENT DEPENDABILITY AND MANPOWER AVAILABILITY SHALL BE DISCUSSED PRIOR TO SCHEDULING THESE CRITICAL CLOSURE(S). THE AIRPORT MANAGER AND THE CONTRACTOR SHALL MUTUALLY AGREE ON THE EXACT DATES AND TIMES OF THE CLOSURE(S).
- CONTRACTOR MUST MAINTAIN ACCESS TO ALL ACTIVE AND OPEN AREAS AT ALL TIMES. CONTRACTOR SHALL RELOCATE EQUIPMENT AT NO ADDITIONAL COST TO CONTRACT TO ALLOW AIRCRAFT TO PASS. CONTRACTOR SHALL COORDINATE CONSTRUCTION OPERATIONS AT ALL ACTIVE AND OPEN AREAS TO PROVIDE MINIMAL DISRUPTIONS TO AIRCRAFT MOVEMENT IN THAT AREA.
- IF THE CONTRACTOR IS REQUIRED TO SECURE THE AIRFIELD PERIMETER DUE TO CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL PLACE 6' CHAIN LINK FENCE AS TEMPORARY PERIMETER. TEMPORARY FENCE SHALL BE CONSIDERED INCIDENTAL REGARDLESS OF HOW MANY TIMES IT IS TAKEN DOWN OR PUT UP TO ALLOW FOR CONSTRUCTION OPERATIONS.
- IT IS VERY LIKELY THAT THE CONSTRUCTION OF OTHER AIRFIELD PROJECTS WILL BE TAKING PLACE CONCURRENTLY WITH THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL COORDINATE SITE ACCESS, HAUL ROUTES AND MATERIAL STORAGE AREA WITH ALL CONSTRUCTION ACTIVITIES. NO ADDITIONAL COMPENSATION SHALL BE CONSIDERED FOR ANY EFFORTS TO COORDINATE AND ACCESS THE SITE DUE TO ADJACENT SITE CONSTRUCTION.
- CONTRACTOR SHALL RESTORE ALL HAUL ROUTES AND MATERIAL AND EQUIPMENT STORAGE AREAS TO PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE ENGINEER AND AIRPORT MANAGER.
- TO THE EXTENT POSSIBLE CONTRACTOR SHALL HAVE ALL EMPLOYEE PARKING OUTSIDE OF AIRPORT FENCE.
- THE CONTRACTOR SHALL COORDINATE WITH THE AIRPORT PRIOR TO ENTERING THE AIRFIELD. THE ROUTE SHOWN ON THE PLANS SHALL BE THE ONLY ROUTE USED BY THE CONTRACTOR TO ACCESS THE NEW BEACON SITE. THE CONTRACTOR SHALL ALWAYS GIVE WAY TO AIRCRAFT USING THE AIRFIELD.
- THE CONTRACTOR SHALL VERIFY THAT THE ADS-B ANTENNA SYSTEM IS OPERATIONAL BEFORE ANY CONSTRUCTION BEGINS FOR THE NEW BEACON. ONCE THE NEW BEACON IS CONSTRUCTED AND OPERATIONAL, THE CONTRACTOR SHALL VERIFY AGAIN THAT THE ADS-B ANTENNA SYSTEM IS OPERATIONAL.
- THE CONTRACTOR SHALL REMOVE THE EXISTING BEACON AND ASSOCIATED CONDUCTORS AFTER THE NEW BEACON IS OPERATIONAL.
- IT IS NOT ANTICIPATED THAT THE CONTRACTOR WILL REQUIRE A CRANE TO REMOVE THE EXISTING BEACON ON TOP OF THE FAA ATCT. IF A CRANE IS REQUIRED, PRIOR TO REMOVING THE EXISTING BEACON, THE CONTRACTOR SHALL COORDINATE WITH THE FAA AND THE AIRPORT AS TO AN ACCEPTABLE LOCATION FOR A CRANE TO BE LOCATED ADJACENT TO THE FAA ATCT.
- THE CONTRACTOR WILL BE REQUIRED TO COORDINATE WITH AIRPORT AND FAA ATCT PERSONNEL AS ROOF ACCESS WHERE THE EXISTING BEACON IS LOCATED.

LEGEND

- PHASE 1 WORK AREA
- PHASE 2 WORK AREA
- AIRCRAFT MOVEMENT AREA ALL PHASES
- AIR OPERATIONS AREA (A.O.A.) SEE CONSTRUCTION SAFETY AREAS TABLE
- CONTRACTOR'S ACCESS/HAUL ROUTE
- ANTICIPATED BEACON LIGHT SHIELD APPROXIMATE COVERAGE
- TEMPORARY "BEACON CONSTRUCTION" ACCESS SIGN LOCATION
- ALL PHASES - IDOT TYPE II BARRICADES OUTSIDE AIRCRAFT MOVEMENT AREA

PHASE 1: SUGGESTED SEQUENCE OF CONSTRUCTION

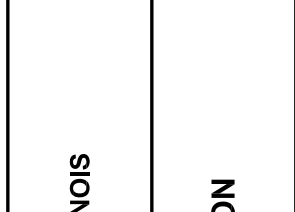
- PLACE BARRICADES AS SHOWN OR AS DIRECTED BY THE AIRPORT AND ENGINEER.
- INSTALL NEW BEACON SYSTEM ON EXISTING ADS-B ANTENNA
- CLEAN PAVEMENTS AND REMOVE BARRICADES.

PHASE 2: SUGGESTED SEQUENCE OF CONSTRUCTION

- PLACE BARRICADES AS SHOWN OR AS DIRECTED BY THE AIRPORT AND ENGINEER.
- REMOVE EXISTING BEACON ON ATCT.
- CLEAN PAVEMENTS AND REMOVE BARRICADES.

I.L. CONTRACT: **PA055**
 I.L. LETTING ITEM: **35A**
 I.L. PROJECT: **PWK-4287**
 S.B.G. PROJECT: **3-17-0018-B50**
 SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE
1	JRL	4/8/2013
2	JRL	5/8/2013



CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
RELOCATE BEACON
SEQUENCE OF CONSTRUCTION

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DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	DKP
DATE:	3/1/2013
JOB No:	12290-06

GENERAL NOTES

- 1. THE SUGGESTED SEQUENCE OF CONSTRUCTION SHOWN IS INTENDED TO ALLOW FOR THE ORDERLY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS WHILE MAINTAINING AIRCRAFT ACCESS AT ALL TIMES. THE PHASING SHOWN IS A SUGGESTED SEQUENCE OF CONSTRUCTION ONLY. THIS SEQUENCE MAY BE MODIFIED HOWEVER, ALTERNATE STAGING PLANS MUST MAINTAIN AIRPORT OPERATIONS TO THE SATISFACTION OF THE AIRPORT MANAGER AND RESIDENT ENGINEER AND BE APPROVED BY THE DIVISION OF AERONAUTICS AND FEDERAL AVIATION ADMINISTRATION.
2. ALL OPERATIONS SHALL BE IN CONFORMANCE WITH AC 150/5370-2F (LATEST EDITION) OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION.
3. CONTRACTOR'S EQUIPMENT SHALL BE STORED IN THE EQUIPMENT AND MATERIAL STORAGE/STAGING AREA WHEN CONSTRUCTION IS NOT IN PROGRESS.
4. THE AIRPORT MANAGER IN CONSULTATION WITH THE RESIDENT ENGINEER SHALL HAVE FINAL SAY IN THE APPROVAL OF THE CONSTRUCTION OPERATING SEQUENCE AS IT RELATES TO PEDESTRIAN, VEHICULAR AND AIRCRAFT SAFETY.
5. ALL EXISTING PAVEMENTS, DRIVES OR ANY OTHER AREAS USED AS A HAUL ROAD OR STORAGE AREA BY THE CONTRACTOR SHALL BE RESTORED IN KIND TO THEIR PRE-CONSTRUCTION CONDITION OR TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER. THE COST OF MAINTAINING, REPAIRING OR CONSTRUCTING THESE PAVEMENTS AND AREAS SHALL BE INCIDENTAL TO THE CONTRACT. EXISTING AREAS OUTSIDE THE PROJECT LIMITS WHICH ARE DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY HIM AT HIS EXPENSE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND THE AIRPORT MANAGER.
6. THE CONTRACTOR SHALL KEEP ALL TRUCKS, EQUIPMENT AND MATERIALS OFF OF THE EXISTING TAXIWAYS, APRONS AND RUNWAYS OUTSIDE OF THE PROJECT LIMITS EXCEPT AS SHOWN OR WITH THE PRIOR PERMISSION OF THE RESIDENT ENGINEER.
7. WORK PERFORMED BY THE CONTRACTOR OUTSIDE OF DAYLIGHT HOURS SHALL BE DONE UNDER SUFFICIENT ARTIFICIAL LIGHTING TO ALLOW FOR PROPER CONSTRUCTION METHODS AND INSPECTIONS. LIGHT SHALL CONSIST OF 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 BE AS APPROVED BY THE RESIDENT ENGINEER AND SHALL NOT BE USED IF THEY AFFECT FLIGHT SAFETY. CONTRACTOR'S WORK HOURS SHALL BE IN ACCORDANCE WITH LOCAL ORDINANCES.
8. THE CONTRACTOR SHALL PROVIDE PORTABLE FLOOD LIGHTING FOR NIGHTTIME CONSTRUCTION. SUFFICIENT UNITS SHALL BE PROVIDED SO THAT WORK AREAS ARE ILLUMINATED TO A LEVEL OF FIVE HORIZONTAL FOOT CANDLES. THE LIGHTING LEVELS SHALL BE CALCULATED AND MEASURED IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE ILLUMINATION ENGINEERING SOCIETY. LIGHTS SHALL BE POSITIONED SO AS NOT TO INTERFERE WITH AIRPORT OPERATIONS.
9. THE CONTRACTOR WILL BE REQUIRED TO HAVE A SWEEPER AVAILABLE FOR USE AT ALL TIMES. WHEN ACTIVE AIRFIELD PAVEMENTS ARE UTILIZED AS HAUL ROADS BY THE CONTRACTOR, MATERIAL TRACKED ON TO THE PAVEMENT SHALL BE CONTINUALLY REMOVED WITH SAID SWEEPER. THIS SWEEPING SHALL NOT BE PAID FOR SEPERATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
10. MATERIALS REMOVED FROM THE PROJECT WILL BE DISPOSED OF OFF AIRPORT PROPERTY, UNLESS NOTED OTHERWISE.
11. PAYMENT FOR TRAFFIC CONTROL INCLUDING, BUT NOT LIMITED TO BARRICADES, SIGNING, RUNWAY CLOSED MARKERS, AIR OPERATIONS AREA (A.O.A.) LATHE AND RIBBON, ETC. SHALL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. BARRICADES WITH ONE ORANGE FLAG (20" x 20") BETWEEN EACH SET OF BARRICADES OR 4' HIGH ORANGE SNOW FENCE SECURELY ATTACHED TO EACH BARRICADE SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. BARRICADES SHALL BE WEIGHED TO PREVENT BLOWING OVER. BARRICADES SHALL HAVE A STEADY BURN OR FLASHING RED LIGHT. BARRICADE INSTALLATION WILL BE REQUIRED PRIOR TO ACCESS TO THE A.O.A. BY CONTRACTOR'S WORKERS, EQUIPMENT OR MATERIAL. SIGNS SHALL BE PLACED AT EACH TAXIWAY/RUNWAY CLOSURE LOCATION AND SHALL BE ATTACHED TO THE BARRICADES. EACH BARRICADE LOCATION SHALL CONSIST OF ONE "DO NOT ENTER" SIGN AND ONE "AIRCRAFT MOVEMENT AREA" SIGN. SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. IN CONJUNCTION WITH IDOT TYPE II BARRICADES, THE CONTRACTOR SHALL SUPPLY AND USE AS DIRECTED BY THE AIRPORT, REFLECTIVE LOW PROFILE TYPE BARRICADES. ALL BARRICADES SHALL BE PLACED OUTSIDE OF ACTIVE SAFETY AREAS.
12. THE CONTRACTOR SHALL CONTACT THE AIRPORT MANAGER THROUGH THE RESIDENT ENGINEER TEN (10) WORKING DAYS IN ADVANCE OF THE START OF CONSTRUCTION SO THAT THE APPROPRIATE NOTAMS MAY BE ISSUED.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL CONSTRUCTION ACCESS GATES CLOSED DURING NON WORKING HOURS. THE CONTRACTOR SHALL PROVIDE A SIGN AT THE ACCESS GATE SAYING "AUTHORIZED PERSONNEL ONLY". THE CONTRACTOR SHALL CLOSE AND LOCK THE ACCESS GATE UPON LEAVING THE SITE. THROUGHOUT THE DURATION OF THE CONTRACT, ANY DAMAGES TO THE ACCESS ROAD, ACCESS GATE OR FENCING ADJACENT TO THE PROJECT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE RESIDENT ENGINEER. ALL COST RELATING TO CONTRACTOR'S ACCESS AND SECURITY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
14. CONTRACTOR WILL BE REQUIRED TO PUT AIRPORT FLAGS AND HAVE BEACON LIGHTS ON ALL EQUIPMENT AT ALL TIMES DURING CONSTRUCTION. SEE FLAG DETAIL.
15. IN THE CASE OF AN EMERGENCY, CONTRACTOR SHALL NOTIFY AIRPORT MANAGER AND THE RESIDENT ENGINEER IMMEDIATELY.
16. DURING ADVERSE WEATHER, THE CONTRACTOR SHALL MAKE PROVISIONS FOR ACCESS TO THE WORK AT NO ADDITIONAL COST TO THE CONTRACT. NO EXTENSION OF CONTRACT TIME WILL BE CONSIDERED FOR DELAYS DUE TO LACK OF ADEQUATE ACCESS TO THE WORK.
17. THE TALLEST PIECE OF CONSTRUCTION EQUIPMENT IS ANTICIPATED TO BE A CRANE WHICH HAS A MAXIMUM HEIGHT OF 145 FEET. ALL THE CRANES SHALL BE OBSTRUCTION MARKED AND LIGHTED IN ACCORDANCE WITH AC 70/7460-1K (LATEST EDITION), OBSTRUCTION MARKING AND LIGHTING, CHAPTERS 3, 4, 5 AND 12 (ORANGE OR ORANGE AND WHITE FLAGS AND RED LIGHTS). ALL CRANES SHALL BE LOWERED AT NIGHT AND WHEN NOT IN USE.
18. IF RUNWAY NUMERALS ARE PRESENT DURING CONSTRUCTION THEN CONTRACTOR SHALL PLACE CLOSED RUNWAY MARKER OVER NUMERALS AS DETAILED, OTHERWISE PLACE RUNWAY CLOSED MARKER IN TURF AT ENDS OF RUNWAY AS DETAILED.
19. CHICAGO EXECUTIVE AIRPORT WILL BE IN OPERATION DURING THE CONSTRUCTION OF THIS PROJECT. COORDINATION OF WORK WITH THE AIRPORT IS MANDATORY SO AS TO MINIMIZE IMPACTS ON AIRPORT OPERATIONS.
20. APPROXIMATE LOCATION OF HAUL ROUTES ON THE AIRPORT SITE ARE SHOWN ON THE GENERAL PROJECT LAYOUT AND THE PHASING PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE OFF-SITE HAUL ROUTES (STATE HIGHWAYS, COUNTY ROADS OR CITY STREETS) WITH THE APPROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE ROADS USED AS HAUL ROUTES SHALL BE MAINTAINED BY THE CONTRACTOR AND SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE TO THEIR ORIGINAL CONDITION UPON COMPLETION OF BEING USED AS A HAUL ROUTE. THE BEFORE AND AFTER CONDITION OF ON-SITE HAUL ROUTES SHALL BE JOINTLY INSPECTED AND DETERMINED BY THE CONTRACTOR AND THE ENGINEER. FENCING, DRAINAGE, GRADING AND OTHER MISCELLANEOUS CONSTRUCTION REQUIRED TO CONSTRUCT TEMPORARY HAUL ROUTES OR ACCESS POINTS ON THE AIRPORT WILL BE THE CONTRACTOR'S TOTAL RESPONSIBILITY AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO THE WORK. ALL ON-SITE ACCESS ROADS TO AIRPORT FACILITIES SHALL REMAIN OPEN AND MAINTAINED AT ALL TIMES.
21. MOBILIZATION/EQUIPMENT STORAGE AREA WILL BE MADE AVAILABLE FOR CONTRACTOR'S MOBILIZATION AND STORAGE AS SHOWN ON THE PLANS. THIS AREA SHALL BE RESTORED TO THE ORIGINAL CONDITION UPON COMPLETION OF THE PROJECT AT THE CONTRACTOR'S EXPENSE.

- 22. LOCATION OF KNOWN EXISTING AIRPORT UNDERGROUND CABLES ARE SHOWN ON THE PLANS AND MUST BE VERIFIED BY THE CONTRACTOR. REPAIR OF DAMAGED CABLE MUST BE STARTED IMMEDIATELY AND CONTINUED UNTIL COMPLETED. ALL SUCH REPAIRS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS, OR AS DIRECTED BY THE OWNER OF THE CABLE OR FACILITY, AND SHALL BE AT THE CONTRACTOR'S EXPENSE. IF FAA CABLES ARE DAMAGED, REPAIRS SHALL BE DONE FROM PREVIOUS EXISTING TERMINATION POINT TO NEXT EXISTING TERMINATION POINT IN ACCORDANCE WITH FAA REQUIREMENTS AND IN THE PRESENCE OF A FAA REPRESENTATIVE. THE OWNER MAY ELECT TO HAVE THE REPAIR PERFORMED BY OTHERS IN WHICH CASE THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING THE INCURRED COSTS OF REPAIRS.
23. COORDINATION MEETINGS - THE CONTRACTOR SHALL CONDUCT WEEKLY COORDINATION MEETINGS TO DISCUSS WORK AREAS AND SCHEDULING, ETC. WITH THE RESIDENT ENGINEER, AIRPORT OPERATIONS, FAA, AND OTHER APPROPRIATE OFFICIALS. MINUTES FROM THE WEEKLY MEETINGS SHALL BE PREPARED BY THE CONTRACTOR, FURNISHED TO ALL ATTENDEES PRIOR TO THE SUBSEQUENT MEETING, AND KEPT ON FILE AT THE FIELD OFFICE. THE COORDINATION MEETING COSTS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
24. THE CONTRACTOR SHALL PROVIDE THE PHONE NUMBERS OF THREE PERSONNEL, INCLUDING THE PROJECT SUPERINTENDENT, WHO MAY BE CONTACTED IN AN EMERGENCY. PERSONNEL SHALL BE ON CALL 24 HOURS PER DAY FOR MAINTAINING AIRPORT HAZARD LIGHTING AND BARRICADES.
25. DRAINAGE MODIFICATIONS SHALL BE SEQUENCED TO PROVIDE POSITIVE DRAINAGE AT ALL TIMES AT NO ADDITIONAL COST TO THE CONTRACT.
26. EXCEPT FOR ACCESSING THE ANTENNA SITE, CONTRACTOR PERSONNEL, VEHICLES, EQUIPMENT AND BARRICADES SHALL NOT BE ALLOWED WITHIN THE TAXIWAY OBJECT FREE AREA (TOFA) OF ACTIVE TAXIWAYS AND THE RUNWAY SAFETY AREA (RSA) OF ACTIVE RUNWAYS.
27. CONTRACTOR SHALL STORE EQUIPMENT AND MATERIALS IN SUCH A MANNER AS NOT TO VIOLATE FEDERAL AVIATION ADMINISTRATION PART 77 IMAGINARY SURFACES OR RUNWAY AND TAXIWAY SAFETY AREAS.
28. ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER ELECTRICAL CABLES SHALL REMAIN IN SERVICE AT ALL TIMES. ALL EXISTING LIGHTING AND VAULT EQUIPMENT SHALL REMAIN IN SERVICE UNTIL PROPOSED IMPROVEMENTS ARE INSTALLED AND OPERATIONAL, UNLESS OTHERWISE APPROVED BY THE RESIDENT ENGINEER. ANY CABLES DAMAGED BY THE CONTRACTOR SHALL BE IMMEDIATELY REPAIRED AT HIS EXPENSE. ANY NECESSARY TEMPORARY JUMPER CABLES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
29. COORDINATION BY THE CONTRACTOR WITH THE EXISTING UTILITIES SHALL BE COMPLETED BEFORE CONSTRUCTION IS STARTED. CONTRACTOR IS REFERRED TO SECTION 50-17 OF THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS FOR SPECIFIC REQUIREMENTS. THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAVE BEEN OBTAINED FROM EXISTING RECORDS. NEITHER THE OWNER OR THE DESIGN ENGINEER ASSUME 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 MATERIAL OF EXISTING UNDERGROUND UTILITIES AS INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED DURING CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND 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 RESIDENT ENGINEER AND THE AIRPORT MANAGER. ANY SUCH MAINS AND/OR SERVICES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED IMMEDIATELY AT HIS EXPENSE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER.
30. ALL AIRFIELD LIGHTING AND LIGHTING GUIDANCE SYSTEMS (NAVAIDS) LOCATED WITHIN AND IMMEDIATELY ADJACENT TO THE CONTRACTORS WORK ZONE SHALL BE CHECKED FOR OPERATIONAL CONDITION PRIOR TO THE DEPARTURE FROM THE AIRPORT WITH THE AIRPORT MANAGER. ANY DEFECIENCIES IN THESE SYSTEMS DUE TO THE ACTS OF CONTRACTOR OR HIS SUBCONTRACTORS, SUPPLIERS OR CONSULTANTS SHALL BE REPAIRED IMMEDIATELY.

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

- 31. ANYTIME THE CONTRACTOR IS REQUIRED TO UTILIZE OR CROSS ACTIVE AIRFIELD PAVEMENTS FOR ACCESS TO AND FROM THE WORK ZONE, A FULL TIME CROSSING GUARD 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 (\$500 PER OCCURENCE) DUE TO AIRFIELD INCURSIONS BY HIS EMPLOYEES, SUBCONTRACTORS, SUPPLIERS, CONSULTANTS AND/OR AGENTS.
32. ANY PAVEMENT DAMAGED BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED IMMEDIATELY BY HIM TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER 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 SEPERATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
33. 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 MANAGER TEN (10) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS.

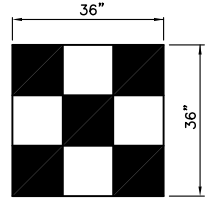
MUNICIPALITIES GENERAL NOTES

- 1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH VILLAGE/CITY CODES, ORDINANCES AND STANDARDS AS APPLICABLE.
2. ALL ELEVATIONS SHOWN ON PLANS ARE IN 1929 DATUM. SUBTRACT 0.24 FEET FROM ELEVATIONS SHOWN TO OBTAIN 1988 NAVD.
3. ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE REGISTERED WITH THE VILLAGE/CITY PRIOR TO THE NOTICE TO PROCEED. ALL REGISTRATION FEES SHALL BE INCIDENTAL TO THE CONTRACT.
4. THE CONTRACTOR SHALL WORK WITH THE AIRPORT AND ENGINEER TO SECURE THE REQUIRED VILLAGE AND CITY LOCAL CONSTRUCTION PERMITS PRIOR TO THE NOTICE TO PROCEED.
5. ALL STORM SEWERS ON THE AIRPORT SITE ARE OWNED, OPERATED AND MAINTAINED BY THE CHICAGO EXECUTIVE AIRPORT.
6. THE CONTRACTOR SHALL COORDINATE WITH THE VILLAGE/CITY AT THE WEEKLY PROGRESS MEETINGS AND SHALL NOTIFY THE CITY OF PROSPECT HEIGHTS (847.398.6700) AND THE VILLAGE OF WHEELING (847.459.2600) A MINIMUM OF 48 HOURS PRIOR TO ANY REQUIRED VILLAGE/CITY INSPECTIONS.

GROUND CONTROL FREQUENCY: 121.7
AIR CONTROL FREQUENCY: 119.9
MAXIMUM ANTICIPATED HEIGHT OF CONSTRUCTION EQUIPMENT:
CRANE @ POINT A: 120' - TOP ELEVATION: 760 +/-
CRANE @ POINT B: 145' - TOP ELEVATION: 787 +/-
TRUCK @ POINT C: 25' - TOP ELEVATION: 667 +/-
IN THE EVENT THE CONTRACTOR PROPOSES TO UTILIZE CONSTRUCTION EQUIPMENT THAT IS TALLER THAN WHAT IS LISTED ABOVE, 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.
POINT "A" CLOSEST CONSTRUCTION POINT TO RUNWAY 16/34
NEW BEACON ELEVATION: 722 +/-
LATITUDE: 42°07'17.92" (NAD83)
LONGITUDE: 87°53'55.46" (NAD83)
POINT "B" CLOSEST CONSTRUCTION POINT TO RUNWAY 16/34 & 6/24
EXISTING BEACON ELEVATION: 755 +/-
LATITUDE: 42°06'58.55" (NAD83)
LONGITUDE: 87°53'53.84" (NAD83)
POINT "C" CLOSEST CONSTRUCTION POINT TO RUNWAY 16/34
EXISTING GROUND ELEVATION: 642 +/-
LATITUDE: 42°07'14.94" (NAD83)
LONGITUDE: 87°54'09.94" (NAD83)

DESIGN AIRCRAFT APPROACH CATEGORY: D
DESIGN AIRPORT GROUP: III

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 30-05). 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
* HANGAR AND APRON DEVELOPMENT IN SE QUADRANT
* HANGAR AND APRON DEVELOPMENT IN EAST QUADRANT
* RUNWAY 34 HOLD PAD REHAB
* RUNWAY 34 END EMAS CONSTRUCTION



CONSTRUCTION EQUIPMENT AND TRUCK SIGNAL FLAG
NOT TO SCALE

NOTE - 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 CABLEING AND SPLICING NECESSARY TO KEEP THE CIRCUITS IN OPERATION SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.

IL. CONTRACT: PA055
IL. LETTING ITEM: 35A
IL. PROJECT: PWK-4287
S.B.G. PROJECT: 3-17-0018-B50

Table with 3 columns: NUMBER, BY, DATE. Row 1: 1, JRL, 4/8/2013. Includes a scale bar: 0 1 2, THIS BAR IS EQUAL TO 2" AT FULL SCALE (34X22).

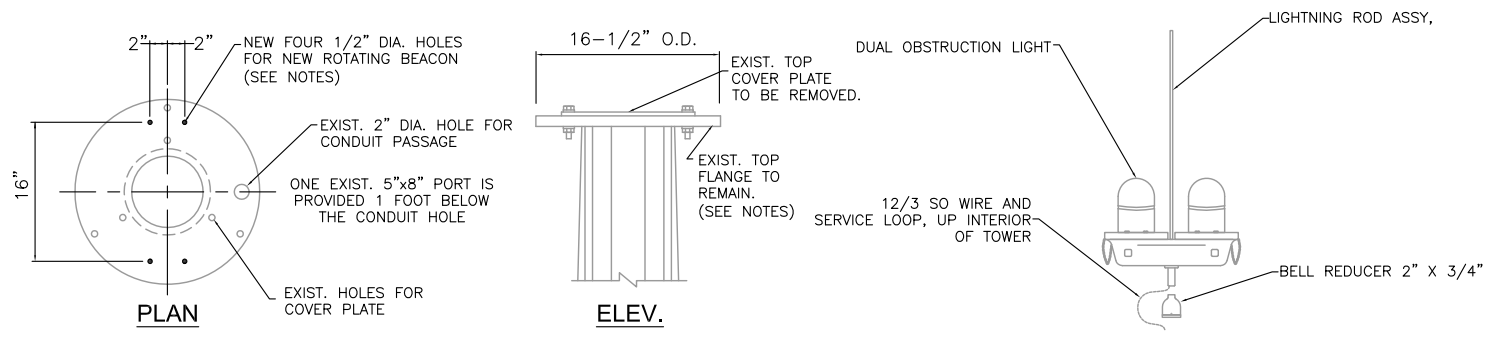
CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
RELOCATE BEACON
SEQUENCE OF CONSTRUCTION
GENERAL NOTES AND DETAILS

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CHICAGO EXECUTIVE AIRPORT

Table with 2 columns: FIELD, VALUE. DESIGN BY: JRL, DRAWN BY: JRO, CHECKED BY: DKP, APPROVED BY: DKP, DATE: 3/1/2013, JOB No: 12290-06

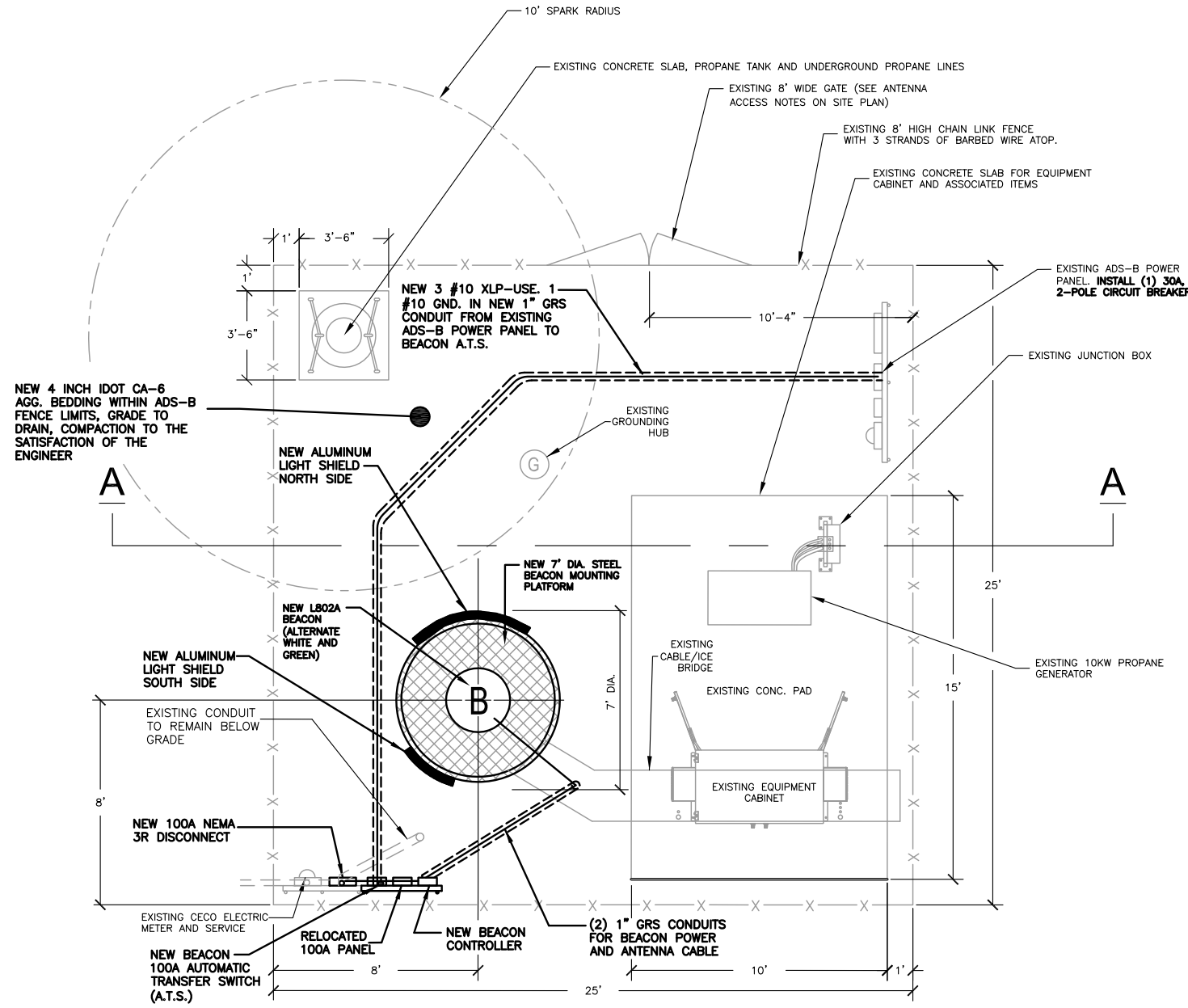
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 UPDATE BY: Jeremy Linke
 LAYOUT: 5 BEACON LOCATION PLAN
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 bdf(7) (Z) (small) (bdf)



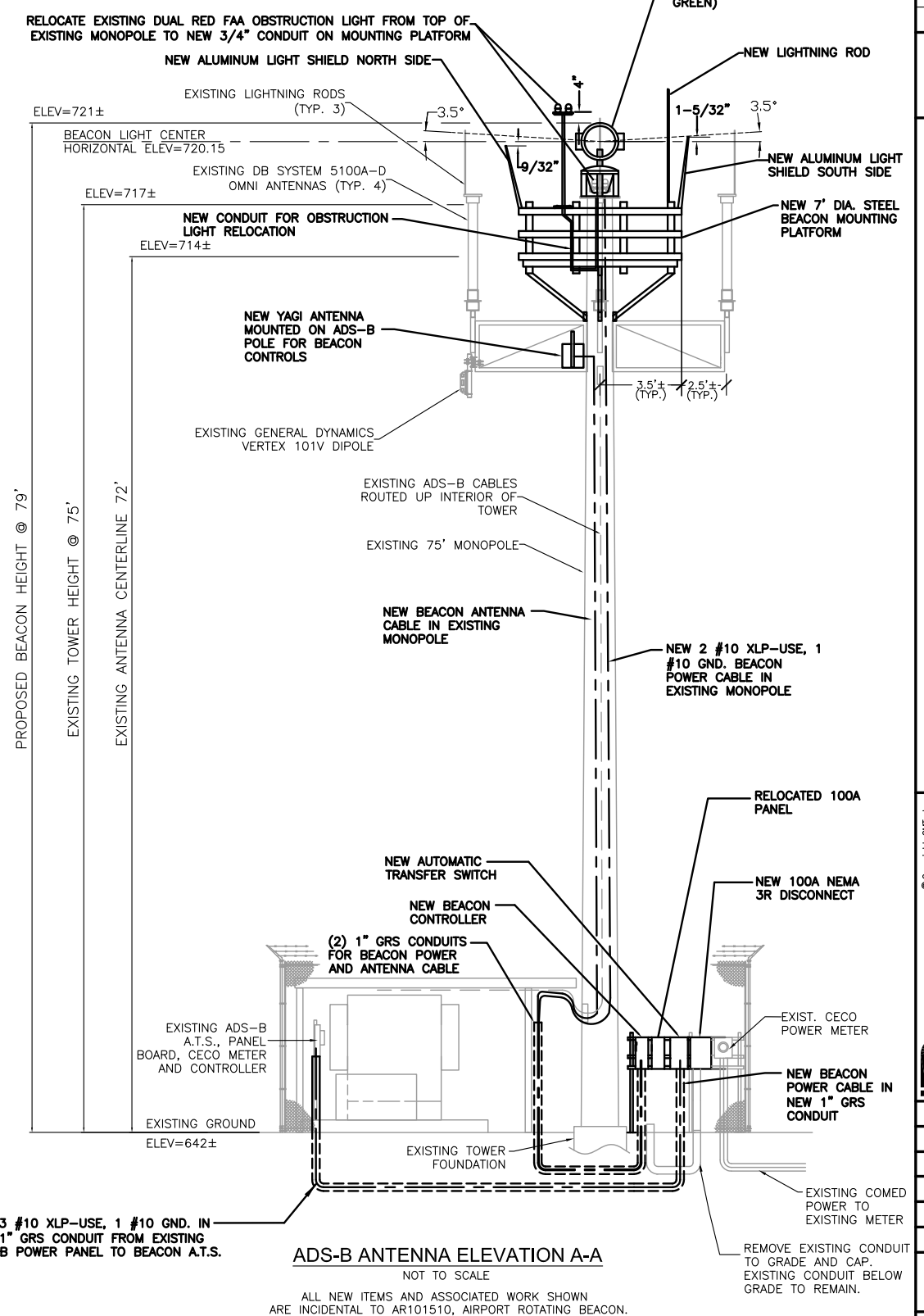
THE EXISTING TOP FLANGE BOLT PATTERN SHALL BE MODIFIED PER MANUFACTURER RECOMMENDATIONS. CONTRACTOR SHALL VERIFY CORRECT BOLT PATTERN AND REQUIREMENTS FOR NEW BEACON.

1. THE RELOCATION OF THE EXISTING FAA OBSTRUCTION LIGHTS SHALL BE INCIDENTAL TO THE NEW BEACON PAY ITEM.
 2. OBSTRUCTION LIGHT SHALL BE ON 24 HOURS (DAY AND NIGHT).



THE INFORMATION SHOWN ON THESE PLANS HAS BEEN OBTAINED FROM AVAILABLE RECORDS. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY WHATSOEVER IN RESPECT TO THE ACCURACY OR SUFFICIENCY OF THE INFORMATION AND THERE IS NO GUARANTEE EITHER EXPRESSED OR IMPLIED THAT THE CONDITIONS INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED IN THE FIELD. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND ACQUAINT HIMSELF WITH THE EXISTING CONDITIONS.

- NOTES:**
- ANY EXISTING UTILITY, CABLE, GROUNDING, AND CONDUIT LOCATIONS SHALL BE LOCATED BY THE CONTRACTOR PRIOR TO NEW INSTALLATION. LOCATIONS NOT SHOWN FOR CLARITY.
 - ALL EXISTING UTILITY VERIFICATION AND NEW UNDERGROUND INSTALLATION SHALL BE COMPLETED BY HAND DIGGING TRENCHES.
 - NEW L802A BEACON SHALL BE HALI-BRITE L802A6216 CIVILIAN VERSION. 120 VAC, 60 HZ, CLASS II, MODEL NO. HBM 400PS OR APPROVED EQUAL.
 - THE MOUNTING PLATFORM SHALL BE HALI-BRITE 440C86-1 7 FOOT DIA. ROUND BEACON BASKET OR APPROVED EQUAL. ALL PLATFORM SUPPORTS AND INSTALLATION SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
 - THE NEW LIGHT SHIELDS SHALL PROTECT GLARE FROM THE NEW BEACON TO THE FAA AIR TRAFFIC CONTROL TOWER AND THE RESIDENCE TO THE NORTH OF HINTZ ROAD AS SHOWN ON SHEET 3, SEQUENCE OF CONSTRUCTION. THE LIGHT SHIELDS SHALL BE VARIOUS SIZED ALUMINUM PANELS OR APPROVED EQUAL AND SHALL BE INSTALLED TO THE PLATFORM TO THE SATISFACTION OF THE AIRPORT AND ENGINEER. AFTER INSTALLATION, THE CONTRACTOR MAY NEED TO ADJUST THE SHIELDS UP TO TWO TIMES TO THE SATISFACTION OF THE FAA TOWER CHIEF, THE AIRPORT AND THE ENGINEER.
 - THE BEACON LIGHT BEAM ANGLE SHALL BE SET TO 3.5 DEGREES ABOVE HORIZONTAL OR AS DETERMINED BY THE AIRPORT.



IL. CONTRACT: **PA055**
 IL. LETTING ITEM: **35A**
 IL. PROJECT: **PWK-4287**
 S.B.G. PROJECT: **3-17-0018-B50**

SURVEY BOOK # BOOK #

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CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
RELOCATE BEACON
BEACON LOCATION PLAN

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CHICAGO EXECUTIVE AIRPORT

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CHECKED BY:	JRL
APPROVED BY:	DKP
DATE:	3/1/2013
JOB No:	12290-06

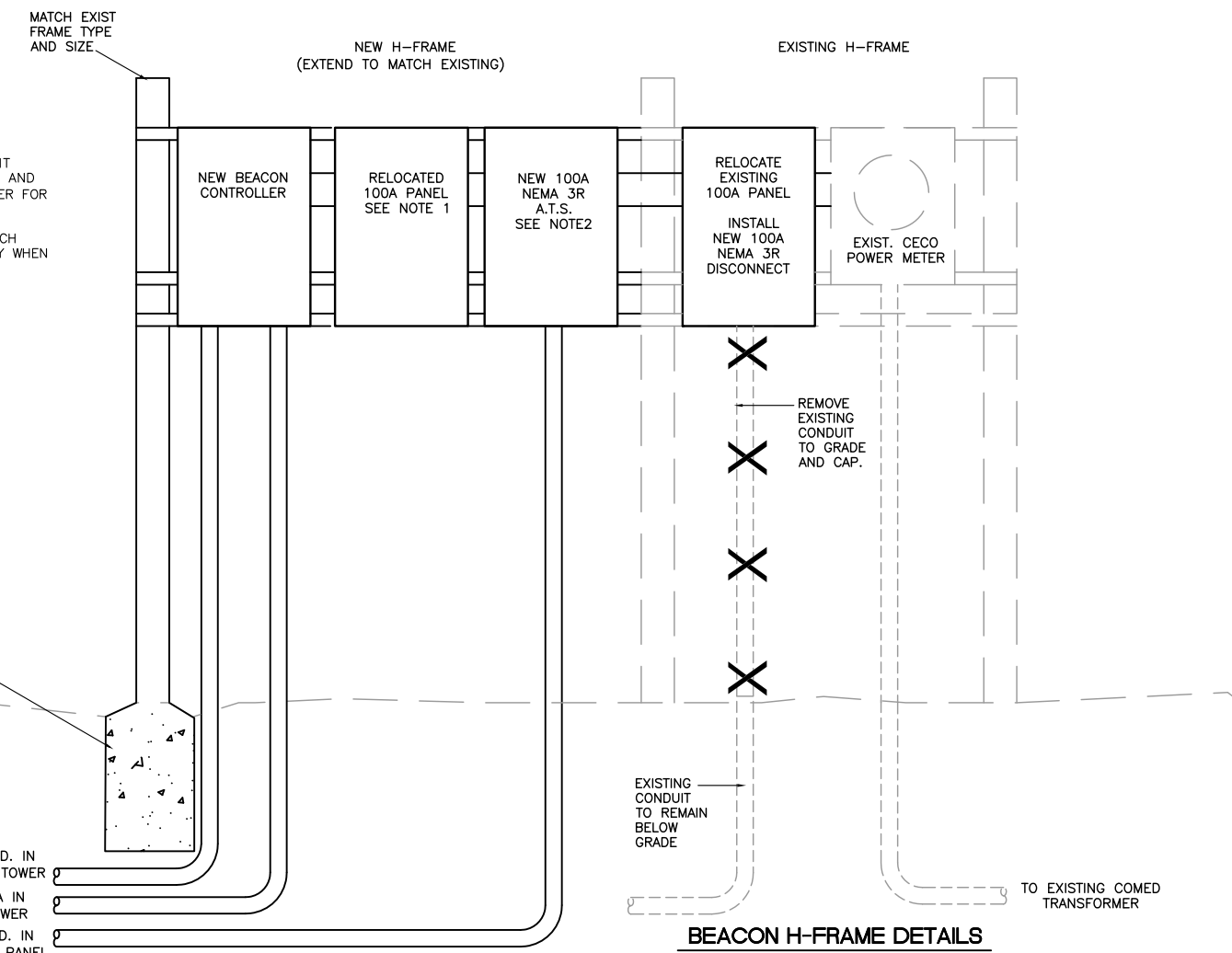
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SHEET 5 OF 7 SHEET

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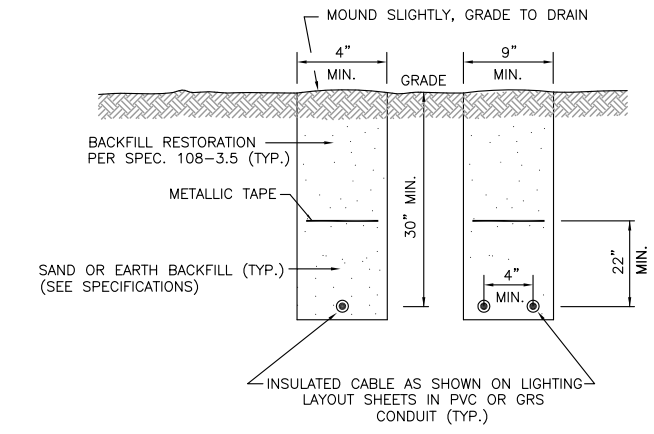
NOTES

- INSTALL (1) 20A, 1-POLE CIRCUIT BREAKER FOR BEACON CONTROL AND (1) 30A 1-POLE CIRCUIT BREAKER FOR BEACON POWER.
- NEW AUTOMATIC TRANSFER SWITCH SHALL TRANSFER TO EMERGENCY WHEN LOSS OF POWER.
- INSTALL NEW CONDUCTORS AND CONDUITS AS SHOWN ON POWER ONE-LINE.



BEACON H-FRAME DETAILS

NOT TO SCALE
 ALL NEW ITEMS AND ASSOCIATED WORK SHOWN ARE INCIDENTAL TO AR101510, AIRPORT ROTATING BEACON.



CABLE TRENCH DETAIL

NOT TO SCALE

NOTES

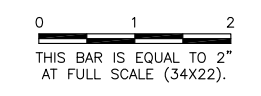
- TRENCHES WITH MORE THAN 2 CABLES SHALL BE INCREASED 3" IN WIDTH FOR EACH ADDITIONAL CABLE. IF SPECIFIED ON PLANS, TWO PARALLEL TRENCHES MAY BE CONSTRUCTED.
- DEPTH OF TRENCHES SHALL BE AS SHOWN UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- SAND BACKFILL SHALL BE USED IF THE EXISTING SOIL DOES NOT MEET THE BACKFILL REQUIREMENTS.
- ALL DISTURBED SURFACES SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. COST IS INCIDENTAL.

IL. CONTRACT: PA055
 IL. LETTING ITEM: 35A
 IL. PROJECT: PWK-4287
 S.B.G. PROJECT: 3-17-0018-B50

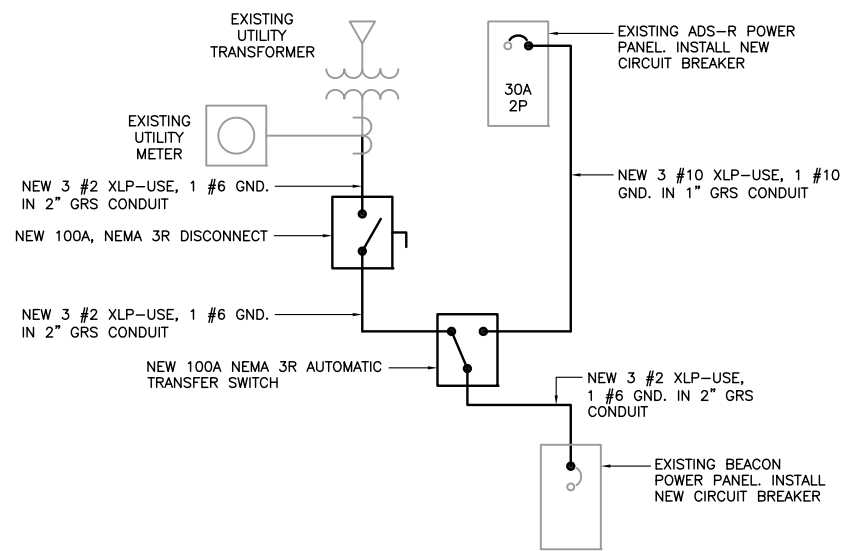
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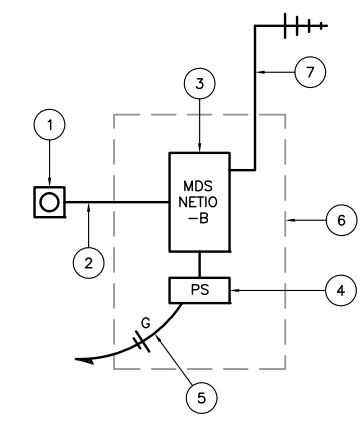
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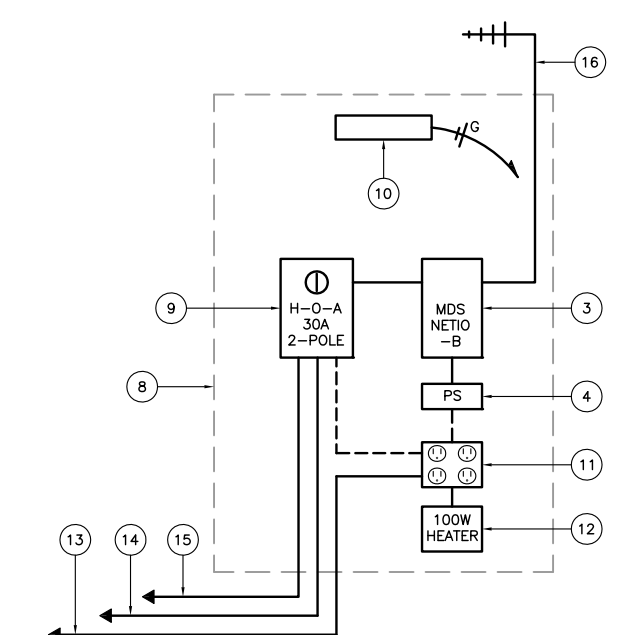
CHICAGO EXECUTIVE AIRPORT
 WHEELING/PROSPECT HEIGHTS, ILLINOIS
 RELOCATE BEACON
 ELECTRICAL DETAILS - SHEET 1



BEACON POWER ONE-LINE



FAA ATCT TOWER CAB



ADS-B/BEACON SITE

BEACON CONTROL DIAGRAM

EQUIPMENT CONDUIT NOMENCLATURE

- EXISTING BEACON PUSH BUTTON IN L-821 PANEL. CONNECT BEACON CONTROL TO EXISTING PUSH BUTTON.
- NEW 2 #12 THWN CONTROLS FROM L-821 PANEL TO BEACON CONTROLLER.
- NEW 900 MHZ WIRELESS TRANSMITTER/RECEIVER WITH ANALOG AND DIGITAL I/O. GE MDS NET10-B OR EQUIVALENT.
- NEW 24V DC POWER SUPPLY OR AS REQUIRED FOR WIRELESS TRANSMITTER/RECEIVER.
- NEW 2 #12 THWN, 1 #12 GND. IN 3/4" CONDUIT, 120 VAC POWER FROM EXISTING CIRCUIT UNDER CABINET.
- NEW 18"Hx12"Wx12"D NEMA 1 ENCLOSURE, SIZED FOR TRANSMITTER AND POWER SUPPLY, HOFFMAN OR EQUAL. INSTALL ENCLOSURE INSIDE CABINET UNDER L-821 PANEL.
- NEW ANTENNA CABLE AND YAGI ANTENNA MOUNTED ON TOP OF FAA ATCT TOWER CAB. ANTENNA CABLE AND ANTENNA SHALL BE AS RECOMMENDED BY WIRELESS EQUIPMENT MANUFACTURER.
- NEW 36"Hx24"Wx12"D NEMA 3R ENCLOSURE SIZED TO ACCOMMODATE RECEIVER, POWER SUPPLY, CONTRACTOR AND HEATER, HOFFMAN OR EQUAL.
- NEW 30A, 2-POLE, 240V LIGHTING CONTRACTOR WITH 120 VAC COIL AND 3-POSITION HAND-OFF-AUTO SELECTOR SWITCH MOUNTED ON ENCLOSURE DOOR.
- NEW ENCLOSURE LIGHT
- NEW QUAD RECEPTACLE
- NEW 100W HEATER WITH THERMOSTAT
- NEW 2 #12 XLP-USE, 1 #12 GND. 120 VAC POWER FROM BEACON POWER PANEL.
- NEW 2 #10 XLP-USE, 1 #10 GND. 120 VAC POWER FROM BEACON POWER PANEL.
- NEW 2 #10 XLP-USE, 1 #10 GND. 120 VAC POWER TO BEACON.
- NEW ANTENNA AND YAGI ANTENNA MOUNTED ON BEACON TOWER. ANTENNA CABLE AND ANTENNA SHALL BE AS RECOMMENDED BY WIRELESS EQUIPMENT MANUFACTURER.

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APPROVED BY:	DKP
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JOB No:	12290-06

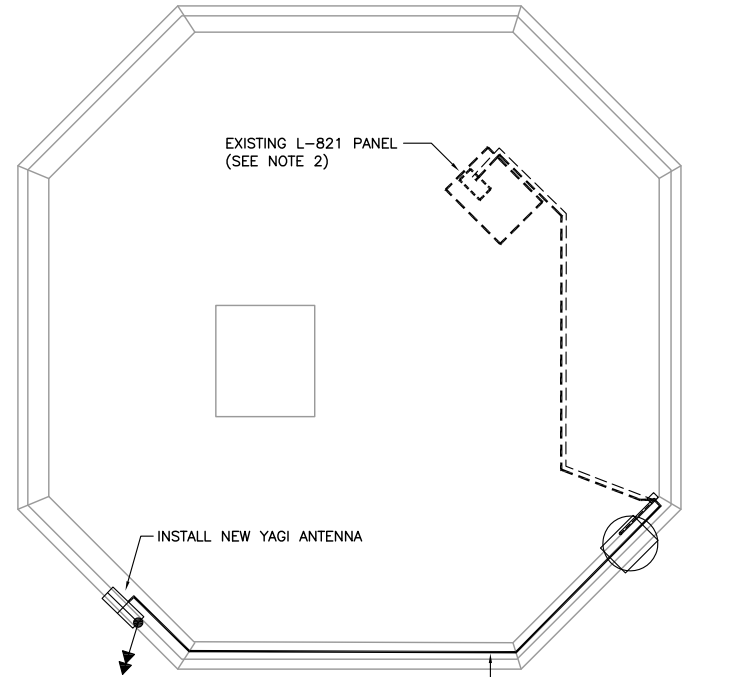
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EXISTING BEACON TO BE REMOVED

EXISTING BEACON

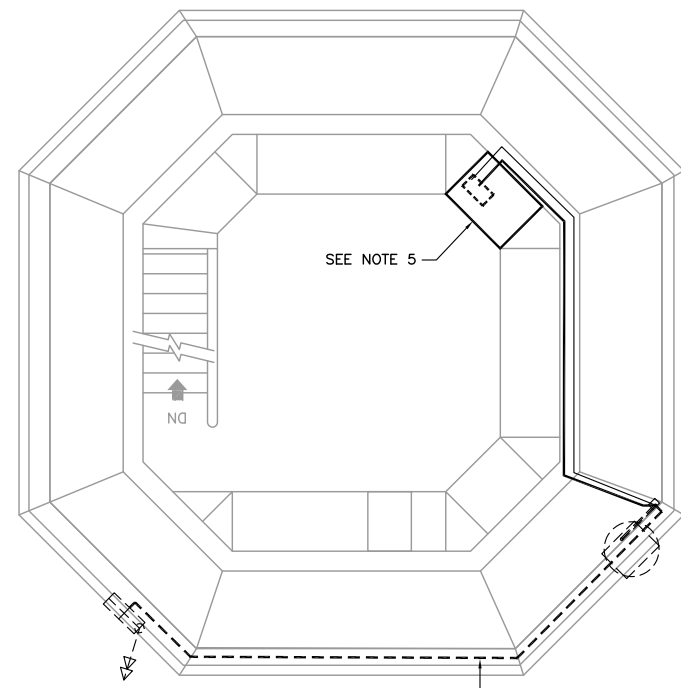


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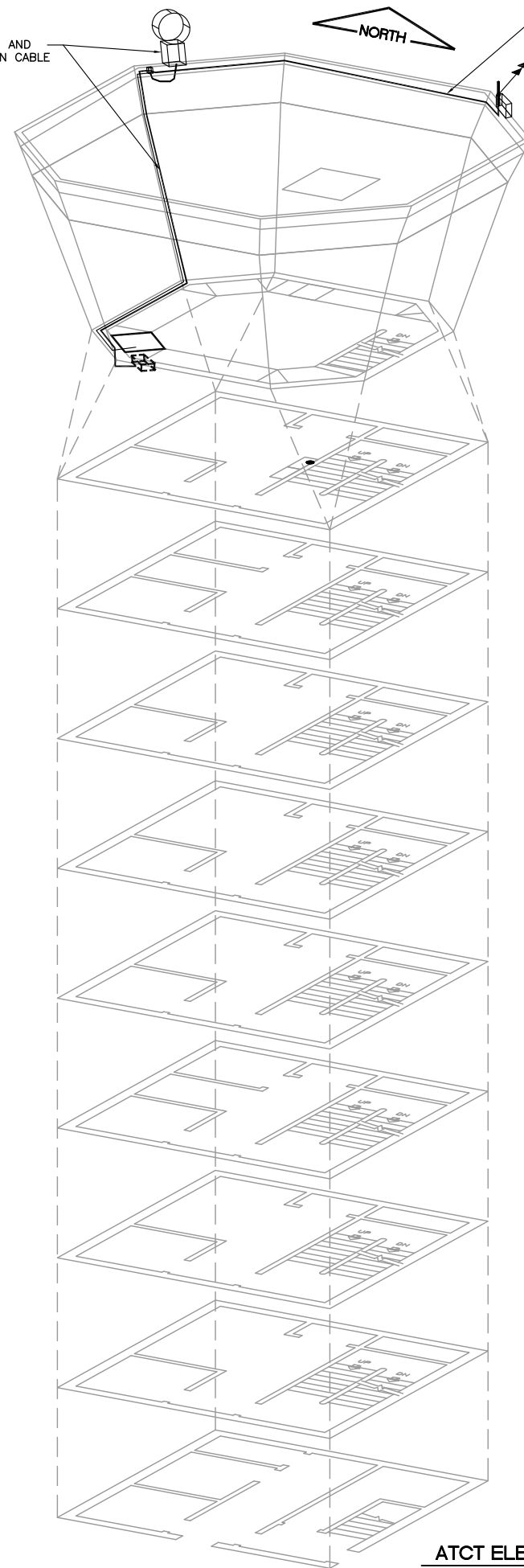
- CONTRACTOR SHALL COORDINATE ALL WORK IN THE EXISTING CONTROL TOWER WITH THE FAA AIRWAYS FACILITIES REPRESENTATIVES, THE AIRPORT AND THE RESIDENT ENGINEER. CONTRACTOR SHALL GIVE A MINIMUM OF 2 DAYS NOTICE PRIOR TO BEGINNING WORK IN THE EXISTING TOWER.
- CONTRACTOR SHALL INSTALL NEW BEACON WIRELESS TRANSMITTER IN ENCLOSURE INSIDE CABINET UNDER L-821 PANNEL. CONNECT DIGITAL INPUT FROM BEACON PUSH BUTTON TO WIRELESS TRANSMITTER.
- CONTRACTOR SHALL REMOVE EXISTING BEACON AND ASSOCIATED CONDUCTORS AFTER NEW BEACON IS OPERATIONAL.
- CONTRACTOR TO PERFORM RADIO PATH STUDY FOR BEACON WIRELESS 900 MHZ COMMUNICATION AND ADJUST ANTENNA TYPE, HEIGHT AND DIRECTION AS NECESSARY.
- CONTRACTOR SHALL INSTALL NEW BEACON CONTROLLER, CONTROLLER POWER, ANTENNA, ANTENNA CABLE AND REMOVAL OF EXISTING BEACON TO PROVIDE COMPLETE AND OPERATIONAL SYSTEM TO THE SATISFACTION OF THE TOWER CHIEF, AIRPORT AND ENGINEER.



EXISTING L-821 PANEL



REMOVE EXISTING BEACON AND BEACON POWER CABLES IN CABLE TROUGH / WIREWAY



VIEW FROM WIRELESS ANTENNA TOWARDS ADS-B SITE

IL CONTRACT: PA055
 IL LETTING ITEM: 35A
 IL PROJECT: PWK-4287
 S.B.G. PROJECT: 3-17-0018-B50

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NUMBER	BY	DATE

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CHICAGO EXECUTIVE AIRPORT
 WHEELING/PROSPECT HEIGHTS, ILLINOIS
 RELOCATE BEACON

ELECTRICAL DETAILS - SHEET 2

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