

CHICAGO EXECUTIVE AIRPORT WHEELING/PROSPECT HEIGHTS, ILLINOIS

CONSTRUCTION PLANS

FOR

CHICAGO EXECUTIVE AIRPORT

CONSTRUCT ENGINEERED MATERIALS ARRESTING SYSTEM (EMAS) PHASE 3B - RUNWAY 34 END (16 DEPARTURE END) INCLUDING RUNWAY 16/34 OFA/RSA IMPROVEMENTS AND SITEWORK



811 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.

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

SHEETS: 1-14, 18-24
SUBMITTED BY JEREMY R. LINKE, P.E.

DATE 4/19/2013

Professional Engineer Seal: JEREMY R. LINKE, No. 02459183, State of Illinois, 11/30/13

ZODIAC AEROSPACE ENGINEERED ARRESTING SYSTEMS CORPORATION
2239 High Hill Road
Logan Township, New Jersey, USA 08085
Phone 856.241.8620

SHEETS: 15-17
SUBMITTED BY JOHN BOSCO, P.E.

DATE 4/19/2013

Professional Engineer Seal: JOHN B. BOSCO, No. 062-043545, State of Illinois, 11/30/13

CHICAGO EXECUTIVE AIRPORT

APPROVED *[Signature]* AIRPORT MANAGER
DENNIS G. ROULEAU

DATE 4/19/2013

ILLINOIS PROJECT: PWK-4182
S.B.G. PROJECT: 3-17-0018-48

DATE: AUGUST 1, 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

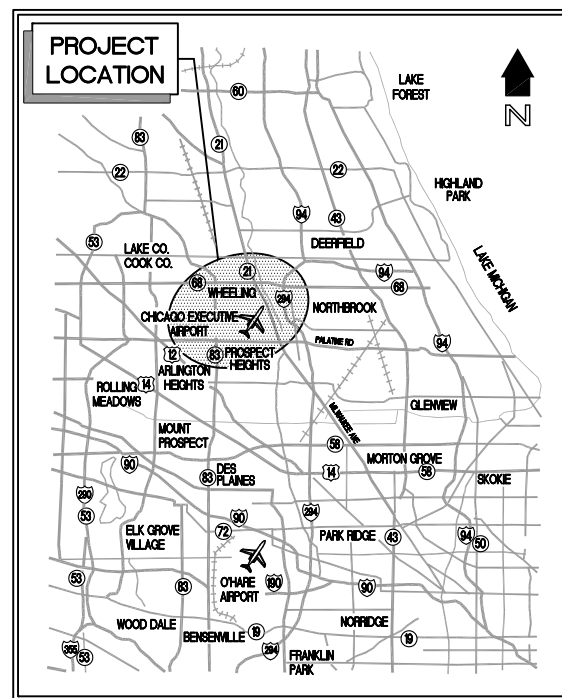
VILLAGE OF WHEELING - 847.459.2600
CITY OF PROSPECT HEIGHTS - 847.398.6070

ENGINEER'S PROJECT PERMIT LOG

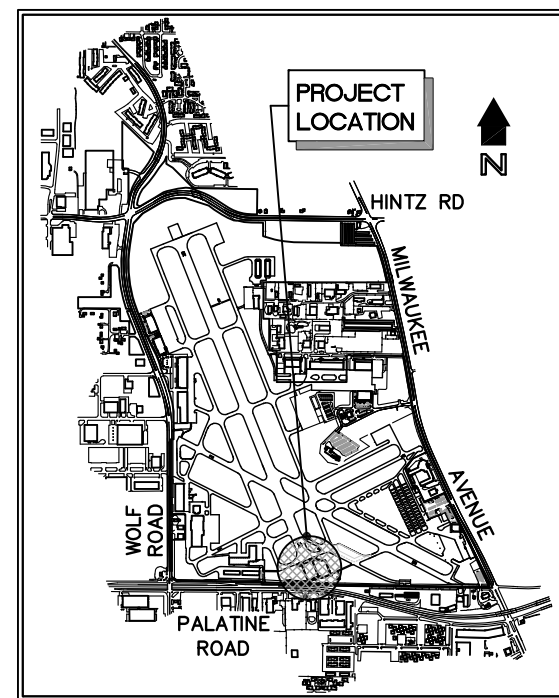
NPDES #
FAA AIRSPACE #
CCDD LPC-663 DATED 3/6/12
MWRDGC PERMIT # 03-246 & RL 09-063
VILLAGE APP FOR CONSTRUCTION PERMIT #
VILLAGE FLOODPLAIN PERMIT #
CONTRACTORS REGISTRATION WITH VILLAGE
VILLAGE SITE ALTERATION PERMIT #
CITY APPLICATION FOR PERMIT #
CITY FLOODPLAIN PERMIT #
CITY SITE GRADING PERMIT #
CONTRACTORS REGISTRATION WITH CITY

INDEX TO SHEETS

- COVER SHEET
- SUMMARY OF QUANTITIES AND GENERAL NOTES
- SITE PLAN/PROJECT CONTROL PLAN
- SEQUENCE OF CONSTRUCTION PER AC 150/5370-2F (LATEST EDITION)
- SEQUENCE OF CONSTRUCTION GENERAL NOTES
- SEQUENCE OF CONSTRUCTION SCHEDULE AND DETAILS
- STORM WATER POLLUTION PREVENTION PLAN
- STORM WATER POLLUTION PREVENTION PLAN NOTES
- STORM WATER POLLUTION PREVENTION PLAN DETAILS
- EXISTING CONDITIONS / PROPOSED REMOVALS
- TYPICAL SECTION
- PLAN AND PROFILE
- GRADING PLAN
- EMAS BLOCK LAYOUT PLAN
- EMAS SECTIONS
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- MARKING AND LIGHTING PLAN
- MARKING AND MISCELLANEOUS DETAILS
- ELECTRICAL DETAILS - SHEET 1
- ELECTRICAL DETAILS - SHEET 2
- INDEX TO CROSS SECTIONS/EARTHWORK SUMMARY
- CROSS SECTIONS - SHEET 1
- CROSS SECTIONS - SHEET 2
- ENGINEERING INFORMATION



LOCATION MAP



SITE PLAN

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY
AR108088	1/C #8 XLP-USE	LF	813
AR108108	1/C #8 5KV UG CABLE	LF	1,187
AR108758	1/C #8 GROUND	LF	406
AR110202	2" PVC DUCT, DIRECT BURY	LF	1,000
AR110504	4-WAY CONCRETE ENCASED DUCT	LF	336
AR110550	SPLIT DUCT	LF	752
AR110610	ELECTRICAL HANDHOLE	EACH	2
AR110947	ADJUST ELECTRICAL MANHOLE	EACH	2
AR125415	MITL-BASE MOUNTED	EACH	4
AR125445	TAXI GUIDANCE SIGN, 5 CHARACTER	EACH	1
AR125610	REILS	PAIR	1
AR125901	REMOVE STAKE MOUNTED LIGHT	EACH	2
AR125902	REMOVE BASE MOUNTED LIGHT	EACH	2
AR125907	REMOVE REILS	PAIR	1
AR125943	ADJUST INPAVEMENT LIGHT	EACH	8
AR150510	ENGINEER'S FIELD OFFICE	LS	1
AR150520	MOBILIZATION	LS	1
AR152410	UNCLASSIFIED EXCAVATION	CY	2,591
AR152540	SOIL STABILIZATION FABRIC	SY	2,185
AR156510	SILT FENCE	LF	565
AR156511	DITCH CHECK	EACH	2
AR156520	INLET PROTECTION	EACH	6
AR162960	RELOCATE CLASS E FENCE	LF	40
AR208515	POROUS GRANULAR EMBANKMENT	CY	735
AR209608	CRUSHED AGG. BASE COURSE - 8"	SY	397
AR209610	CRUSHED AGG. BASE COURSE - 10"	SY	1,918
AR401610	BITUMINOUS SURFACE COURSE	TON	954
AR401650	BITUMINOUS PAVEMENT MILLING	SY	6,146
AR401900	REMOVE BITUMINOUS PAVEMENT	SY	150
AR401910	REMOVE & REPLACE BIT. PAVEMENT	SY	57
AR403610	BITUMINOUS BASE COURSE	TON	243
AR602510	BITUMINOUS PRIME COAT	GAL	605
AR603510	BITUMINOUS TACK COAT	GAL	1,097
AR620520	PAVEMENT MARKING - WATERBORNE	SF	18,994
AR620525	PAVEMENT MARKING - BLACK BORDER	SF	5,685
AR705506	6" PERFORATED UNDERDRAIN	LF	580
AR800154	REMOVE WOODEN TAXI GUIDANCE SIGN	EACH	2
AR800194	REMOVE ELEVATED RETROREFLECTIVE MARKER	EACH	3
AR800205	ELEVATED RETROREFLECTIVE MARKER - TYPE 1	EACH	6
AR800206	ELEVATED RETROREFLECTIVE MARKER - TYPE 2	EACH	27
AR800207	EMAS CONCRETE GRADE BEAM	LS	1
* AR800208	EMAS BED INSTALLATION	LS	1
* AR800209	EMAS BED	LS	1
AR910200	ROADWAY SIGN	EACH	3
AR901510	SEEDING	ACRE	2.4
AR908510	MULCHING	ACRE	2.4

* DENOTES SPECIALTY ITEM

UTILITY CONTACT LIST

UTILITY SERVICE OR FACILITY	CONTACT (PERSON)	CONTACT (PHONE)
AT&T, COMMONWEALTH EDISON, NICOR GAS, WIDE OPEN WEST, COMCAST, LEVEL 3 COMMUNICATIONS, MCI, ABOVENET, REDSPEED ILLINOIS, TDS METROCOM WEST SHORE PIPELINE NORTHWEST WATER COMMISION	J.U.L.I.E. (JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS)	811 OR 1-800-892-0123
AIRFIELD FAA CONTROL AND COMMUNICATION CABLES	FAA SECTOR FIELD OFFICE	(630) 587-7801
CITY OF PROSPECT HEIGHTS WATER, SANITARY AND STORM SEWER	OPERATIONS AND MAINTENANCE CITY OF PROSPECT HEIGHTS	(847) 459-0588
ILLINOIS AMERICAN WATER COMPANY - WATER, SANITARY AND STORM SEWER	SUPERVISOR OF CONSTRUCTION	(630) 739-8810
VILLAGE OF WHEELING WATER, SANITARY AND STORM SEWER	OPERATIONS AND MAINTENANCE	(847) 459-2985
METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO, SANITARY SEWER	FIELD OFFICE PERSONNEL	(708) 588-4055
MISCELLANEOUS COMMUNICATION CABLES	SIGNATURE FLIGHT GROUP AL PALICKI ATLANTIC AVIATION DAVID KAUFMAN	(847) 537-1200 (847) 808-0812

NOTES:

1. 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 TO THE CONTRACT. THE FAA PERSONNEL ARE ONLY AVAILABLE FROM 9 AM TO 3 PM, MONDAY THROUGH FRIDAY WITH ADVANCED NOTICE.

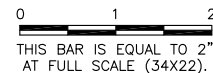
MUNICIPALITIES GENERAL NOTES

1. THE CHICAGO EXECUTIVE AIRPORT IS A JOINT OWNERSHIP BY BOTH THE VILLAGE OF WHEELING AND CITY OF PROSPECT HEIGHTS.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH VILLAGE/CITY CODES, ORDINANCES AND STANDARDS AS APPLICABLE.
3. ALL ELEVATIONS SHOWN ON PLANS ARE IN 1929 DATUM. SUBTRACT 0.24 FEET FROM ELEVATIONS SHOWN TO OBTAIN 1988 NAVD.
4. 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.
5. 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.
6. ALL STORM SEWERS AND SANITARY SEWERS ON THE AIRPORT SITE ARE OWNED, OPERATED AND MAINTAINED BY THE CHICAGO EXECUTIVE AIRPORT UNLESS LABELED OTHERWISE.
7. 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.

IL. CONTRACT: **PA056**
IL. LETTING ITEM: **1A**
IL. PROJECT: **PWK-4182**
S.B.G. PROJECT: **3-17-0018-B48**

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE



**CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)**

**SUMMARY OF QUANTITIES
AND GENERAL NOTES**

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DESIGN BY: JRL
DRAWN BY: JRO
CHECKED BY: DKP
APPROVED BY: BW
DATE: 08/1/2013
JOB No: 11290-03

DATE: Thursday, August 01, 2013, 1:16:52 PM
FILE: K:\Chicago\11290-03_Rwy34\Draw\Sheet\4-Emas-Quantities - Layout.dwg
UPDATE BY: Jeremy Linke
LAYOUT: 2 - 34Emas-Quantities - Layout1
Bdf(Z) jlpml - Small - Color - 4 - GE - 4 - Color - Small - Layout1
IMAGE FILES: \M:\work\11290\11290.dwg
KREF DWG: 11290-03 - 34Emas-Quantities - Layout1.dwg

DATE: Thursday, August 01, 2013, 1:17:00 PM
 FILE: K:\Chicago\11290-03_Survey\Draw\Sheet\4-EMAS-Site Plan - Layout1.dwg
 UPDATE BY: Jeremy Link
 LAYOUT: 3_34-EMAS-Site Plan - Layout1
 bdf'(Z) iilim - Simu - Color - Simu - 1202_1.sld
 IMAGE FILES: 1-1 in s-1031_2012_1.sld
 XREF DWG: 1344-EMAS-Site Plan - 111290-03

HORIZONTAL CONTROL TABLE (1927 DATUM)

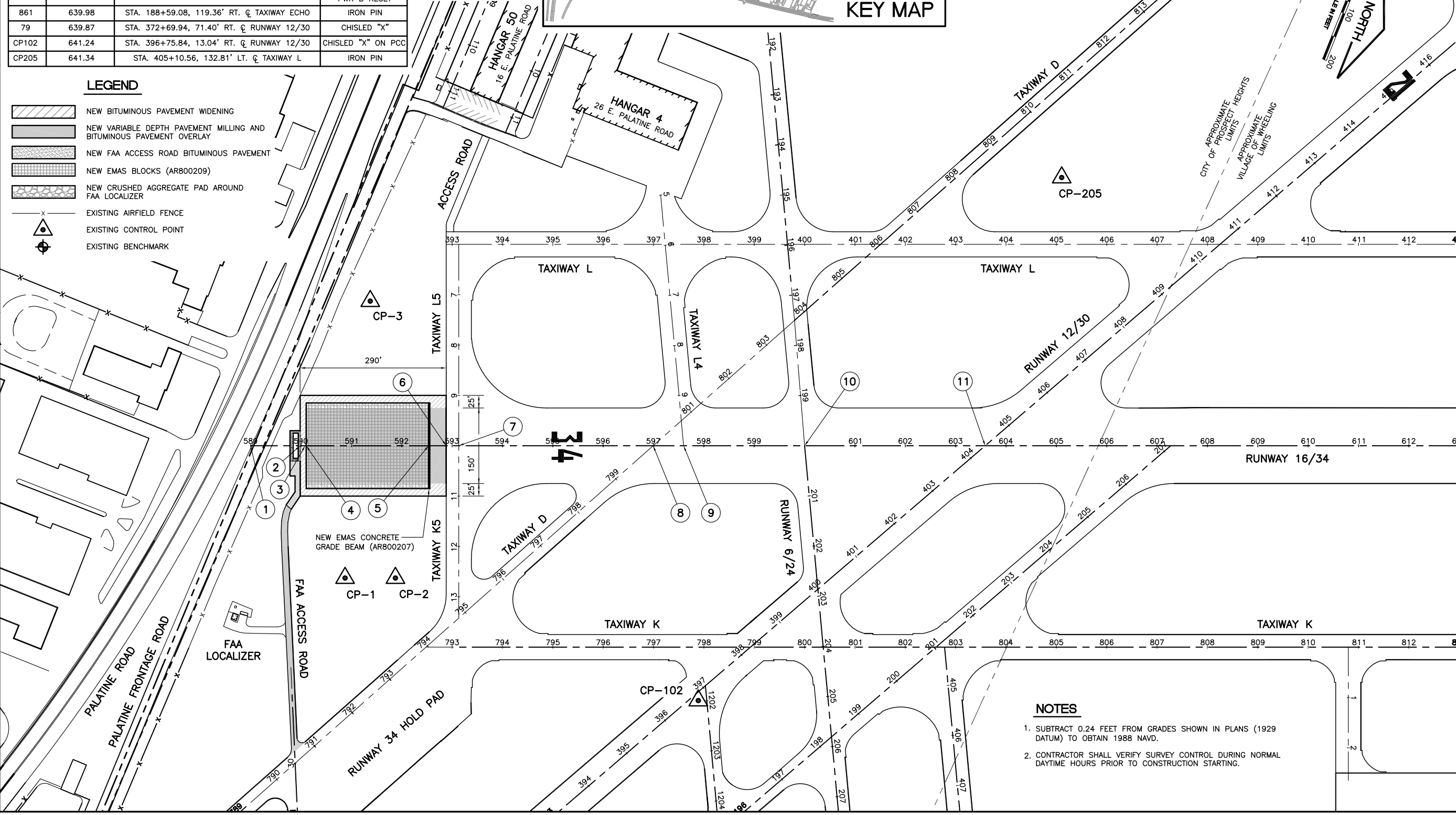
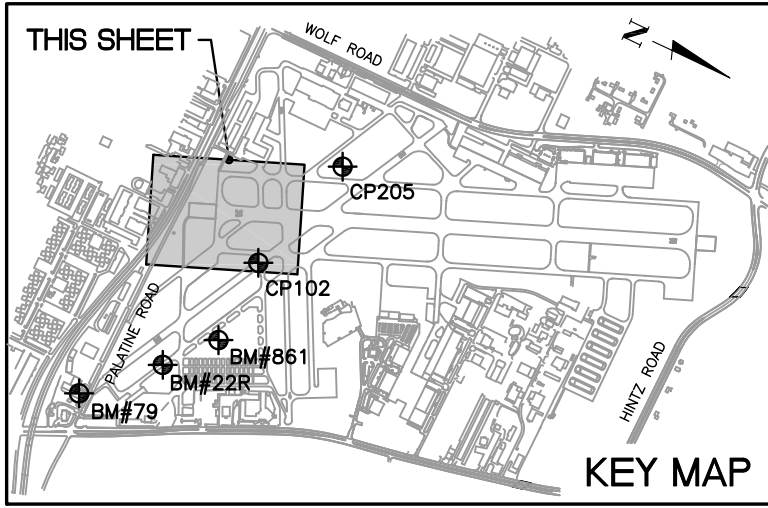
POINT	NORTHING	EASTING	DESCRIPTION	STATION/OFFSET
1	1982765.70	617635.62	RUNWAY 16/34 CENTERLINE EXTENDED	STA. 589+00.00, @ RUNWAY 16/34
2	1982856.89	617599.36	RUNWAY 16/34 AND NEW PAVEMENT	STA. 589+98.21 @ RUNWAY 16/34
3	1982868.18	617595.66	RUNWAY 16/34 AND NEW EMAS PAVEMENT	STA. 590+08.21 @ RUNWAY 16/34
4	1982868.06	617594.91	RUNWAY 16/34 AND NEW EMAS BLOCKS	STA. 590+10.24 @ RUNWAY 16/34
5	1983093.88	617505.13	END NEW EMAS PAVEMENT	STA. 592+53.21 @ RUNWAY 16/34
6	1983126.37	617492.21	END RUNWAY 16/34 AND BLAST PAD	STA. 592+88.21 @ RUNWAY 16/34
7	1983149.67	617482.95	TAXIWAY K5/L5 AND RUNWAY 16/34	STA. 593+13.21 @ RUNWAY 16/34
8	1983508.32	617340.35	TAXIWAY D AND RUNWAY 16/34	STA. 597+00.79 @ RUNWAY 16/34
9	1983564.59	617317.98	TAXIWAY L4 AND RUNWAY 16/34	STA. 597+59.73 @ RUNWAY 16/34
10	1983787.87	617229.20	RUNWAY 6/24 AND RUNWAY 16/34	STA. 600+00.00 @ RUNWAY 16/34
11	1984121.10	617096.71	RUNWAY 12/30 AND RUNWAY 16/34	STA. 603+58.61 @ RUNWAY 16/34
CP-1	1983036.9074	617810.4716	IRON PIN	STA. 590+87.42, 262.69' RT. @ RUNWAY 16/34
CP-2	1983129.8318	617773.5250	IRON PIN	STA. 591+87.42, 262.69' RT. @ RUNWAY 16/34
CP-3	1982880.1634	617280.9139	IRON PIN	STA. 591+37.42, 287.31' LT. @ RUNWAY 16/34
BM#861	1983705.8500	618661.5760	IRON PIN	STA. 188+59.08, 119.36' RT. @ TAXIWAY ECHO
BM#79	1982713.3210	619935.4790	CHISLED "X"	STA. 372+69.94, 71.40' RT. @ RUNWAY 12/30

VERTICAL CONTROL TABLE (1929 DATUM)

BM #	ELEVATION	LOCATION	DESCRIPTION
22R	639.51	STA. 182+00.00, 40.8' LT. @ TAXIWAY ECHO	NOAA BRASS DISC PWK B RESET
861	639.98	STA. 188+59.08, 119.36' RT. @ TAXIWAY ECHO	IRON PIN
79	639.87	STA. 372+69.94, 71.40' RT. @ RUNWAY 12/30	CHISLED "X"
CP102	641.24	STA. 396+75.84, 13.04' RT. @ RUNWAY 12/30	CHISLED "X" ON PCC
CP205	641.34	STA. 405+10.56, 132.81' LT. @ TAXIWAY L	IRON PIN

LEGEND

- NEW BITUMINOUS PAVEMENT WIDENING
- NEW VARIABLE DEPTH PAVEMENT MILLING AND BITUMINOUS PAVEMENT OVERLAY
- NEW FAA ACCESS ROAD BITUMINOUS PAVEMENT
- NEW EMAS BLOCKS (AR800209)
- NEW CRUSHED AGGREGATE PAD AROUND FAA LOCALIZER
- EXISTING AIRFIELD FENCE
- EXISTING CONTROL POINT
- EXISTING BENCHMARK



IL CONTRACT: PA056
 IL LETTING ITEM: 1A
 IL PROJECT: PWK-4182
 S.B.G. PROJECT: 3-17-0018-B48

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE

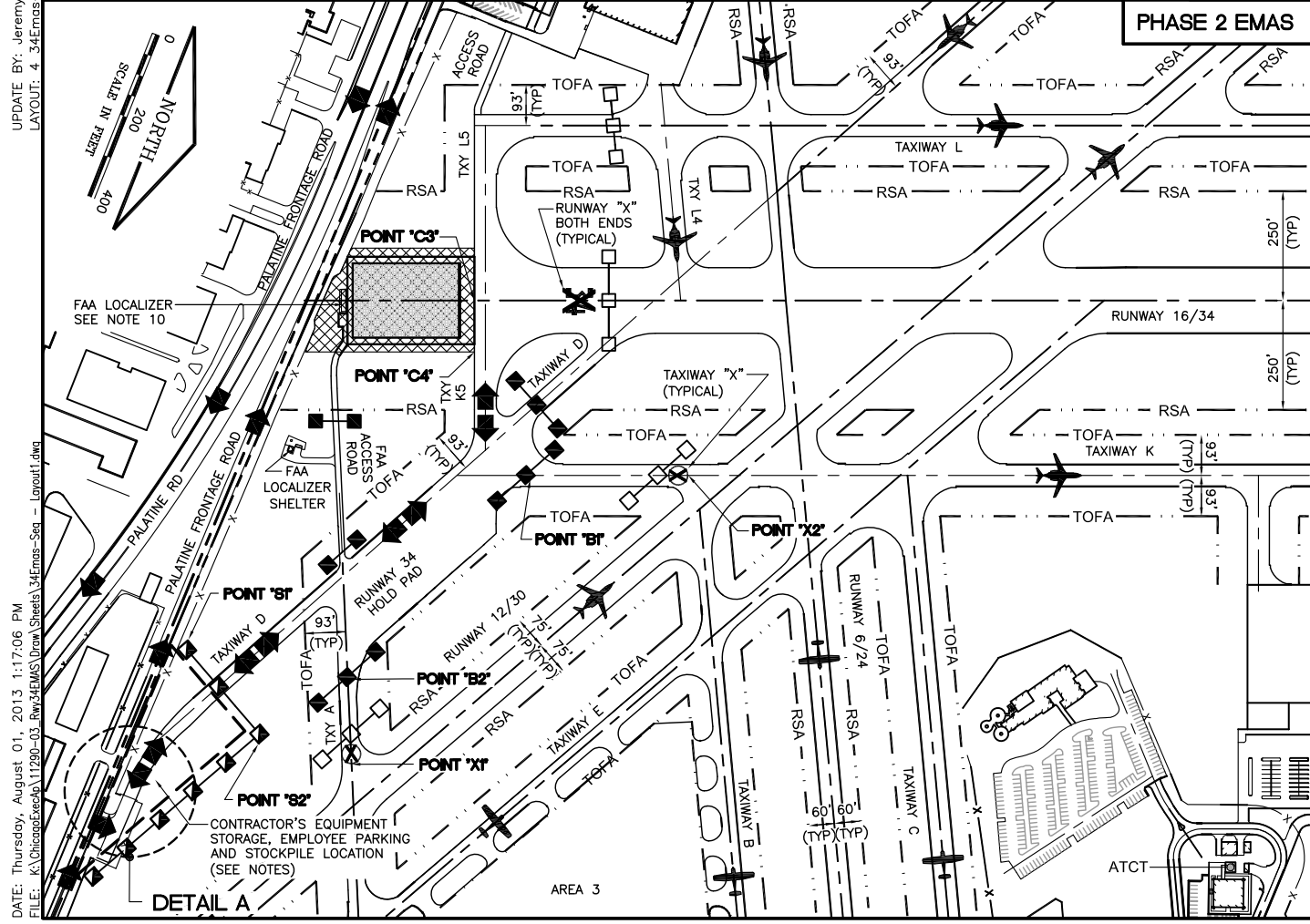
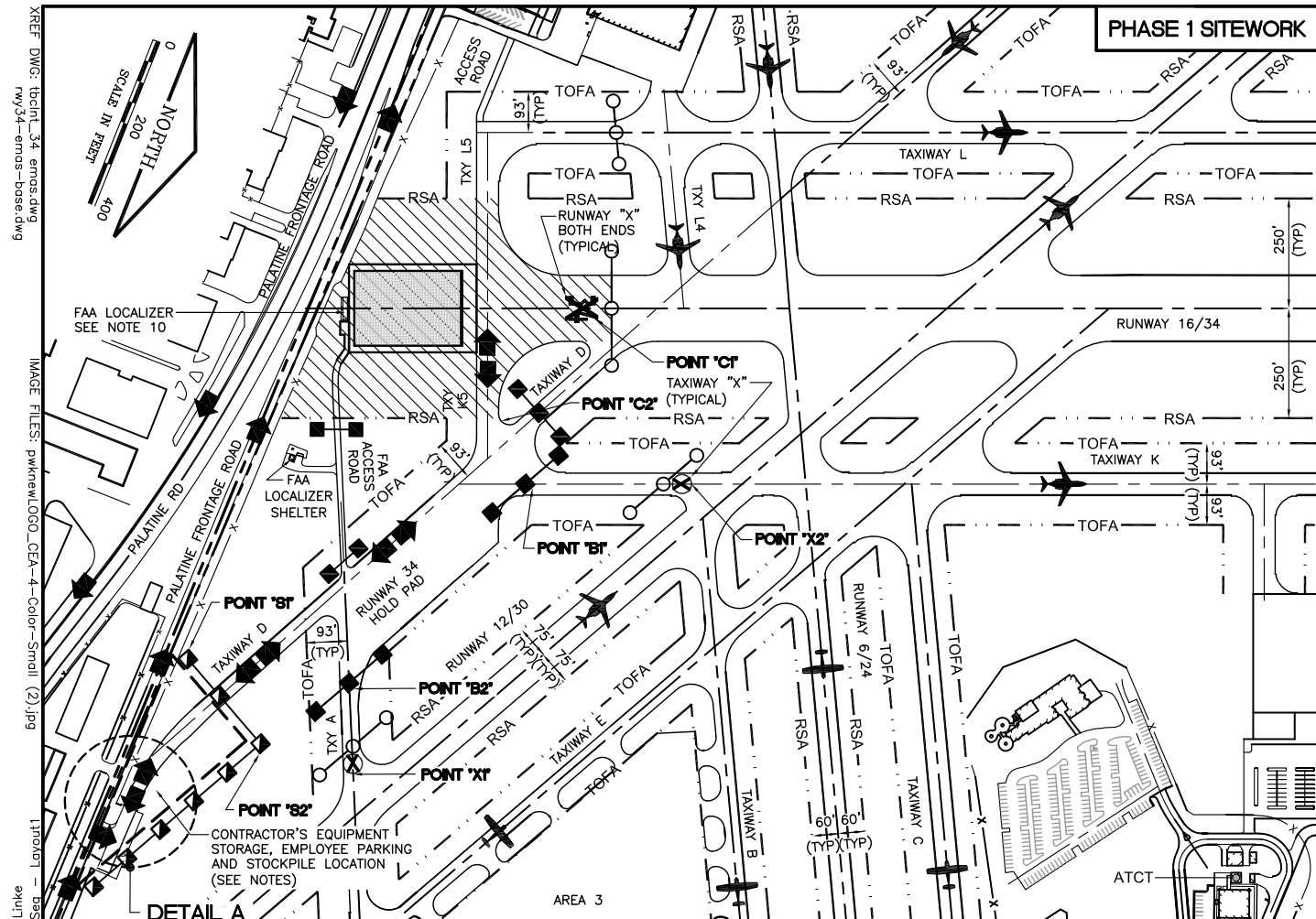
CHICAGO EXECUTIVE AIRPORT
 WHEELING/PROSPECT HEIGHTS, ILLINOIS
 CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)
 SITE PLAN/PROJECT CONTROL PLAN

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DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	BW
DATE:	08/1/2013
JOB No:	11290-03
SHEET	3 OF 24 SHEETS

- NOTES**
- SUBTRACT 0.24 FEET FROM GRADES SHOWN IN PLANS (1929 DATUM) TO OBTAIN 1988 NAVD.
 - CONTRACTOR SHALL VERIFY SURVEY CONTROL DURING NORMAL DAYTIME HOURS PRIOR TO CONSTRUCTION STARTING.



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 RUNWAY, THE ENTIRE RUNWAY SAFETY AREA (250 FEET FROM CENTERLINE AND INCLUDING BEYOND THE END OF THE RUNWAY WITHIN AIRPORT PROPERTY) MUST MEET FAA CRITERIA. FAA CRITERIA REQUIRES THAT THERE BE NO OPEN EXCAVATIONS OR TRENCHES, THE MAXIMUM PAVEMENT DROP OFF BE 3 INCHES, AND ALL GRADES IN ANY DIRECTION BE LESS THAN 5 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 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).
- 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 AT FENCE REMOVAL LOCATIONS. TEMPORARY FENCE SHALL BE CONSIDERED INCIDENTAL REGARDLESS OF HOW MANY TIMES IT IS TAKEN DOWN OR PUT UP TO ALLOW FOR CONSTRUCTION OPERATIONS.
- 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. FAA ACCESS ROAD SHALL NOT BE USED AS A HAUL ROAD BY THE CONTRACTOR.
- 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 PROTECT EXISTING FAA LOCALIZER UTILITIES, CABLES AND GROUNDING AT ALL TIMES. THE CONTRACTOR SHALL ATTACH 4' HIGH ORANGE CONSTRUCTION FENCE AROUND FAA LOCALIZER BARRICADES (INCIDENTAL).
- THE CONTRACTOR SHALL COORDINATE WITH THE AIRPORT AND ENGINEER AS TO THE EXACT STAGING AREA LOCATION FOR STAGING AND DELIVERY OF THE EMAS BLOCKS AND TRAILERS.

LIQUIDATED DAMAGES (ALL PHASES)

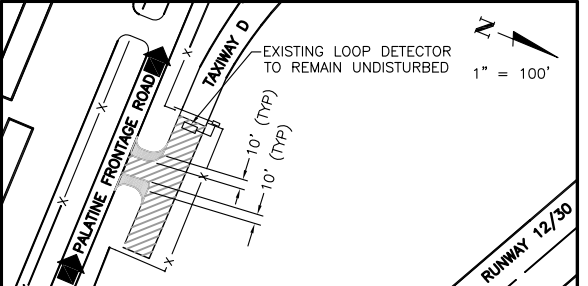
- BECAUSE OF THE CRITICAL LIMITATIONS WHICH THE CLOSURE OF RUNWAY 16/34 PLACES ON THE USERS OF THE AIRPORT, LIQUIDATED DAMAGES IN THE AMOUNT OF \$2500 MAY BE DEDUCTED FROM THE MONIES OWED THE CONTRACTOR FOR EACH HALF HOUR OVER 6:00 AM UNTIL SPECIFIED WORK IS COMPLETED AND THE RUNWAY IS REOPENED TO AIRCRAFT 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 RUNWAY CLOSURES. FOR EVERY ADDITIONAL RUNWAY 16/34 CLOSURE REQUIRED BY THE CONTRACTOR LIQUIDATED DAMAGES IN THE AMOUNT OF \$2,500 MAY BE ASSESSED.

WORK AREA	ALLOWABLE WORK PERIODS	OPERATIONAL STATUS/ RESTRICTIONS
PHASE 1 WORK INSIDE RUNWAY 16/34 SAFETY AREA MASS EXCAVATION AND SITE WORK	SEE SEQUENCE OF CONSTRUCTION PHASING AND SCHEDULE	RUNWAY 16/34 CLOSED TAXIWAY DELTA, EAST OF RUNWAY 16/34 CLOSED TAXIWAY L5 CLOSED TAXIWAY K5 CLOSED TAXIWAY A, WEST OF RUNWAY 12/30 CLOSED RUNWAY 34 HOLD PAD CLOSED
PHASE 2 WORK INSIDE RUNWAY 16/34 SAFETY AREA EMAS INSTALLATION	SEE SEQUENCE OF CONSTRUCTION PHASING AND SCHEDULE	RUNWAY 16/34 CLOSED TAXIWAY DELTA, EAST OF RUNWAY 16/34 CLOSED TAXIWAY L5 CLOSED TAXIWAY K5 CLOSED TAXIWAY A, WEST OF RUNWAY 12/30 CLOSED RUNWAY 34 HOLD PAD CLOSED

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
RUNWAY SAFETY AREA WIDTH (RSA)	500 (250' FROM C)	150 (75' FROM C)	120 (60' FROM C)
RUNWAY OBJECT FREE AREA WIDTH (ROFA)	800	500	400
TAXIWAY SAFETY AREA WIDTH (TSA)	118	79	49
TAXIWAY OBJECT FREE AREA WIDTH (TOFA)	186 (93' FROM C)	131(65.5' FROM C)	89 (44.5' FRM C)

DATA FROM 2009 CEA APPROVED ALP



DETAIL A

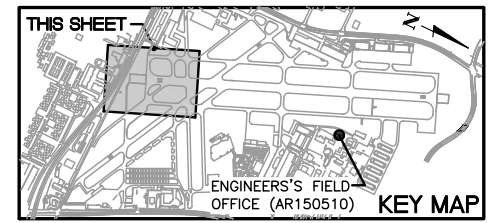
- 2" MILL (AR401650) AND 2" BITUMINOUS SURFACE OVERLAY (AR401610) AT END OF PROJECT. CONTRACTOR TO MARK (AR620520) PARKING STALLS PER AIRPORT.
- TEMPORARY WIDENING OF ACCESS ROAD: STRIP TOPSOIL (AR152410), PLACE 12 INCHES OF PGE (AR208515), 8" CRUSHED AGGREGATE (AR209608) AND 6 INCHES OF BITUMINOUS BASE COURSE (AR403610).

LEGEND

- PHASE 1 WORK AREA
- PHASE 2 WORK AREA
- AIRCRAFT MOVEMENT AREA ALL PHASES
- ALL PHASES IDOT TYPE II BARRICADES (20' SPACING) WITH STEADY OR FLASHING RED LIGHTS FOR STAGING AREA (TO REMAIN FOR DURATION OF PROJECT)
- ALL PHASES IDOT TYPE II BARRICADES (20' SPACING) WITH STEADY OR FLASHING RED LIGHTS FOR HAUL ROUTE DESIGNATION (PLACED OUTSIDE ACTIVE RSA AND TOFA EVERY RUNWAY CLOSURE)
- PHASE 1 LOW PROFILE BARRICADES (PLACED OUTSIDE ACTIVE RSA AND TOFA EVERY RUNWAY CLOSURE)
- PHASE 2 LOW PROFILE BARRICADES (PLACED OUTSIDE ACTIVE RSA AND TOFA EVERY RUNWAY CLOSURE)
- TOFA - TAXIWAY OBJECT FREE AREA (TOFA)
- RSA - RUNWAY SAFETY AREA (RSA)
- X - RUNWAY CLOSED MARKER(S) (INCIDENTAL) (TO BE PLACED ON BOTH ENDS OF CLOSED RUNWAY 16/34, SEE NOTES AND DETAILS)
- ⊗ - TAXIWAY CLOSURE MARKER (INCIDENTAL) (TO BE PLACED ON TAXIWAYS AS SHOWN, SEE NOTES AND DETAILS)
- ➔ - CONTRACTOR'S ACCESS/HAUL ROUTE

NOTES

- CONTRACTOR SHALL REMOVE TEMPORARY WIDENING AND RESTORE ENTRANCE TO ORIGINAL CONDITION AT END OF PROJECT (INCIDENTAL).
- FOR TEMPORARY DRAINAGE THE CONTRACTOR SHALL TIE NEW PVC OR CMP TO EXISTING DRAINAGE UNDER TEMPORARY WIDENING(S) AND REMOVE AT END OF PROJECT (INCIDENTAL).



IL CONTRACT: PA056
IL LETTING ITEM: 1A
IL PROJECT: PWK-4182
S.B.G. PROJECT: 3-17-0018-B48

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE

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

CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)
SEQUENCE OF CONSTRUCTION
PER AC 150/5370-2F (LATEST EDITION)

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CHICAGO EXECUTIVE AIRPORT

DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	BW
DATE:	08/1/2013
JOB No:	11290-03
SHEET 4 OF 24 SHEETS	

DATE: Thursday, August 01, 2013, 1:17:06 PM
FILE: K:\Chicago\11290-03_Airport\11290-03_Sheet34\Emas-Seq - Layout1.dwg
UPDATE BY: Jeremy Linke
LAYOUT: 4_34Emas-Seq - Layout1
IMAGE FILES: pwk\m\LOGO_CEA-4-Color-Small (2).tif
KREF DWG: 10421_34 Emas.dwg
6/16/2013 10:44:48 AM

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 PHASING AND 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 ENGINEER AND AIRPORT.
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 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 SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
10. MATERIALS REMOVED FROM THE PROJECT WILL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFF AIRPORT PROPERTY, UNLESS NOTED OTHERWISE.
11. PAYMENT FOR TRAFFIC CONTROL INCLUDING, BUT NOT LIMITED TO BARRICADES, CONSTRUCTION FENCE, SIGNING, RUNWAY AND TAXIWAY CLOSED MARKERS, SAFETY AND OBJECT FREE AREAS, LATHE AND RIBBON, ETC. SHALL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. LOW PROFILE BARRICADES END TO END AND IDOT TYPE II BARRICADES AT 10-FOOT CENTERS WITH TWO ORANGE FLAGS (20" x 20") BETWEEN EACH SET OF BARRICADES OR 4' HIGH ORANGE CONSTRUCTION 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 WEIGHTED TO PREVENT BLOWING OVER. BARRICADES SHALL HAVE FLASHING RED LIGHT(S) AND CONFORM TO IDOT STANDARD 701901-02, TYPE II AND LOW PROFILE BARRICADES SHALL CONFORM TO THE DETAILS IN THE PLANS AND SEQUENCE OF CONSTRUCTION. BARRICADE INSTALLATION WILL BE REQUIRED PRIOR TO ACCESS TO THE WORK AREA 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. ALL BARRICADES SHALL BE PLACED OUTSIDE OF ACTIVE SAFETY AREAS AND OBJECT FREE 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 OR A WORKING BEACON LIGHT ON ALL EQUIPMENT AT ALL TIMES DURING CONSTRUCTION. SEE FLAG DETAIL, THIS SHEET.
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 AN ASPHALT/STONE TRUCK WHICH HAS A MAXIMUM HEIGHT OF 25 FEET IN A DUMP POSITION.
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 PREVIOUS 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 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. VEHICLES AND EQUIPMENT SHALL NOT BE ALLOWED WITHIN THE TAXIWAY OBJECT FREE AREA AND RUNWAY SAFETY AREA OF ACTIVE TAXIWAYS AND 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 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 SPECIAL PROVISIONS FOR SPECIFIC REQUIREMENTS. THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAS 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 DEFICIENCIES IN THESE SYSTEMS DUE TO THE ACTS OF CONTRACTOR OR HIS SUBCONTRACTORS, SUPPLIERS OR CONSULTANTS SHALL BE REPAIRED IMMEDIATELY.

CONTRACTOR CROSSING RUNWAY SAFETY AREAS (RSA) AND TAXIWAY OBJECT FREE AREAS (TOFA)

- 32. 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 OCCURRENCE) DUE TO AIRFIELD INCURSIONS BY HIS EMPLOYEES, SUBCONTRACTORS, SUPPLIERS, CONSULTANTS AND/OR AGENTS.
33. 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 SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

LIMITATIONS ON CONSTRUCTION WITHIN RUNWAY SAFETY AREAS (RSA) AND TAXIWAY OBJECT FREE AREAS (TOFA)

- RUNWAYS:
34. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER TEN (10) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS. ANY WORK WITHIN THE RUNWAY SAFETY AREA WILL REQUIRE A RUNWAY CLOSURE. WORK SHALL BE EXPEDITED IN THESE AREAS AND AT THE END OF EACH WORKING PERIOD THESE AREAS SHALL BE SMOOTHLY GRADED TO ALLOW THE RUNWAY TO BE REOPENED PER FAA REQUIREMENTS. AT LEAST ONE OF THE RUNWAYS SHALL REMAIN IN OPERATION AT ALL TIMES. IF NECESSARY, STEEL PLATES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR TO COVER ANY OPEN TRENCHES OR EXCAVATION WITHIN THE RSA AT NO ADDITIONAL COST TO THE CONTRACT. NO MATERIAL SHALL BE STOCKPILED WITHIN THE RSA. IF DURING RUNWAY CLOSURE AN EMERGENCY IS DECLARED, THE CONTRACTOR SHALL IMMEDIATELY CLEAR THE RUNWAY OF ALL VEHICLES, MEN, EQUIPMENT AND BARRICADES.
TAXIWAYS:
35. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER FIVE (5) WORKING DAYS IN ADVANCE FOR WORK WITHIN THE TAXIWAY OBJECT FREE AREA. ANY WORK WITHIN THE TAXIWAY OBJECT FREE AREA WILL REQUIRE A TAXIWAY CLOSURE. CONSTRUCTION MAY BE ALLOWED UP TO THE EDGE OF THE TAXIWAY PAVEMENTS WITHOUT CLOSURE ON A LIMITED BASIS AS DETERMINED BY THE AIRPORT MANAGER AND THE CONTRACTOR WILL BE REQUIRED TO HAVE WING WALKERS AND FLAGGERS AT HIS OWN COST. WORK WITHIN THE TAXIWAY OBJECT FREE AREA SHALL BE EXPEDITED AND AT THE END OF EACH WORKING PERIOD THESE AREAS SHALL BE SMOOTHLY GRADED TO ALLOW THE TAXIWAY TO BE REOPENED PER FAA REQUIREMENTS. IF NECESSARY, STEEL PLATES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR TO COVER ANY OPEN TRENCHES OR EXCAVATION WITHIN THE TOFA AT NO ADDITIONAL COST TO THE CONTRACT. 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.

DESIGN AIRCRAFT APPROACH CATEGORY: D
DESIGN AIRPORT GROUP: III
RUNWAY 34 END EMAS
MAXIMUM ANTICIPATED WINGSPAN OF ADG III
GULFSTREAM G500 - WINGSPAN = 93.5'
COMPUTED TAXILANE CENTERLINE TO OBJECT SEPARATION (TOFA) = 66.1'

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

- REHABILITATION OF 34 HOLD PAD IN SE QUADRANT.
CONSTRUCTION OF BYPASS TAXIWAY IN NW QUADRANT OR HAUL ROAD ACCESS DEVELOPMENT IN SE QUADRANT
HAWTHORNE/SOVEREIGN DEVELOPMENT IN SE QUADRANT
REHABILITATION OF EAST QUADRANT APRON IN EAST QUADRANT
RELOCATE AIRPORT BEACON IN NE QUADRANT
EAST QUADRANT HANGAR AND APRON DEVELOPMENT IN EAST QUADRANT

GROUND CONTROL FREQUENCY: 121.7 MHz
AIR CONTROL FREQUENCY: 119.9 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.

TABLE 1 - CRITICAL POINTS

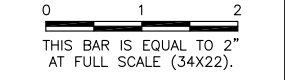
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NOTES - ALL PHASES

- 1. 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.
2. ALL TEMPORARY FENCING SHALL BE 6' CHAIN LINK FENCING AS APPROVED BY THE AIRPORT AND SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT, UNLESS SPECIFICALLY OUT ON THE PLANS.

IL. CONTRACT: PA056
IL. LETTING ITEM: 1A
IL. PROJECT: PWK-4182
S.B.G. PROJECT: 3-17-0018-B48
SURVEY BOOK # BOOK #

REVISIONS table with columns: NUMBER, BY, DATE



CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)
SEQUENCE OF CONSTRUCTION
GENERAL NOTES

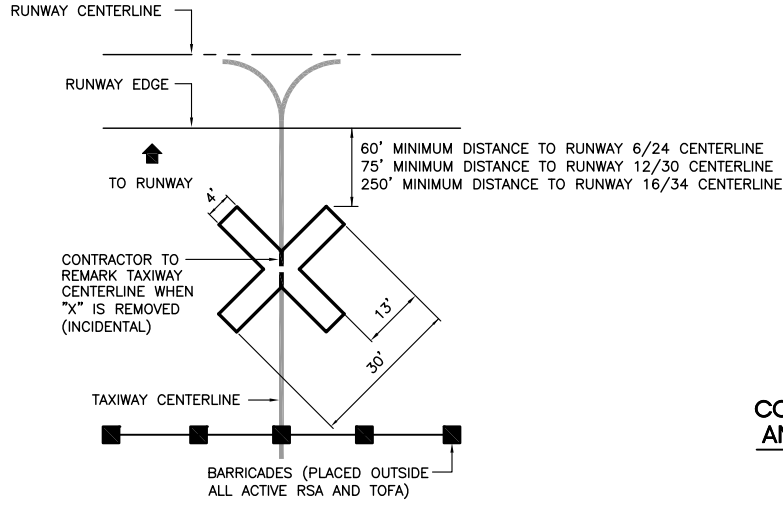
CMT CONSULTING ENGINEERS logo and contact information: CHICAGO EXECUTIVE AIRPORT, License No. 84-000693

DESIGN BY: JRL
DRAWN BY: JRO
CHECKED BY: DLP
APPROVED BY: BW
DATE: 08/1/2013
JOB No: 11290-03

DATE: Thursday, August 01, 2013, 1:17:11 PM
FILE: K:\Chicago\executive\11290-03_Awp\4484\MS Draw\Sheet\4484.msx - See Notes - Layout1.dwg
UPDATE BY: Jeremy Linke
LAYOUT: 5_4484.msx - See Notes - Layout1

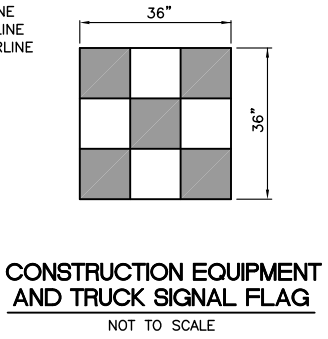
		ANTICIPATED ACCELERATED CONSTRUCTION SCHEDULE							
		PHASE 1 - SITEWORK - WEEKENDS					PHASE 2 - EMAS - WEEKNIGHTS		
ITEM	DESCRIPTION	Weekend 1	Weekend 2	Weekend 3	Weekend 4	Weekend 5	Nights	Nights	Nights
		10PM Fri -6AM Mon 5	10PM Fri -6AM Mon 5	10PM Fri -6AM Mon 5	10PM Fri -6AM Mon 5	10PM Fri -6AM Mon 5	10PM-6AM 7	10PM-6AM 7	10PM-6AM 2
		WORK PERIODS	WORK PERIODS	WORK PERIODS	WORK PERIODS	WORK PERIODS	WORK PERIODS	WORK PERIODS	WORK PERIODS
ALL PHASES - PRIOR TO CLOSING RUNWAY									
-	Coordinate temporary Runway 16/34 closure with Engineer and Airport.								
-	Coordinate FAA NAVaids shutdown with FAA.								
-	Disconnect appropriate electrical circuits in airfield vault.								
-	Place temporary runway closure markers at ends of Runway 16 and 34.								
-	Place barricades and cones as shown or as directed by the Airport.								
ALL PHASES - PRIOR TO OPENING RUNWAY									
-	Patch/fill all trenches and grade in conformance with plans in runway safety area.								
-	Turn on and check all appropriate electrical circuits in airfield vault.								
-	Sweep Runway, perform safety inspection with Airport and coordinate runway opening.								
PHASE 1 - SITEWORK									
AR108XXX	CABLE								
AR110XXX	DUCT								
AR110 / 125 / 800 / 910	ELEC. ITEMS, ADJUSTMENTS, MARKERS & SIGNS								
AR152410	UNCLASSIFIED EXCAVATION								
AR156XXX	EROSION CONTROL & SWPPP								
AR208515	POROUS GRANULAR EMBANKMENT								
AR209XXX	CRUSHED AGG. BASE COURSE								
AR401610	BITUMINOUS SURFACE COURSE								
AR401XXX	BIT. PAVEMENT MILLING & REMOVAL								
AR403610	BITUMINOUS BASE COURSE								
AR6205XX	PAVEMENT MARKING								
AR705506	6" PERFORATED UNDERDRAIN								
AR800207	EMAS CONCRETE GRADE BEAM								
AR901 & AR908	SEEDING & MULCHING								
PHASE 2 - EMAS INSTALLATION									
AR800208 & AR800209	EMAS BED INSTALLATION								
AR800206	ELEVATED RETROREFLECTIVE MARKER - TYPE 2								
END OF PROJECT									
-	Coordinate turning on FAA NAVaids with FAA.								
-	Coordinate FAA Flight Check with Engineer, Airport and FAA.								

NOTES 1) ASSUMPTIONS: 1 WORK PERIOD = 8 HOURS OF WORK
1 WEEKEND 10PM FRI - 6AM MON = 56 HOURS. ANTICIPATE PUTTING IN 40 HOURS PER WEEKEND = 5 WORK PERIODS, REMAINING TIME IS BUFFER FOR OPENING, EMERGENCIES AND WEATHER
2) AS APPROVED BY THE AIRPORT, ADDITIONAL WEEK NIGHT CLOSURES AND/OR WEEKEND CLOSURES MAY BE REQUIRED TO COMPLETE THE PROJECT IF CLOSURES ARE CANCELED DUE TO ANTICIPATED ADVERSE WEATHER CONDITIONS.
3) PHASE 1 SITEWORK SHALL NOT BE INITIATED UNTIL A FIRM SHIPPING DATE IS ESTABLISHED BETWEEN THE CONTRACTOR AND THE EMAS MANUFACTURER.

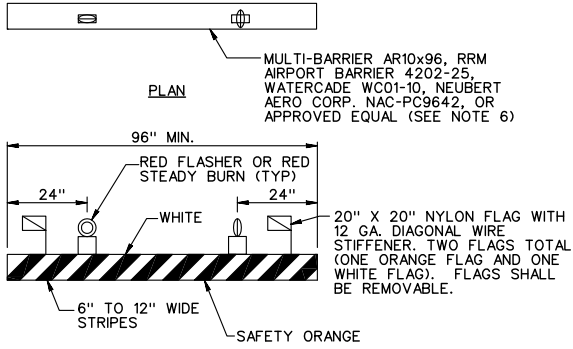


CLOSED TAXIWAY MARKER DETAIL
NOT TO SCALE

- 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 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.



CONSTRUCTION EQUIPMENT AND TRUCK SIGNAL FLAG
NOT TO SCALE

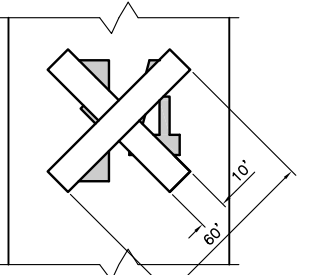


LOW PROFILE LIGHTED BARRICADE
NOT TO SCALE

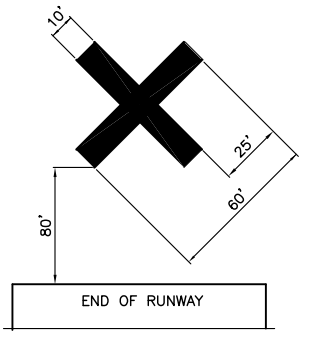
- BARRICADE NOTES:**
- FLASHER OR STEADY BURN LIGHTS SHALL BE BATTERY OR SOLAR POWER OPERATED. LENS SHALL BE RED AND BE ABLE TO ROTATE 90°.
 - FACING OF BARRICADE SHALL BE COVERED WITH REFLECTIVE TAPE OR PAINT.
 - BARRICADES TO BE PLACED END TO END AS INDICATED AT THE LOCATIONS SHOWN ON THE PLANS, ALONG OPERATIONAL PAVEMENT ADJACENT TO CONSTRUCTION OR AS DIRECTED BY THE RESIDENT ENGINEER OR AIRPORT. 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 ITS COMPONENTS, AND WEIGHTED TO AVOID BEING BLOWN OVER.
 - BARRICADES SHALL BE OF A COMMERCIAL DESIGN.

CLOSED RUNWAY MARKER NOTES

- 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 ON PAVEMENT SHALL BE PLACED OVER EXISTING RUNWAY NUMERALS AS SHOWN.
- COST OF FURNISHING, INSTALLING, MAINTAINING AND REMOVING MARKERS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- 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. THE CONTRACTOR SHALL MARK THE RUNWAYS TO BE CLOSED BY PLACING A YELLOW CROSS AT THE LOCATION AND DIMENSIONS DETAILED ON THIS SHEET. 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 MARKER DETAIL
ON PAVEMENT - NO SCALE

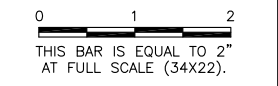


OFF PAVEMENT TEMPORARY CLOSED RUNWAY MARKER DETAIL
NO SCALE

IL CONTRACT: PA056
IL LETTING ITEM: 1A
IL PROJECT: PWK-4182
S.B.G. PROJECT: 3-17-0018-B48

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE

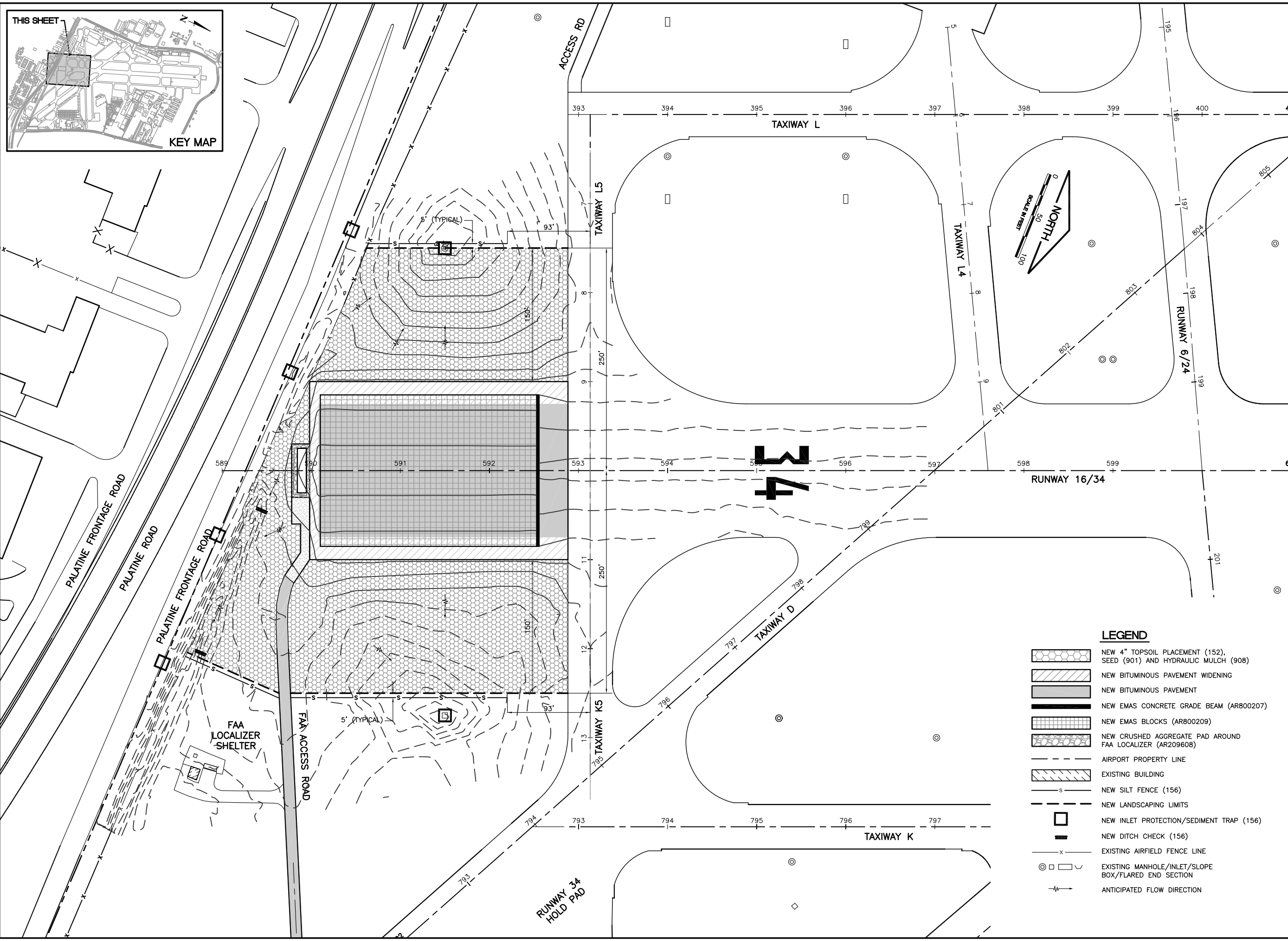
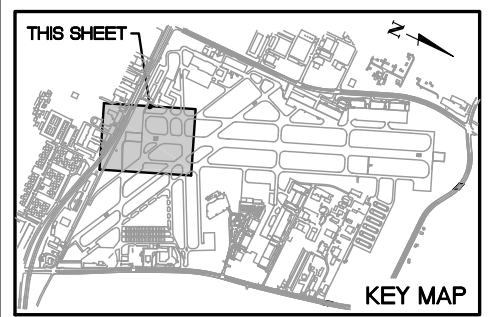


CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)
SEQUENCE OF CONSTRUCTION SCHEDULE AND DETAILS

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CHICAGO EXECUTIVE AIRPORT

DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	BW
DATE:	08/1/2013
JOB No:	11290-03

DATE: Thursday, August 01, 2013, 1:17:27 PM
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- LEGEND**
- NEW 4" TOPSOIL PLACEMENT (152), SEED (901) AND HYDRAULIC MULCH (908)
 - NEW BITUMINOUS PAVEMENT WIDENING
 - NEW BITUMINOUS PAVEMENT
 - NEW EMAS CONCRETE GRADE BEAM (AR800207)
 - NEW EMAS BLOCKS (AR800209)
 - NEW CRUSHED AGGREGATE PAD AROUND FAA LOCALIZER (AR209608)
 - AIRPORT PROPERTY LINE
 - EXISTING BUILDING
 - NEW SILT FENCE (156)
 - NEW LANDSCAPING LIMITS
 - NEW INLET PROTECTION/SEDIMENT TRAP (156)
 - NEW DITCH CHECK (156)
 - EXISTING AIRFIELD FENCE LINE
 - EXISTING MANHOLE/INLET/SLOPE BOX/FLARED END SECTION
 - ANTICIPATED FLOW DIRECTION

IL. CONTRACT: PA056
 IL. LETTING ITEM: 1A
 IL. PROJECT: PWK-4182
 S.B.G. PROJECT: 3-17-0018-B48

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE

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

**CHICAGO EXECUTIVE AIRPORT
 WHEELING/PROSPECT HEIGHTS, ILLINOIS
 CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)
 STORM WATER POLLUTION PREVENTION PLAN**

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DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	BW
DATE:	08/1/2013
JOB No:	11290-03
SHEET 7 OF 24 SHEETS	

DATE: Thursday, August 01, 2013, 1:17:31 PM
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UPDATE BY: Jeremy Linke
LAYOUT: 8_34EMAS-swppp_Notes - Layout1
Bdl(Z) jlpml - Notes
IMAGE FILES: pwk\m\OGC_GEA-4-COIO-Sum - Layout1
XREF DWG: bchm_34_ems.dwg

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 AT 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 BITUMINOUS PAVEMENT WIDENING AND INSTALLING AN EMAS SYSTEM AT THE CHICAGO EXECUTIVE AIRPORT. THE PROJECT INCLUDES EARTH EXCAVATION, EMBANKMENT, UNDER DRAINS, VARIOUS PAVEMENT ITEMS, ELECTRICAL WORK, EMAS INSTALLATION AND OTHER MISCELLANEOUS CONSTRUCTION WORK.

DESCRIPTION OF CONSTRUCTION ACTIVITY:

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 GRUBBING, EXCAVATION AND GRADING:

PLACEMENT, MAINTENANCE, REMOVAL AND PROPER CLEAN-UP OF TEMPORARY EROSION CONTROL. SUCH AS PERIMETER SILT FENCE, TEMPORARY DITCH CHECKS AND INLET PROTECTION.

REMOVAL, ADJUSTMENTS AND INSTALLATION OF ELECTRICAL AND MISCELLANEOUS ITEMS.

EXCAVATION, STABILIZATION AND AGGREGATE BASE INSTALLATION FOR BITUMINOUS PAVEMENT WIDENING.

INSTALLATION OF UNDERDRAIN.

CONSTRUCTION OF CONCRETE EMAS BEAM.

VARIABLE DEPTH PAVEMENT MILLING.

CONSTRUCTION OF NEW BITUMINOUS PAVEMENTS AND OVERLAYS.

RSA GRADING, SEEDING AND MULCHING.

EMAS BLOCK INSTALLATION.

INSTALLATION OF NEW PAVEMENT MARKING AND RETROREFLECTIVE MARKERS.

PLACEMENT OF PERMANENT EROSION CONTROL, SUCH AS SEEDING, MULCHING AND EROSION CONTROL BLANKET. REMOVAL AND DISPOSAL OF TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES.

AREA OF CONSTRUCTION SITE:

THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE 4.1 ACRES OF WHICH 2.8 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 SITE DRAINS INTO THE DES PLAINES RIVER THROUGH A STORM SEWER SYSTEM.

EROSION AND SEDIMENT CONTROL:

DESCRIPTION OF STABILIZATION PRACTICES AT THE BEGINNING OF CONSTRUCTION:

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: TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, EROSION CONTROL BLANKET, SOD, EROSION CONTROL BLOCK, PROTECTION OF TREES, PRESERVATION OF NATURAL VEGETATION, AND ALL OTHER APPROPRIATE MEASURES AS DIRECTED BY THE ENGINEER. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICAL 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.

AREAS OF EXISTING VEGETATION (WOOD AND GRASSLANDS) OUTSIDE THE PROPOSED CONSTRUCTION LIMITS SHALL BE IDENTIFIED BY THE ENGINEER FOR PRESERVING AND SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES.

DEAD, DISEASED, OR UNSUITABLE VEGETATION WITHIN THE SITE SHALL BE REMOVED AS DIRECTED BY THE ENGINEER.

AS SOON AS REASONABLE ACCESS IS AVAILABLE TO ALL LOCATIONS WHERE WATER DRAINS AWAY FROM THE PROJECT, TEMPORARY DITCH CHECKS, INLET PROTECTION AND PERIMETER SILT FENCE SHALL BE INSTALLED AS CALLED OUT IN THE PLAN AND 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.

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.

EARTH STOCKPILES SHALL BE TEMPORARILY SEEDED, AT THE CONTRACTORS EXPENSE, IF THEY ARE TO REMAIN UNUSED FOR MORE THAN FOURTEEN DAYS.

THE DOWN STREAM SIDE OF ALL STOCKPILES SHALL BE ENCOMPASSED WITH EROSION CONTROL BARRIER.

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. CONSTRUCT DITCHES AND PROVIDE TEMPORARY EROSION CONTROL SYSTEMS.

C. BUILD NECESSARY EMBANKMENT AT CULVERT/STORM SEWER LOCATIONS AND THEN EXCAVATE AND PLACE PIPE.

D. EXCAVATED AREAS AND EMBANKMENT AREAS SHALL BE PERMANENTLY SEEDED OR SODDED 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.

CONSTRUCTION EQUIPMENT SHALL BE STORED AND FUELED ONLY AT DESIGNATED LOCATIONS WITHIN THE STAGING AREA. 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.

THE RESIDENT ENGINEER SHALL INSPECT THE PROJECT PERIODICALLY DURING CONSTRUCTION ACTIVITIES. INSPECTION SHALL ALSO BE DONE WEEKLY AND AFTER RAINS OF 1/2 OR GREATER OR EQUIVALENT SNOWFALL AND DURING WINTER SHUTDOWN PERIOD. THE PROJECT SHALL ADDITIONALLY BE INSPECTED BY THE RESIDENT ENGINEER ON A BI-WEEKLY BASIS TO DETERMINE THAT THE EROSION AND SEDIMENT CONTROL EFFORTS ARE IN PLACE AND EFFECTIVE AND IF OTHER EROSION CONTROL WORK IS NECESSARY.

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.

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.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING SOIL CONTAMINATION FROM BUILDING MATERIALS, FERTILIZERS, CHEMICALS, PAVEMENT MARKING, WASTE PILES, FUEL CONTAINMENT, AND ANY OTHER POTENTIAL HAZARDOUS MATERIALS THAT MAY EXIST ONSITE.

NO DEDICATED CONCRETE OR ASPHALT BATCH PLANTS SHALL BE LOCATED ON THIS SITE.

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.

COST OF MAINTAINING THE VARIOUS TEMPORARY EROSION CONTROL SYSTEMS SHALL BE INCLUDED INCLUDED IN THE UNIT BID PRICE FOR THE VARIOUS TEMPORARY EROSION CONTROL PAY ITEMS.

ONCE PERMANENT EROSION CONTROL SYSTEMS AS PROPOSED IN THE PLANS ARE FUNCTIONAL AND ESTABLISHED, TEMPORARY ITEMS SHALL BE REMOVED, CLEANED UP, AND DISTURBED TURF RE-SEEDED AND/OR SODDED.

MAINTENANCE AFTER CONSTRUCTION:

CONSTRUCTION IS COMPLETE AFTER FINAL ACCEPTANCE BY THE ILLINOIS DIVISION OF AERONAUTICS. MAINTENANCE OF TEMPORARY AND PERMANENT EROSION CONTROL SYSTEMS UP TO THIS DATE WILL BE REQUIRED BY THE CONTRACTOR.

DOCUMENTATION:

PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL COMPLETE AND SUBMIT A "NOTICE OF INTENT (NOI)" PROPERLY SIGNED TO THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY.

PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL POST A SIGN OR OTHER NOTICE NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE. IF THIS IS NOT POSSIBLE, THEN IT MAY BE PERMITTED TO POST THIS NOTICE IN A LOCAL PUBLIC BUILDING. THE SIGN OR NOTICE MUST CONTAIN THE FOLLOWING:

1. A COPY OF THE COMPLETED NOTICE OF INTENT (NOI) AS SUBMITTED TO THE IEPA
2. THE LOCATION OF THE SWPPP AND NAME AND 24/7 TELEPHONE NUMBER OF THE CONTACT PERSON.

THROUGHOUT CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN AND UPDATE AN "AS-BUILT" SET OF STORM WATER POLLUTION PREVENTION PLANS IN THE PROJECT FILES. THE SWPPP SHALL BE UPDATED WITHIN 7-DAYS OF ANY MODIFICATIONS TO THE PLANS. THE SWPPP AND ALL REVISIONS SHALL BE RETAINED FOR THREE YEARS AFTER FINAL STABILIZATION OF THE SITE, WHICH SHALL BE DEFINED AS VEGETATION COVER OF AT LEAST 70% OF HISTORIC CONDITIONS.

A STORM WATER POLLUTION PREVENTION PLAN EROSION CONTROL INSPECTION REPORT (FORM BC 2259) SHALL BE COMPLETED WITH INSPECTION FREQUENCIES AS OUTLINED HEREIN. SWPPP REPORTS SHALL BE RETAINED FOR THREE YEARS AFTER THE DATE OF FINAL STABILIZATION AS DEFINED HEREIN.

IF ANY VIOLATION OF THE PROVISIONS OF THE PLAN IS IDENTIFIED DURING THE CONDUCT OF THE CONSTRUCTION COVERED IN THIS PLAN, THE ENGINEER AND/OR CONTRACTOR SHALL COMPLETE AND FILE AN "INCIDENT OF NONCOMPLIANCE (ION)" REPORT FOR THE IDENTIFIED VIOLATION. THE FORMS SHALL BE AS PROVIDED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, AND SHALL INCLUDE SPECIFIC INFORMATION ON THE INCIDENT THAT CAUSED NONCOMPLIANCE, ACTIONS THAT WERE TAKEN TO CORRECT THE NONCOMPLIANCE AND TO PREVENT ITS REOCCURRENCE, AND A STATEMENT DETAILING ANY ENVIRONMENTAL IMPACT WHICH MAY HAVE RESULTED FROM THE NONCOMPLIANCE. ALL REPORTS OF NONCOMPLIANCE SHALL BE SIGNED BY A RESPONSIBLE AUTHORITY IN ACCORDANCE WITH PART VI. G. OF THE GENERAL PERMIT.

AFTER PROJECT FINAL ACCEPTANCE, THE CONTRACTOR SHALL COMPLETE AND SUBMIT A "NOTICE OF TERMINATION (NOT)" FORM PROPERLY SIGNED TO THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY. FORMS FOR THE IEPA SHALL BE MAILED TO THE FOLLOWING ADDRESS:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF WATER POLLUTION CONTROL, MAIL CODE #15
ATTN: PERMIT SECTION
1021 NORTH GRAND AVENUE EAST
P.O. BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

NPDES PERMIT # _____
DATE ISSUED _____
DATE EXPIRED _____

GENERAL NOTES FOR SOIL EROSION AND SEDIMENT CONTROL:

1. ALL TREE PROTECTION, SEDIMENT CONTROL MEASURES, AND PERMANENT AND TEMPORARY STORM WATER PRACTICES SHALL BE IN PLACE PRIOR TO STARTING CONSTRUCTION.
2. NO WORK SHALL BE PERFORMED IN FLOWING WATER. WORK IN AND NEAR FLOWING WATER SHALL BE ISOLATED FROM CONCENTRATED FLOWS OR STREAM FLOWS AT ALL TIMES. THE USE OF EARTHEN MATERIAL FOR ISOLATION WILL NOT BE ACCEPTABLE.
3. CONSTRUCTION MATERIALS AND/OR OTHER STOCKPILES SHALL NOT BE LOCATED ON STREAM BANKS NOR IN THE PATH OF STREAM FLOW.
4. TEMPORARY EROSION CONTROL DEVICES SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
5. PERMANENT SEEDING SHALL BE USED WHENEVER POSSIBLE. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR PROLONG GRADING OR SHAPING SO THAT THE ENTIRE PROJECT CAN BE PERMANENTLY SEEDED AT ONE TIME.
6. THE CONTRACTOR SHALL INSPECT ADJACENT STREETS DAILY AND CLEAN ADJACENT STREETS WHEN NECESSARY. ADJACENT STREETS SHALL BE KEPT FREE OF SOIL AND DEBRIS.
7. SHOULD IT BE NECESSARY TO REMOVE ANY EROSION CONTROL DEVICES FOR CONSTRUCTION REASONS, THE CONTRACTOR SHALL FIRST OBTAIN PERMISSION AND SHALL REPLACE AND/OR REPAIR THE REMOVED DEVICES THE SAME DAY. THE COST OF REMOVING AND REPLACING THE DEVICE SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
8. ALL OTHER SOIL EROSION AND SEDIMENT CONTROL DEVICES AND MEASURES DEEMED NECESSARY BY THE RESIDENT ENGINEER, COOK COUNTY, CHICAGO EXECUTIVE AIRPORT, IDOT DIVISION OF AERONAUTICS, AND THE IEPA SHALL BE IMPLEMENTED IMMEDIATELY UPON NOTIFICATION OF THE CONTRACTOR.
9. THE CONTRACTOR SHALL PROVIDE LOCATIONS FOR CONCRETE TRUCK WASHOUT, AS APPROVED BY THE ENGINEER, PRIOR TO ANY CONCRETE POURS. THESE LOCATIONS SHALL NOT BE NEAR ANY STREAM OR BODY OF WATER. LOCATIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO ANY CONCRETE POURS. ADDITIONALLY THE CONTRACTOR SHALL PROVIDE ADEQUATE FACILITIES TO WASH OUT PAVING EQUIPMENT AND FINISHING TOOLS. ALL WASTE WATER AND EXCESS CONCRETE MATERIALS SHALL BE CONTAINED BY AN APPROVED CONCRETE WASHOUT FACILITY.
10. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES TO ENSURE THAT EROSION CONTROL MEASURES ARE CONSISTENT BETWEEN ALL PROJECT PHASES AND ALL SUB-CONTRACTORS.
11. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PROTECT WETLANDS TO REMAIN FROM DAMAGE BY SEDIMENT, CONSTRUCTION EQUIPMENT, OR BY HIS PERSONNEL. THE CONTRACTOR SHALL ASSURE THAT DEBRIS OR ANY CONSTRUCTION MATERIAL IS NOT DISPOSED OF IN THE WETLANDS.
12. WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION DEWATERING SHALL BE FILTERED BY AN APPROVED MEANS.
13. SEDIMENT COLLECTED DURING CONSTRUCTION BY THE VARIOUS TEMPORARY EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF ON A REGULAR BASIS. SEDIMENT SHALL BE REMOVED FROM EROSION CONTROL SYSTEMS WHEN THE HEIGHT OF THE SEDIMENT EXCEEDS ONE-HALF OF THE HEIGHT OF THE DEVICE OR AS RECOMMENDED BY THE MANUFACTURER, WHICHEVER IS LESS.
14. ALL EROSION CONTROL MEASURES SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES ARE OPERATIONAL.
15. THE CONDITION OF THE CONSTRUCTION SITE FOR 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. ALL OPEN AREAS THAT ARE TO REMAIN IDLE THROUGHOUT THE WINTER SHALL RECEIVE TEMPORARY EROSION CONTROL MEASURES INCLUDING TEMPORARY SEEDING, MULCHING AND/OR EROSION CONTROL BLANKET PRIOR TO THE END OF THE FALL GROWING SEASON. THE AREAS TO BE WORKED BEYOND THE END OF THE GROWING SEASON MUST INCORPORATE SOIL STABILIZATION MEASURES THAT DO NOT RELY ON VEGETATIVE COVER SUCH AS EROSION CONTROL BLANKET AND HEAVY MULCHING.
16. PERMANENT STABILIZATION SHALL BE COMPLETED WITHIN 7 DAYS FOR AREAS WHERE WORK IS COMPLETED.

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: CHICAGO EXECUTIVE AIRPORT MARKED: RUNWAY 34 END EMAS
SECTION: 13 PROJECT NUMBER: PWK-4182
COUNTY: COOK CONTRACT NUMBER: 3-17-0018-B48 (PA054)

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.

RECORD OF SITE DISTURBANCE AND STABILIZATION

MAJOR GRADING ACTIVITIES: LOCATION: _____	BEGINNING DATE: _____ COMPLETION DATE: _____
MAJOR GRADING ACTIVITIES: LOCATION: _____	BEGINNING DATE: _____ COMPLETION DATE: _____
SITE STABILIZATION: LOCATION: _____	BEGINNING DATE: _____ COMPLETION DATE: _____
SITE STABILIZATION: LOCATION: _____	BEGINNING DATE: _____ COMPLETION DATE: _____
CONSTRUCTION CEASED: EXPLANATION: _____	BEGINNING DATE: _____ COMPLETION DATE: _____

THE INFORMATION WITHIN THIS BOX SHALL BE COMPLETED BY THE CONTRACTOR AS CONSTRUCTION PROGRESSES IN ACCORDANCE WITH THE NPDES GENERAL PERMIT FOR STORMWATER DISCHARGES. THIS INFORMATION MAY ALSO BE NOTED DIRECTLY ON THE SWPPP SITE MAP.

IL CONTRACT: **PA056**

IL LETTING ITEM: **1A**

IL PROJECT: **PWK-4182**

S.B.G. PROJECT: **3-17-0018-B48**

SURVEY BOOK # BOOK #

REVISIONS

NUMBER	BY	DATE

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

CHICAGO EXECUTIVE AIRPORT
WHEELING PROSPECT HEIGHTS, ILLINOIS
CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)
STORM WATER POLLUTION PREVENTION PLAN
NOTES

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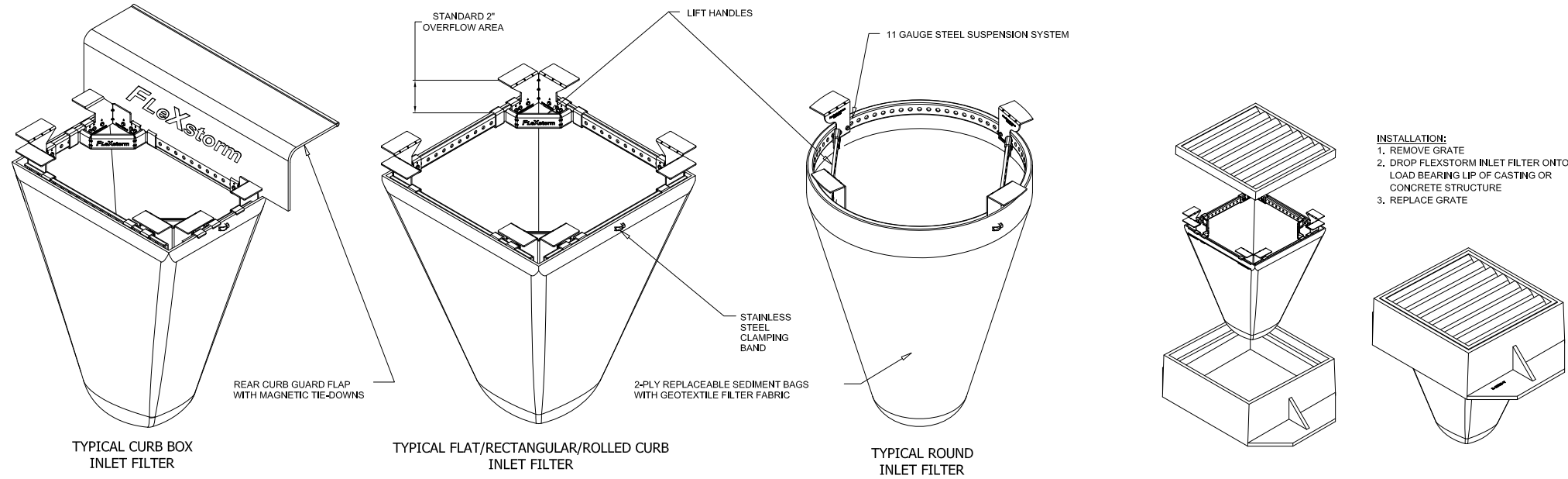
DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	BW
DATE:	08/1/2013
JOB No:	11290-03

KREF DWG: 11290-03-34-EMAS-SWPPP.dwg
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UPDATE BY: Jeremy Linke
 LAYOUT: 9-34-EMAS-SWPPP-Details - Layout1

DATE: Thursday, August 01, 2013, 1:17:36 PM
 FILE: K:\Chicago\11290-03-34-EMAS-SWPPP\Draw\Sheet\34-EMAS-SWPPP-Details - Layout1.dwg

IPP Flexstorm Inlet Filter Specifications		
Material Property	Test Method	Value (min ave)
> Inner Filter Bag Specs (2 ft³ min vol)		
		Non-Woven Woven Mono
Grab Tensile	ASTM D 4632	100 lbs 200 lbs
Puncture Strength	ASTM D 4833	65 lbs 90 lbs
Trapezoidal Tear	ASTM D 4533	45 lbs 75 lbs
UV Resistance	ASTM D 4355	70% at 500 hrs 90%
App Open Size (AOS)	ASTM D 4751	70 sieve (.212 mm) 40 sieve (.425 mm)
Permittivity	ASTM D 4491	2.0 /sec 2.1/sec
Water Flow Rate	ASTM D 4491	145 gpm/sqft 145 gpm/sqft
> Polyester Outer Reinforcement Bag Specifications		
Weight	ASTM D 3776	4.55 oz/sqyd +/- 15%
Thickness	ASTM D 1777	.040 +/- .005
> Frame Construction		
A36 Structural Steel; 11 Gauge; Zinc Plated	ASTM A 576	Tensile Strength > 58,000 psi; Yield Strength > 36,000 psi

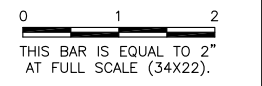


- INSTALLATION:**
1. REMOVE GRATE
 2. DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
 3. REPLACE GRATE

IL CONTRACT: **PA056**
 IL LETTING ITEM: **1A**
 IL PROJECT: **PWK-4182**
 S.B.G. PROJECT: **3-17-0018-B48**

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE

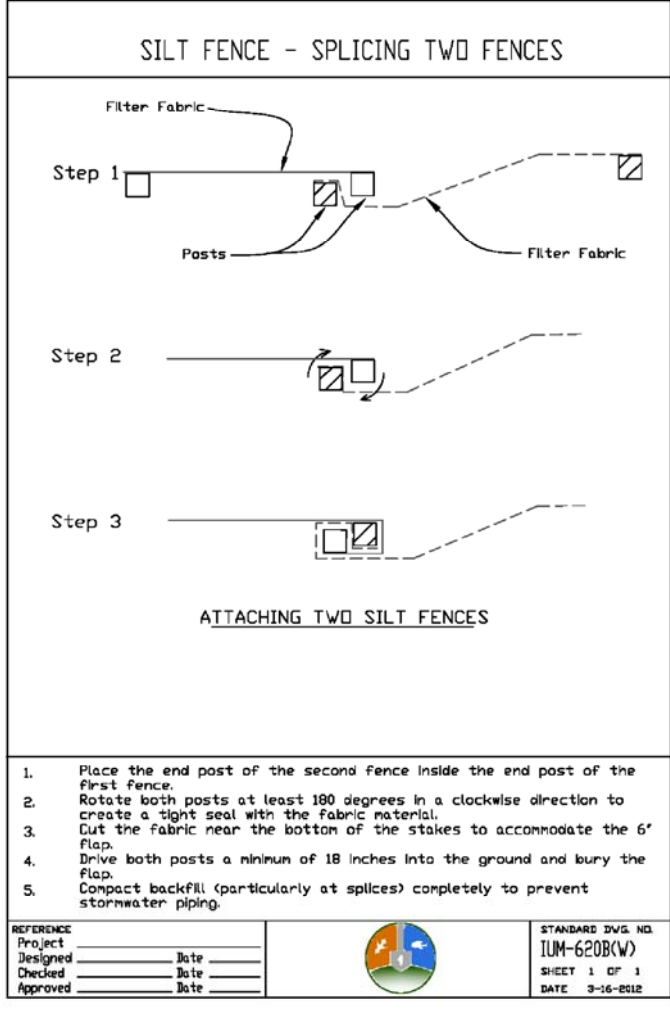
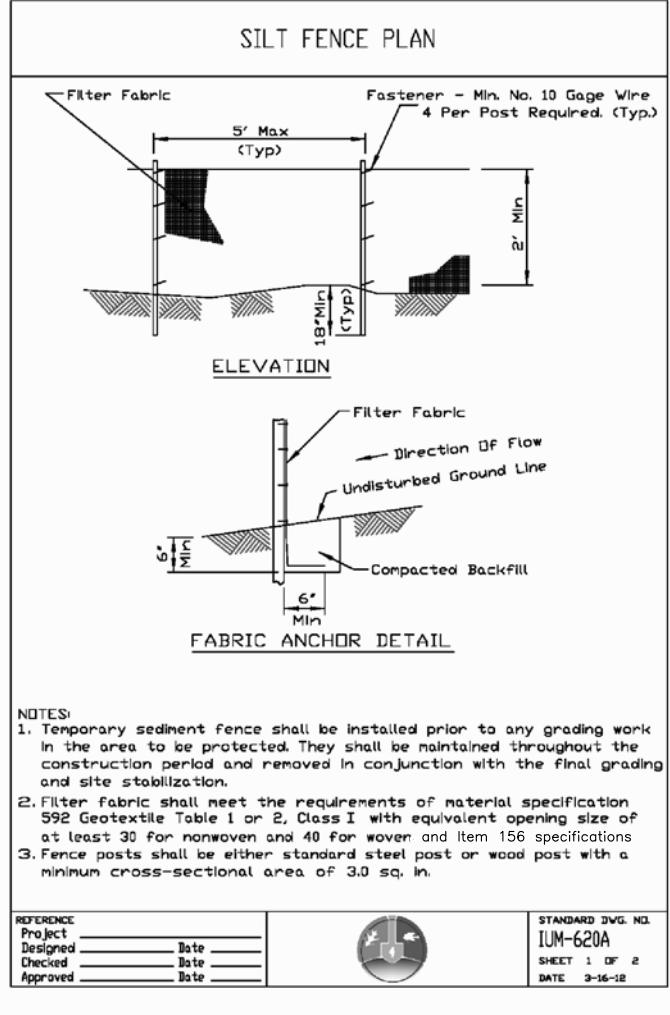
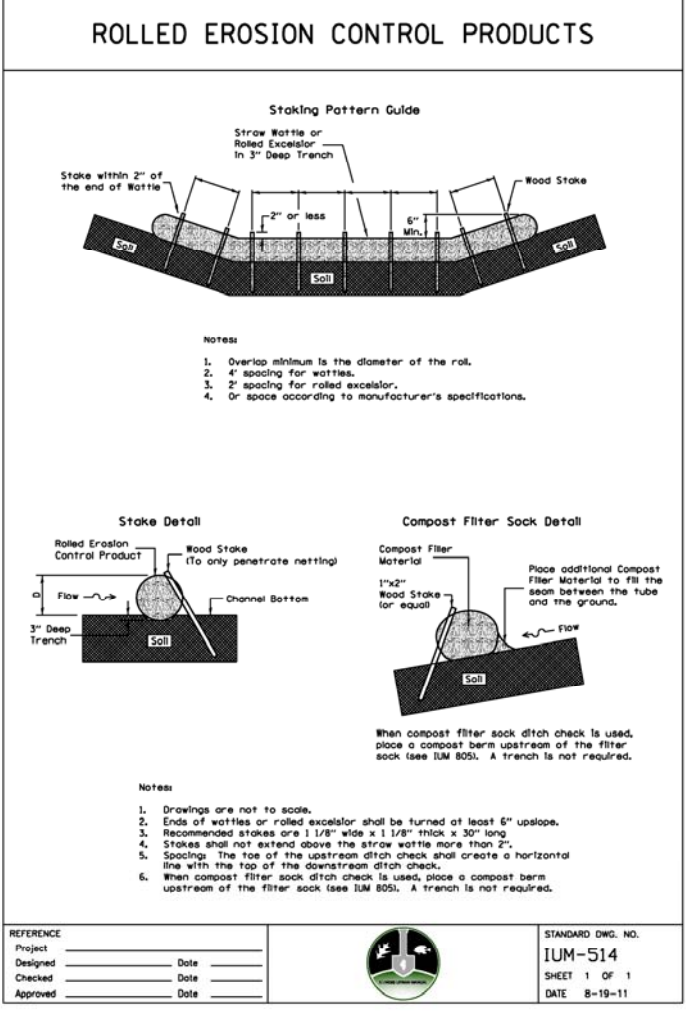


INLET PROTECTION / SEDIMENT TRAP
 NOT TO SCALE
 STORM SEWER INLET PROTECTION SHALL BE FLEXSTORM INLET FILTERS AS DETAILED HEREIN OR APPROVED EQUAL

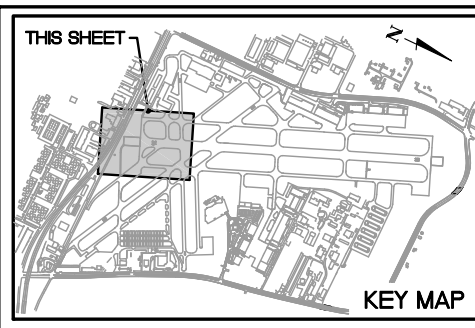
**CHICAGO EXECUTIVE AIRPORT
 WHEELING/PROSPECT HEIGHTS, ILLINOIS
 CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)
 STORM WATER POLLUTION
 PREVENTION PLAN (SWPPP) DETAILS**

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CHECKED BY:	DKP
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DATE:	08/1/2013
JOB No:	11290-03



DATE: Thursday, August 01, 2013, 1:17:43 PM
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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.

40 LF OF EXISTING 6' CHAIN LINK FENCE TO BE RELOCATED IN SAME LOCATION TO FACILITATE CONSTRUCTION AS NEEDED. PAID FOR ONCE AS AR162960 RELOCATE CLASS E FENCE (SEE PHASING NOTES ON SHEET 4)

REMOVE WOODEN SIGN (TYPICAL)
 REMOVE RETROREFLECTIVE MARKER (TYPICAL)

REMOVE WOODEN SIGN (TYPICAL)
 REMOVE RETROREFLECTIVE MARKER (TYPICAL)

EXISTING FAA LOCALIZER SHELTER AND EQUIPMENT

NEW 5 SY BITUMINOUS REMOVAL AND REPLACEMENT

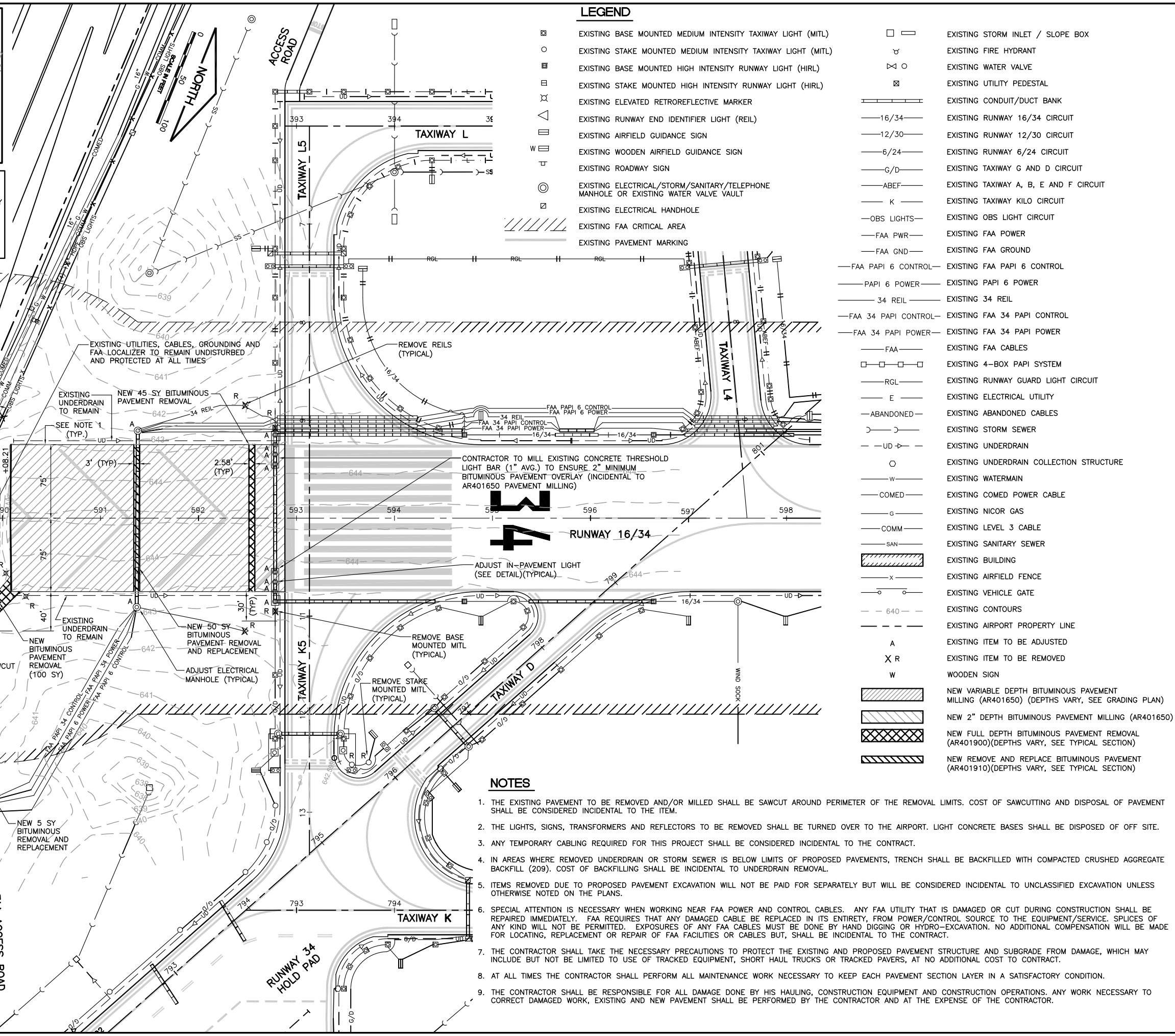
NEW BITUMINOUS PAVEMENT REMOVAL (100 SY)

EXISTING UNDERDRAIN TO REMAIN

NEW 50 SY BITUMINOUS PAVEMENT REMOVAL AND REPLACEMENT

EXISTING UNDERDRAIN TO REMAIN

CONTINUE 2" MILL TO EDGE OF TAXIWAY D



LEGEND

	EXISTING BASE MOUNTED MEDIUM INTENSITY TAXIWAY LIGHT (MITL)		EXISTING STORM INLET / SLOPE BOX
	EXISTING STAKE MOUNTED MEDIUM INTENSITY TAXIWAY LIGHT (MITL)		EXISTING FIRE HYDRANT
	EXISTING BASE MOUNTED HIGH INTENSITY RUNWAY LIGHT (HIRL)		EXISTING WATER VALVE
	EXISTING STAKE MOUNTED HIGH INTENSITY RUNWAY LIGHT (HIRL)		EXISTING UTILITY PEDESTAL
	EXISTING ELEVATED RETROREFLECTIVE MARKER		EXISTING CONDUIT/DUCT BANK
	EXISTING RUNWAY END IDENTIFIER LIGHT (REIL)		EXISTING RUNWAY 16/34 CIRCUIT
	EXISTING AIRFIELD GUIDANCE SIGN		EXISTING RUNWAY 12/30 CIRCUIT
	EXISTING WOODEN AIRFIELD GUIDANCE SIGN		EXISTING RUNWAY 6/24 CIRCUIT
	EXISTING ROADWAY SIGN		EXISTING TAXIWAY G AND D CIRCUIT
	EXISTING ELECTRICAL/STORM/SANITARY/TELEPHONE MANHOLE OR EXISTING WATER VALVE VAULT		EXISTING TAXIWAY A, B, E AND F CIRCUIT
	EXISTING ELECTRICAL HANDHOLE		EXISTING TAXIWAY KILO CIRCUIT
	EXISTING FAA CRITICAL AREA		EXISTING OBS LIGHT CIRCUIT
	EXISTING PAVEMENT MARKING		EXISTING FAA POWER
			EXISTING FAA GROUND
			EXISTING FAA PAPI 6 CONTROL
			EXISTING PAPI 6 POWER
			EXISTING 34 REIL
			EXISTING FAA 34 PAPI CONTROL
			EXISTING FAA 34 PAPI POWER
			EXISTING FAA CABLES
			EXISTING 4-BOX PAPI SYSTEM
			EXISTING RUNWAY GUARD LIGHT CIRCUIT
			EXISTING ELECTRICAL UTILITY
			EXISTING ABANDONED CABLES
			EXISTING STORM SEWER
			EXISTING UNDERDRAIN
			EXISTING UNDERDRAIN COLLECTION STRUCTURE
			EXISTING WATERMAIN
			EXISTING COMED POWER CABLE
			EXISTING NICOR GAS
			EXISTING LEVEL 3 CABLE
			EXISTING SANITARY SEWER
			EXISTING BUILDING
			EXISTING AIRFIELD FENCE
			EXISTING VEHICLE GATE
			EXISTING CONTOURS
			EXISTING AIRPORT PROPERTY LINE
			EXISTING ITEM TO BE ADJUSTED
			EXISTING ITEM TO BE REMOVED
			WOODEN SIGN
			NEW VARIABLE DEPTH BITUMINOUS PAVEMENT MILLING (AR401650) (DEPTHS VARY, SEE GRADING PLAN)
			NEW 2" DEPTH BITUMINOUS PAVEMENT MILLING (AR401650)
			NEW FULL DEPTH BITUMINOUS PAVEMENT REMOVAL (AR401900)(DEPTHS VARY, SEE TYPICAL SECTION)
			NEW REMOVE AND REPLACE BITUMINOUS PAVEMENT (AR401910)(DEPTHS VARY, SEE TYPICAL SECTION)

NOTES

- THE EXISTING PAVEMENT TO BE REMOVED AND/OR MILLED SHALL BE SAWCUT AROUND PERIMETER OF THE REMOVAL LIMITS. COST OF SAWCUTTING AND DISPOSAL OF PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE ITEM.
- THE LIGHTS, SIGNS, TRANSFORMERS AND REFLECTORS TO BE REMOVED SHALL BE TURNED OVER TO THE AIRPORT. LIGHT CONCRETE BASES SHALL BE DISPOSED OF OFF SITE.
- ANY TEMPORARY CABLING REQUIRED FOR THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- IN AREAS WHERE REMOVED UNDERDRAIN OR STORM SEWER IS BELOW LIMITS OF PROPOSED PAVEMENTS, TRENCH SHALL BE BACKFILLED WITH COMPACTED CRUSHED AGGREGATE BACKFILL (209). COST OF BACKFILLING SHALL BE INCIDENTAL TO UNDERDRAIN REMOVAL.
- ITEMS REMOVED DUE TO PROPOSED PAVEMENT EXCAVATION WILL NOT BE PAID FOR SEPARATELY BUT WILL BE CONSIDERED INCIDENTAL TO UNCLASSIFIED EXCAVATION UNLESS OTHERWISE NOTED ON THE PLANS.
- 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 TO THE CONTRACT.
- THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO PROTECT THE EXISTING AND PROPOSED PAVEMENT STRUCTURE AND SUBGRADE FROM DAMAGE, WHICH MAY INCLUDE BUT NOT BE LIMITED TO USE OF TRACKED EQUIPMENT, SHORT HAUL TRUCKS OR TRACKED PAVERS, AT NO ADDITIONAL COST TO CONTRACT.
- AT ALL TIMES THE CONTRACTOR SHALL PERFORM ALL MAINTENANCE WORK NECESSARY TO KEEP EACH PAVEMENT SECTION LAYER IN A SATISFACTORY CONDITION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE DONE BY HIS HAULING, CONSTRUCTION EQUIPMENT AND CONSTRUCTION OPERATIONS. ANY WORK NECESSARY TO CORRECT DAMAGED WORK, EXISTING AND NEW PAVEMENT SHALL BE PERFORMED BY THE CONTRACTOR AND AT THE EXPENSE OF THE CONTRACTOR.

IL. CONTRACT: **PA056**
 IL. LETTING ITEM: **1A**
 IL. PROJECT: **PWK-4182**
 S.B.G. PROJECT: **3-17-0018-B48**

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE

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

CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)

EXISTING CONDITIONS/PROPOSED REMOVALS

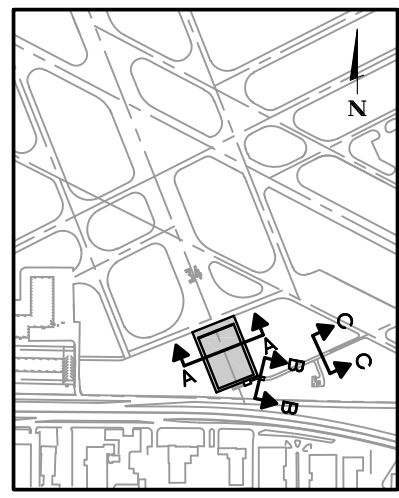
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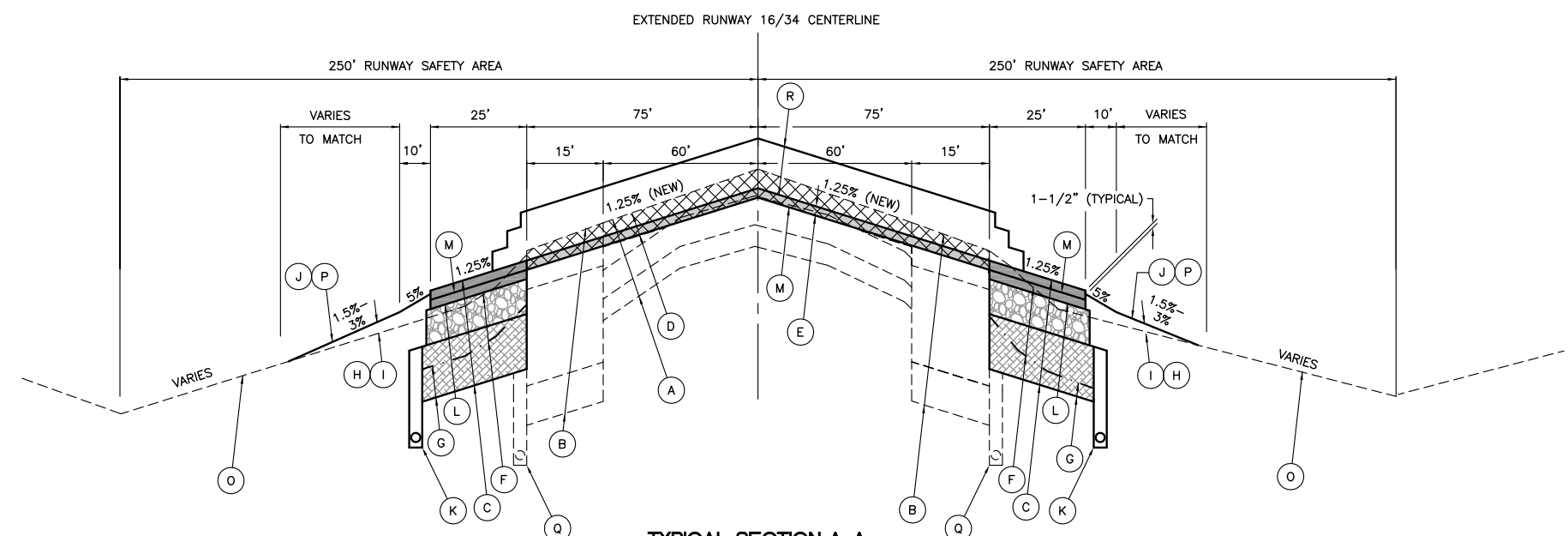
CHICAGO EXECUTIVE AIRPORT

DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	BW
DATE:	08/1/2013
JOB No:	11290-03
SHEET 10 OF 24 SHEETS	

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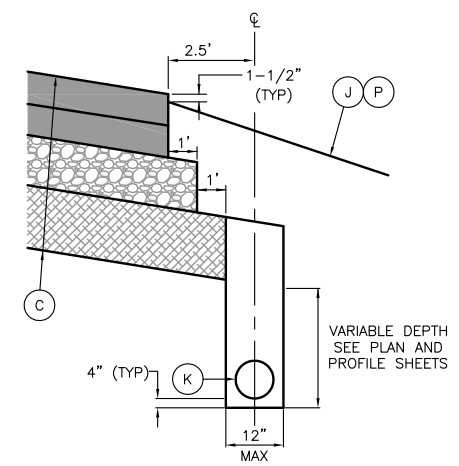


KEY MAP



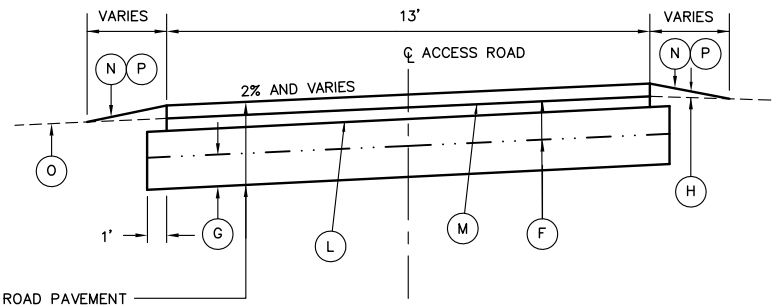
TYPICAL SECTION A-A
RUNWAY 34 END EMAS PAVEMENT

NOT TO SCALE



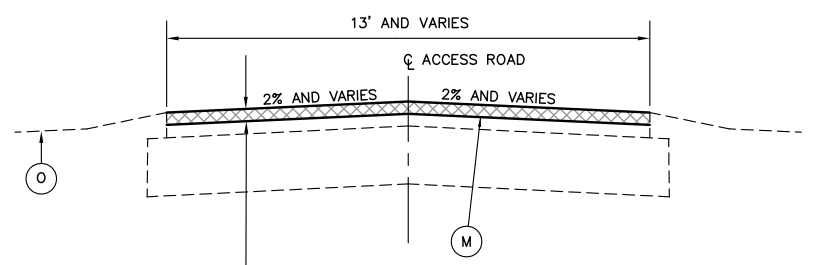
UNDERDRAIN DETAIL
EDGE OF PAVEMENT AREAS

NOT TO SCALE



TYPICAL SECTION B-B
NEW FAA ACCESS ROAD PAVEMENT

NOT TO SCALE



TYPICAL SECTION C-C
MILL AND OVERLAY EXISTING FAA ACCESS ROAD PAVEMENT

NOT TO SCALE

GENERAL NOTES

1. THE EXISTING PAVEMENT TO BE REMOVED AND MILLED SHALL BE SAW CUT AROUND PERIMETER OF REMOVAL LIMITS. COST OF SAW CUTTING, REMOVING AND DISPOSAL OF PAVEMENT SHALL BE CONSIDERED INCIDENTAL UNLESS OTHERWISE CALLED OUT ON PLANS.
2. ANY EXCESS MATERIAL INCLUDING CLAY, EXISTING AGGREGATE BASE, MILLINGS, AND TOPSOIL SHALL BE HAULED OFF AND DISPOSED OF BY THE CONTRACTOR.

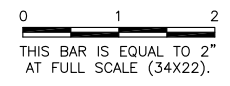
LEGEND

- (A) EXISTING BLAST PAD PAVEMENT - INNER 120' WIDE ±
EXISTING 4-1/2" BITUMINOUS PAVEMENT
EXISTING VARIABLE DEPTH BITUMINOUS LEVELING COURSE (0" TO 6")
EXISTING 8-1/2" BITUMINOUS PAVEMENT
EXISTING 6" CRUSHED AGGREGATE BASE COURSE
- (B) EXISTING BLAST PAD PAVEMENT - OUTER EDGE 15' WIDE ±
EXISTING 8" BITUMINOUS PAVEMENT
EXISTING 18" CRUSHED AGGREGATE BASE COURSE
EXISTING 6" AND VARIABLE DEPTH POROUS GRANULAR EMBANKMENT
- (C) NEW 25' BITUMINOUS PAVEMENT WIDENING
NEW 2" BITUMINOUS SURFACE COURSE (AR401610)
NEW 2" BITUMINOUS BASE COURSE (AR403610)
NEW 10" CRUSHED AGGREGATE BASE COURSE (AR209610)
NEW 12" POROUS GRANULAR EMBANKMENT (AR208515)
NEW SOIL STABILIZATION FABRIC (AR152540)
- (D) NEW VARIABLE DEPTH PAVEMENT MILLING (1-1/2" TO 5")(AR401650)
- (E) NEW 2" BITUMINOUS SURFACE COURSE OVERLAY (AR401610)
- (F) NEW 12" (AVG.) TOPSOIL STRIPPING (AR152410)
- (G) NEW UNCLASSIFIED EXCAVATION (AR152410)
- (H) NEW SHOULDER FILL (AR152410)
- (I) NEW TOPSOIL PLACEMENT (4" MINIMUM)(AR152410)
- (J) NEW SEEDING (AR901510) AND HYDRAULIC MULCHING (AR908510)
- (K) NEW 6" PERFORATED UNDERDRAIN, TRENCH ENVELOPE AND CA-7 BACKFILL (AR705506)
- (L) NEW PRIME COAT (AR602510)
- (M) NEW TACK COAT (AR603510)
- (N) NEW SEEDING (AR901510) AND HYDRAULIC MULCHING (AR908510)
- (O) EXISTING GROUNDLINE
- (P) NEW GROUNDLINE
- (Q) EXISTING UNDERDRAIN TO REMAIN
- (R) NEW EMAS BED (EMAS BLOCKS) (AR800209)

IL CONTRACT: PA056
 IL LETTING ITEM: 1A
 IL PROJECT: PWK-4182
 S.B.G. PROJECT: 3-17-0018-B48

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE



CHICAGO EXECUTIVE AIRPORT
 WHEELING/PROSPECT HEIGHTS, ILLINOIS
 CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)

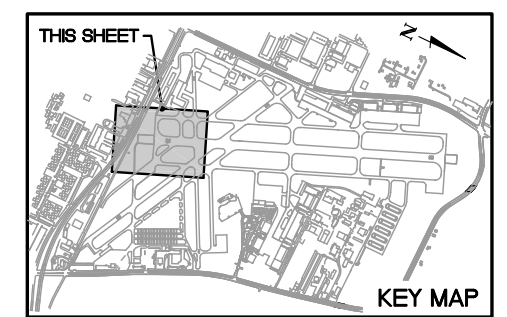
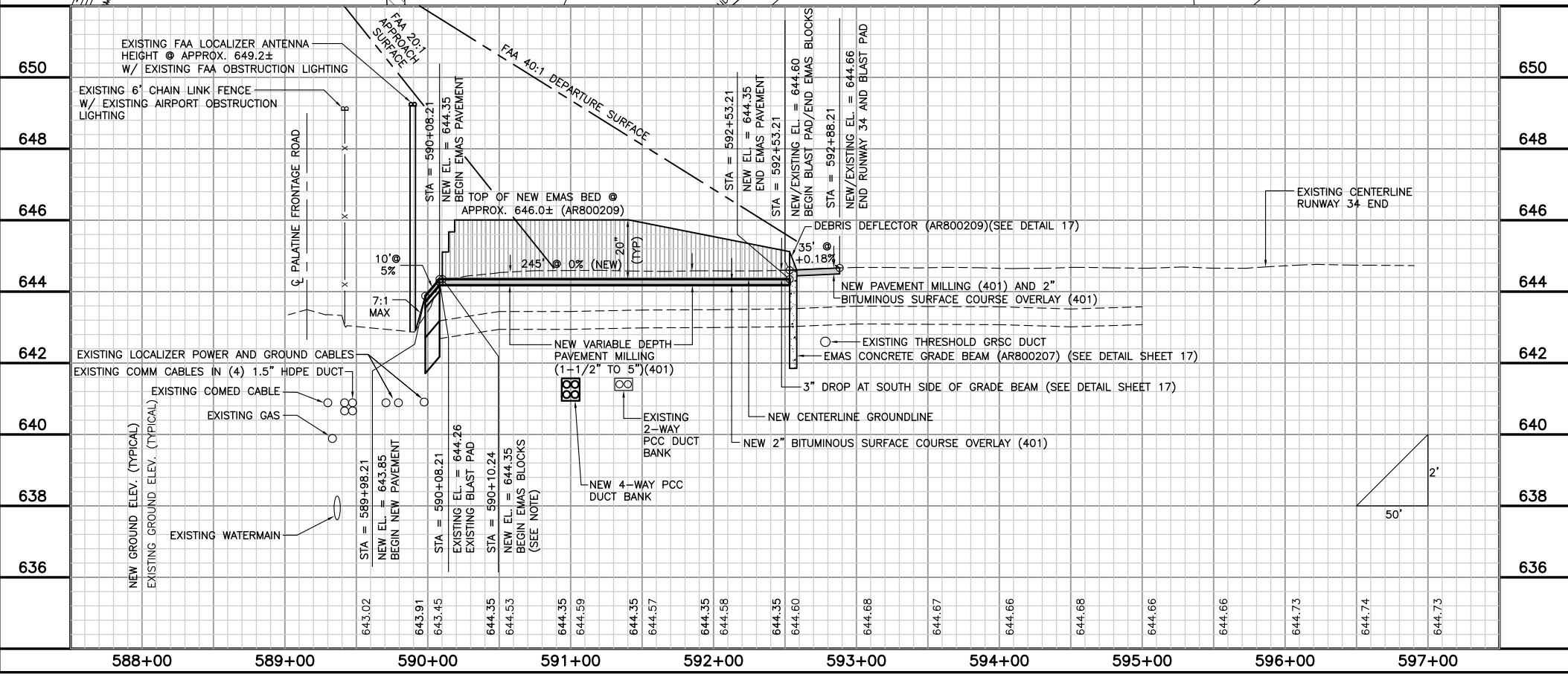
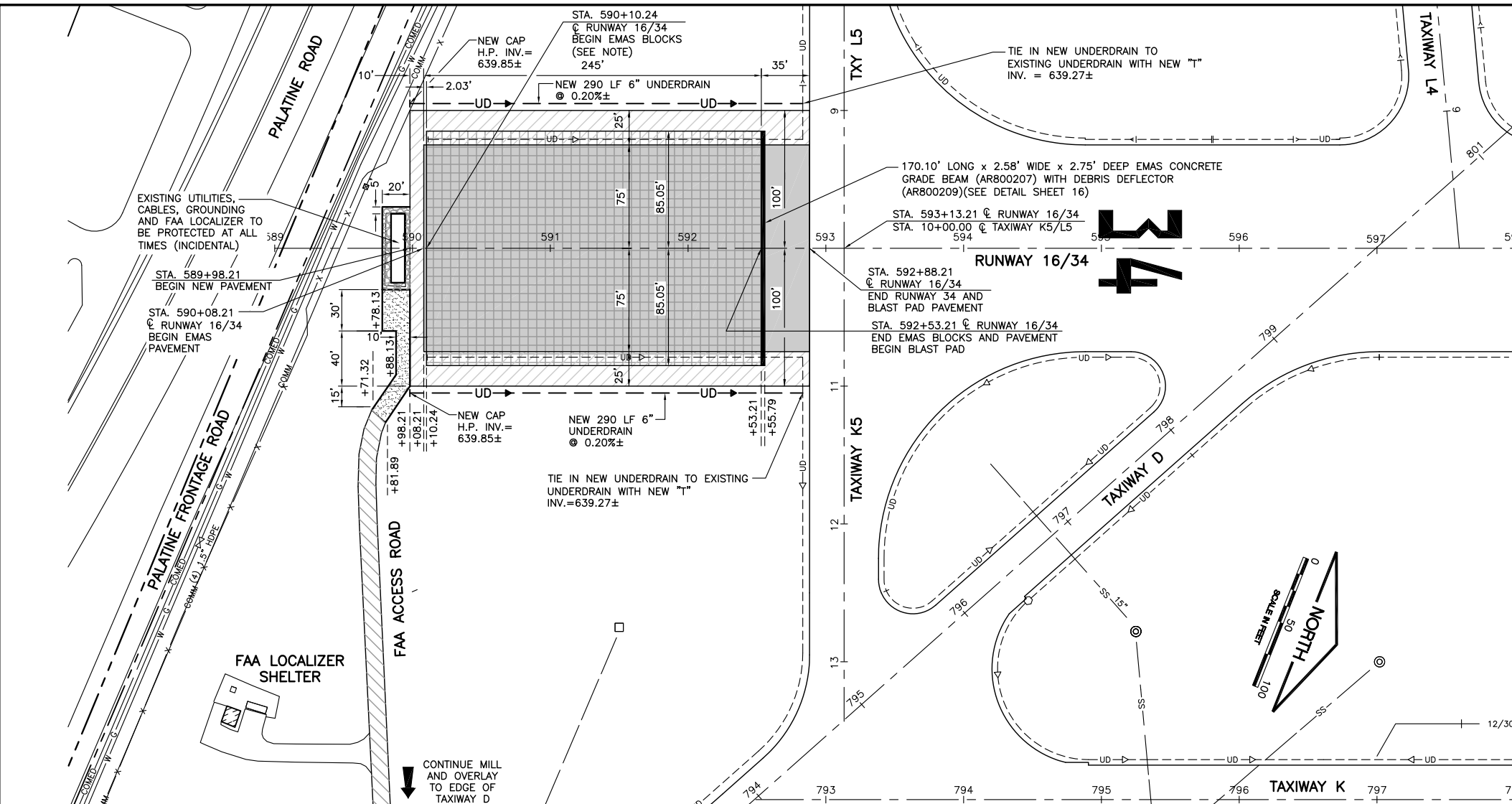
TYPICAL SECTIONS

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DATE:	08/1/2013
JOB No:	11290-03

DATE: Thursday, August 01, 2013, 1:17:53 PM
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 LAYOUT: 12_34Emas-Plan-And-Profile - Layout1.dwg
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 EMP: 34Emas-Plan-And-Profile - Layout1.dwg



LEGEND

- NEW BITUMINOUS PAVEMENT WIDENING:
NEW 2" BITUMINOUS SURFACE COURSE (401)
NEW 2" BITUMINOUS BASE COURSE (403)
NEW 10" CRUSHED AGGREGATE BASE COURSE (209)
NEW 12" POROUS GRANULAR EMBANKMENT (208)
NEW SOIL STABILIZATION FABRIC (152)
- NEW VARIABLE DEPTH MILLING (401) (1-1/2" TO 5")
AND 2" BITUMINOUS SURFACE COURSE OVERLAY (401)
- NEW BITUMINOUS PAVEMENT MILLING (401) AND
2" BITUMINOUS SURFACE COURSE OVERLAY (401)
- NEW EMAS CONCRETE GRADE BEAM (AR800207)(SEE DETAIL)
- NEW FAA ACCESS ROAD BITUMINOUS PAVEMENT:
NEW 2" BITUMINOUS SURFACE COURSE (401)
NEW 2" BITUMINOUS BASE COURSE (403)
NEW 8" CRUSHED AGGREGATE BASE COURSE (209)
NEW SOIL STABILIZATION FABRIC (152)
- NEW EMAS BLOCKS (AR800209)
- NEW 8" CRUSHED AGGREGATE PAD AROUND
FAA LOCALIZER (209)
- EXISTING UNDERDRAIN COLLECTION STRUCTURE
- EXISTING 6" CPPUP UNDERDRAIN
- NEW 6" PERFORATED UNDERDRAIN (705)
(SEE NOTES ON SHEET 14)

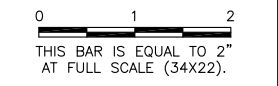
STORM SEWER/UNDERDRAIN NOTES

1. CONTRACTOR SHALL FIELD VERIFY EXISTING STORM SEWER/UNDERDRAIN INVERTS BEFORE INSTALLING NEW PIPE, CONNECTIONS AND ORDERING MATERIALS.
2. ALL UNDERDRAIN CONNECTIONS, CORING INTO STRUCTURES, TEES, BENDS, AND MISCELLANEOUS PIECES SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE UNDERDRAIN.
3. UNDERDRAIN SLOPES FOLLOW EDGE OF PAVEMENT SLOPE UNLESS OTHERWISE NOTED.
4. INSTALL NEW UNDERDRAIN TO BE CLEAR OF ELECTRICAL DUCTS/CONDUITS, COST INCIDENTAL.
5. UNDERDRAIN CONFLICTS WITH EXISTING AND NEW CONDITIONS SHALL BE RESOLVED AND COST SHALL BE INCIDENTAL TO UNDERDRAIN.
6. PRIOR TO ORDERING AND INSTALLING ALL FIELD TILE REPLACEMENT PIPE, THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION AND INVERTS OF EXISTING FIELD TILE CONNECTIONS. ADJUSTMENTS SHALL BE MADE AS NECESSARY AT NO ADDITIONAL COST TO THE CONTRACT.
7. CORING OF DRAINAGE STRUCTURE AND REMOVAL OF EXISTING STORM SEWER MANHOLE/INLET CONCRETE BENCHES TO FACILITATE CONNECTIONS OF PROPOSED STORM SEWER PIPE SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE PIPE.
8. ANY EXISTING FIELD TILE HIT DURING CONSTRUCTION SHALL BE RECONNECTED AT NO ADDITIONAL COST TO THE CONTRACT. IN THE EVENT THAT FIELD TILES ARE ENCOUNTERED DURING CONSTRUCTION, THEY SHALL BE SHOWN ON AS-BUILT PLANS.

IL. CONTRACT: **PA056**
 IL. LETTING ITEM: **1A**
 IL. PROJECT: **PWK-4182**
 S.B.G. PROJECT: **3-17-0018-B48**

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE



**CHICAGO EXECUTIVE AIRPORT
 WHEELING/PROSPECT HEIGHTS, ILLINOIS
 CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)**

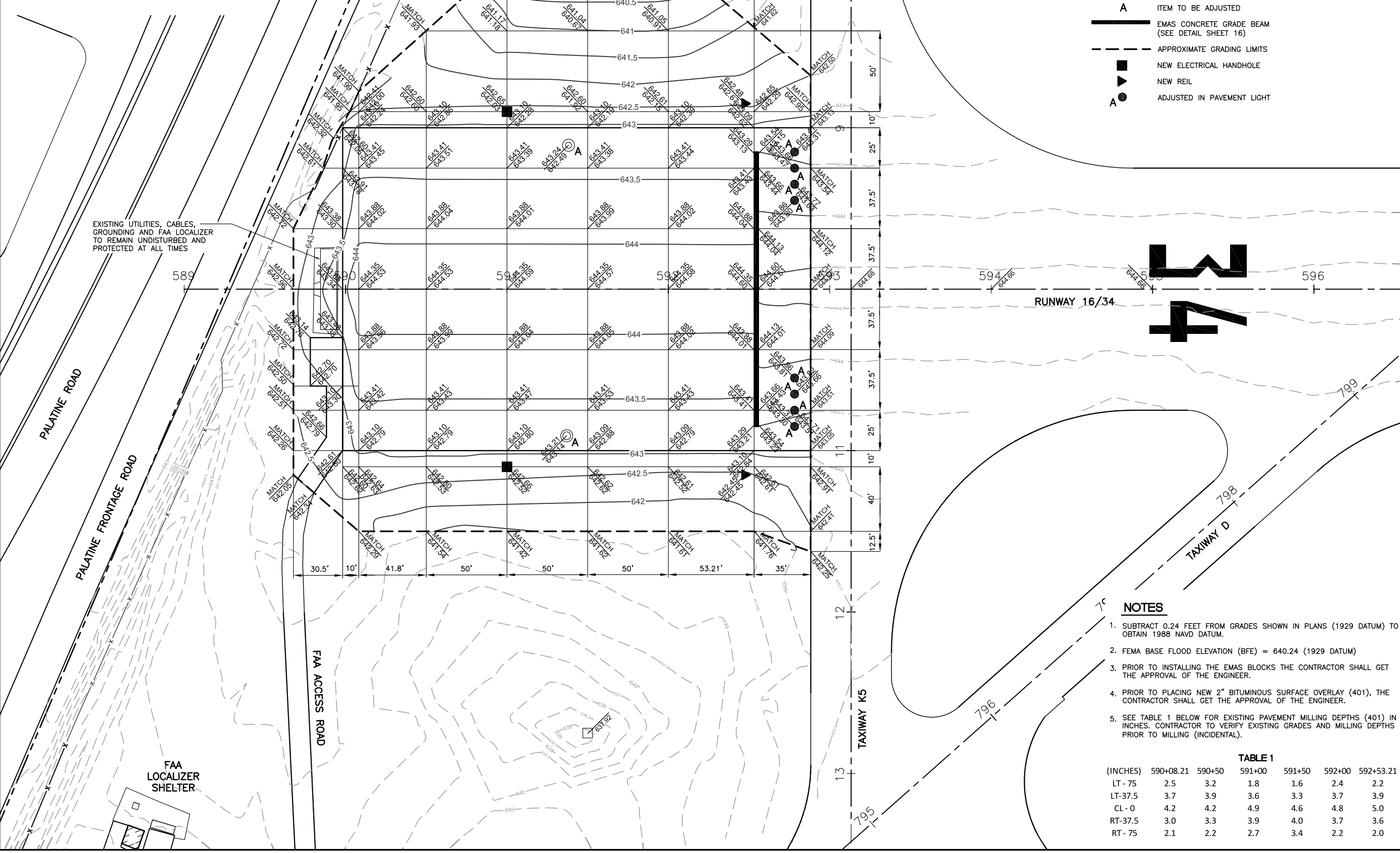
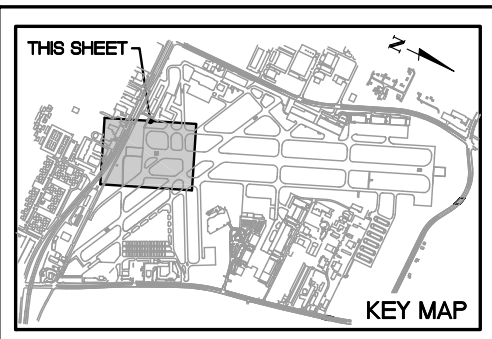
PLAN AND PROFILE

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 CHECKED BY: DKP
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 DATE: 08/1/2013
 JOB No: 11290-03

DATE: Thursday, August 01, 2013, 1:18:00 PM
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 REF: DWG: 13_34Emas-Grading - Layout1.dwg
 112900300 - Rch\DrawingPlan.dwg



LEGEND

- 640 — NEW ELEVATION
- - - 640 - - - EXISTING ELEVATION
- ⊙ / □ EXISTING MANHOLE/INLET
- A ITEM TO BE ADJUSTED
- ▬ EMAS CONCRETE GRADE BEAM (SEE DETAIL SHEET 16)
- - - APPROXIMATE GRADING LIMITS
- NEW ELECTRICAL HANDHOLE
- ▲ NEW REIL
- ADJUSTED IN PAVEMENT LIGHT

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

IL CONTRACT: PA056
 IL LETTING ITEM: 1A
 IL PROJECT: PWK-4182
 S.B.G. PROJECT: 3-17-0018-B48

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE

**CHICAGO EXECUTIVE AIRPORT
 WHEELING/PROSPECT HEIGHTS, ILLINOIS
 CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)
 GRADING PLAN**

- NOTES**
- SUBTRACT 0.24 FEET FROM GRADES SHOWN IN PLANS (1929 DATUM) TO OBTAIN 1988 NAVD DATUM.
 - FEMA BASE FLOOD ELEVATION (BFE) = 640.24 (1929 DATUM)
 - PRIOR TO INSTALLING THE EMAS BLOCKS THE CONTRACTOR SHALL GET THE APPROVAL OF THE ENGINEER.
 - PRIOR TO PLACING NEW 2" BITUMINOUS SURFACE OVERLAY (401), THE CONTRACTOR SHALL GET THE APPROVAL OF THE ENGINEER.
 - SEE TABLE 1 BELOW FOR EXISTING PAVEMENT MILLING DEPTHS (401) IN INCHES. CONTRACTOR TO VERIFY EXISTING GRADES AND MILLING DEPTHS PRIOR TO MILLING (INCIDENTAL).

TABLE 1

(INCHES)	590+08.21	590+50	591+00	591+50	592+00	592+53.21
LT - 75	2.5	3.2	1.8	1.6	2.4	2.2
LT - 37.5	3.7	3.9	3.6	3.3	3.7	3.9
CL - 0	4.2	4.2	4.9	4.6	4.8	5.0
RT - 37.5	3.0	3.3	3.9	4.0	3.7	3.6
RT - 75	2.1	2.2	2.7	3.4	2.2	2.0

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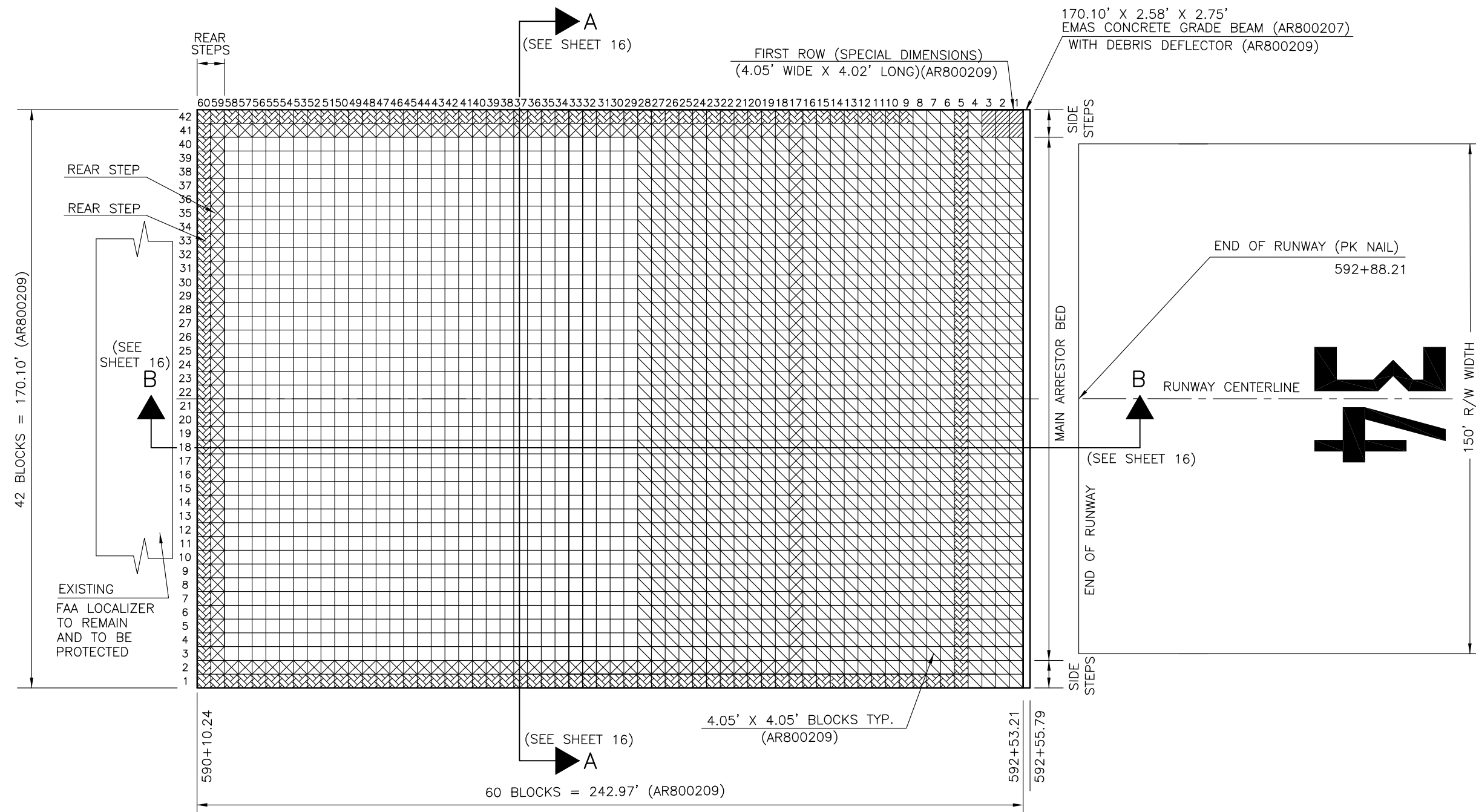
CHICAGO EXECUTIVE AIRPORT

DESIGN BY: JRL
 DRAWN BY: JRO
 CHECKED BY: DKP
 APPROVED BY: BW

DATE: 08/1/2013
 JOB No: 11290-03

SHEET 13 OF 24 SHEETS

DATE: Thursday, August 01, 2013, 1:18:05 PM
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 UPDATE BY: Jeremy Linke
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 REF: DWG: 14Emas-Emas Block Layout Plan Bldg\34Emas-Emas Block Layout Plan - Layout1.dwg



LEGEND

BLOCK HEIGHT

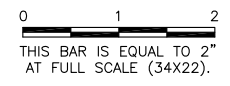
- 6"-20"
- 8" STEPS
- 14" STEPS
- 20"
- EQUIP. RAMP



IL. CONTRACT: **PA056**
 IL. LETTING ITEM: **1A**
 IL. PROJECT: **PWK-4182**
 S.B.G. PROJECT: **3-17-0018-B48**

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE



CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)
EMAS BLOCK LAYOUT PLAN

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CHECKED BY:	DKP
APPROVED BY:	ESCO
DATE:	08/1/2013
JOB No:	11290-03

EMAS BLOCK LAYOUT – RUNWAY 34 END (16 DEPARTURE END)

NOT TO SCALE



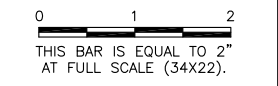
ENGINEERED ARRESTING SYSTEMS CORPORATION
 2239 High Hill Road
 Logan Township, New Jersey, USA 08085
 Phone 856.241.8620 Fax 856.241.8621

DATE: Thursday, August 01, 2013, 1:18:08 PM
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 REF: DWG: Tech\34-Emas.dwg

IL CONTRACT: PA056
 IL LETTING ITEM: 1A
 IL PROJECT: PWK-4182
 S.B.G. PROJECT: 3-17-0018-B48

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REVISIONS		
NUMBER	BY	DATE

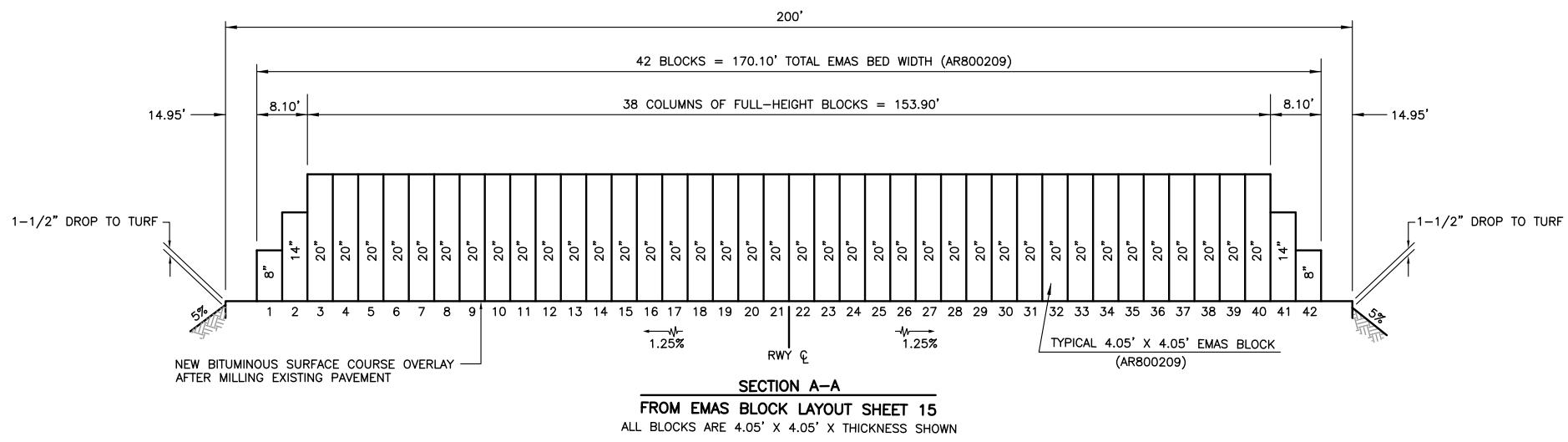
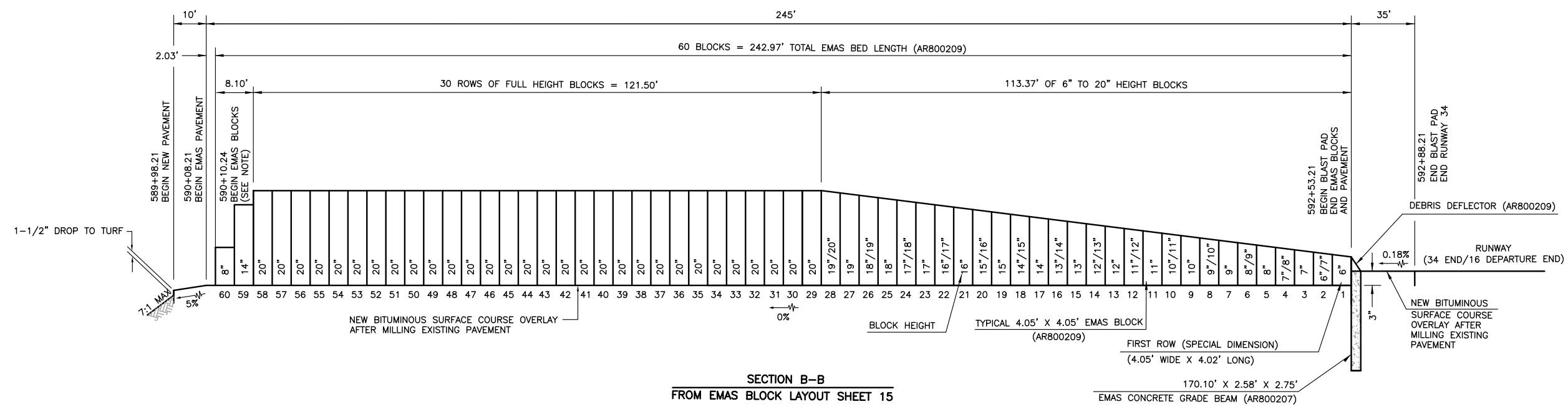


**CHICAGO EXECUTIVE AIRPORT
 WHEELING/PROSPECT HEIGHTS, ILLINOIS
 CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)**

EMAS SECTIONS

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DATE:	08/1/2013
JOB No:	11290-03

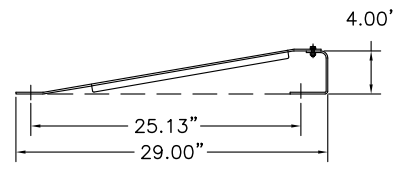


EMAS BLOCK SECTIONS - RUNWAY 34 END (16 DEPARTURE END)
 NOT TO SCALE



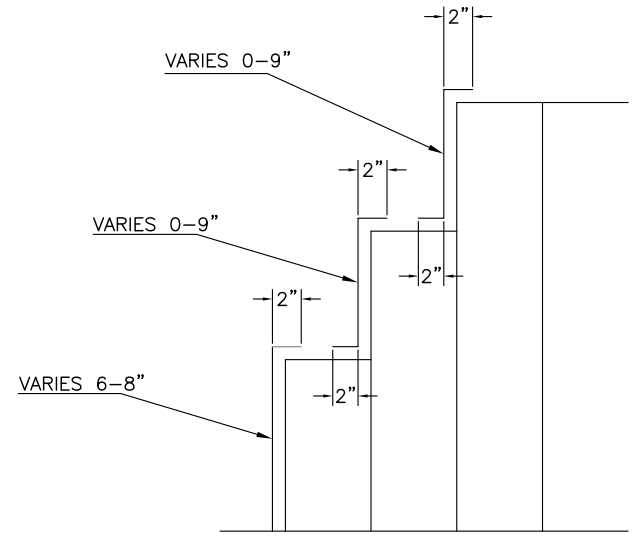
ENGINEERED ARRESTING SYSTEMS CORPORATION
 2239 High Hill Road
 Logan Township, New Jersey, USA 08085
 Phone 856.241.8620 Fax 856.241.8621

DATE: Thursday, August 01, 2013, 1:18:11 PM
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 REF DWG: Tech\34 Emas.dwg



TYPICAL DEBRIS DEFLECTOR ASSEMBLY (AR800209)

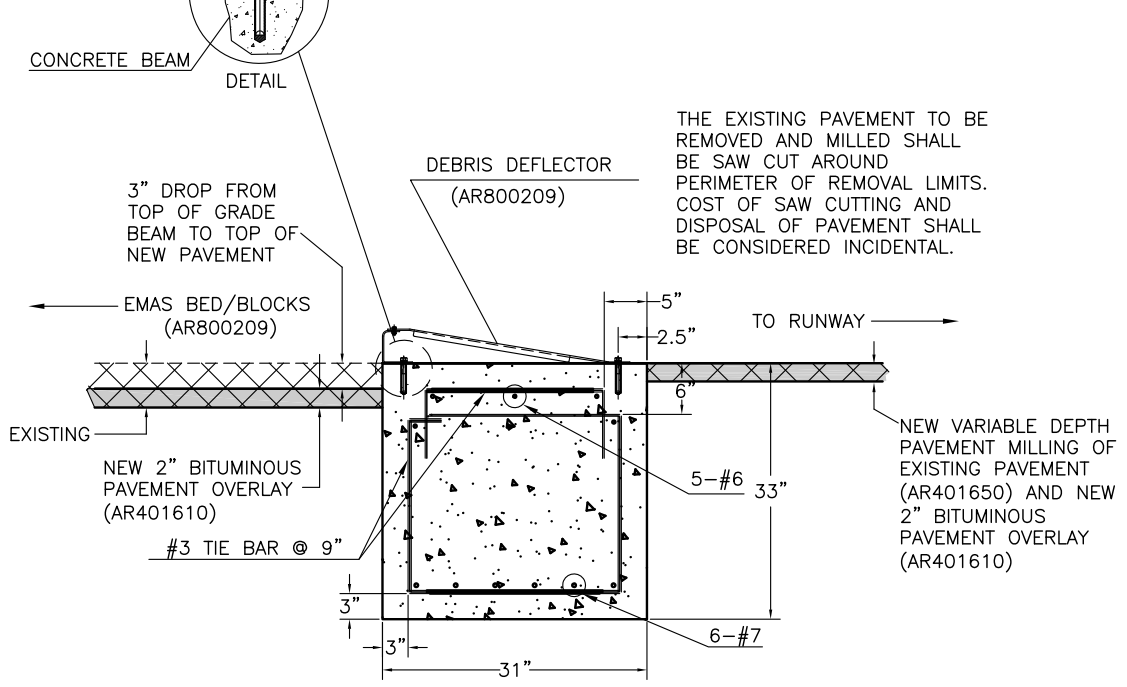
SCALE: N.T.S.



SIDE COATING (AR800209)

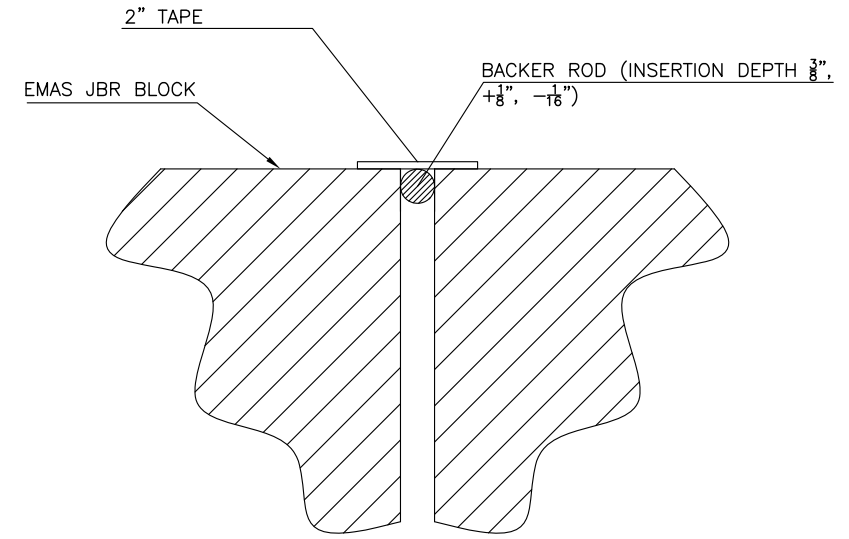
APPROXIMATELY 2,000 NET SQ. FT. OF EXTRUDED SILICONE SIDE COATING APPLIED TO VERTICAL SURFACES
SCALE: N.T.S.

- SST HEX HD CAPSCREW (SD0036-1)
 - SST FENDER WASHER (SD0041-1)
 - SST THREADED INSERT (SD0011-1)
 - ADHESIVE CAPSULE (SD0011-2)
- NOTE: REQUIRES SETTING TOOL (SD0011-3)
DRILLED HOLE DEPTH MINIMUM OF 5 INCHES



EMAS CONCRETE GRADE BEAM DETAIL SECTION (AR800207)

SCALE: N.T.S.



TYPICAL TAPE JOINT (AR800209)

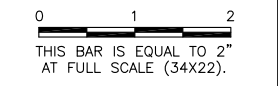
ESCO WILL SUPPLY SPECIALTY TAPE.
SCALE: N.T.S.

THE EXISTING PAVEMENT TO BE REMOVED AND MILLED SHALL BE SAW CUT AROUND PERIMETER OF REMOVAL LIMITS. COST OF SAW CUTTING AND DISPOSAL OF PAVEMENT SHALL BE CONSIDERED INCIDENTAL.

IL CONTRACT: **PA056**
 IL LETTING ITEM: **1A**
 IL PROJECT: **PWK-4182**
 S.B.G. PROJECT: **3-17-0018-B48**

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE



**CHICAGO EXECUTIVE AIRPORT
 WHEELING/PROSPECT HEIGHTS, ILLINOIS
 CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)**

EMAS DETAILS

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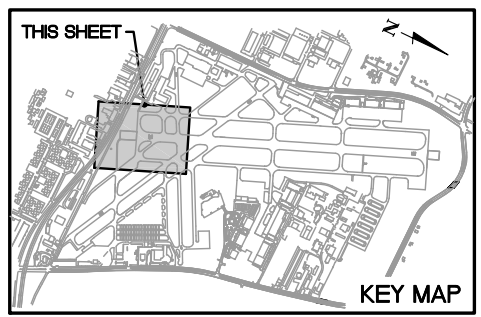
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DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	ESCO
DATE:	08/1/2013
JOB No:	11290-03



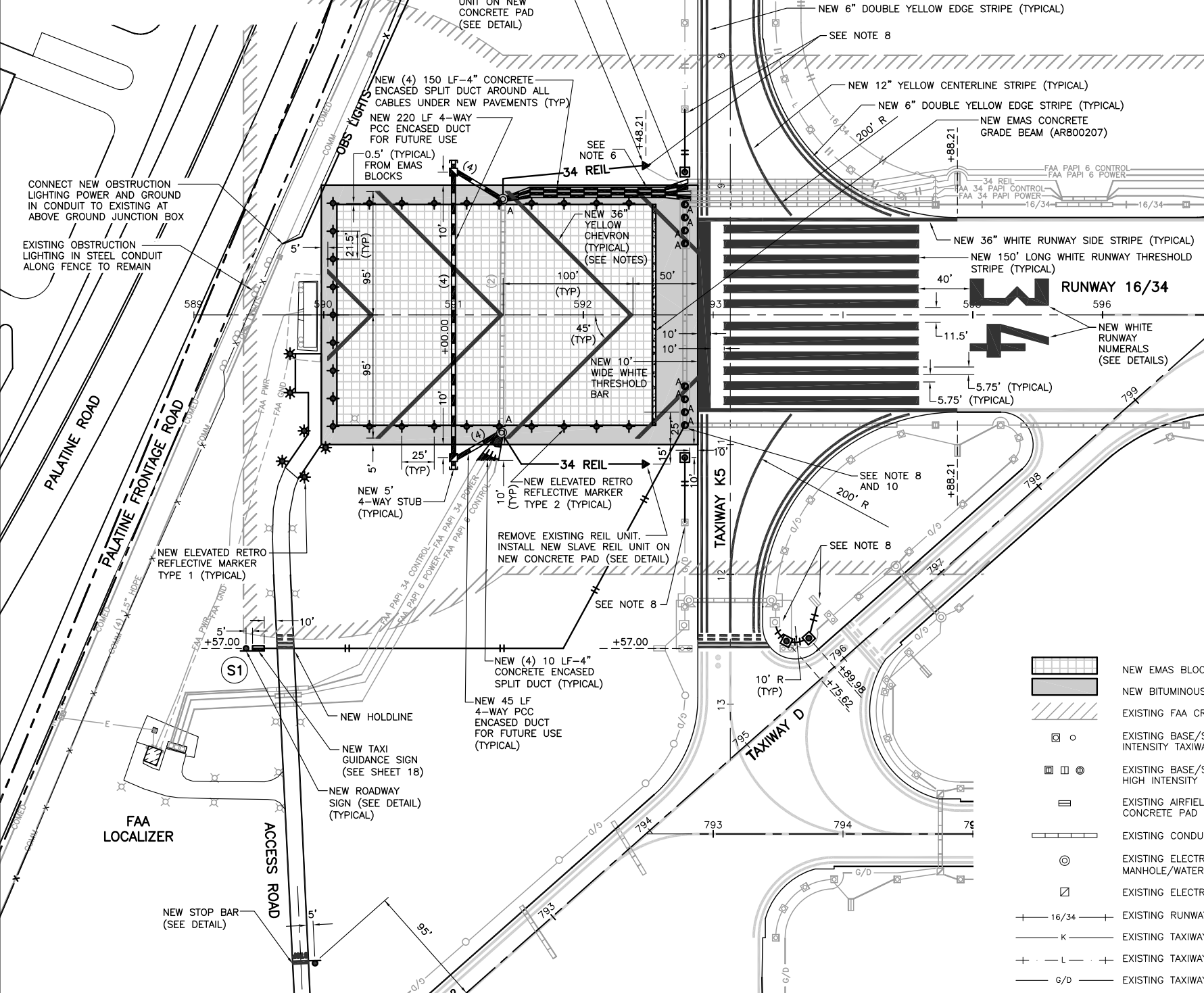
ENGINEERED ARRESTING SYSTEMS CORPORATION
 2239 High Hill Road
 Logan Township, New Jersey, USA 08085
 Phone 856.241.8620 Fax 856.241.8621

DATE: Thursday, August 01, 2013, 1:18:15 PM
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LAYOUT: 17 34Emas-Marking And Lighting Plan
DRAWN BY: Jeremy Linke
CHECKED BY: DKP
APPROVED BY: AB
DATE: 08/1/2013
JOB No: 11290-03
SHEET 17 OF 24 SHEETS



MARKING NOTES

- SEE SHEET 14 FOR TYPICAL MARKING DETAILS AND NOTES.
- NEW 36" YELLOW CHEVRONS TO BE PAINTED ON EMAS BLOCKS.
- MARKING EQUIPMENT TO BE USED ON TOP OF EMAS BLOCKS SHALL BE APPROVED BY EMAS MANUFACTURER PRIOR TO USE.



ELECTRICAL / LIGHTING NOTES

- SEE EXISTING CONDITIONS FOR LIGHTING REMOVALS.
- ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, OBSTRUCTION LIGHTING, FAA CABLES AND OTHER AIRPORT ELECTRICAL CABLES SHALL REMAIN IN SERVICE UNTIL REPLACED AS DIRECTED BY THE RESIDENT ENGINEER. ALL TEMPORARY CABLING AND SPLICING SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
- AT ANY LOCATION WHERE THE NEW DUCT OR CABLE ROUTE CROSSES AN EXISTING UTILITY, THE CONTRACTOR SHALL HAND EXCAVATE AND LOCATE THE EXISTING UTILITY PRIOR TO TRENCHING. COST OF LOCATING ALL EXISTING UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT.
- THE LOCATION OF EXISTING UTILITIES ARE APPROXIMATE. THE CONTRACTOR SHALL OPEN THE ENTIRE TRENCH BETWEEN MANHOLES BEFORE ANY CONDUIT IS LAID TO ASCERTAIN THE EXISTENCE AND POSITION OF ANY OBSTRUCTIONS.
- CONTRACTOR SHALL COORDINATE THE LOCATION OF THE EXISTING AND PROPOSED UTILITIES PRIOR TO INSTALLATION OF THE PROPOSED UNIT DUCTS, CONDUITS AND DUCT BANKS. ANY DAMAGES TO EXISTING UTILITIES SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL VERIFY THAT THE NEW SPLIT DUCT AND EXISTING CABLE ROUTING DOES NOT CONFLICT WITH THE NEW CONCRETE GRADE BEAM. THE CONTRACTOR SHALL RESOLVE ANY CONFLICTS (INCIDENTAL).
- CONTRACTOR SHALL PROVIDE PULL WIRE FOR ALL DUCT BANKS AND CAP THE UNUSED DUCT BANKS FOR FUTURE USE.
- CONTRACTOR SHALL CONNECT EXISTING CABLE TO NEW CABLE IN SIGN/LIGHT/MANHOLE/HANDHOLE/SPIECE CAN. COST OF CONNECTION SHALL BE INCIDENTAL TO THE CABLE.
- NO 90 DEGREE BENDS WILL BE ALLOWED IN CONDUIT.
- CONTRACTOR SHALL CORE HOLES INTO EXISTING SPLICE CANS/MANHOLES/HANDHOLES AS REQUIRED FOR CONNECTION OF NEW CONDUIT. BREAKING INTO EXISTING STRUCTURES WITH SLEDGE HAMMERS, JACK HAMMERS, OR OTHER DESTRUCTIVE MEANS WILL NOT BE ALLOWED. THE COST OF CORING AND GROUTING SHALL BE INCIDENTAL TO THE INSTALLATION OF THE PROPOSED CABLE OR CONDUIT.
- ALL LIGHTS SHALL HAVE QUARTZ BULBS. ALL SIGNS SHALL BE LED.
- ALL SPLICES SHALL BE WATERPROOF. COST OF SPLICES SHALL BE INCIDENTAL TO THE COST OF THE CABLE.
- AT EXISTING DUCT BANKS THAT FALL WITHIN THE NEW PAVEMENT, THE CONTRACTOR SHALL STAMP OR OTHERWISE MARK THE DUCT LOCATION WITHIN THE PAVEMENT, AS DIRECTED BY THE RESIDENT ENGINEER WITH NEW DUCT MARKERS (SEE DETAIL) IN THE PAVEMENT (COST INCIDENTAL).
- ALL WORK ON FAA UTILITIES, CABLES CONDUITS AND EQUIPMENT SHALL COMPLY WITH THE DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION SPECIFICATION FOR CONSTRUCTION OF TERMINAL NAVIGATIONAL AID FACILITIES FAA-GL-918C, LATEST EDITION. THE FAA SHALL BE NOTIFIED 3 WORKING DAYS (72 HOURS) IN ADVANCE OF WORKING ON AND AROUND FAA CABLES, CONDUITS AND EQUIPMENT.
- 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 TO THE CONTRACT.

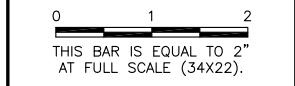
LEGEND

ABDEFY	EXISTING TAXIWAY A,B,D,E,F AND Y CIRCUIT
34 REIL	EXISTING 34 REIL CABLES
RGL	EXISTING RUNWAY GUARD LIGHT CIRCUIT
FAA PAPI 6 CONTROL	EXISTING RUNWAY 6 FAA PAPI CONTROL CIRCUIT
FAA PAPI 6 POWER	EXISTING RUNWAY 6 FAA PAPI POWER CIRCUIT
FAA PAPI 34 CONTROL	EXISTING RUNWAY 34 FAA PAPI CONTROL CIRCUIT
FAA PAPI 34 POWER	EXISTING RUNWAY 34 FAA PAPI POWER CIRCUIT
OBS LIGHTS	EXISTING AIRPORT OBSTRUCTION LIGHTING POWER AND GROUND
FAA PWR	EXISTING FAA ILS POWER
FAA GND	EXISTING FAA GROUNDING
COMM	EXISTING COMMUNICATIONS CABLE IN HDPE
COMED	EXISTING COMED CABLE
○	EXISTING OBSTRUCTION LIGHTS
A	NEW L-850D IN-PAVEMENT THRESHOLD LIGHT FIXTURE (GREEN AND RED LENS) IN EXISTING 12" DIA. BASE. REMOVE EXISTING FIXTURE AND ADJUST NEW FIXTURE TO NEW GRADE (PAID FOR AS AR125943) (SEE DETAIL)
□	NEW BASE MOUNTED MEDIUM INTENSITY TAXIWAY LIGHT (MITL)(SEE DETAIL)(AR125415)
▶	NEW REIL L-849 UNIT (SEE DETAIL)(AR125610)
34 REIL	NEW MASTER TO SLAVE REIL CABLE (PER MANUFACTURER) IN PVC CONDUIT (SEE DETAIL)(AR125610)
OBS LIGHTS	NEW OBSTRUCTION LIGHTING POWER AND GROUND 2-#8 XLP-USE (AR108088) AND 1-#8 GROUND (AR108758) IN NEW 2" PVC CONDUIT (AR110202)
□	NEW ELECTRIC HANDHOLE (SEE DETAIL)(AR110610)
—	NEW CONCRETE ENCASED DUCT BANK(AR110504)(NUMBER OF CONDUITS) AND SPLIT DUCT (AR110550)
*	NEW ELEVATED RETRO REFLECTIVE MARKER - TYPE 1 (SEE DETAIL)(AR800205)
+	NEW ELEVATED RETRO REFLECTIVE MARKER - TYPE 2 (SEE DETAIL)(AR800206)
—	NEW 1/C #8, 5KV L-824 TYPE C CABLE (AR108108) IN 2" PVC CONDUIT DIRECT BURIED (AR110202)(NUMBER OF TICKS INDICATE NUMBER OF CABLES)
—	NEW PAVEMENT MARKING (SEE DETAILS) (AR620520 AND AR620525)
—	EXISTING PAVEMENT MARKING
A	EXISTING ITEM TO BE ADJUSTED
+	NEW ROADWAY SIGN (AR910200)
—	NEW TAXI GUIDANCE SIGN (AR125445)

IL CONTRACT: PA056
IL LETTING ITEM: 1A
IL PROJECT: PWK-4182
S.B.G. PROJECT: 3-17-0018-B48

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE



**CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)
MARKING AND LIGHTING PLAN**

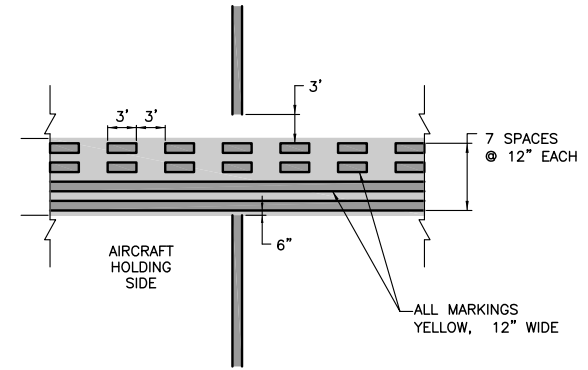
CMT CONSULTING ENGINEERS
CONRAD MERRILL & TILLY, INC.
License No. 04-00663

DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	AB
DATE:	08/1/2013
JOB No:	11290-03

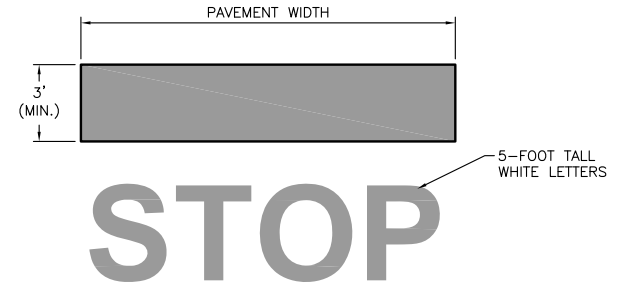
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PAVEMENT MARKING NOTES

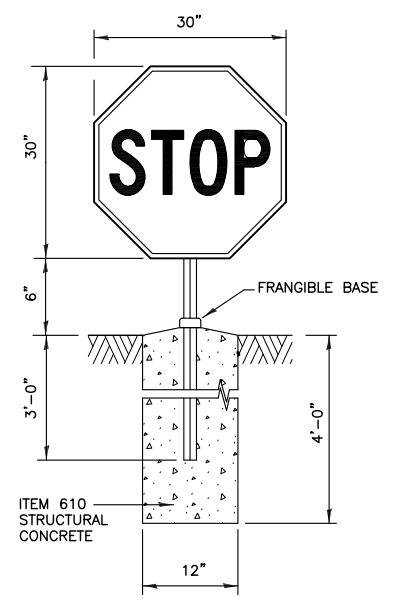
1. ALL TAXIWAY MARKINGS ARE YELLOW (AR620520) WITH A 6" BLACK BORDER (AR620525) UNLESS NOTED.
2. ALL RUNWAY MARKINGS (AR620520) ARE WHITE WITH A 6" BLACK BORDER (AR620525) UNLESS NOTED.
3. THE PAVEMENT SURFACE SHALL BE CLEAN AND DRY PRIOR TO MARKING.
4. WHEN YELLOW TAXIWAY STRIPING CROSSES ANY WHITE RUNWAY STRIPING, THE TAXIWAY STRIPE SHALL BE GAPPED 8" EACH SIDE OR RUNWAY STRIPE EXCEPT RUNWAY/RUNWAY HOLDLINES.
5. ALL LETTERS, NUMBERS AND SYMBOLS SHALL CONFORM TO FAA ADVISORY CIRCULAR 150/5340-1K (LATEST EDITION).



RUNWAY HOLDING POSITION MARKING
NOT TO SCALE



STOP BAR DETAIL
NOT TO SCALE



ROADWAY SIGN
NOT TO SCALE - AR901200

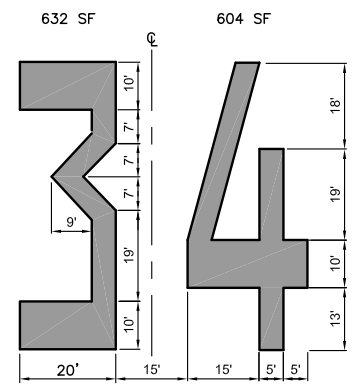
NOTES

1. ALL SIGNS ARE STANDARD MATERIALS, COLORS AND LETTER STYLE AND SIZE AS SHOWN IN THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.

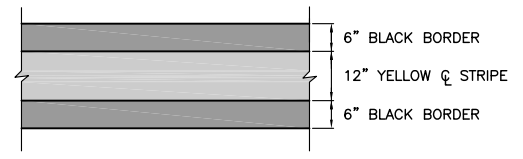
AIRFIELD SIGNAGE SCHEDULE				
NEW SIGN NUMBER	NEW SIGN FACE	NEW SIGN LEGEND	NEW SIGN TYPE	NEW SIGN LOCATION
S1	W E	BLANK 34-16	0 1	SEE SHEET 17

NEW SIGN TYPE LEGEND

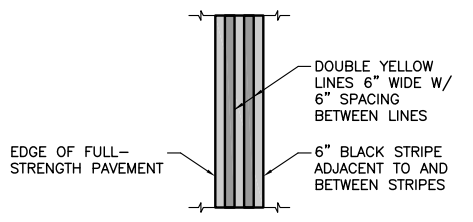
- 0 - BLANK PANEL - BLACK
- 1 - RUNWAY/TAXIWAY HOLDLINE - WHITE LEGEND ON RED BACKGROUND
- 2 - LOCATION SIGN - YELLOW LEGEND ON BLACK BACKGROUND
- 3 - DIRECTION/INFORMATION SIGN - BLACK LEGEND ON YELLOW BACKGROUND



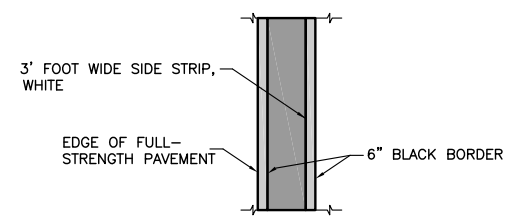
NUMERAL DETAILS
NO SCALE



TAXIWAY CENTERLINE DETAIL
NOT TO SCALE



TAXIWAY EDGE MARKINGS CONTINUOUS
NOT TO SCALE



RUNWAY EDGE MARKINGS CONTINUOUS
NOT TO SCALE

IL CONTRACT: **PA056**
 IL LETTING ITEM: **1A**
 IL PROJECT: **PWK-4182**
 S.B.G. PROJECT: **3-17-0018-B48**

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE

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

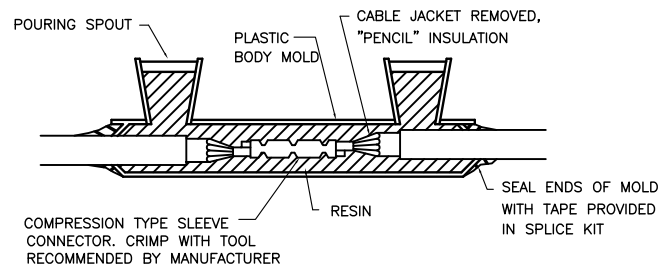
CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)

MARKING AND MISCELLANEOUS DETAILS

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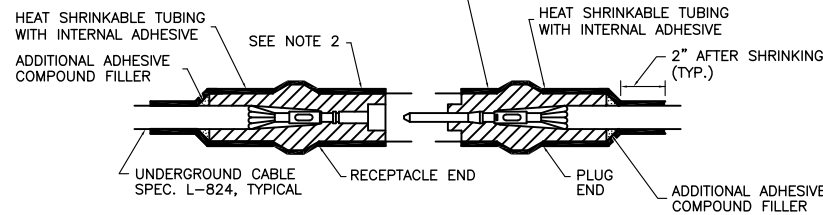
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DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	DKP
APPROVED BY:	BW
DATE:	08/1/2013
JOB No:	11290-03



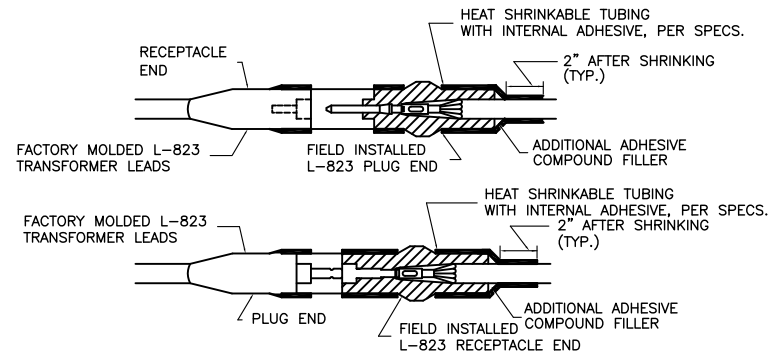
TYPE A - CABLE SPLICE

FOR SPLICES IN HOMERUNS AND FOR EXTENSIONS TO EXISTING CABLES ONLY
N.T.S.



TYPE B - CABLE SPLICE

FOR SPLICES FOR USE AT JUNCTION OF HOMERUN WITH LOOP CIRCUIT
N.T.S.

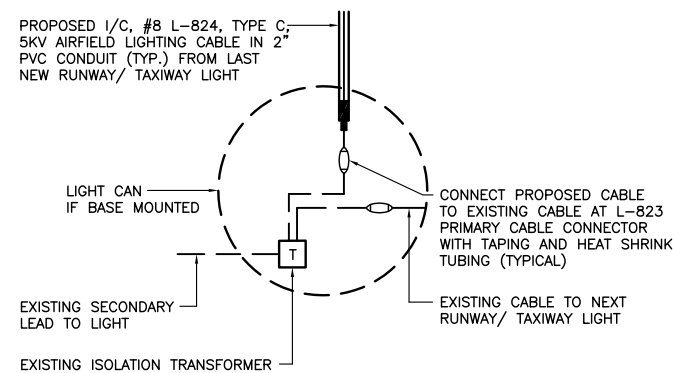


TYPE C AND D - CABLE SPLICE

FOR SPLICES AT RUNWAY/TAXIWAY LIGHTS AND SIGNS
N.T.S.

NOTES

- INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE.
- WRAP WITH AT LEAST ONE LAYER OF RUBBER OR SYNTHETIC RUBBER TAPE AND ONE LAYER OF PLASTIC TAPE, ONE-HALF LAPPED, EXTENDING AT LEAST 1-1/2 INCHES ON EACH SIDE OF JOINT.
- THE COST OF FURNISHING AND INSTALLING ALL SPLICE MATERIALS SHALL BE INCIDENTAL TO THE ASSOCIATED CABLE ITEMS.
- THE CONTRACTOR SHALL HAVE A MINIMUM OF TWO (2) TYPE A SPLICE KITS ON THE JOB SITE AT ALL TIMES FOR EMERGENCY REPAIRS.

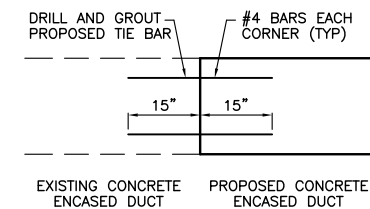


RUNWAY/TAXIWAY LIGHTING CIRCUIT CONNECTION DETAIL

NOT TO SCALE

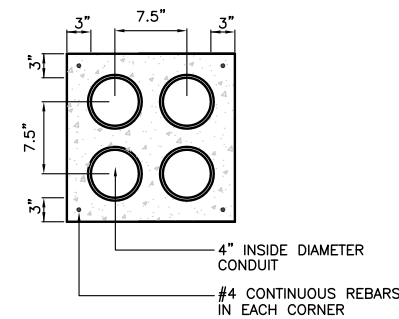
GENERAL NOTES

- TRANSFORMER HOLDER MAY BE ANY COMMERCIALY AVAILABLE BRICK.
- BREAKING GROOVE COUPLINGS SHALL NOT BE OVER 1" ABOVE GROUND LINE.
- ISOLATION TRANSFORMERS COME WITH 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 I/C, No. 8, 5000 V., L-824 TYPE C CABLES FOR CONNECTION TO EACH TRANSFORMER.
- 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.
- ALL LIGHTS, CABLES AND TRANSFORMERS TO BE REMOVED SHALL REMAIN THE PROPERTY OF THE AIRPORT. AT THE DISCRETION OF THE AIRPORT MANAGER THE CONTRACTOR MAY BE REQUIRED TO DISPOSE OF THESE MATERIALS OFFSITE.
- DUCT MARKERS SHALL BE INSTALLED AT EVERY NEW DUCT AND AT EVERY EXISTING DUCT USED FOR THIS PROJECT.



EXTENSION OF EXISTING DUCT

NO SCALE
NOTE: COST OF CONNECTION SHALL BE CONSIDERED INCIDENTAL TO PROPOSED DUCT.

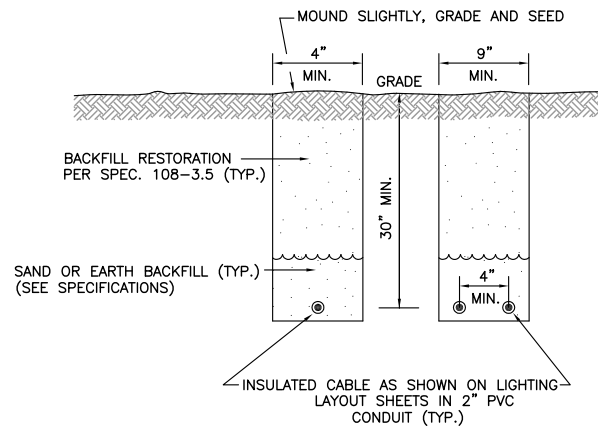


CONCRETE ENCASED DUCT BANKS

NOT TO SCALE

NOTES:

- DIMENSIONS ARE MINIMUM.
- CONCRETE SHALL CONFORM TO ITEM 610.
- ALL CONDUIT SHALL BE SCHEDULE 40 PVC.
- TOP OF CONCRETE ENCASEMENT IN TURF AREAS SHALL NOT BE LESS THAN 24" BELOW SUBGRADE.
- 4" SPLIT DUCT SHALL BE CONCRETE ENCASED WITH 3" MINIMUM CONCRETE SURROUNDING 4" CONDUIT. COST INCIDENTAL TO SPLIT DUCT.

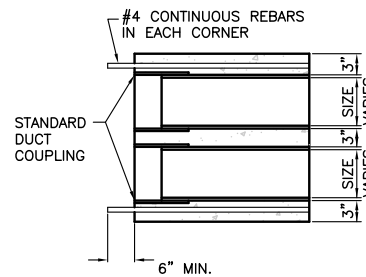


TURF AREA CABLE TRENCH DETAIL

NOT TO SCALE

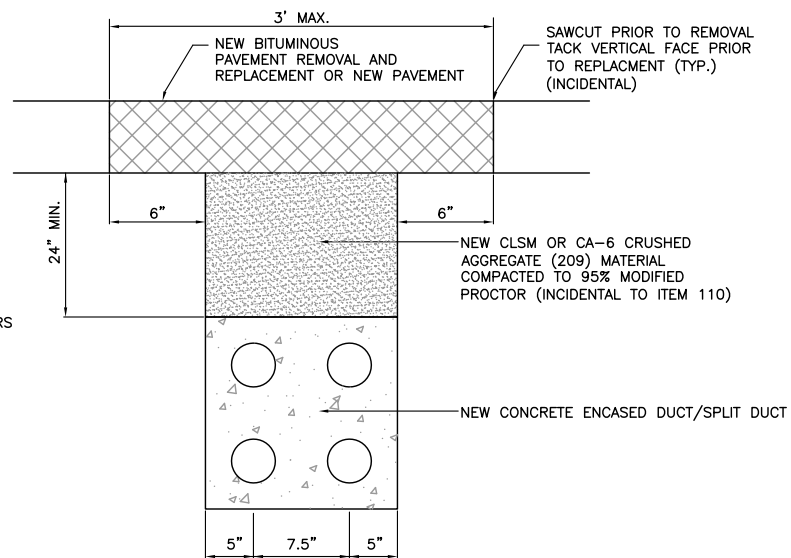
NOTES

- 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.



CONCRETE ENCASED DUCT END DETAIL

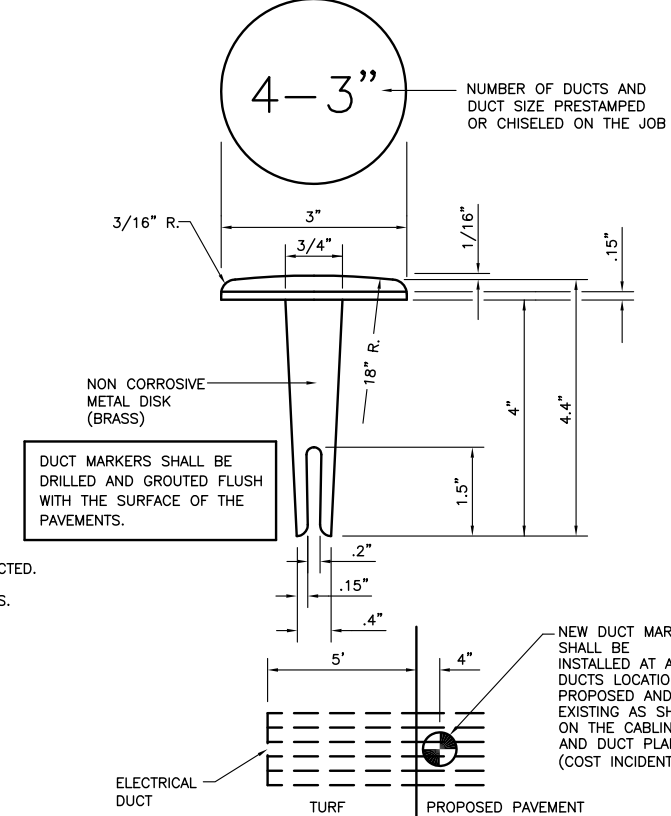
NO SCALE



DUCT BANK INSTALLATION UNDER EXISTING OR NEW PAVEMENT

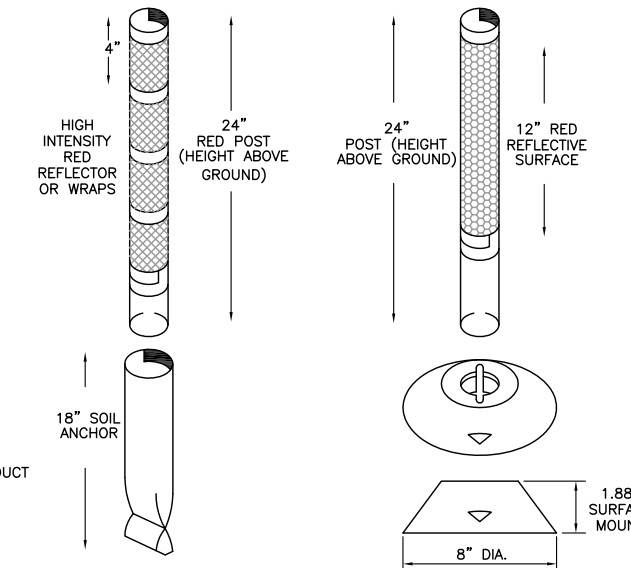
NOT TO SCALE

NOTE: 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.



DUCT MARKER DETAIL

NOT TO SCALE



ELEVATED RETROREFLECTIVE MARKER TYPE 1

(SOIL ANCHOR MOUNT)
NOT TO SCALE - AR800205

NOTE: RETROREFLECTIVE MARKER SHALL BE CROUSE-HINDS OR APPROVED EQUAL.

ELEVATED RETROREFLECTIVE MARKER TYPE 2

(SURFACE MOUNT)
NOT TO SCALE - AR800206

NOTE: RETROREFLECTIVE MARKER SHALL BE CROUSE-HINDS OR APPROVED EQUAL.

IL CONTRACT: PA056
IL LETTING ITEM: 1A
IL PROJECT: PWK-4182
S.B.G. PROJECT: 3-17-0018-B48

SURVEY BOOK # BOOK #

REVISIONS

NUMBER	BY	DATE

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

CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)

ELECTRICAL DETAILS - SHEET 1

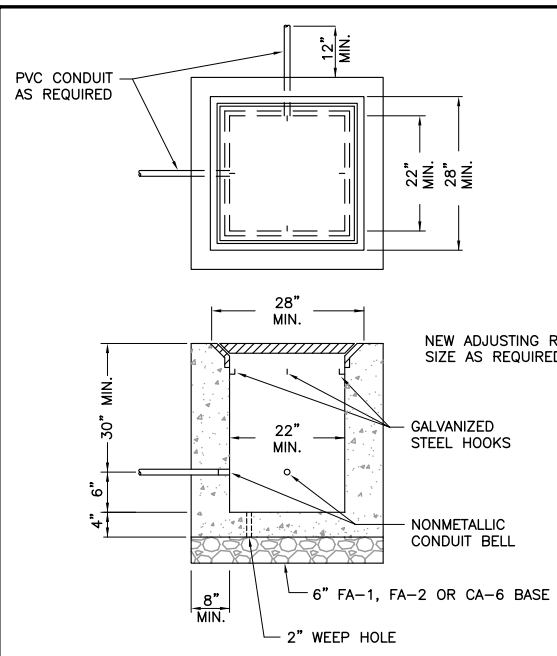
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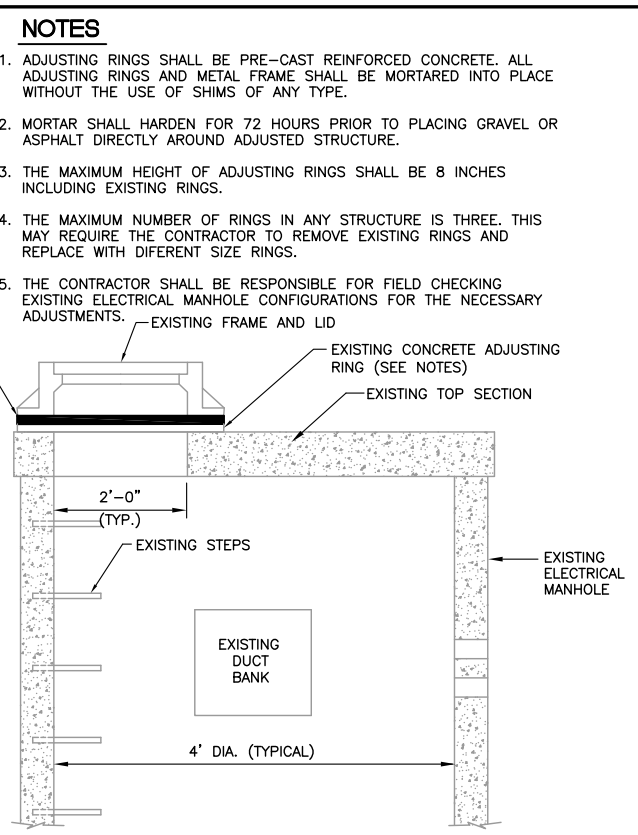
DESIGN BY: JRL
DRAWN BY: JRO
CHECKED BY: AB
APPROVED BY: DKP
DATE: 08/1/2013
JOB No: 11290-03

DATE: Thursday, August 01, 2013, 1:18:26 PM
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 XREF DWG: 11290-03-34-Emas-Marking Lighting Details - 2 - 34-16



TYPE 2 ELECTRICAL/COMMUNICATION HANDHOLE
NOT TO SCALE - AR110610

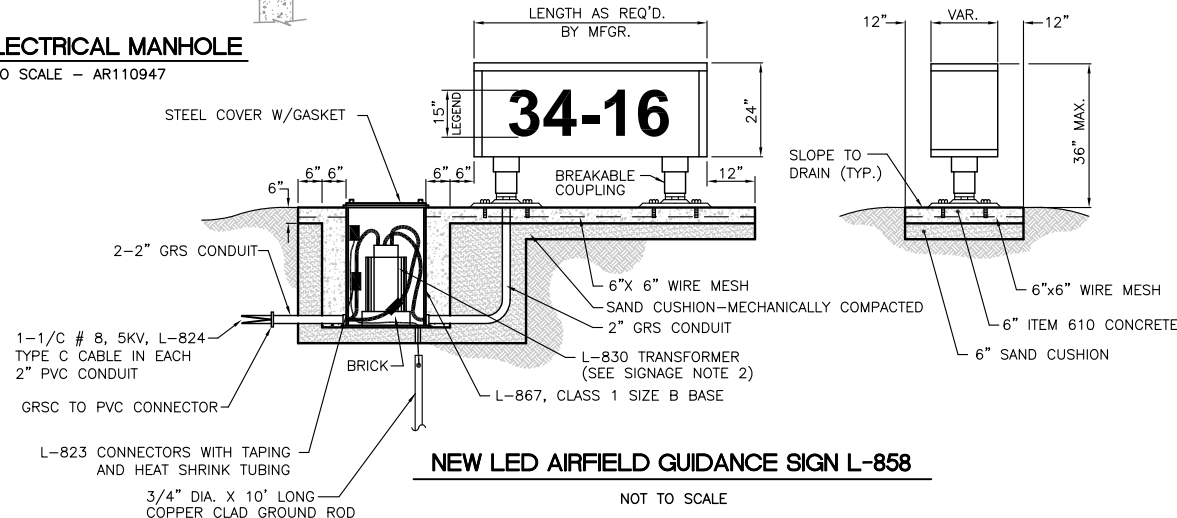
- NOTES:**
- CONDUIT ENTRANCES AND NUMBER OF CONDUITS SHALL BE AS SHOWN ON SITE PLAN VIEW.
 - FRAME AND LID SHALL BE NEEHAH R-6662-KH OR EQUAL.
 - COVER SHALL BE STAMPED "ELECTRICAL".



ADJUST ELECTRICAL MANHOLE
NOT TO SCALE - AR110947

SIGNAGE NOTES

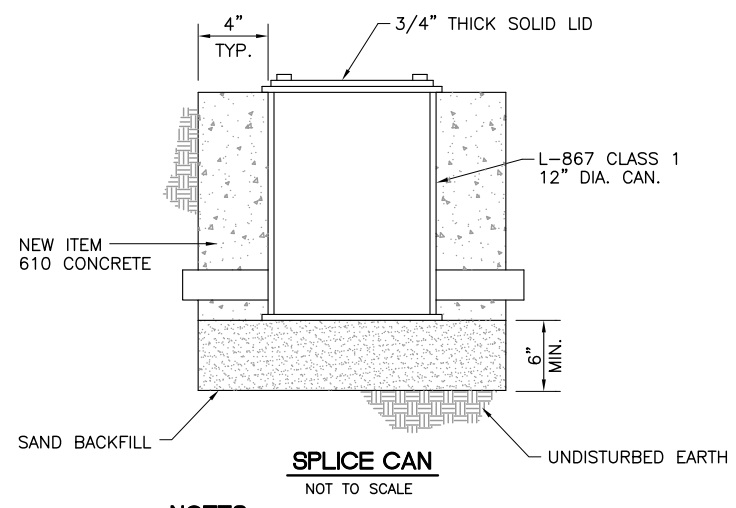
- ALL SIGNS ARE 2-SIDED LED SIGNS, STYLE 2 AND CLASS 2 AS MANUFACTURED BY ADB OR APPROVED EQUAL.
- TRANSFORMER WATTAGE AS RECOMMENDED BY MANUFACTURER FOR LED SIGNS.
- LIGHTED SIGNS SHALL BE BASE MOUNTED ONLY.
- THE NUMBER OF MODULES PER SIGN SHALL BE AS RECOMMENDED BY THE MANUFACTURER.
- CONTRACTOR SHALL SUBMIT DETAILED SHOP DRAWING INCLUDING SIGN, COLOR, SIZE AND PROPOSED LEGEND, IN ENOUGH DETAIL AND DETERMINE PROPOSED SPACING AND OTHER INFORMATION REQUIRED BY SPECIAL PROVISIONS. CONTRACTOR TO VERIFY PROPOSED SIGN LOCATIONS AND ORIENTATIONS WITH RESIDENT ENGINEER PRIOR TO INSTALLATION.



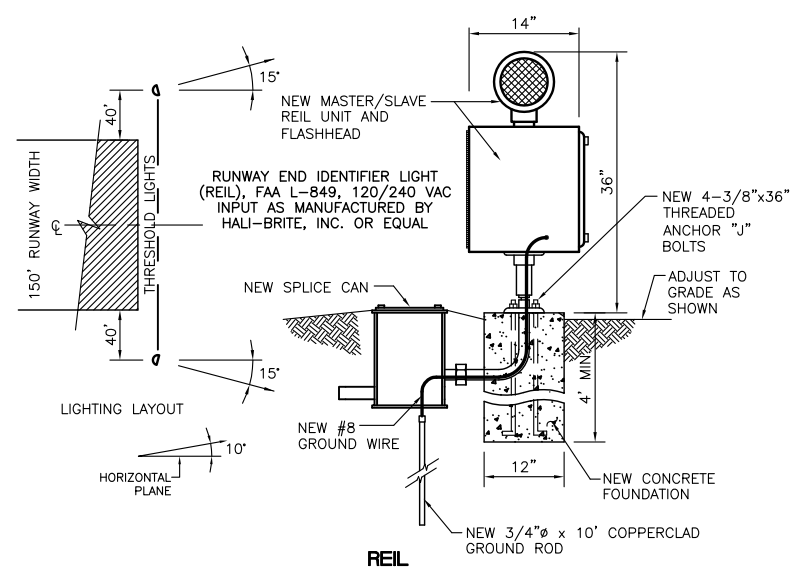
NEW LED AIRFIELD GUIDANCE SIGN L-858
NOT TO SCALE

GENERAL NOTES

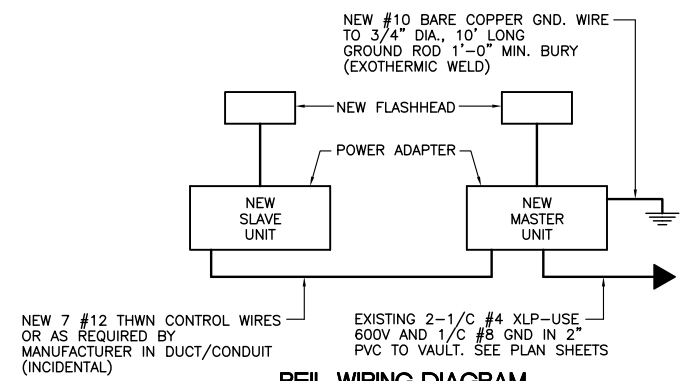
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- NOTES**
- SOLID LID SHALL BOLT ON TO CAN.
 - COST OF SPLICE CANS SHALL BE CONSIDERED INCIDENTAL TO THE REIL INSTALLATION (AR125610).

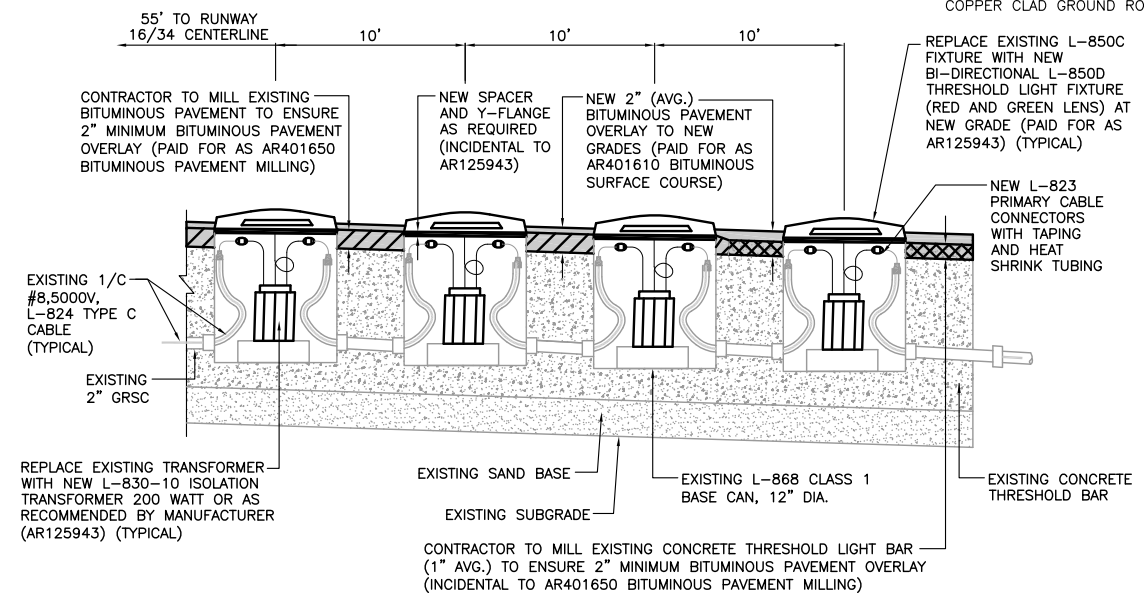


- NOT TO SCALE - AR125610**
- CONTRACTOR TO DISCONNECT EXISTING POWER AND CONTROL WIRES, ADJUST REIL VERTICALLY AND RE-CONNECT POWER AND CONTROL WIRES.
 - ELEVATION OF LIGHT UNIT SHALL MEET REQUIREMENTS PER AC 150/5340-30G (LATEST EDITION)

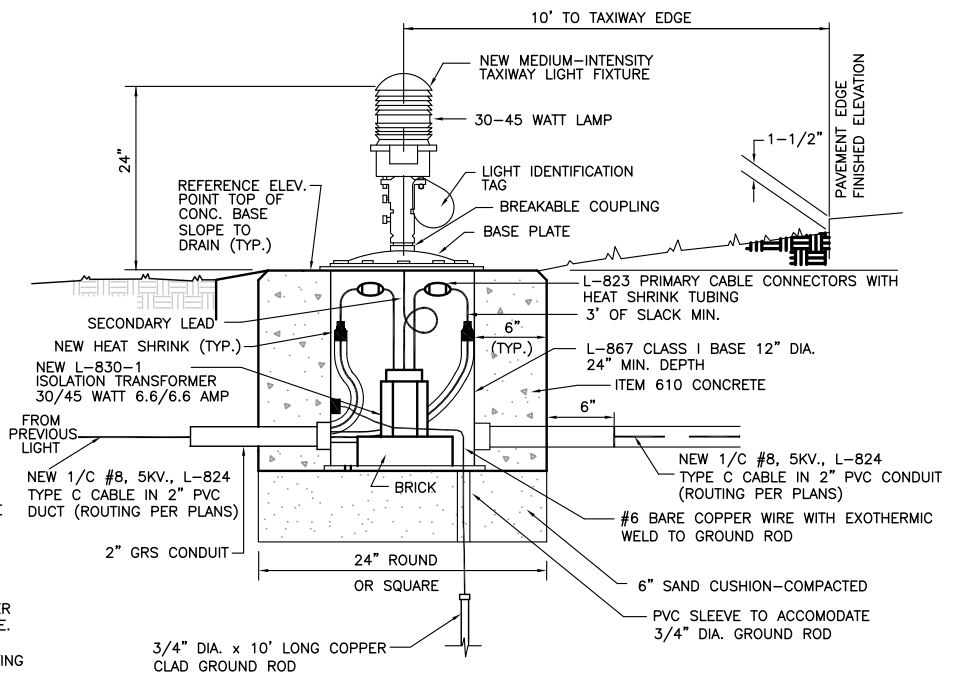


REIL WIRING DIAGRAM
NOT TO SCALE - AR125610

- THE NEW REIL UNITS SYSTEM SHALL BE COMPLETED WITH FLASHHEADS, POWER ADAPTERS, FRANGIBLE FITTINGS, CABLES, CONDUITS, GROUNDING AND ALL NECESSARY EQUIPMENT FOR A COMPLETE AND OPERATIONAL SYSTEM. REIL UNIT FAA APPROVED TYPE L-849.
- CONTRACTOR SHALL FURNISH AND INSTALL ONE (1) 3KVA 480-120/240 TRANSFORMER AND 20A, 2-POLE NEMA 3R DISCONNECT SWITCH AT EACH REIL.



ADJUST IN-PAVEMENT THRESHOLD LIGHT(S) W/ NEW FIXTURE DETAIL
NOT TO SCALE - AR125943



NEW BASE MOUNTED MEDIUM INTENSITY TAXIWAY LIGHT
NOT TO SCALE - AR125415

IL CONTRACT: PA056
 IL LETTING ITEM: 1A
 IL PROJECT: PWK-4182
 S.B.G. PROJECT: 3-17-0018-B48

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE

0 1 2
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**CHICAGO EXECUTIVE AIRPORT
 WHEELING/PROSPECT HEIGHTS, ILLINOIS
 CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)
 ELECTRICAL DETAILS - SHEET 2**

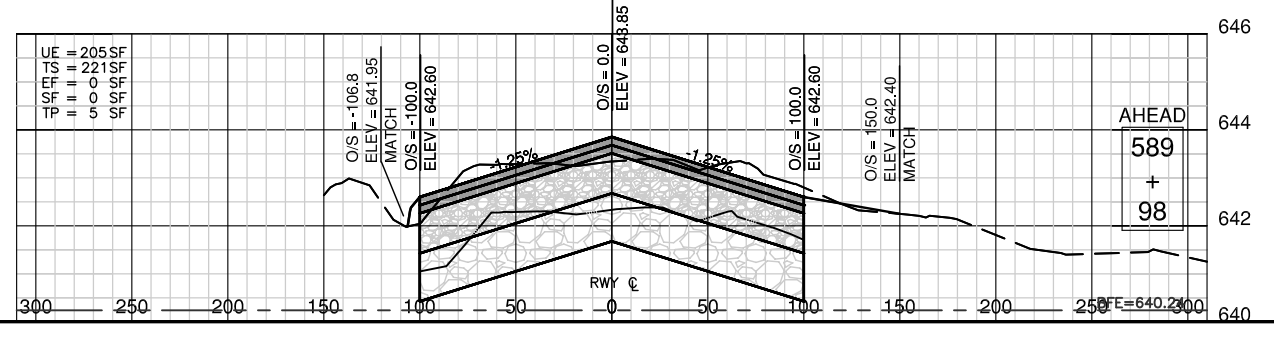
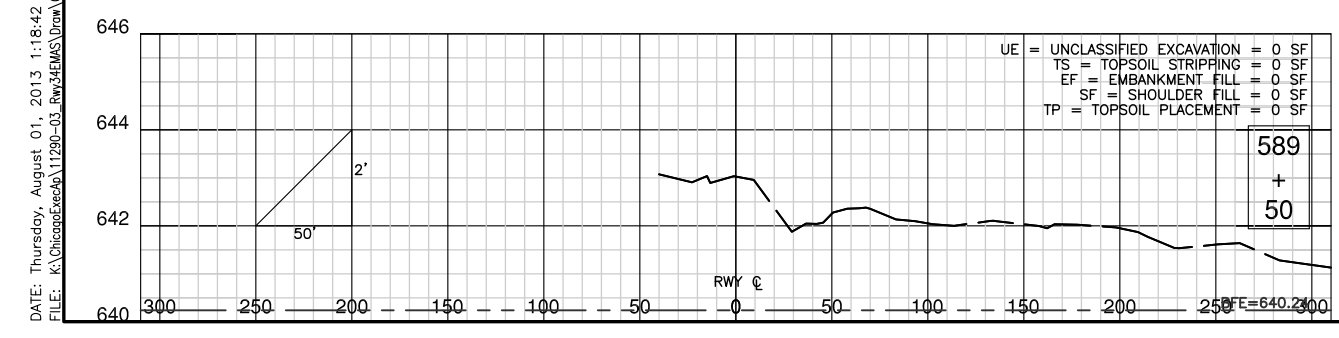
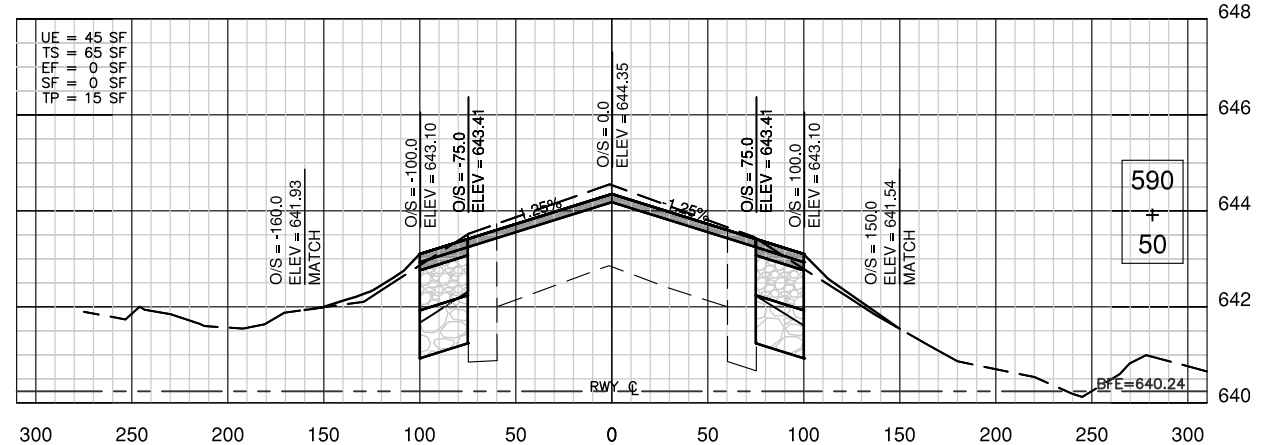
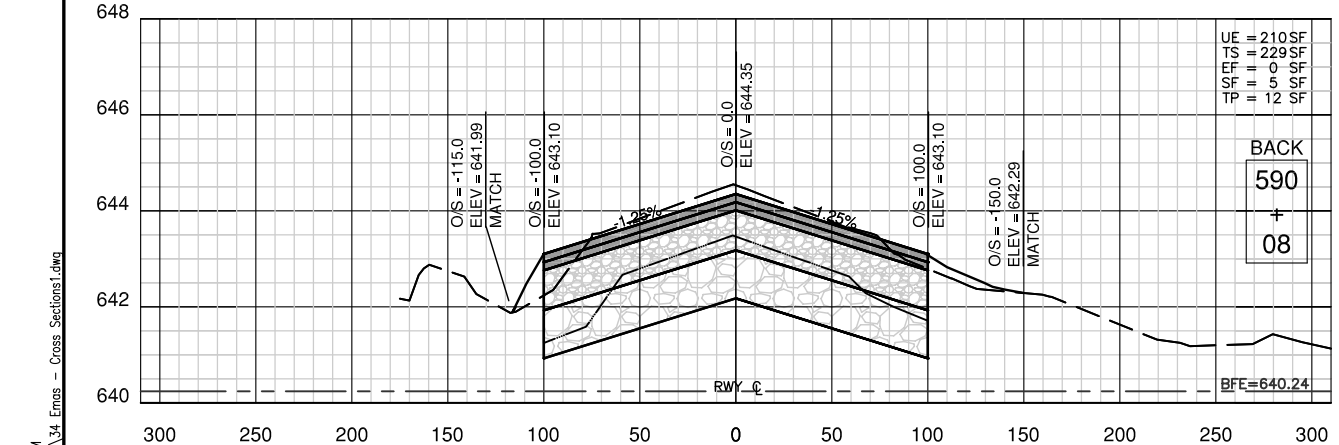
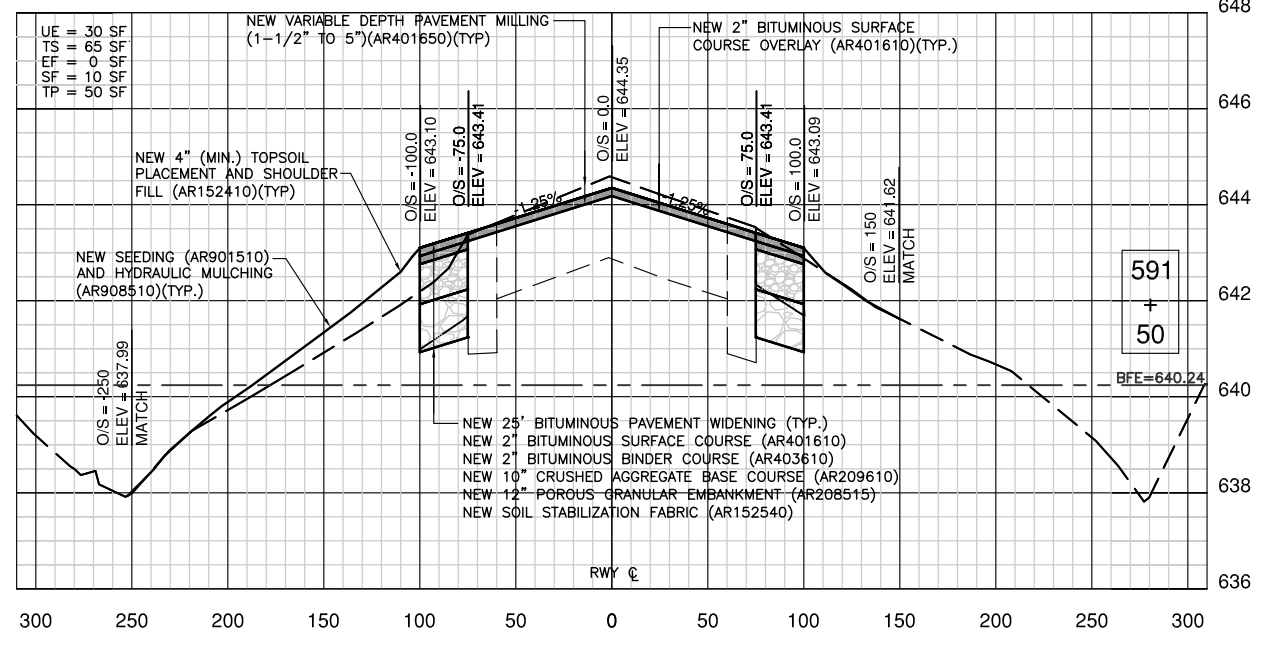
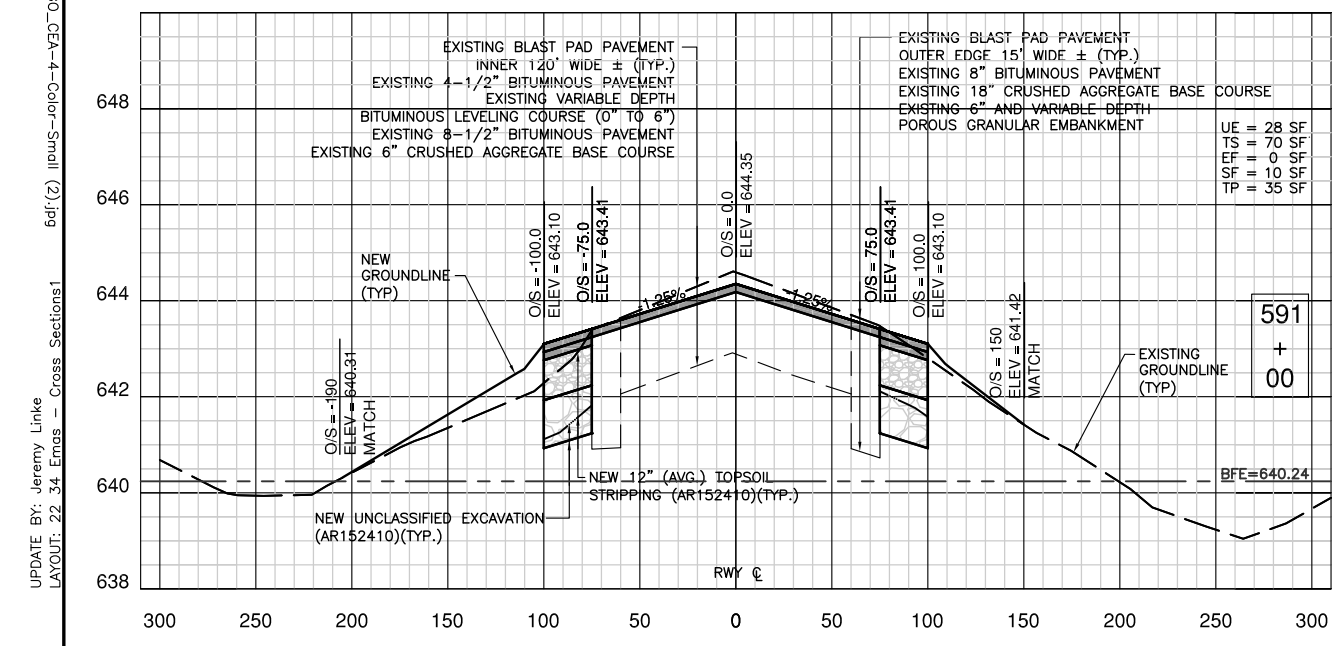
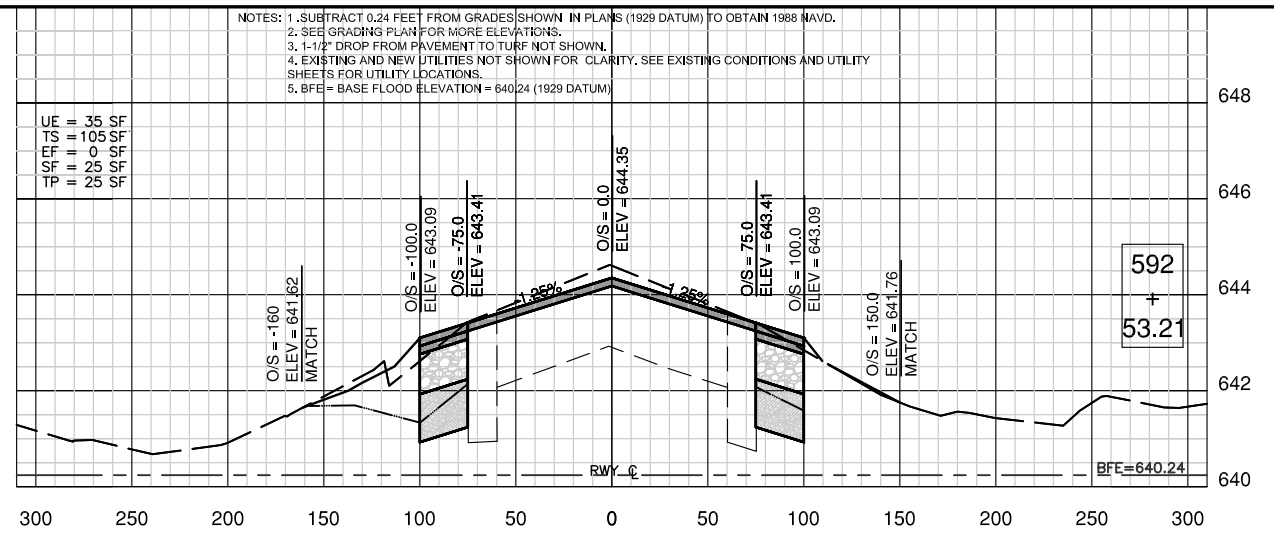
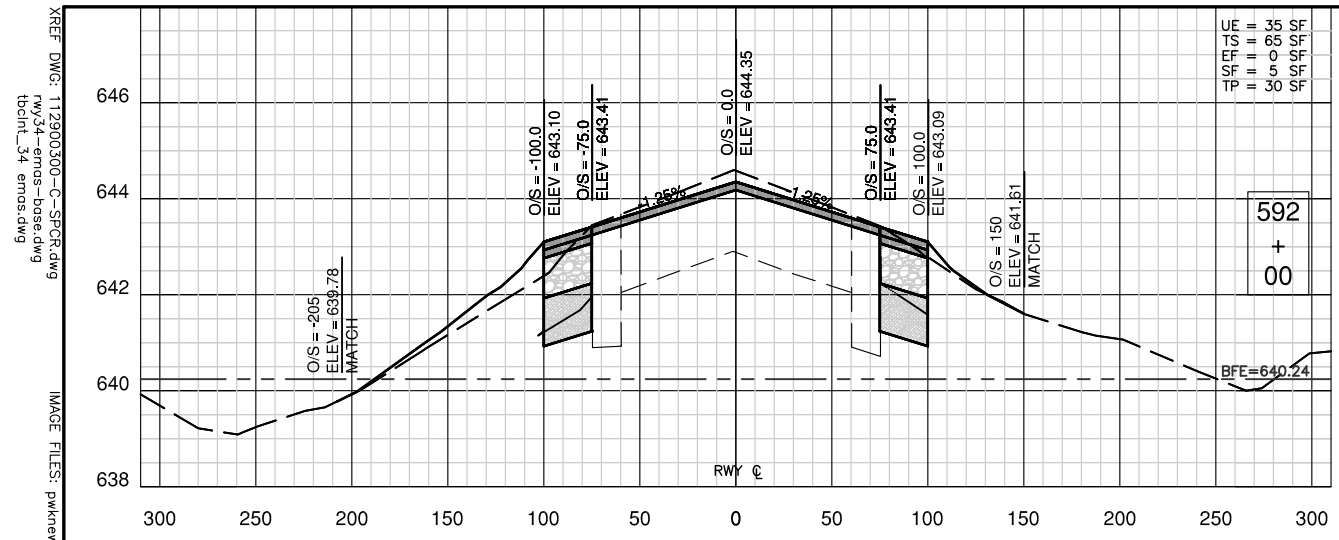
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CHICAGO EXECUTIVE AIRPORT

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CHECKED BY:	DKP
APPROVED BY:	AB
DATE:	08/1/2013
JOB No:	11290-03

SHEET 20 OF 24 SHEETS



NOTES: 1. SUBTRACT 0.24 FEET FROM GRADES SHOWN IN PLANS (1929 DATUM) TO OBTAIN 1988 NAVD.
 2. SEE GRADING PLAN FOR MORE ELEVATIONS.
 3. 1-1/2\"/>

IL. CONTRACT: PA056
 IL. LETTING ITEM: 1A
 IL. PROJECT: PWK-4182
 S.B.G. PROJECT: 3-17-0018-B48

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE

0 1 2
 THIS BAR IS EQUAL TO 2\"/>

CHICAGO EXECUTIVE AIRPORT
 WHEELING/PROSPECT HEIGHTS, ILLINOIS
 CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)
 CROSS SECTIONS - SHEET 1

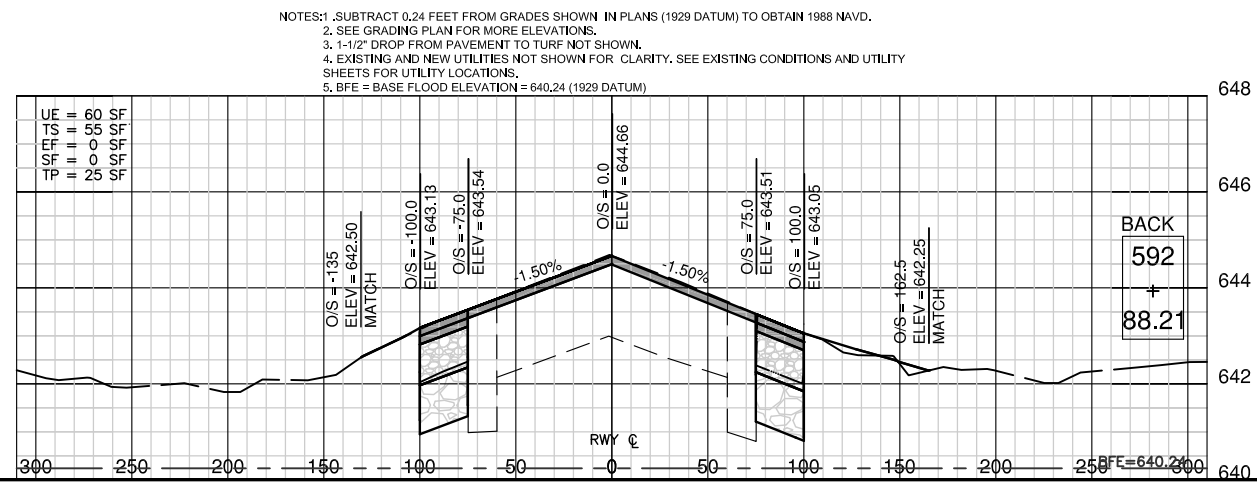
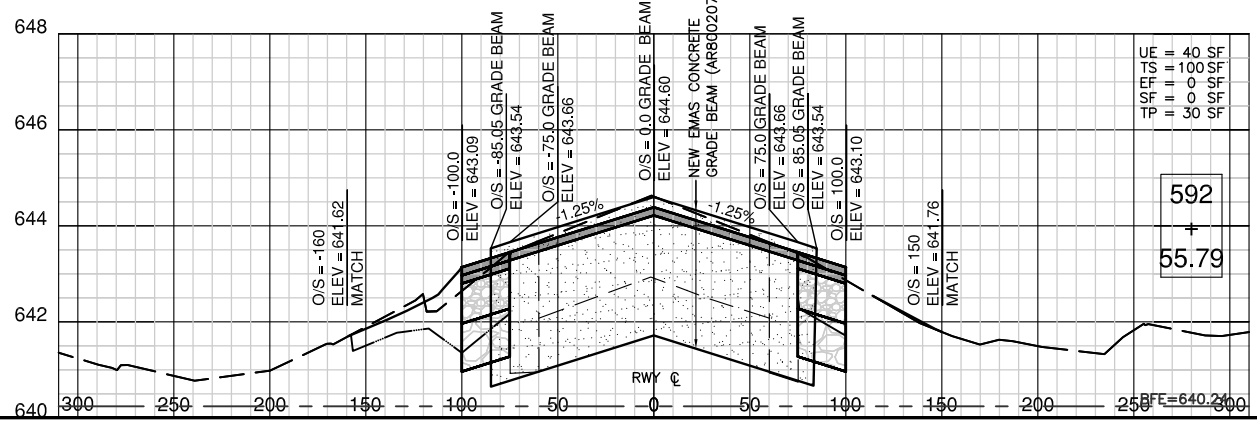
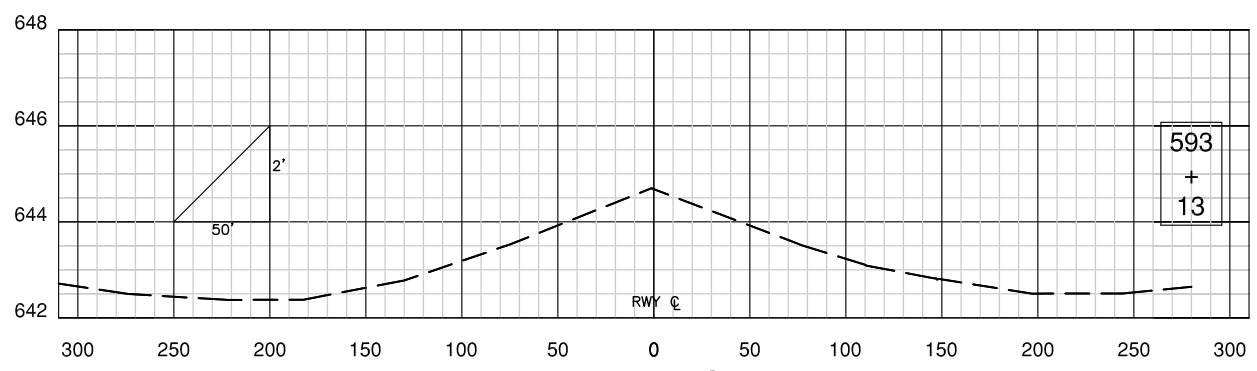
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CHECKED BY:	DKP
APPROVED BY:	BW
DATE:	08/1/2013
JOB No:	11290-03

DATE: Thursday, August 01, 2013, 1:18:44 PM
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 11/24/13
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 11/24/13

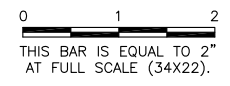


NOTES: 1. SUBTRACT 0.24 FEET FROM GRADES SHOWN IN PLANS (1929 DATUM) TO OBTAIN 1988 NAVD.
 2. SEE GRADING PLAN FOR MORE ELEVATIONS.
 3. 1-1/2" DROP FROM PAVEMENT TO TURF NOT SHOWN.
 4. EXISTING AND NEW UTILITIES NOT SHOWN FOR CLARITY. SEE EXISTING CONDITIONS AND UTILITY SHEETS FOR UTILITY LOCATIONS.
 5. BFE = BASE FLOOD ELEVATION = 640.24 (1929 DATUM)

IL CONTRACT: PA056
 IL LETTING ITEM: 1A
 IL PROJECT: PWK-4182
 S.B.G. PROJECT: 3-17-0018-B48

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE



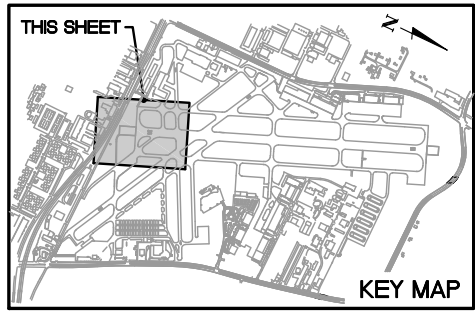
CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)
CROSS SECTIONS - SHEET 2

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DATE:	08/1/2013
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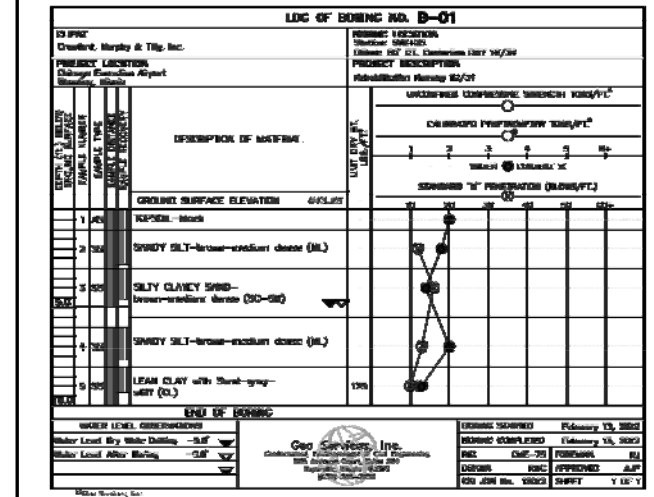
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SOIL BORING SCHEDULE

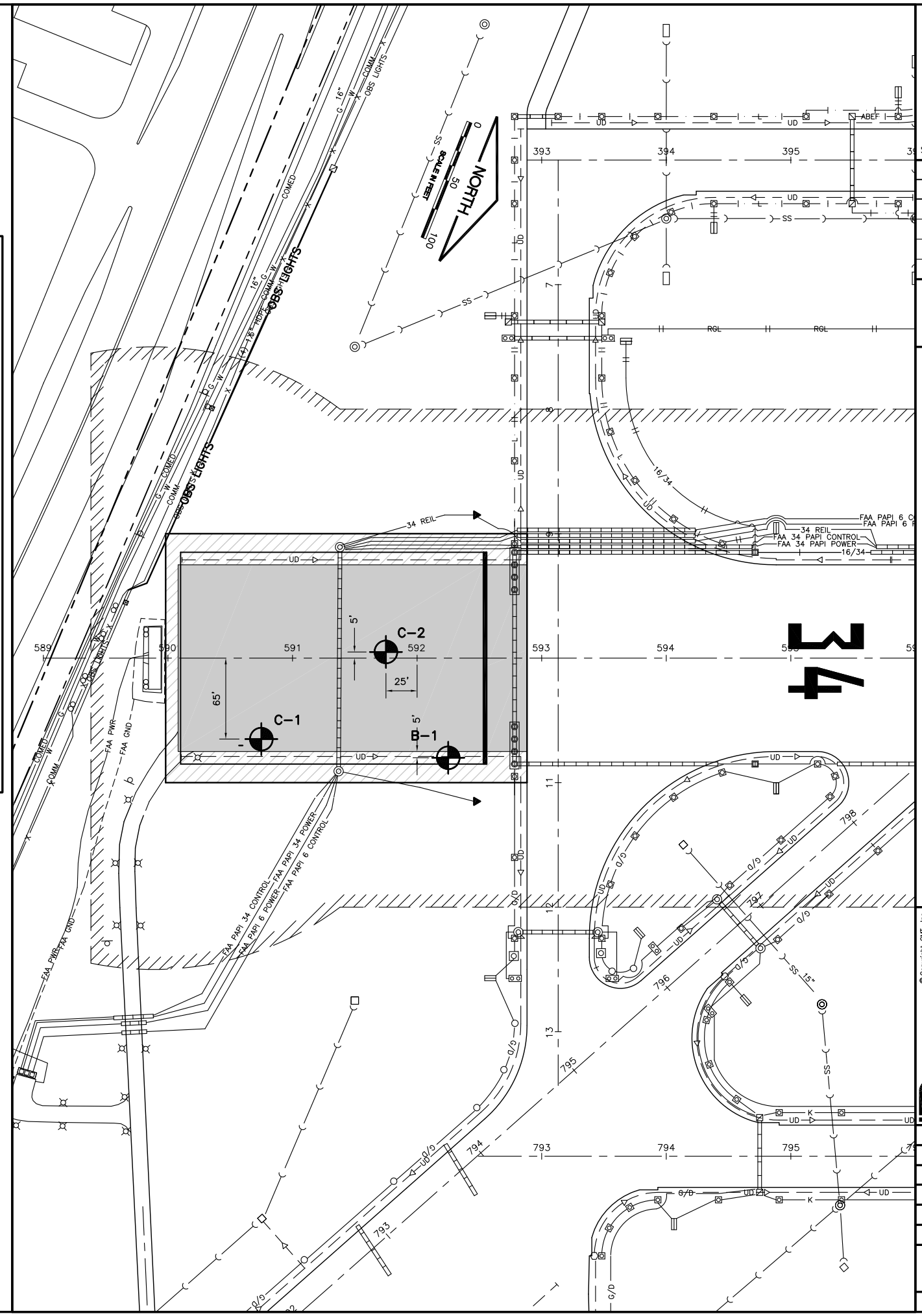
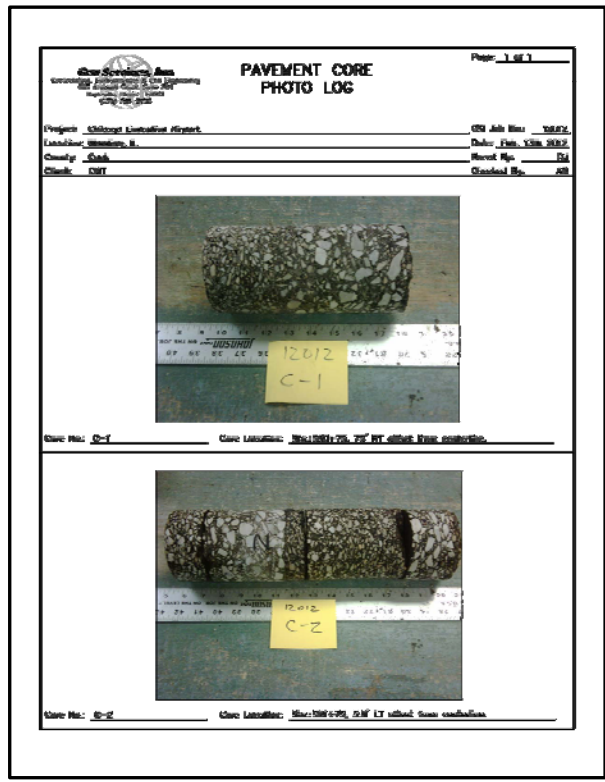
NO.	NORTHING	EASTING	STA.	OFFSET	ELEVATION
B-1	1983097.26	617589.88	592+25	80' RT. CENTERLINE RWY 16/34	643.25
C-1	1982952.33	617631.36	590+75	65' RT. CENTERLINE RWY 16/34	643.60
C-2	1983019.39	617529.37	591+75	5' LT. CENTERLINE RWY 16/34	644.55

NOTE: HORIZONTAL CONTROL IS IN 1927 DATUM. VERTICAL CONTROL IS IN 1929 DATUM.



Subsurface Investigation for the Chicago Executive Airport Rehabilitation Runway 16/34

CORE NO.	THICKNESS (ft.)	MATERIAL DESCRIPTION
C-1	3.25 3.8 3.75 6.8	1.0' - 3.25' - Firmly consolidated, fine to medium aggregate silty ASPHALT - 98% unconfined, low to medium aggregate silty. Confined strata. 3.25' - 3.8' - ASPHALT - 98% unconfined, low to medium aggregate silty. Confined strata. 3.8' - 3.75' - ASPHALT - 98% unconfined, low to medium aggregate silty. Confined strata. 3.75' - 6.8' - ASPHALT - 98% unconfined, low to medium aggregate silty. Confined strata.
C-2	1.25 3.75 1.0 1.25 2.25 1.0 1.0	1.0' - 1.25' - Firmly consolidated, fine to medium aggregate silty ASPHALT - 98% unconfined, low to medium aggregate silty. Confined strata. 1.25' - 3.75' - ASPHALT - 98% unconfined, low to medium aggregate silty. Confined strata. 3.75' - 4.75' - ASPHALT - 98% unconfined, low to medium aggregate silty. Confined strata. 4.75' - 5.75' - ASPHALT - 98% unconfined, low to medium aggregate silty. Confined strata. 5.75' - 6.75' - ASPHALT - 98% unconfined, low to medium aggregate silty. Confined strata. 6.75' - 7.75' - ASPHALT - 98% unconfined, low to medium aggregate silty. Confined strata. 7.75' - 8.75' - ASPHALT - 98% unconfined, low to medium aggregate silty. Confined strata.



IL CONTRACT: PA056
 IL LETTING ITEM: 1A
 IL PROJECT: PWK-4182
 S.B.G. PROJECT: 3-17-0018-B48

SURVEY BOOK # BOOK #

REVISIONS		
NUMBER	BY	DATE

0 1 2
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**CHICAGO EXECUTIVE AIRPORT
 WHEELING/PROSPECT HEIGHTS, ILLINOIS
 CONSTRUCT EMAS - RUNWAY 34 END (16 DEPARTURE END)**

ENGINEERING INFORMATION

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 CHECKED BY: DKP
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SHEET 24 OF 24 SHEETS