CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS

CONSTRUCTION PLANS
FOR
CHICAGO EXECUTIVE AIRPORT

REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

ILLINOIS PROJECT: PWK-4262

S.B.G. PROJECT: 3-17-0018-B49

DATE : APRIL 19, 2013

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
RANGE: 11 EAST
COOK COUNTY

WHEELING TOWNSHIP
(SECTION: 13)

CMT
CRAWFORD MURPHY & TILLY, INC.
CONSULTING ENGINEERS

12290-07

SUBMITTED BY _____ P.E.
JEREMY R. LINKE, P.E.

LICENSED PROFESSIONAL ENGINEER JEREMY R. LINKE 062-057163 STATE OF ILLINOIS

DATE 1.29.13

CHICAGO EXECUTIVE AIRPORT

APPROVED _____ AIRPORT MANAGER
DENNIS G. ROULEAU

DATE 1/31/13

PROJECT INFORMATION

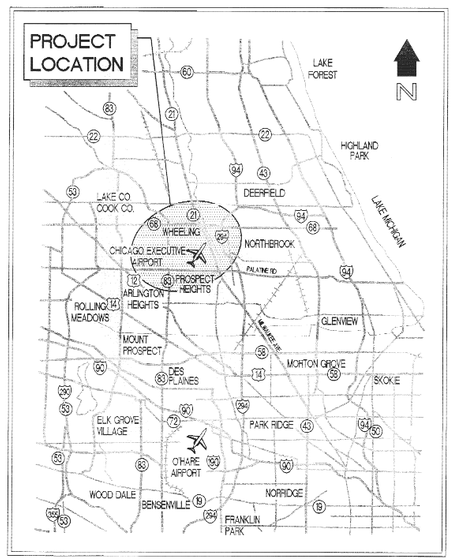
CONTRACTOR:
RESIDENT ENGINEER:
ORIGINAL CONTRACT AMOUNT:
FINAL CONSTRUCTION COST:
IDOT LETTING DATE:
IDOT AWARD DATE:
NOTICE TO PROCEED:
START OF CONSTRUCTION:
SUBSTANTIAL COMPLETION:

LOCAL AGENCY CONTACT INFORMATION

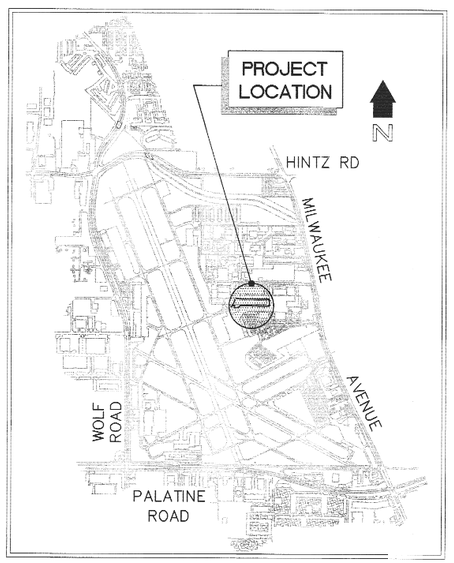
VILLAGE OF WHEELING - 847.459.2600
CITY OF PROSPECT HEIGHTS - 847.398.6070

ENGINEER'S PROJECT PERMIT LOG

NPDES #
FAA AIRSPACE #
CCDD LPC-663 DATED 11/16/12
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



LOCATION MAP



SITE PLAN

INDEX TO SHEETS

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	RECORD QUANTITY
BASE BID CONSTRUCTION				
AR108108	1/C #8 5KV UG CABLE	LF	255	
AR110202	2" PVC DUCT, DIRECT BURY	LF	128	
AR110906	REMOVE ELECTRICAL HANDHOLE	EACH	2	
AR125100	ELEVATED RETROREFLECTIVE MARKER	EACH	6	
AR125415	MITL - BASE MOUNTED	EACH	2	
AR125901	REMOVE STAKE MOUNTED LIGHT	EACH	20	
AR125902	REMOVE BASE MOUNTED LIGHT	EACH	1	
AR150510	ENGINEER'S FIELD OFFICE	LS	1	
AR150520	MOBILIZATION	LS	1	
AR152410	UNCLASSIFIED EXCAVATION	CY	1,946	
AR156510	SILT FENCE	LF	268	
AR156520	INLET PROTECTION	EACH	19	
AR156531	EROSION CONTROL BLANKET	SY	547	
AR163000	TEMPORARY CONSTRUCTION FENCE	LF	225	
AR208515	POROUS GRANULAR EMBANKMENT	CY	134	
AR209606	CRUSHED AGG. BASE COURSE - 6"	SY	2,580	
AR209650	AGGREGATE BASE PREPARATION	SY	4,570	
AR401610	BITUMINOUS SURFACE COURSE	TON	280	
AR401650	BITUMINOUS PAVEMENT MILLING	SY	706	
AR401652	BITUMINOUS PAVEMENT GRINDING	SY	4,002	
AR401910	REMOVE & REPLACE BIT. PAVEMENT	SY	70	
AR403610	BITUMINOUS BASE COURSE	TON	183	
AR501509	9" PCC PAVEMENT	SY	6,057	
AR501530	PCC TEST BATCH	EACH	1	
AR501900	REMOVE PCC PAVEMENT	SY	448	
AR602510	BITUMINOUS PRIME COAT	GAL	191	
AR603510	BITUMINOUS TACK COAT	GAL	275	
AR620520	PAVEMENT MARKING - WATERBORNE	SF	1,712	
AR620525	PAVEMENT MARKING - BLACK BORDER	SF	2,033	
AR620900	PAVEMENT MARKING REMOVAL	SF	751	
AR701518	18" RCP, CLASS IV	LF	500	
AR701900	REMOVE PIPE	LF	495	
AR705506	6" PERFORATED UNDERDRAIN	LF	1,092	
AR705900	REMOVE UNDERDRAIN	LF	60	
AR705904	REMOVE UNDERDRAIN CLEANOUT	EACH	1	
AR751416	TYPE 1 INLET	EACH	5	
AR751903	REMOVE MANHOLE	EACH	3	
AR751943	ADJUST MANHOLE	EACH	3	
AR800035	CONTROLLED LOW STRENGTH MATERIAL	CY	161	
AR800036	MONITORING WELL ABANDONMENT	EACH	1	
AR800153	CONCRETE WASHOUT	LS	1	
AR901510	SEEDING	ACRE	0.15	

ADDITIVE ALTERNATE #1 CONSTRUCTION				
AS152410	UNCLASSIFIED EXCAVATION	CY	641	
AS208515	POROUS GRANULAR EMBANKMENT	CY	57	
AS209606	CRUSHED AGG. BASE COURSE - 6"	SY	917	
AS209650	AGGREGATE BASE PREPARATION	SY	1,785	
AS401610	BITUMINOUS SURFACE COURSE	TON	72	
AS401650	BITUMINOUS PAVEMENT MILLING	SY	137	
AS401652	BITUMINOUS PAVEMENT GRINDING	SY	1,709	
AS401910	REMOVE & REPLACE BIT. PAVEMENT	SY	16	
AS403610	BITUMINOUS BASE COURSE	TON	50	
AS501509	9" PCC PAVEMENT	SY	2,351	
AS501900	REMOVE PCC PAVEMENT	SY	26	
AS602510	BITUMINOUS PRIME COAT	GAL	57	
AS603510	BITUMINOUS TACK COAT	GAL	53	
AS620520	PAVEMENT MARKING - WATERBORNE	SF	9,750	
AS620525	PAVEMENT MARKING - BLACK BORDER	SF	1,097	
AS620900	PAVEMENT MARKING REMOVAL	SF	1,001	
AS705506	6" PERFORATED UNDERDRAIN	LF	252	
AS800035	CONTROLLED LOW STRENGTH MATERIAL	CY	45	
AS910420	BOLLARD	EACH	4	

ADDITIVE ALTERNATE #2 CONSTRUCTION				
AT209650	AGGREGATE BASE PREPARATION	SY	230	
AT501509	9" PCC PAVEMENT	SY	230	
AT501900	REMOVE PCC PAVEMENT	SY	230	
AT751980	RECONSTRUCT INLET	EACH	5	

IL. CONTRACT: **PA054**
IL. LETTING ITEM: **15A**
IL. PROJECT: **PWK-4262**
S.B.G. PROJECT: **3-17-0018-B49**

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
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

SUMMARY OF QUANTITIES

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

CHICAGO EXECUTIVE AIRPORT

DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	JRL
APPROVED BY:	DKP
DATE:	4/19/2013
JOB No:	12290-07-00

FINAL

SHEET 2 OF 21 SHEETS

LEGEND

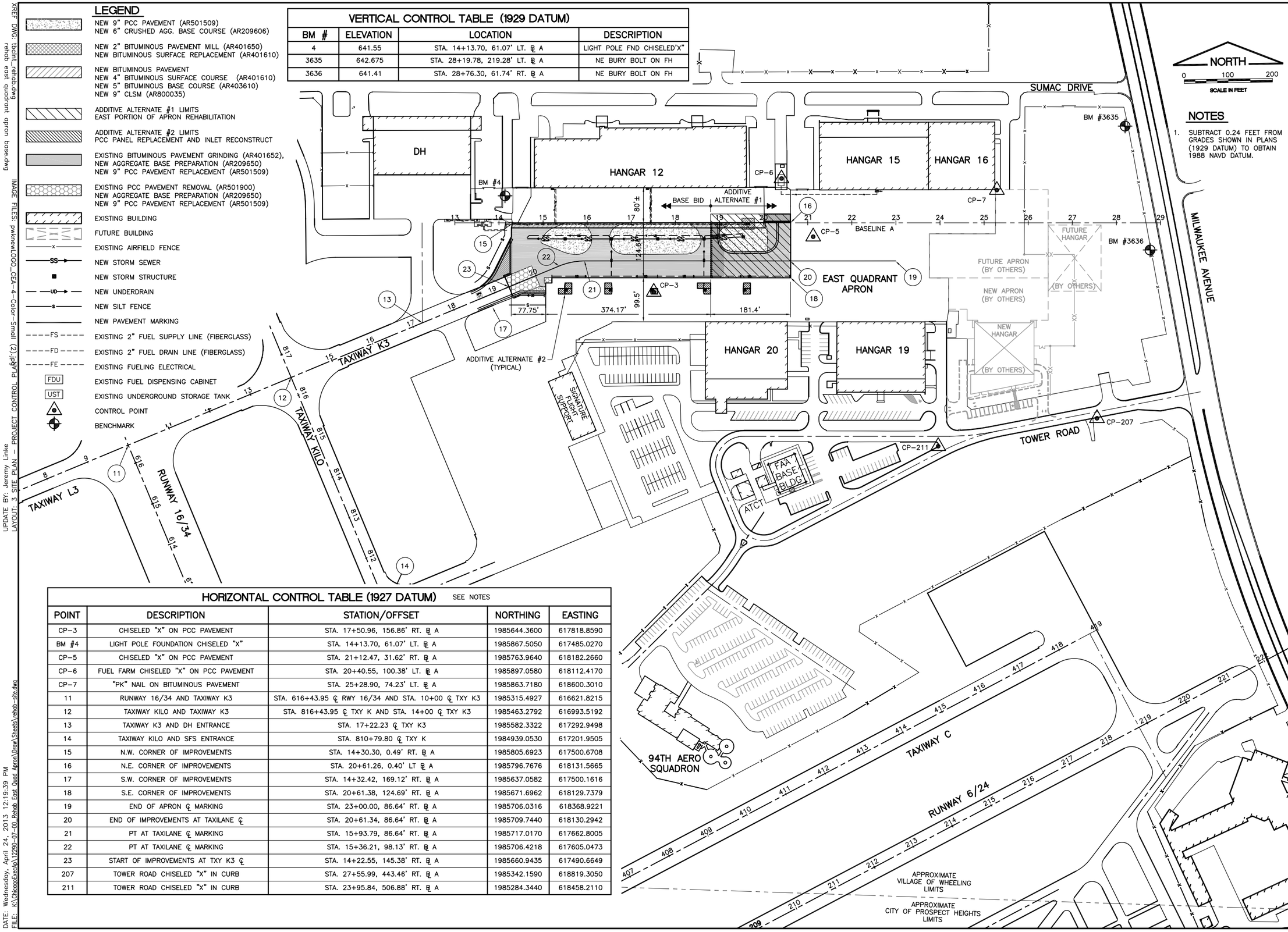
- NEW 9" PCC PAVEMENT (AR501509)
  NEW 6" CRUSHED AGG. BASE COURSE (AR209606)
- NEW 2" BITUMINOUS PAVEMENT MILL (AR401650)
  NEW BITUMINOUS SURFACE REPLACEMENT (AR401610)
- NEW BITUMINOUS PAVEMENT
  NEW 4" BITUMINOUS SURFACE COURSE (AR401610)
  NEW 5" BITUMINOUS BASE COURSE (AR403610)
  NEW 9" CLSM (AR800035)
- ADDITIVE ALTERNATE #1 LIMITS
  EAST PORTION OF APRON REHABILITATION
- ADDITIVE ALTERNATE #2 LIMITS
  PCC PANEL REPLACEMENT AND INLET RECONSTRUCT
- EXISTING BITUMINOUS PAVEMENT GRINDING (AR401652),
  NEW AGGREGATE BASE PREPARATION (AR209650)
  NEW 9" PCC PAVEMENT REPLACEMENT (AR501509)
- EXISTING PCC PAVEMENT REMOVAL (AR501900)
  NEW AGGREGATE BASE PREPARATION (AR209650)
  NEW 9" PCC PAVEMENT REPLACEMENT (AR501509)
- EXISTING BUILDING
- FUTURE BUILDING
- EXISTING AIRFIELD FENCE
- NEW STORM SEWER
- NEW STORM STRUCTURE
- NEW UNDERDRAIN
- NEW SILT FENCE
- NEW PAVEMENT MARKING
- FS — EXISTING 2" FUEL SUPPLY LINE (FIBERGLASS)
- FD — EXISTING 2" FUEL DRAIN LINE (FIBERGLASS)
- FE — EXISTING FUELING ELECTRICAL
- FDU — EXISTING FUEL DISPENSING CABINET
- UST — EXISTING UNDERGROUND STORAGE TANK
- CONTROL POINT
- BENCHMARK

VERTICAL CONTROL TABLE (1929 DATUM)

BM #	ELEVATION	LOCATION	DESCRIPTION
4	641.55	STA. 14+13.70, 61.07' LT. ℄ A	LIGHT POLE FND CHISELED'X"
3635	642.675	STA. 28+19.78, 219.28' LT. ℄ A	NE BURY BOLT ON FH
3636	641.41	STA. 28+76.30, 61.74' RT. ℄ A	NE BURY BOLT ON FH

HORIZONTAL CONTROL TABLE (1927 DATUM) SEE NOTES

POINT	DESCRIPTION	STATION/OFFSET	NORTHING	EASTING
CP-3	CHISELED "X" ON PCC PAVEMENT	STA. 17+50.96, 156.86' RT. ℄ A	1985644.3600	617818.8590
BM #4	LIGHT POLE FOUNDATION CHISELED "X"	STA. 14+13.70, 61.07' LT. ℄ A	1985867.5050	617485.0270
CP-5	CHISELED "X" ON PCC PAVEMENT	STA. 21+12.47, 31.62' RT. ℄ A	1985763.9640	618182.2660
CP-6	FUEL FARM CHISELED "X" ON PCC PAVEMENT	STA. 20+40.55, 100.38' LT. ℄ A	1985897.0580	618112.4170
CP-7	"PK" NAIL ON BITUMINOUS PAVEMENT	STA. 25+28.90, 74.23' LT. ℄ A	1985863.7180	618600.3010
11	RUNWAY 16/34 AND TAXIWAY K3	STA. 616+43.95 ℄ RWY 16/34 AND STA. 10+00 ℄ TXY K3	1985315.4927	616621.8215
12	TAXIWAY KILO AND TAXIWAY K3	STA. 816+43.95 ℄ TXY K AND STA. 14+00 ℄ TXY K3	1985463.2792	616993.5192
13	TAXIWAY K3 AND DH ENTRANCE	STA. 17+22.23 ℄ TXY K3	1985582.3322	617292.9498
14	TAXIWAY KILO AND SFS ENTRANCE	STA. 810+79.80 ℄ TXY K	1984939.0530	617201.9505
15	N.W. CORNER OF IMPROVEMENTS	STA. 14+30.30, 0.49' RT. ℄ A	1985805.6923	617500.6708
16	N.E. CORNER OF IMPROVEMENTS	STA. 20+61.26, 0.40' LT ℄ A	1985796.7676	618131.5665
17	S.W. CORNER OF IMPROVEMENTS	STA. 14+32.42, 169.12' RT. ℄ A	1985637.0582	617500.1616
18	S.E. CORNER OF IMPROVEMENTS	STA. 20+61.38, 124.69' RT. ℄ A	1985671.6962	618129.7379
19	END OF APRON ℄ MARKING	STA. 23+00.00, 86.64' RT. ℄ A	1985706.0316	618368.9221
20	END OF IMPROVEMENTS AT TAXILANE ℄	STA. 20+61.34, 86.64' RT. ℄ A	1985709.7440	618130.2942
21	PT AT TAXILANE ℄ MARKING	STA. 15+93.79, 86.64' RT. ℄ A	1985717.0170	617662.8005
22	PT AT TAXILANE ℄ MARKING	STA. 15+36.21, 98.13' RT. ℄ A	1985706.4218	617605.0473
23	START OF IMPROVEMENTS AT TXY K3 ℄	STA. 14+22.55, 145.38' RT. ℄ A	1985660.9435	617490.6649
207	TOWER ROAD CHISELED "X" IN CURB	STA. 27+55.99, 443.46' RT. ℄ A	1985342.1590	618819.3050
211	TOWER ROAD CHISELED "X" IN CURB	STA. 23+95.84, 506.88' RT. ℄ A	1985284.3440	618458.2110



NORTH
0 100 200
SCALE IN FEET

NOTES

1. SUBTRACT 0.24 FEET FROM GRADES SHOWN IN PLANS (1929 DATUM) TO OBTAIN 1988 NAVD DATUM.

IL. CONTRACT: **PA054**
IL. LETTING ITEM: **15A**
IL. PROJECT: **PWK-4262**
S.B.G. PROJECT: **3-17-0018-B49**

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
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

SITE PLAN - PROJECT CONTROL PLAN

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

CHICAGO EXECUTIVE AIRPORT

DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	JRL
APPROVED BY:	DKP
DATE:	4/19/2013
JOB No:	12290-07-00

FINAL

SHEET 3 OF 21 SHEETS

XREF DWG: tbcint_rehab.dwg
rehab east quadrant apron base.dwg
IMAGE FILES: pwknewLOGO_CEA-4-Color-Small.jpg
UPDATE BY: Jeremy Linke
LAYOUT: 3 SITE PLAN - PROJECT CONTROL PLAN
DATE: Wednesday, April 24, 2013 12:19:39 PM
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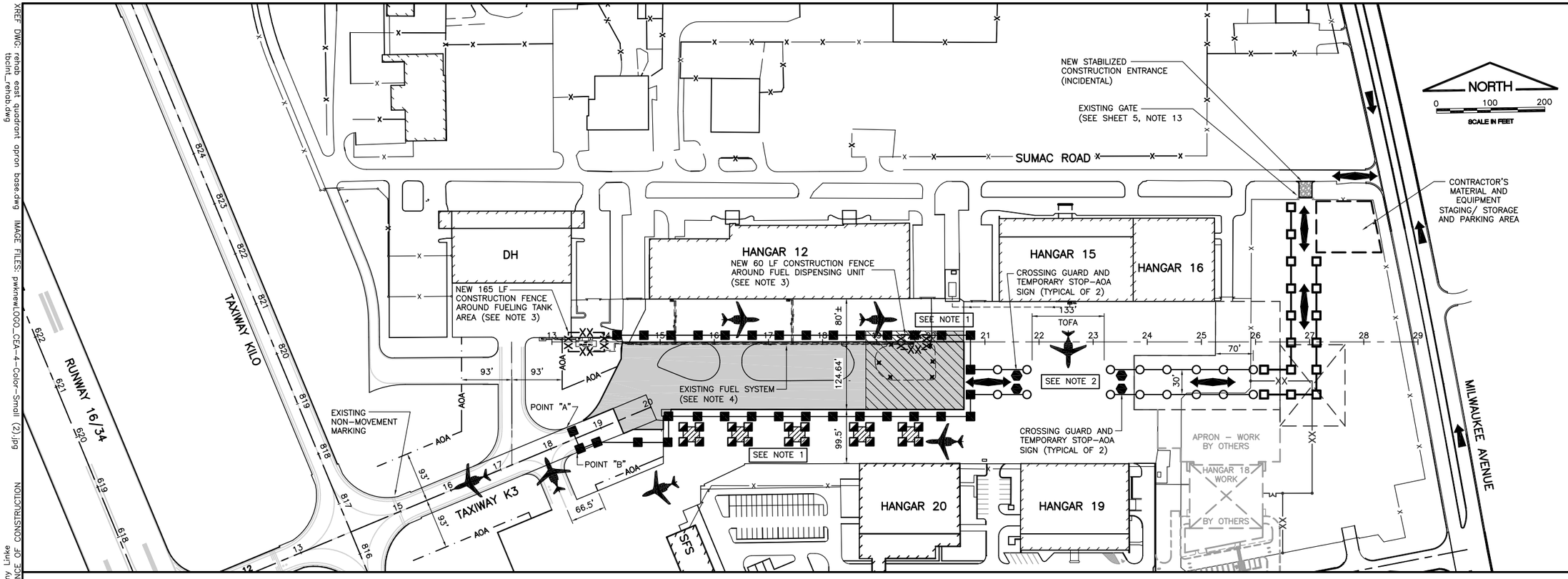
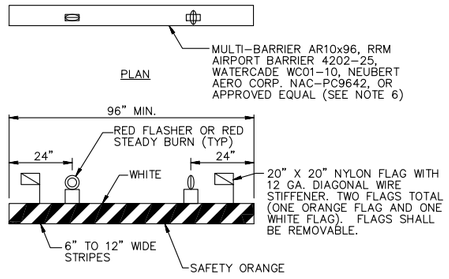




LOW PROFILE LIGHTED BARRICADE

NOT TO SCALE

BARRICADE NOTES:

1. FLASHER OR STEADY BURN LIGHTS SHALL BE BATTERY OR SOLAR POWER OPERATED. LENS SHALL BE RED AND BE ABLE TO ROTATE 90°.
2. FACING OF BARRICADE SHALL BE COVERED WITH REFLECTIVE TAPE OR PAINT.
3. BARRICADES TO BE PLACED WITH A MAXIMUM OF 10' SPACING CENTER TO CENTER BETWEEN RED LIGHTS ALONG OPERATIONAL PAVEMENT ADJACENT TO CONSTRUCTION AS DIRECTED BY THE RESIDENT ENGINEER. ALTERNATE FLASHER OR STEADY BURN LENSES SO THAT EVERY OTHER LENS IS ROTATED 90°.
4. FLASHER OR STEADY BURN LIGHTS SHALL BE SECURED TO THE BARRICADES, AS APPROVED BY THE RESIDENT ENGINEER.
5. 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.
6. BARRICADES SHALL BE OF A COMMERCIAL DESIGN.

DESIGN AIRCRAFT APPROACH CATEGORY: D
DESIGN AIRPORT GROUP: III

EAST QUADRANT APRON
MAXIMUM ANTICIPATED WINGSPAN OF ADG III
GULFSTREAM G500 – WINGSPAN = 93.5'
COMPUTED TAXILANE CENTERLINE TO OBJECT SEPARATION (TOFA) = 66.1'

GROUND CONTROL FREQUENCY: 121.7
AIR CONTROL FREQUENCY: 119.9
MAXIMUM ANTICIPATED HEIGHT OF CONSTRUCTION EQUIPMENT: 25'

IN THE EVENT THE CONTRACTOR PROPOSES TO UTILIZE AN ON-SITE CONCRETE BATCH PLANT, LOCATION TO BE COORDINATED WITH RESIDENT ENGINEER AND ACTING AIRPORT MANAGER TO ALLOW FOR APPROPRIATE AIRSPACE CLEARANCE. THE CONTRACTOR WILL BE RESPONSIBLE TO SUBMIT FAA FORM 7460 FOR AIRSPACE APPROVAL. THE RESIDENT ENGINEER WILL PROVIDE BASE AIRPORT INFORMATION FOR THE CONTRACTOR'S USE.

POINT "A" CLOSEST CONSTRUCTION
POINT TO RUNWAY 16/34
ELEVATION: 640.2
LATITUDE: 42°07'02.92" (NAD83)
LONGITUDE: 87°54'02.60" (NAD83)

POINT "B" CLOSEST CONSTRUCTION
POINT TO RUNWAY 12/30 AND RUNWAY 6/24
ELEVATION: 640.2
LATITUDE: 42°07'02.46" (NAD83)
LONGITUDE: 87°54'02.35" (NAD83)

NOTE – ALL PHASES
ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER AIRPORT ELECTRICAL CABLES SHALL REMAIN IN SERVICE UNTIL REPLACED AS ACCEPTABLE TO THE RESIDENT ENGINEER. ALL TEMPORARY CABLING AND SPLICING NECESSARY TO KEEP THE CIRCUITS IN OPERATION SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.

EXISTING CRITICAL AIRCRAFT AND REQUIRED SAFETY AREAS

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

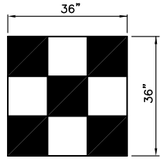
AOA = AIRCRAFT OPERATIONS AREA

DATA FROM 2009 CEA APPROVED ALP

WORK AREA	OPERATIONAL STATUS/ RESTRICTIONS
PHASE 1 EAST QUADRANT APRON REHAB	TAXIWAY K3 ENTRANCE TO EAST QUADRANT APRON – CLOSED EAST QUADRANT APRON – AIRCRAFT OPERATIONS RESTRICTED TO OWNER'S DESIGNATED AVIATION PERSONNEL TO "WING WALK" AIRCRAFT AT ALL TIMES. CONTRACTOR'S FLAGGERS TO DIRECT AND MOVE THEIR MEN AND EQUIPMENT TO BE CLEAR TO ALLOW PASSAGE OF AIRCRAFT VIA "WING WALKERS"
PHASE 2 EAST QUADRANT APRON PANEL REPLACEMENT	EAST QUADRANT APRON – PANEL REPLACEMENT WORK SHALL ONLY BE STARTED ONCE PHASE 1 WORK IS COMPLETED AND OPEN TO AIRCRAFT TRAFFIC ON PHASE 1 PAVEMENT

LEGEND

- PHASE 1 (BASE BID AND ADDITIVE ALTERNATE #1 LIMITS) CONTRACTOR'S WORK AREA
- PHASE 2 (ADDITIVE ALTERNATE #2 LIMITS) CONTRACTOR'S WORK AREA
- AIRCRAFT MOVEMENT AREA
- PHASE 1 LOW PROFILE BARRICADES
- PHASE 2 LOW PROFILE BARRICADES
- ALL PHASES LOW PROFILE BARRICADES FOR HAUL ROUTE
- ALL PHASES IDOT TYPE II BARRICADES (20' SPACING) WITH STEADY OR FLASHING RED LIGHTS FOR HAUL ROUTE DESIGNATION OUTSIDE AIRCRAFT MOVEMENT AREA
- CROSSING GUARD AND TEMPORARY "STOP" AND "AIRCRAFT MOVEMENT AREA" SIGN
- AOA — AIR OPERATIONS AREA (AOA)
- CONTRACTOR'S ACCESS/HAUL ROUTE
- x — EXISTING FENCE
- XX — NEW 4' TALL CONSTRUCTION FENCE



CONSTRUCTION EQUIPMENT AND TRUCK SIGNAL FLAG

NOT TO SCALE

GENERAL NOTES

1. NO AIRCRAFT WILL BE ALLOWED TO PARK IN THIS AREA TO ALLOW FOR AIRCRAFT TRAFFIC.
2. CONTRACTOR WILL BE REQUIRED TO HAVE A CROSSING GUARD FOR CONTRACTORS VEHICLES AND EQUIPMENT CROSSING AIRCRAFT MOVEMENT AREA.
3. TEMPORARY FENCE SHALL ONLY BE PAID FOR ONCE. REMOVAL AND REPLACEMENT DUE TO SEQUENCING AND CONSTRUCTION OPERATIONS SHALL BE INCIDENTAL.
4. CONTRACTOR SHALL INSTALL BARRICADES ALONG FUEL LINE SYSTEM LIMITS (BOTH SIDES). THE CONTRACTOR SHALL NOT CROSS OVER FUEL LINES DURING HAULING OPERATIONS OR CONSTRUCTION OPERATIONS.

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IL. LETTING ITEM: **15A**
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CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

SEQUENCE OF CONSTRUCTION
PER AC 150/5370-2F (LATEST EDITION)

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

CHICAGO EXECUTIVE AIRPORT

DESIGN BY:	JRL
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CHECKED BY:	JRL
APPROVED BY:	DKP
DATE:	4/19/2013
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FINAL

SHEET 4 OF 21 SHEETS

XREF DWG: rehab east quadrant apron base.dwg
IMAGE FILES: pwknewLOGO_CEA-4-Color-Small (2).jpg
tbcint_rehab.dwg
UPDATE BY: Jeremy Lin
LAYOUT: 4 SEQUENCE OF CONSTRUCTION
DATE: Wednesday, April 24, 2013 12:19:43 PM
FILE: K:\ChicagoExecAp\12290-07-00_Rehab East Quad Apron\Draw\Sheets\rehab-sequence.dwg

GENERAL NOTES

1. THE SUGGESTED SEQUENCE OF CONSTRUCTION SHOWN IS INTENDED TO ALLOW FOR THE ORDERLY CONSTRUCTION OF THE PROPOSED IMPROVEMENTS WHILE MAINTAINING AIRCRAFT ACCESS AT ALL TIMES. THE PHASING SHOWN IS A SUGGESTED SEQUENCE OF CONSTRUCTION ONLY. THIS SEQUENCE MAY BE MODIFIED HOWEVER, ALTERNATE STAGING PLANS MUST MAINTAIN AIRPORT OPERATIONS TO THE SATISFACTION OF THE AIRPORT MANAGER AND RESIDENT ENGINEER AND BE APPROVED BY THE DIVISION OF AERONAUTICS AND FEDERAL AVIATION ADMINISTRATION.
2. ALL OPERATIONS SHALL BE IN CONFORMANCE WITH AC 150/5370-2F (LATEST EDITION) **OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION**.
3. CONTRACTOR'S EQUIPMENT SHALL BE STORED IN THE EQUIPMENT AND MATERIAL STORAGE/STAGING AREA WHEN CONSTRUCTION IS NOT IN PROGRESS.
4. THE AIRPORT MANAGER IN CONSULTATION WITH THE RESIDENT ENGINEER SHALL HAVE FINAL SAY IN THE APPROVAL OF THE CONSTRUCTION OPERATING SEQUENCE AS IT RELATES TO PEDESTRIAN, VEHICULAR AND AIRCRAFT SAFETY.
5. ALL EXISTING PAVEMENTS, DRIVES OR ANY OTHER AREAS USED AS A HAUL ROAD OR STORAGE AREA BY THE CONTRACTOR SHALL BE RESTORED IN KIND TO THEIR PRE-CONSTRUCTION CONDITION OR TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER. THE COST OF MAINTAINING, REPAIRING OR CONSTRUCTING THESE PAVEMENTS AND AREAS SHALL BE INCIDENTAL TO THE CONTRACT. EXISTING AREAS OUTSIDE THE PROJECT LIMITS WHICH ARE DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY HIM AT HIS EXPENSE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND THE AIRPORT MANAGER.
6. THE CONTRACTOR SHALL KEEP ALL TRUCKS, EQUIPMENT AND MATERIALS OFF OF THE EXISTING TAXIWAYS, APRONS AND RUNWAYS OUTSIDE OF THE PROJECT LIMITS EXCEPT AS SHOWN OR WITH THE PRIOR PERMISSION OF THE RESIDENT ENGINEER.
7. WORK PERFORMED BY THE CONTRACTOR OUTSIDE OF DAYLIGHT HOURS SHALL BE DONE UNDER SUFFICIENT ARTIFICIAL LIGHTING TO ALLOW FOR PROPER CONSTRUCTION METHODS AND INSPECTIONS. LIGHT SHALL CONSIST OF MOVABLE POLE MOUNTED FLOODLIGHTS AND/OR SPOTLIGHTS OF SUFFICIENT NUMBER TO ILLUMINATE THE WORK AREA. VEHICLE HEADLIGHTS WILL BE ALLOWED ONLY IN ADDITION TO OTHER LIGHTS MENTIONED ABOVE. LIGHTING SHALL BE AS APPROVED BY THE RESIDENT ENGINEER AND SHALL NOT BE USED IF THEY AFFECT FLIGHT SAFETY. CONTRACTOR'S WORK HOURS SHALL BE IN ACCORDANCE WITH LOCAL ORDINANCES.
8. THE CONTRACTOR SHALL PROVIDE PORTABLE FLOOD LIGHTING FOR NIGHTTIME CONSTRUCTION. SUFFICIENT UNITS SHALL BE PROVIDED SO THAT WORK AREAS ARE ILLUMINATED TO A LEVEL OF FIVE HORIZONTAL FOOT CANDLES. THE LIGHTING LEVELS SHALL BE CALCULATED AND MEASURED IN ACCORDANCE WITH THE CURRENT STANDARDS OF THE ILLUMINATION ENGINEERING SOCIETY. LIGHTS SHALL BE POSITIONED SO AS NOT TO INTERFERE WITH AIRPORT OPERATIONS.
9. THE CONTRACTOR WILL BE REQUIRED TO HAVE A SWEEPER AVAILABLE FOR USE AT ALL TIMES. WHEN ACTIVE AIRFIELD PAVEMENTS ARE UTILIZED AS HAUL ROADS BY THE CONTRACTOR, MATERIAL TRACKED ON TO THE PAVEMENT SHALL BE CONTINUALLY REMOVED WITH SAID SWEEPER. THIS SWEEPING SHALL NOT BE PAID FOR SEPERATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
10. MATERIALS REMOVED FROM THE PROJECT WILL BE DISPOSED OF OFF AIRPORT PROPERTY, UNLESS NOTED OTHERWISE.
11. PAYMENT FOR TRAFFIC CONTROL INCLUDING, BUT NOT LIMITED TO BARRICADES, SIGNING, RUNWAY CLOSED MARKERS, AIR OPERATIONS AREA (A.O.A.) LATHE AND RIBBON, ETC. SHALL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. BARRICADES WITH TWO ORANGE FLAG (20" x 20") BETWEEN EACH SET OF BARRICADES OR 4' HIGH ORANGE SNOW FENCE SECURELY ATTACHED TO EACH BARRICADE SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. BARRICADES SHALL BE WEIGHTED TO PREVENT BLOWING OVER. BARRICADES SHALL HAVE A STEADY BURN OR FLASHING RED LIGHT. BARRICADE INSTALLATION WILL BE REQUIRED PRIOR TO ACCESS TO THE A.O.A. BY CONTRACTOR'S WORKERS, EQUIPMENT OR MATERIAL. SIGNS SHALL BE PLACED AT EACH TAXIWAY/RUNWAY CLOSURE LOCATION AND SHALL BE ATTACHED TO THE BARRICADES. EACH BARRICADE LOCATION SHALL CONSIST OF ONE "DO NOT ENTER" SIGN AND ONE "AIRCRAFT MOVEMENT AREA" SIGN. SIGNS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT. IN CONJUNCTION WITH IDOT TYPE II BARRICADES, THE CONTRACTOR SHALL SUPPLY AND USE AS DIRECTED BY THE AIRPORT, REFLECTIVE LOW PROFILE TYPE BARRICADES. ALL BARRICADES SHALL BE PLACED OUTSIDE OF ACTIVE SAFETY AREAS.
12. THE CONTRACTOR SHALL CONTACT THE AIRPORT MANAGER THROUGH THE RESIDENT ENGINEER TEN (10) WORKING DAYS IN ADVANCE OF THE START OF CONSTRUCTION SO THAT THE APPROPRIATE NOTAMS MAY BE ISSUED.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL CONSTRUCTION ACCESS GATES CLOSED DURING NON WORKING HOURS. THE CONTRACTOR SHALL PROVIDE A SIGN AT THE ACCESS GATE SAYING "AUTHORIZED PERSONNEL ONLY". THE CONTRACTOR SHALL CLOSE AND LOCK THE ACCESS GATE UPON LEAVING THE SITE. THROUGHOUT THE DURATION OF THE CONTRACT, ANY DAMAGES TO THE ACCESS ROAD, ACCESS GATE OR FENCING ADJACENT TO THE PROJECT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF THE RESIDENT ENGINEER. ALL COST RELATING TO CONTRACTOR'S ACCESS AND SECURITY SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
14. CONTRACTOR WILL BE REQUIRED TO PUT AIRPORT FLAGS AND HAVE BEACON LIGHTS ON ALL EQUIPMENT AT ALL TIMES DURING CONSTRUCTION. SEE FLAG DETAIL.
15. IN THE CASE OF AN EMERGENCY, CONTRACTOR SHALL NOTIFY AIRPORT MANAGER AND THE RESIDENT ENGINEER IMMEDIATELY.
16. DURING ADVERSE WEATHER, THE CONTRACTOR SHALL MAKE PROVISIONS FOR ACCESS TO THE WORK AT NO ADDITIONAL COST TO THE CONTRACT. NO EXTENSION OF CONTRACT TIME WILL BE CONSIDERED FOR DELAYS DUE TO LACK OF ADEQUATE ACCESS TO THE WORK.
17. THE TALLEST PIECE OF CONSTRUCTION EQUIPMENT IS ANTICIPATED TO BE 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 APROPRIATE OWNER WHO HAS JURISDICTION OVER THE AFFECTED ROUTE. ON-SITE ROADS USED AS HAUL ROUTES SHALL BE MAINTAINED BY THE CONTRACTOR AND SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE TO THEIR ORIGINAL CONDITION UPON COMPLETION OF BEING USED AS A HAUL ROUTE. THE BEFORE AND AFTER CONDITION OF ON-SITE HAUL ROUTES SHALL BE JOINTLY INSPECTED AND DETERMINED BY THE CONTRACTOR AND THE ENGINEER. FENCING, DRAINAGE, GRADING AND OTHER MISCELLANEOUS CONSTRUCTION REQUIRED TO CONSTRUCT TEMPORARY HAUL ROUTES OR ACCESS POINTS ON THE AIRPORT WILL BE THE CONTRACTOR'S TOTAL RESPONSIBILITY AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO THE WORK. ALL ON-SITE ACCESS ROADS TO AIRPORT FACILITIES SHALL REMAIN OPEN AND MAINTAINED AT ALL TIMES.
21. MOBILIZATION/EQUIPMENT STORAGE AREA WILL BE MADE AVAILABLE FOR CONTRACTOR'S MOBILIZATION AND STORAGE AS SHOWN ON THE PLANS. THIS AREA SHALL BE RESTORED TO THE ORIGINAL CONDITION UPON COMPLETION OF THE PROJECT AT THE CONTRACTOR'S EXPENSE.
22. LOCATION OF KNOWN EXISTING AIRPORT UNDERGROUND CABLES ARE SHOWN ON THE PLANS AND MUST BE VERIFIED BY THE CONTRACTOR. REPAIR OF DAMAGED CABLE MUST BE STARTED IMMEDIATELY AND CONTINUED UNTIL COMPLETED. ALL SUCH REPAIRS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS, OR AS DIRECTED BY THE OWNER OF THE CABLE OR FACILITY, AND SHALL BE AT THE CONTRACTOR'S EXPENSE. IF FAA CABLES ARE DAMAGED, REPAIRS SHALL BE DONE FROM PREVIOUS EXISTING TERMINATION POINT TO NEXT EXISTING TERMINATION POINT IN ACCORDANCE WITH FAA REQUIREMENTS AND IN THE PRESENCE OF A FAA REPRESENTATIVE. THE OWNER MAY ELECT TO HAVE THE REPAIR PERFORMED BY OTHERS IN WHICH CASE THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING THE INCURRED COSTS OF REPAIRS.
23. COORDINATION MEETINGS – THE CONTRACTOR SHALL CONDUCT WEEKLY COORDINATION MEETINGS TO DISCUSS WORK AREAS AND SCHEDULING, ETC. WITH THE RESIDENT ENGINEER, AIRPORT OPERATIONS, FAA, AND OTHER APPROPRIATE OFFICIALS. MINUTES FROM THE WEEKLY MEETINGS SHALL BE PREPARED BY THE CONTRACTOR, FURNISHED TO ALL ATTENDEES PRIOR TO THE SUBSEQUENT MEETING, AND KEPT ON FILE AT THE FIELD OFFICE. THE COORDINATION MEETING COSTS SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
24. THE CONTRACTOR SHALL PROVIDE THE PHONE NUMBERS OF THREE PERSONNEL, INCLUDING THE PROJECT SUPERINTENDENT, WHO MAY BE CONTACTED IN AN EMERGENCY. PERSONNEL SHALL BE ON CALL 24 HOURS PER DAY FOR MAINTAINING AIRPORT HAZARD LIGHTING AND BARRICADES.
25. DRAINAGE MODIFICATIONS SHALL BE SEQUENCED TO PROVIDE POSITIVE DRAINAGE AT ALL TIMES AT NO ADDITIONAL COST TO THE CONTRACT.
26. CONTRACTOR PERSONNEL, VEHICLES, EQUIPMENT AND BARRICADES SHALL NOT BE ALLOWED WITHIN THE TAXIWAY OBJECT FREE AREA (TOFA) OF ACTIVE TAXIWAYS AND THE RUNWAY SAFETY AREA (RSA) OF ACTIVE RUNWAYS.
27. CONTRACTOR SHALL STORE EQUIPMENT AND MATERIALS IN SUCH A MANNER AS NOT TO VIOLATE FEDERAL AVIATION ADMINISTRATION PART 77 IMAGINARY SURFACES OR RUNWAY AND TAXIWAY SAFETY AREAS.
28. ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER ELECTRICAL CABLES SHALL REMAIN IN SERVICE AT ALL TIMES. ALL EXISTING LIGHTING AND VAULT EQUIPMENT SHALL REMAIN IN SERVICE UNTIL PROPOSED IMPROVEMENTS ARE INSTALLED AND OPERATIONAL, UNLESS OTHERWISE APPROVED BY THE RESIDENT ENGINEER. ANY CABLES DAMAGED BY THE CONTRACTOR SHALL BE IMMEDIATELY REPAIRED AT HIS EXPENSE. ANY NECESSARY TEMPORARY JUMPER CABLES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
29. COORDINATION BY THE CONTRACTOR WITH THE EXISTING UTILITIES SHALL BE COMPLETED BEFORE CONSTRUCTION IS STARTED. CONTRACTOR IS REFERRED TO SECTION 50-17 OF THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS FOR SPECIFIC REQUIREMENTS. THE LOCATION OF UNDERGROUND UTILITIES AS INDICATED ON THE PLANS HAVE BEEN OBTAINED FROM EXISTING RECORDS. NEITHER THE OWNER OR THE DESIGN ENGINEER ASSUME ANY RESPONSIBILITY WHATSOEVER IN RESPECT TO THE ACCURACY, COMPLETENESS OR SUFFICIENCY OF THE INFORMATION. THERE IS NO GUARANTEE, EITHER EXPRESSED OR IMPLIED THAT THE LOCATIONS, SIZE AND TYPE MATERIAL OF EXISTING UNDERGROUND UTILITIES AS INDICATED ARE REPRESENTATIVE OF THOSE TO BE ENCOUNTERED DURING CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANY OF HIS OPERATIONAL PLANS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR DETAILED INFORMATION AND ASSISTANCE IN LOCATING UTILITIES. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY, THE RESIDENT ENGINEER AND THE AIRPORT MANAGER. ANY SUCH MAINS AND/OR SERVICES DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED IMMEDIATELY AT HIS EXPENSE TO THE SATISFACTION OF THE RESIDENT ENGINEER AND AIRPORT MANAGER.
30. ALL AIRFIELD LIGHTING AND LIGHTING GUIDANCE SYSTEMS (NAVAIDS) LOCATED WITHIN AND IMMEDIATELY ADJACENT TO THE CONTRACTORS WORK ZONE SHALL BE CHECKED FOR OPERATIONAL CONDITION PRIOR TO THE DEPARTURE FROM THE AIRPORT WITH THE AIRPORT MANAGER. ANY DEFECIENCIES IN THESE SYSTEMS DUE TO THE ACTS OF CONTRACTOR OR HIS SUBCONTRACTORS, SUPPLIERS OR CONSULTANTS SHALL BE REPAIRED IMMEDIATELY.
31. ORANGE CONES SHALL BE PLACED AT 25' CENTERS ALONG THE PAVEMENT EDGE DURING CONCRETE POURING OPERATIONS OF THE CLOSURE LANES TO PREVENT VEHICLES FROM ENTERING PLASTIC CONCRETE. IN THE EVENT A VEHICLE ENTERS THE CONCRETE BEFORE A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI HAS BEEN OBTAINED, SAID PAVEMENT SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.

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

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 OCCURENCE) 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 SWEPT TO PROVIDE DEBRIS FREE SURFACE DURING ALL HAUL ROAD OPERATIONS. THIS COST SHALL NOT BE PAID SEPERATELY BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
34. WORK WITHIN THE A.O.A. SHALL BE EXPEDITED. ANY DROP OFF SHALL BE ADEQUATELY LIGHTED, SIGNED AND BARRICADED. NO MATERIAL SHALL BE STOCKPILED WITHIN THE A.O.A. SHOULD IT BE NECESSARY FOR THE CONTRACTOR TO TEMPORARILY RELOCATE MEN AND EQUIPMENT TO ALLOW AIRCRAFT TO PASS, THEY SHALL DO SO AT NO EXTRA COST TO THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER TEN (10) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS.

MUNICIPALITIES GENERAL NOTES

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

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

RUNWAYS:

THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND AIRPORT MANAGER TEN (10) WORKING DAYS IN ADVANCE OF ANY PLANNED CONSTRUCTION WITHIN THESE LIMITS. WORK SHALL BE EXPEDITED IN THESE AREAS AND AT THE END OF EACH WORKING DAY THESE AREAS SHALL BE SMOOTHLY GRADED TO ALLOW THE RUNWAY TO BE REOPENED. AT LEAST ONE OF THE RUNWAYS SHALL REMAIN IN OPERATION AT ALL TIMES. IF NECCESSARY STEEL PLATES SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR TO COVER ANY OPEN TRENCHES OR EXCAVATION WITHIN THE RSA IF DURING RUNWAY CLOSURE AN EMERGENCY IS DECLARED, THE CONTRACTOR SHALL IMMEDIATELY CLEAR THE RUNWAY OF ALL VEHICLES, MEN AND EQUIPMENT. REFERENCE TABLE ON PREVIOUS SHEET FOR SAFETY AREA WIDTHS.

TAXIWAYS:

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

CONTRACTOR SHALL PLAN AND PERFORM HIS WORK SO AS NOT TO INTERFERE OR HINDER THE PROGRESS, WORK OR HAUL ROAD ACCESS OF OTHER CONTRACTORS (SEE STANDARD SPECIFICATIONS 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 WORK SITE DUE TO ADJACENT CONSTRUCTION

* RUNWAY 34 EMAS
* HAWTHORNE/SOVEREIGN DEVELOPMENT IN SE QUADRANT
* REHABILITATE 34 HOLD APRON
* TIN GOOSE HANGAR 18 DEVELOPMENT IN EAST QUADRANT

IL. CONTRACT: **PA054**
IL. LETTING ITEM: **15A**
IL. PROJECT: **PWK-4262**
S.B.G. PROJECT: **3-17-0018-B49**

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
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

SEQUENCE OF CONSTRUCTION
GENERAL NOTES

CMT
CRAWFORD, MURPHY & TILLY, INC.
CONSULTING ENGINEERS
License No. 184-006613

CHICAGO EXECUTIVE AIRPORT

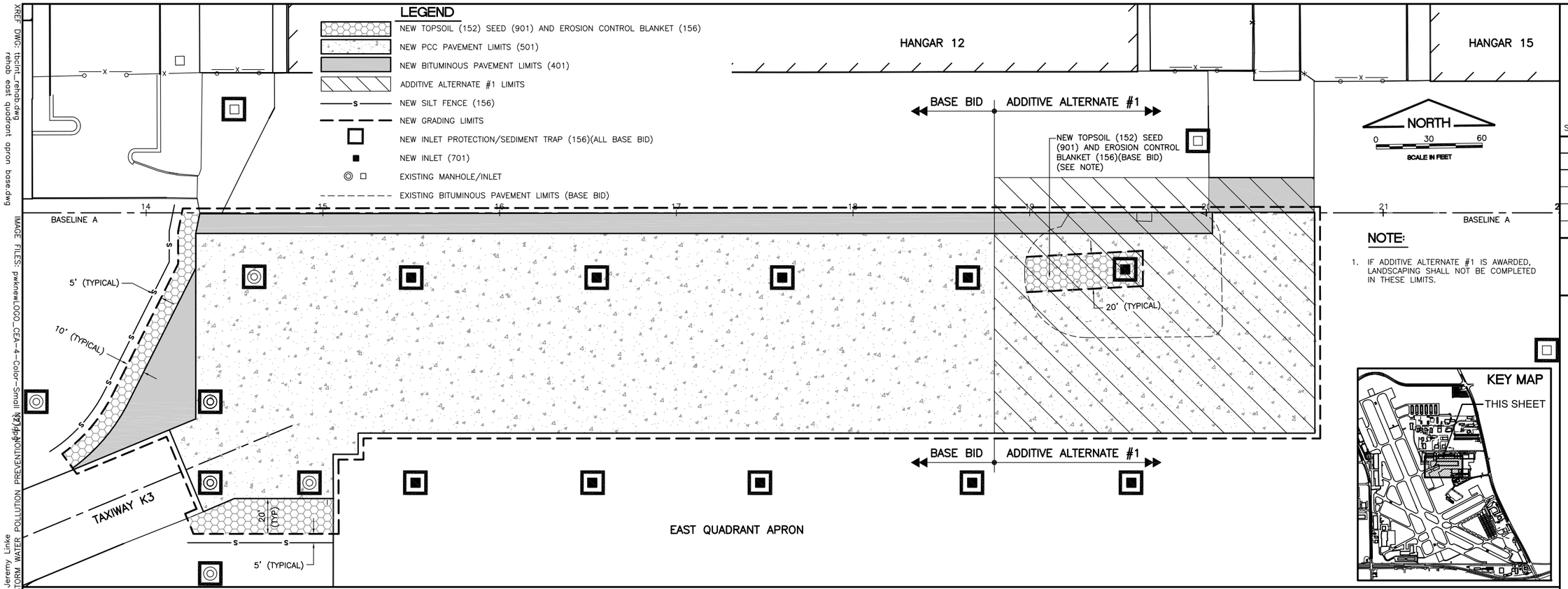
DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	JRL
APPROVED BY:	DKP
DATE:	4/19/2013
JOB No:	12290-07-00

FINAL

SHEET 5 OF 21 SHEETS

LEGEND

- NEW TOPSOIL (152) SEED (901) AND EROSION CONTROL BLANKET (156)
- NEW PCC PAVEMENT LIMITS (501)
- NEW BITUMINOUS PAVEMENT LIMITS (401)
- ADDITIVE ALTERNATE #1 LIMITS
- NEW SILT FENCE (156)
- NEW GRADING LIMITS
- NEW INLET PROTECTION/SEDIMENT TRAP (156)(ALL BASE BID)
- NEW INLET (701)
- EXISTING MANHOLE/INLET
- EXISTING BITUMINOUS PAVEMENT LIMITS (BASE BID)



NOTE:

1. IF ADDITIVE ALTERNATE #1 IS AWARDED, LANDSCAPING SHALL NOT BE COMPLETED IN THESE LIMITS.

IL. CONTRACT: **PA054**
IL. LETTING ITEM: **15A**
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CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

STORM WATER POLLUTION PREVENTION PLAN

STORM WATER POLLUTION PREVENTION PLAN

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

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

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

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

SITE DESCRIPTION

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

THIS PROJECT CONSISTS OF REHABILITATION OF A PORTION OF THE EAST QUADRANT GENERAL AVIATION APRON AT THE CHICAGO EXECUTIVE AIRPORT. THE PROJECT INCLUDES EARTH EXCAVATION, ELECTRICAL WORK, VARIOUS PAVEMENT ITEMS AND OTHER MISCELLANEOUS CONSTRUCTION WORK.

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:

1. PLACEMENT, MAINTENANCE, REMOVAL AND PROPER CLEAN-UP OF TEMPORARY EROSION CONTROL. SUCH AS PERIMETER SILT FENCE AND INLET PROTECTION.
2. PAVEMENT MILLING, PAVEMENT REMOVAL AND REPLACEMENT.
3. EXCAVATION AND EMBANKMENT WILL BE COMPLETED WITHIN THE PROJECT LIMITS TO GRADE OUT FOR THE PROPOSED PAVEMENT IMPROVEMENTS.
4. PAVEMENT CONSTRUCTION.
5. ELECTRICAL INSTALLATION, SHOULDER ADJUSTMENTS, FINAL GRADING AS NEEDED AND OTHER MISCELLANEOUS ITEMS.
6. PLACEMENT OF PERMANENT EROSION CONTROL, SUCH AS SEEDING AND EROSION CONTROL BLANKET.

AREA OF CONSTRUCTION SITE

THE TOTAL AREA OF THE CONSTRUCTION SITE IS ESTIMATED TO BE 2 ACRES OF WHICH 2 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.

CONTROLS-EROSION CONTROLS AND SEDIMENT CONTROL

DESCRIPTION OF STABILIZATION PRACTICES AT THE BEGINNING OF CONSTRUCTION:

1. THE DRAWINGS SPECIFICATIONS AND SPECIAL PROVISIONS WILL ENSURE THAT EXISTING VEGETATION IS PRESERVED WHERE ATTAINABLE AND DISTURBED PORTIONS OF THE SITE WILL BE STABILIZED. STABILIZATION PRACTICES INCLUDE SEEDING AND MULCHING AS DIRECTED BY THE ENGINEER. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE 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.
2. 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.
3. THIS PLAN HAS BEEN PREPARED TO COMPLY WITH THE PROVISIONS OF THE NPDES PERMIT NUMBER ILR10, ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY FOR STORM WATER DISCHARGES FROM CONSTRUCTION SITE ACTIVITIES.

DESCRIPTION OF STABILIZATION PRACTICES DURING CONSTRUCTION:

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

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

DESCRIPTION OF STRUCTURAL PRACTICES AFTER FINAL GRADING:

1. 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.
2. ONCE PERMANENT EROSION CONTROL SYSTEMS AS PROPOSED IN THE PLANS ARE FUNCTIONAL AND ESTABLISHED, TEMPORARY ITEMS SHALL BE REMOVED, CLEANED UP, AND DISTURBED TURF RESEEDED.

MAINTENANCE AFTER CONSTRUCTION

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

CMT
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CONSULTING ENGINEERS
License No. 184-000613

CHICAGO EXECUTIVE AIRPORT

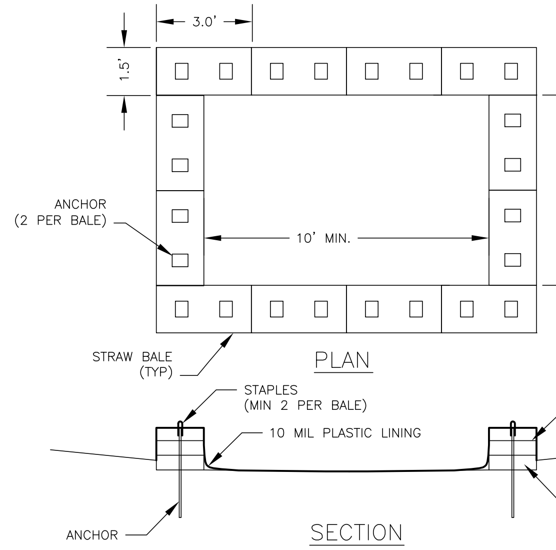
DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	JRL
APPROVED BY:	DKP
DATE:	4/19/2013
JOB No:	12290-07-00

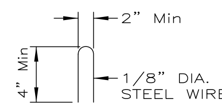
FINAL

SHEET 6 OF 21 SHEETS

CONCRETE WASHOUT

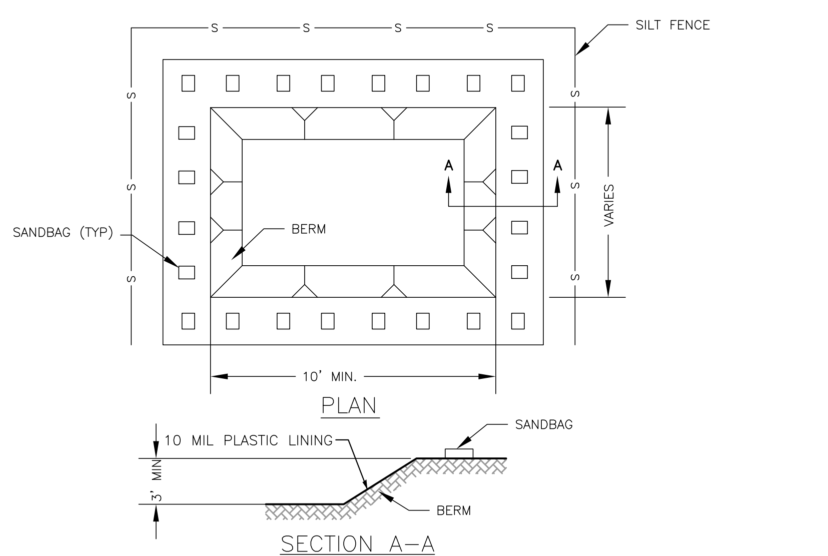
NOT TO SCALE





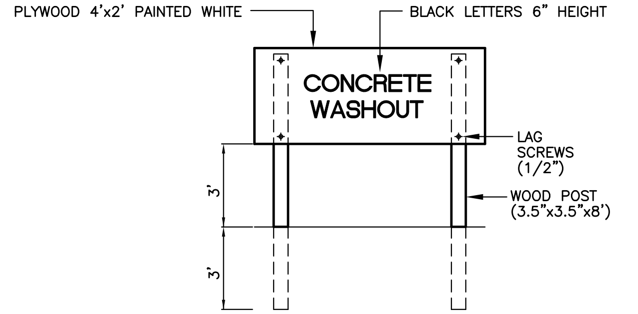
ABOVE GROUND TEMPORARY WASHOUT

NOTES:
1. CONTRACTOR SHALL DETERMINE LOCATION AND SIZE OF WASHOUT.
2. WASHOUT SIZE AND LOCATION SHALL BE APPROVED BY THE ENGINEER.
3. A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 20 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY. AT A MINIMUM, THE SIGN SHALL READ "CONCRETE WASHOUT" IN 6" TALL LETTERS.
4. INSPECTION SHALL OCCUR ONCE PER WEEK AND DAILY DURING CONCRETE OPERATIONS. REPAIR/REPLACEMENT OF THE FACILITY SHALL BE MADE SUCH THAT CONCRETE WASTE IS CONTAINED.
5. MEDIA SHALL BE REMOVED AND DISPOSED OF AT A LEGAL OFF-SITE LOCATION WHEN THE FACILITY HAS REACHED 50% CAPACITY.
6. UPON COMPLETION OF CONCRETE OPERATIONS, THE CONCRETE WASHOUT AND ALL MATERIALS CONTAINED WITHIN SHALL BE DISPOSED OF AT A LEGAL OFF-SITE LOCATION.



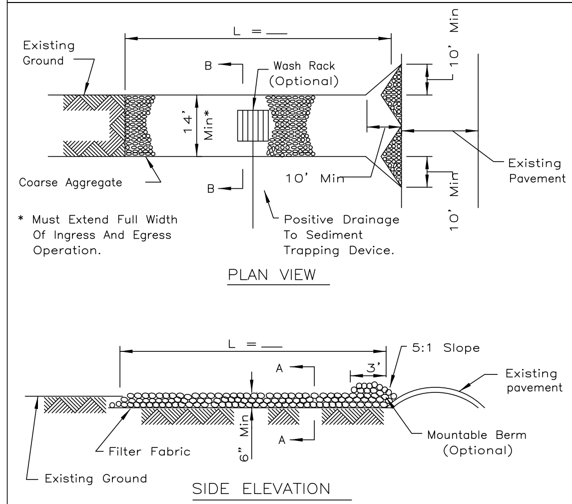
BELOW GROUND TEMPORARY WASHOUT

NOTES:
1. CONTRACTOR SHALL DETERMINE LOCATION AND SIZE OF WASHOUT.
2. WASHOUT SIZE AND LOCATION SHALL BE APPROVED BY THE ENGINEER.
3. SANDBAGS SHALL BE INSTALLED TO ANCHOR THE LINING. THE NUMBER OF SANDBAGS SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL ADD SANDBAGS SO AS TO MAINTAIN ANCHORING OF THE LINING.
4. A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 20 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY. AT A MINIMUM, THE SIGN SHALL READ "CONCRETE WASHOUT" IN 6" TALL LETTERS.
5. THE TEMPORARY WASHOUT FACILITY SHALL BE SURROUNDED BY SILT FENCE ON ALL SIDES.
6. INSPECTION SHALL OCCUR ONCE PER WEEK AND DAILY DURING CONCRETE OPERATIONS. REPAIR/REPLACEMENT OF THE FACILITY SHALL BE MADE SUCH THAT CONCRETE WASTE IS CONTAINED.
7. MEDIA SHALL BE REMOVED AND DISPOSED OF AT A LEGAL OFF-SITE LOCATION WHEN THE FACILITY HAS REACHED 50% CAPACITY.
8. UPON COMPLETION OF CONCRETE OPERATIONS, THE CONCRETE WASHOUT AND ALL MATERIALS CONTAINED WITHIN SHALL BE DISPOSED OF AT A LEGAL OFF-SITE LOCATION.



CONCRETE WASHOUT SIGN DETAIL (OR EQUIVALENT)

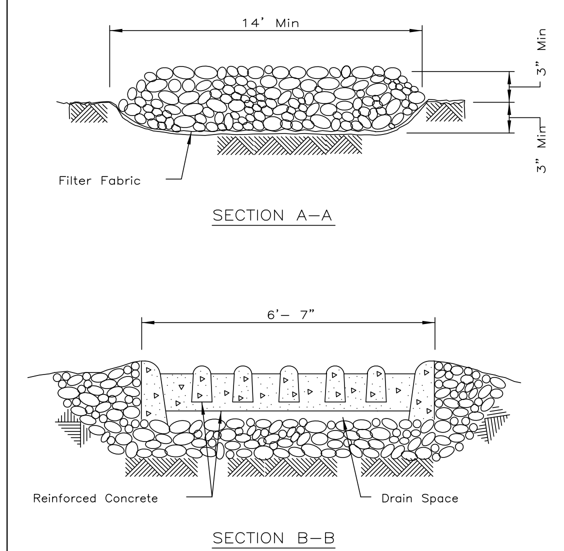
STABILIZED CONSTRUCTION ENTRANCE PLAN



NOTES:
1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table I or 2, Class , I or and shall be placed over the cleared area prior to the placing of rock.
2. Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
3. Any drainage facilities required because of washing shall be constructed according to manufacturers specifications.
4. If wash racks are used they shall be installed according to the manufacturer's specifications.

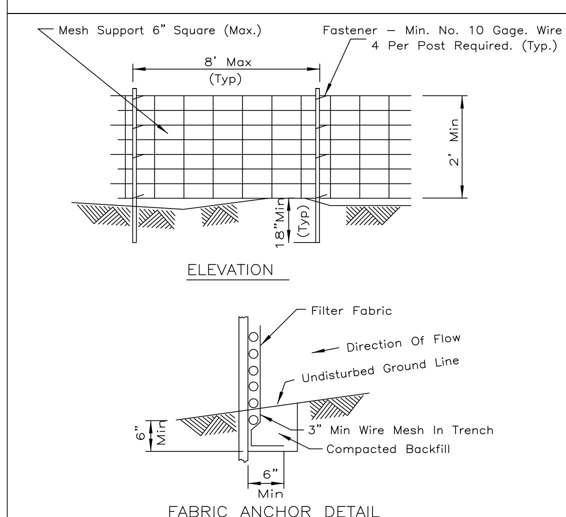
REFERENCE		NRCS Natural Resources Conservation Service	STANDARD DWG. NO. IL-630
Project			SHEET 1 OF 2
Designed	Date		DATE 8-18-94
Checked	Date		
Approved	Date		

STABILIZED CONSTRUCTION ENTRANCE PLAN



REFERENCE		NRCS Natural Resources Conservation Service	STANDARD DWG. NO. IL-630
Project			SHEET 2 OF 2
Designed	Date		DATE 8-18-94
Checked	Date		
Approved	Date		

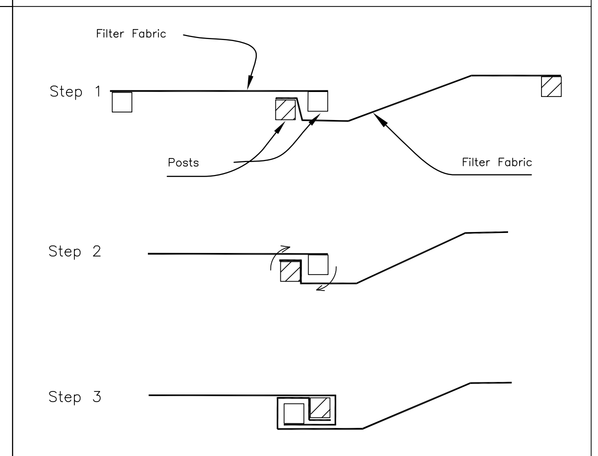
SILT FENCE WITH WIRE SUPPORT PLAN



NOTES:
1. Wires of mesh support shall be min. gage no. 12.
2. Temporary sediment fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
3. Filter fabric shall meet the requirements of material specification 592 Geotextile Table 1 or 2, Class with equivalent opening size of at least 30 for nonwoven and 50 for woven.
4. Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 3.0 sq. in.

REFERENCE		NRCS Natural Resources Conservation Service	STANDARD DWG. NO. IL-620W
Project			SHEET 1 OF 2
Designed	Date		DATE 3-3-95
Checked	Date		
Approved	Date		

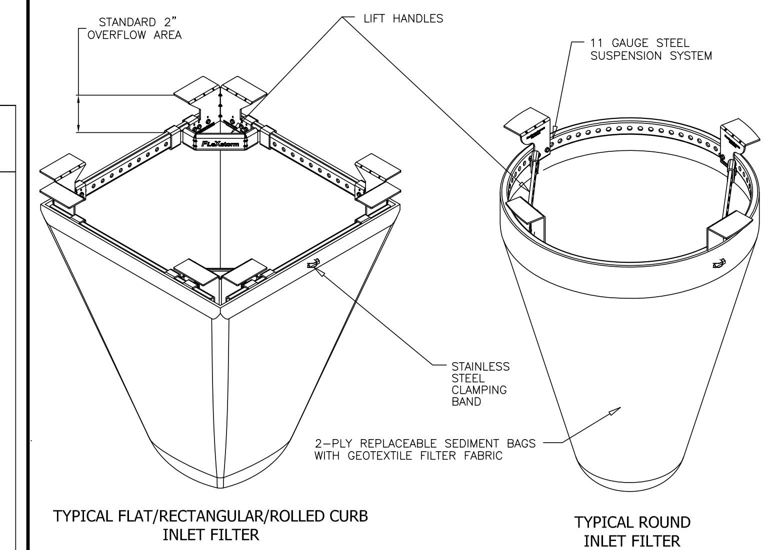
SILT FENCE



ATTACHING TWO SILT FENCES

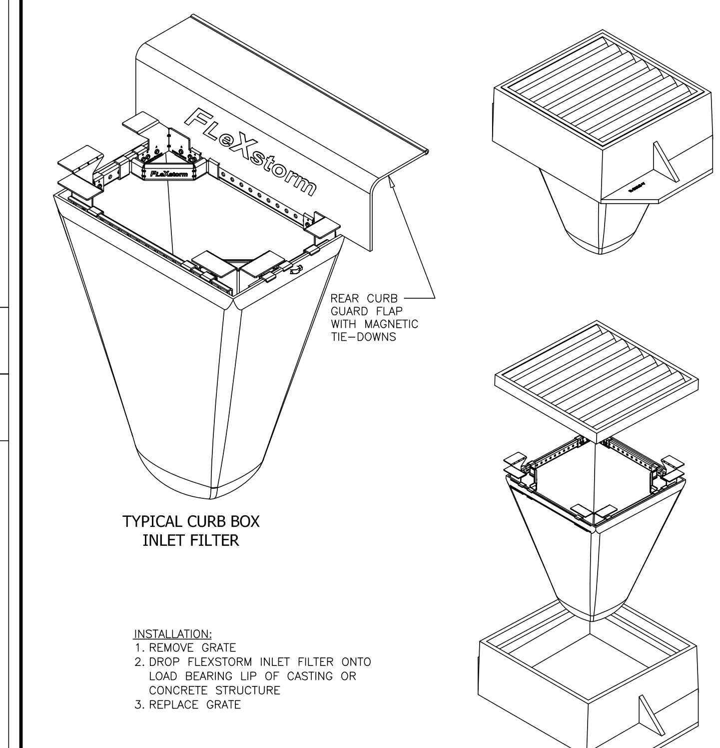
NOTES:
1. Place the end post of the second fence inside the end post of the first fence.
2. Rotate both posts at least 180 degrees in a clockwise direction to create a tight seal with the fabric material.
3. Drive both posts a minimum of 18 inches into the ground and bury the flap.

REFERENCE		NRCS Natural Resources Conservation Service	STANDARD DWG. NO. IL-620(W)
Project			SHEET 2 OF 2
Designed	Date		DATE 1-29-99
Checked	Date		
Approved	Date		



TYPICAL FLAT/RECTANGULAR/ROLLED CURB INLET FILTER

TYPICAL ROUND INLET FILTER



TYPICAL CURB BOX INLET FILTER

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

IPP *FLe*Xstorm Inlet Filter Specifications			
Material Property	***Test Method***	***Value (min ave)***	
> Inner Filter Bag Specs (2 ft^3 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 Guage; Zinc Plated	ASTM A 576	*Tensile Strength > 58,000 psi; Yield Strength > 36,000 psi*	

INLET PROTECTION / SEDIMENT TRAP

NOT TO SCALE

STORM SEWER INLET PROTECTION SHALL BE FLEXSTORM INLET FILTERS AS DETAILED HEREIN OR APPROVED EQUAL

IL. CONTRACT: **PA054**
IL. LETTING ITEM: **15A**
IL. PROJECT: **PWK-4262**
S.B.G. PROJECT: **3-17-0018-B49**

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
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

STORM WATER POLLUTION PREVENTION PLAN NOTES AND DETAILS

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CHICAGO EXECUTIVE AIRPORT

DESIGN BY:	JRL
DRAWN BY:	JRO
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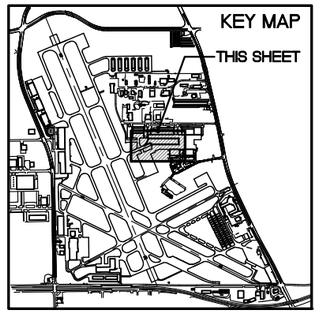
APPROVED BY:	DKP
DATE:	4/19/2013
JOB No:	12290-07-00

FINAL

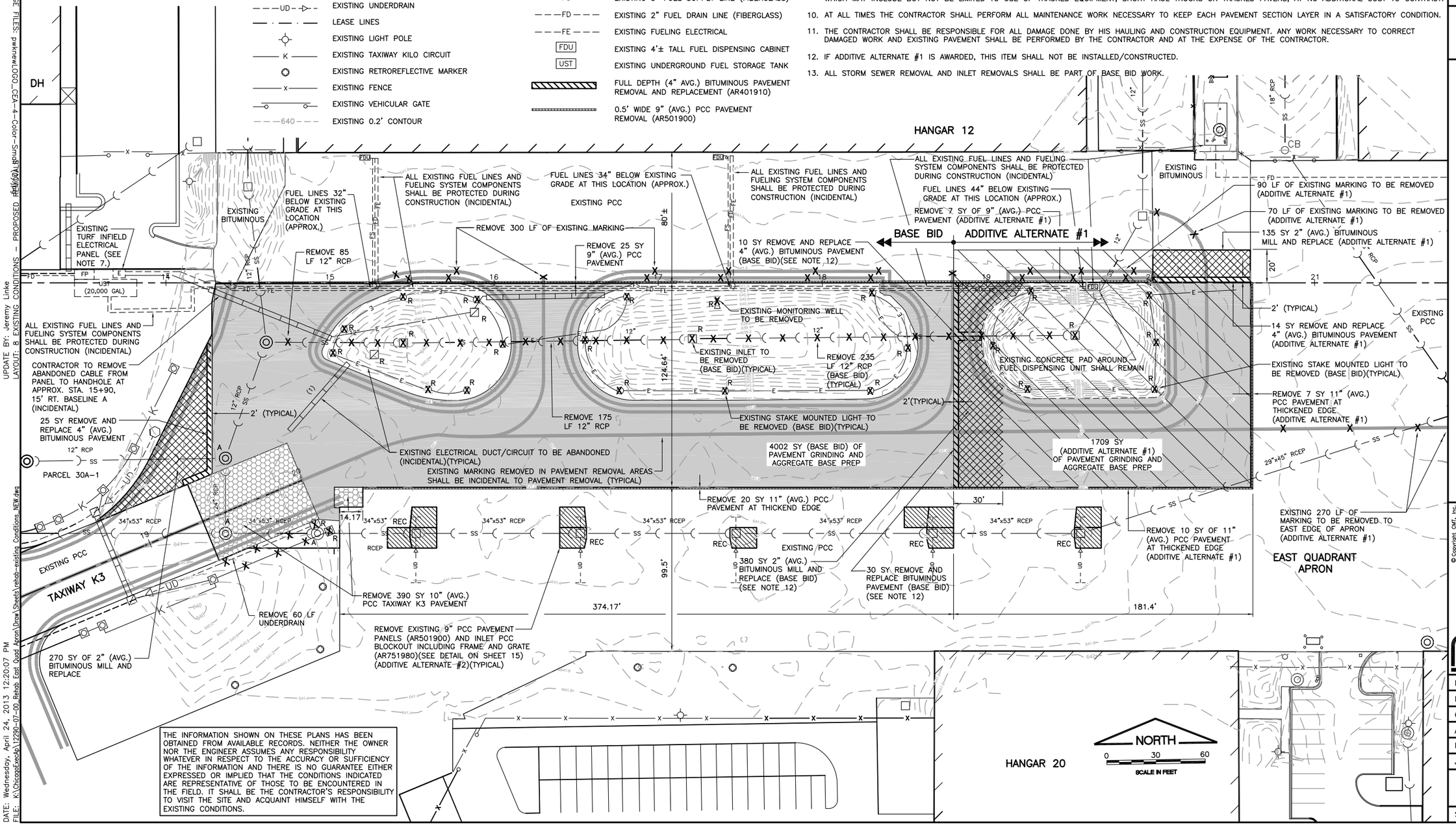


LEGEND

- EXISTING 4" (AVG.) BITUMINOUS PAVEMENT GRINDING (AR401652) AND AGGREGATE BASE PREPARATION (AR209650)
- NEW 2" (AVG.)BITUMINOUS MILL (AR401650) AND REPLACEMENT (AR401610)
- ADDITIVE ALTERNATE #1 LIMITS
- ADDITIVE ALTERNATE #2 LIMITS
- EXISTING PCC PAVEMENT REMOVAL (AR501900) AND AGGREGATE BASE PREPARATION (AR209650)
- EXISTING MANHOLE/INLET/CATCH BASIN
- EXISTING BUILDING
- EXISTING UNDERDRAIN COLLECTION STRUCTURE
- EXISTING UNDERDRAIN
- LEASE LINES
- EXISTING LIGHT POLE
- EXISTING TAXIWAY KILO CIRCUIT
- EXISTING RETROREFLECTIVE MARKER
- EXISTING FENCE
- EXISTING VEHICULAR GATE
- EXISTING 0.2' CONTOUR
- REC — EXISTING INLET AND PCC BLOCKOUT TO BE RECONSTRUCTED (AR751980)(ADD. ALT. #2)
- EXISTING MONITORING WELL
- EXISTING STORM SEWER
- EXISTING STAKE MOUNTED LIGHT
- EXISTING BASE MOUNTED LIGHT
- EXISTING ELECTRICAL DUCT
- EXISTING AIRFIELD ELECTRICAL CIRCUIT
- EXISTING ELECTRICAL HANDHOLE
- R X — EXISTING ITEM TO BE REMOVED
- A — EXISTING ITEM TO BE ADJUSTED
- EXISTING 3" FUEL SUPPLY LINE (FIBERGLASS)
- EXISTING 2" FUEL DRAIN LINE (FIBERGLASS)
- EXISTING FUELING ELECTRICAL
- FDU — EXISTING 4'± TALL FUEL DISPENSING CABINET
- UST — EXISTING UNDERGROUND FUEL STORAGE TANK
- FULL DEPTH (4" AVG.) BITUMINOUS PAVEMENT REMOVAL AND REPLACEMENT (AR401910)
- 0.5' WIDE 9" (AVG.) PCC PAVEMENT REMOVAL (AR501900)

NOTES

1. THE EXISTING PAVEMENT TO BE REMOVED SHALL BE SAWED FULL DEPTH AROUND PERIMETER OF THE REMOVAL LIMITS. COST OF SAWCUTTING AND DISPOSAL OF PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE ITEM.
2. ANY TAXIWAY LIGHTS, TRANSFORMERS AND REFLECTORS TO BE REMOVED SHALL BE TURNED OVER TO THE AIRPORT. LIGHT CONCRETE BASES SHALL BE DISPOSED OF OFF SITE.
3. ANY TEMPORARY CABLING REQUIRED FOR THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
4. 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.
5. 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.
6. CONTRACTOR SHALL BRICK AND MORTAR PIPE ENDS AT REMOVAL LIMITS WHERE NOTED. BRICK AND MORTAR OF PIPE ENDS SHALL BE CONSIDERED INCIDENTAL TO THE PIPE REMOVAL.
7. CONTRACTOR SHALL DISCONNECT TURF INFIELD CIRCUIT AT PANEL. REMOVE CONDUCTORS AND LOCK-OUT CIRCUIT BREAKER.
8. SEE FUEL NOTES ON TYPICAL SECTION.
9. 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.
10. AT ALL TIMES THE CONTRACTOR SHALL PERFORM ALL MAINTENANCE WORK NECESSARY TO KEEP EACH PAVEMENT SECTION LAYER IN A SATISFACTORY CONDITION.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE DONE BY HIS HAULING AND CONSTRUCTION EQUIPMENT. ANY WORK NECESSARY TO CORRECT DAMAGED WORK AND EXISTING PAVEMENT SHALL BE PERFORMED BY THE CONTRACTOR AND AT THE EXPENSE OF THE CONTRACTOR.
12. IF ADDITIVE ALTERNATE #1 IS AWARDED, THIS ITEM SHALL NOT BE INSTALLED/CONSTRUCTED.
13. ALL STORM SEWER REMOVAL AND INLET REMOVALS SHALL BE PART OF BASE BID WORK.



THE INFORMATION SHOWN ON THESE PLANS HAS BEEN OBTAINED FROM AVAILABLE RECORDS. NEITHER THE OWNER NOR THE ENGINEER ASSUMES ANY RESPONSIBILITY WHATEVER 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.

IL. CONTRACT: **PA054**
IL. LETTING ITEM: **15A**
IL. PROJECT: **PWK-4262**
S.B.G. PROJECT: **3-17-0018-B49**

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
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

EXISTING CONDITIONS - PROPOSED REMOVALS

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CHICAGO EXECUTIVE AIRPORT

DESIGN BY:	JRL
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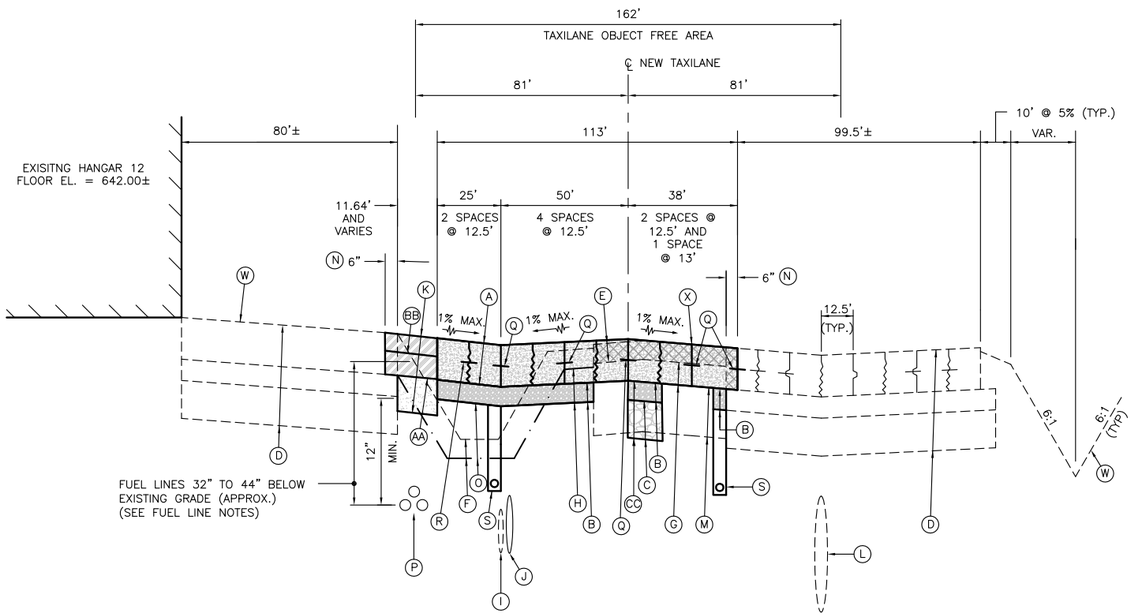
SHEET 8 OF 21 SHEETS



APRON SECTION A-A

NOT TO SCALE

GENERAL NOTES

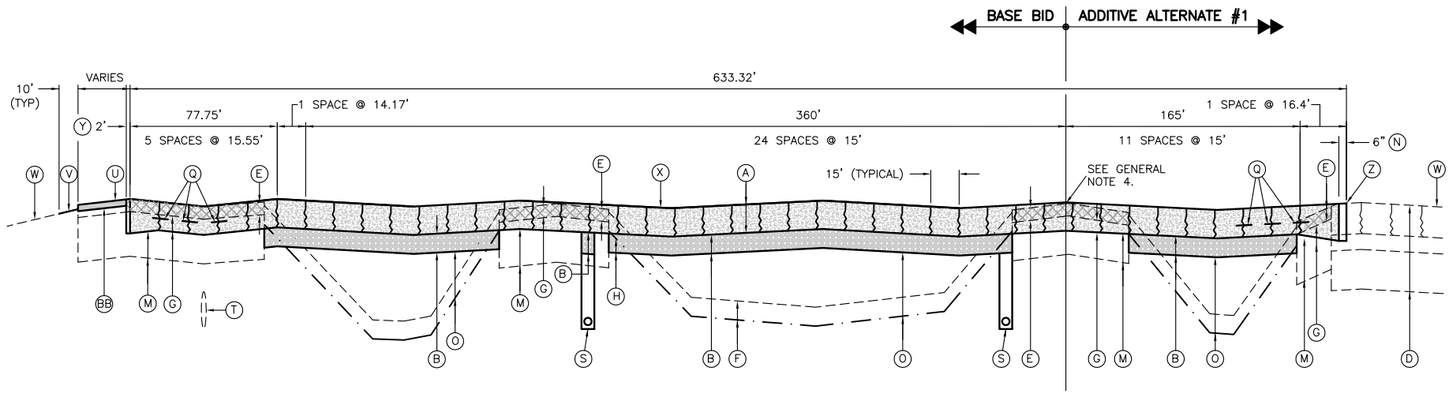
1. MILLINGS RESULTING FROM AR401652 BITUMINOUS PAVEMENT GRINDING SHALL BE USED FOR EMBANKMENT FILL (PAID UNDER AR401652.)
2. IT IS ANTICIPATED THAT THERE WILL BE MILLINGS REMAINING AFTER ALL EMBANKMENT FILL IS COMPLETED. THE REMAINING MILLINGS SHALL BE USED FOR BASE COURSE STABILIZATION IN ADDITIONAL UNDERCUT AREAS (AR152410) AS DETERMINED BY THE ENGINEER.
3. ANY EXCESS MATERIAL INCLUDING CLAY, EXISTING AGGREGATE BASE, MILLINGS, AND TOPSOIL SHALL BE HAULED OFF AND DISPOSED OF BY THE CONTRACTOR.
4. IF ADDITIVE ALTERNATE #1 IS AWARDED, THE BITUMINOUS TRANSITION AND REMOVAL & REPLACEMENT (WHICH IS NOT SHOWN FOR CLARITY) SHALL NOT BE CONSTRUCTED AT THIS LOCATION.

GENERAL NOTES FOR WORK OVER EXISTING FUEL LINES

1. THE CONTRACTOR SHALL NOT USE HEAVY CONSTRUCTION EQUIPMENT OVER THE FUEL LINES. MEANS, METHODS AND EQUIPMENT TO BE USED OVER AND AROUND THE FUEL LINES SHALL BE APPROVED BY THE OWNER AND ENGINEER PRIOR TO STARTING WORK IN THE FUEL LINE LIMITS.
2. CONTRACTOR SHALL INSTALL BARRICADES ALONG FUEL LINE SYSTEM LIMITS (BOTH SIDES). THE CONTRACTOR SHALL NOT CROSS OVER FUEL LINES DURING HAULING OPERATIONS OR CONSTRUCTION OPERATIONS.
3. THE CONTRACTOR SHALL HAND DIG TO VALIDATE DEPTHS OF THE FUEL LINES PRIOR TO EXCAVATION OPERATIONS AROUND AND OVER THE FUEL LINES. (COST INCIDENTAL)
4. THE EXISTING DEPTH OF COVER OVER THE FUEL LINES IS APPROXIMATE AND BASED ON OWNER PROVIDED DATA.
5. BOTH PRIOR TO THE START OF CONSTRUCTION AND AFTER CONSTRUCTION OF THE PROJECT, THE CONTRACTOR SHALL PERFORM THE APPROPRIATE PRESSURE AND LEAKAGE TESTS ON THE FUEL LINE SYSTEM TO ENSURE THAT THE FUEL LINES WERE NOT DAMAGED DURING CONSTRUCTION ACTIVITIES. THESE TESTS SHALL BE PERFORMED BY A CERTIFIED FUEL LINE TESTING COMPANY WITH A MINIMUM OF 5 YEARS EXPERIENCE. RESULTS SHALL BE SUBMITTED TO THE OWNER AND ENGINEER FOR REVIEW AND APPROVAL. ALL COSTS ASSOCIATED WITH THE TESTING, REPORTING AND COORDINATION SHALL BE INCIDENTAL TO THE CONTRACT.
6. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING AND/OR REPLACING ANY FUEL SYSTEM COMPONENTS THAT ARE DAMAGED AS A RESULT OF CONSTRUCTION. ALL FUEL LINE TESTING, EVALUATION AND REPAIR COSTS SHALL BE AT THE CONTRACTORS EXPENSE.

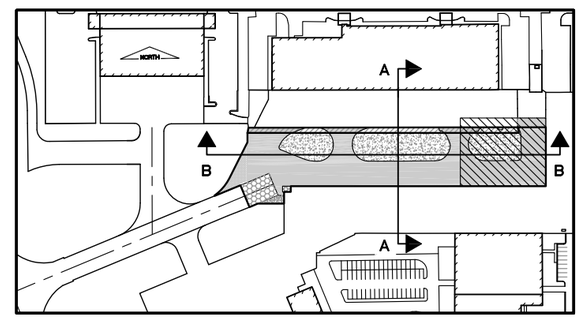
LEGEND

- (A) NEW 9" PCC PAVEMENT (AR501509)
- (B) NEW 6" CRUSHED AGGREGATE BASE COURSE (AR209606)
- (C) NEW 12" POROUS GRANULAR EMBANKMENT (AR208515)
- (D) EXISTING PAVEMENT STRUCTURE:
  9" PCC PAVEMENT
  4" ASPHALT TREATED PERMEABLE BASE COURSE (ATPB)
  12" LIME MODIFIED SUBGRADE
- (E) EXISTING ±4" BITUMINOUS PAVEMENT GRINDING (AR401652)(SEE NOTES)
- (F) AVERAGE 6" TOPSOIL STRIPPING (AR152410)
- (G) EXISTING VARIABLE DEPTH CRUSHED AGGREGATE BASE COURSE TO BE REMOVED (PAID FOR AS AR152410 – UNCLASSIFIED EXCAVATION)
- (H) UNCLASSIFIED EXCAVATION (AR152410)
- (I) EXISTING 12" RCP TO BE REMOVED (AR701900)
- (J) NEW 18" RCP STORM SEWER (AR701518)
- (K) NEW BITUMINOUS PAVEMENT SECTION:
  4" BITUMINOUS SURFACE COURSE (AR401610)
  5" BITUMINOUS BASE COURSE (AR403610)
  9" CONTROLLED LOW STRENGTH MATERIAL (CLSM)(AR800035)
- (L) EXISTING 34"x53" RCEP STORM SEWER
- (M) EXISTING ±9" CRUSHED AGGREGATE BASE COURSE TO REMAIN AS BASE. CONTRACTOR TO REGRADE AND RECOMPACT BASE AS REQUIRED. PAID FOR AS AGGREGATE BASE PREPARATION (AR209650)
- (N) 6" WIDE PCC PAVEMENT REMOVAL (FULL DEPTH 11" AVG.)(AR501900)
- (O) NEW EMBANKMENT FILL (PAID AS PART OF AR401652)(SEE NOTES)
- (P) EXISTING 2" AND 3" FIBERGLASS FUEL LINES AND FUEL DISPENSER ELECTRICAL CABLE TO REMAIN UNDISTURBED (SEE FUEL NOTES)
- (Q) NEW DOWEL BAR
- (R) NEW TIE BAR
- (S) NEW 6" PERFORATED UNDERDRAIN, TRENCH ENVELOPE AND CA-7 BACKFILL (AR705506)(SEE DETAIL ON SHEET 14)
- (T) EXISTING 12" RCP TO REMAIN
- (U) 2" BITUMINOUS PAVEMENT TO BE MILLED (AR401650) AND REPLACED (AR401610)
- (V) NEW SEEDING (AR901510) AND EROSION CONTROL BLANKET (AR156531)
- (W) EXISTING GROUNDLINE
- (X) NEW GROUNDLINE
- (Y) 2' WIDE BITUMINOUS PAVEMENT REMOVAL AND REPLACEMENT (AR401910)
  2" BITUMINOUS SURFACE COURSE ON 2" BITUMINOUS BASE COURSE
- (Z) NEW TYPE A ISOLATION JOINT
- (AA) NEW PRIME COAT (AR602510)
- (BB) NEW TACK COAT (AR603510)
- (CC) NEW UNDERCUT AREAS (AR152410) AS FIELD CONDITIONS NECESSITATE



APRON SECTION B-B

NOT TO SCALE



KEY MAP

ADDITIVE ALTERNATE #1 LIMITS

IL. CONTRACT: **PA054**
IL. LETTING ITEM: **15A**
IL. PROJECT: **PWK-4262**
S.B.G. PROJECT: **3-17-0018-B49**

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
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

TYPICAL SECTIONS

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

CHICAGO EXECUTIVE AIRPORT

DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	JRL
APPROVED BY:	DKP
DATE:	4/19/2013
JOB No:	12290-07-00

FINAL

SHEET 9 OF 21 SHEETS

XREF DWG: tbcint_rehab.dwg
rehab east quadrant apron base.dwg
IMAGE FILES: XEROX_20130110_0001.tiff
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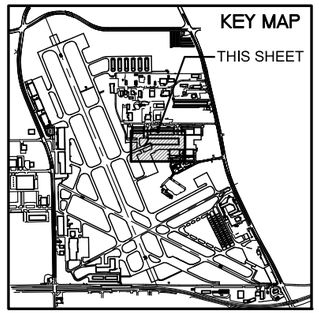
UPDATE BY: Jeremy Lynch
LAYOUT: 9 TYPICAL SECTIONS
DATE: Wednesday, April 24, 2013 12:20:13 PM
FILE: K:\ChicagoExecAp\12290-07-00_Rehab East Quad Apron\Draw\Sheets\rehab-typical Sections.dwg

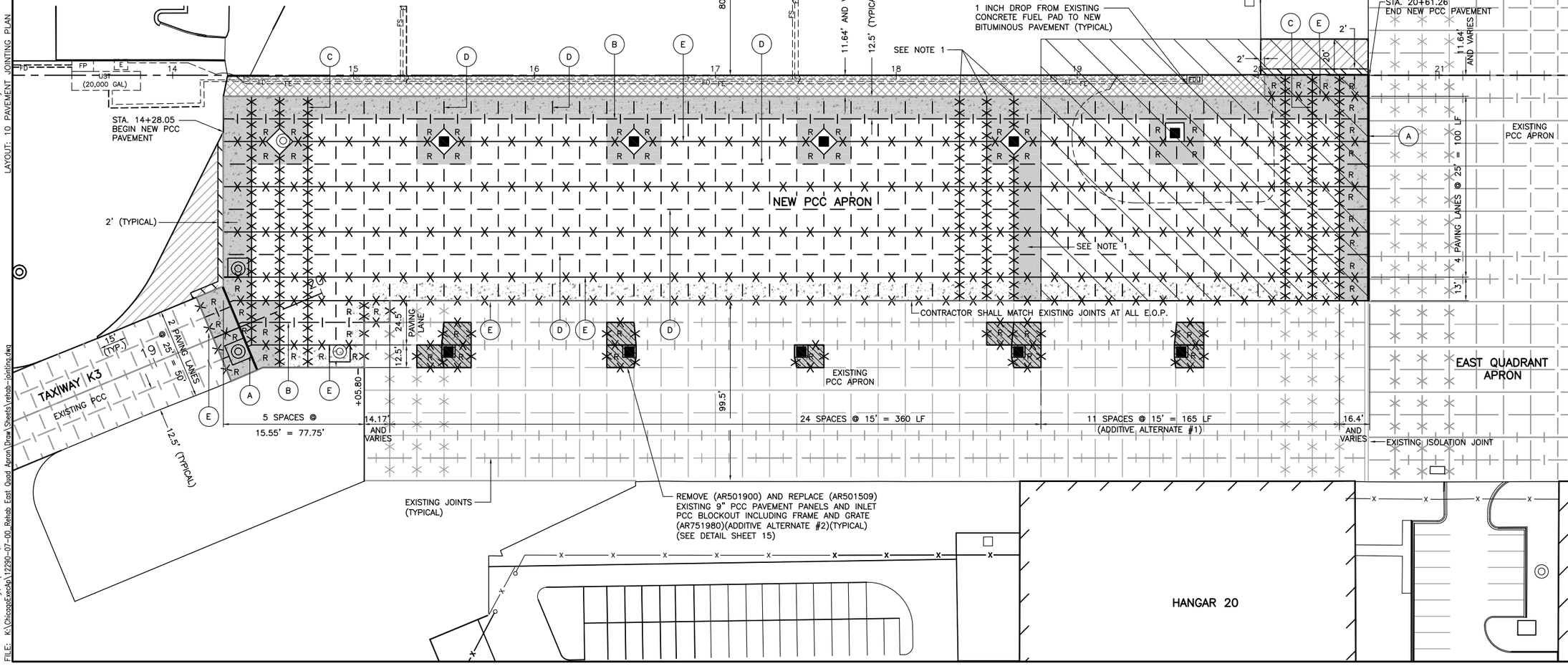


NOTES

1. IF ADDITIVE ALTERNATE #1 IS AWARDED, THE LAST THREE TRANSVERSE JOINTS IN THE BASE BID SHALL BE TYPE D DUMMY CONTRACTION JOINTS WITH NO THICKENED EDGE, EXCEPT AROUND INLET AND ADJACENT TO NEW BITUMINOUS PAVEMENT.

LEGEND

- NEW 2" BITUMINOUS MILL (AR401650) AND REPLACEMENT (AR401610)
- NEW BITUMINOUS PAVEMENT
  4" BITUMINOUS SURFACE COURSE (AR401610)
  5" BITUMINOUS BASE COURSE (AR403610)
  9" CONTROLLED LOW STRENGTH MATERIAL (CLSM)(AR800053)
- NEW PCC PAVEMENT LIMITS (AR501509)
- ADDITIVE ALTERNATE #1 LIMITS
- ADDITIVE ALTERNATE #2 LIMITS
- APRON STRUCTURE PAVEMENT BLOCKOUT
- THICKENED EDGE
- TYPE A ISOLATION JOINT
- TYPE B – HINGED CONTRACTION JOINT
- TYPE C – DOWELED CONTRACTION JOINT
- TYPE D – DUMMY CONTRACTION JOINT
- TYPE E – DOWELED CONSTRUCTION JOINT
- R — ODD SHAPED PANEL REINFORCEMENT (SOME R SYMBOLS NOT SHOWN FOR CLARITY)
- FULL DEPTH (4" AVG.) BITUMINOUS REMOVAL AND REPLACEMENT (AR401910)
- EXISTING INLET/MANHOLE
- FS — EXISTING 3" FUEL SUPPLY LINE (FIBERGLASS)
- FD — EXISTING 2" FUEL DRAIN LINE (FIBERGLASS)
- FE — EXISTING FUELING ELECTRICAL
- FDU — EXISTING 4'± TALL FUEL DISPENSING CABINET
- UST — EXISTING UNDERGROUND STORAGE TANK



IL. CONTRACT: **PA054**
IL. LETTING ITEM: **15A**
IL. PROJECT: **PWK-4262**
S.B.G. PROJECT: **3-17-0018-B49**

SURVEY BOOK # BOOK #

REVISIONS

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CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

PAVEMENT JOINTING PLAN

CMT
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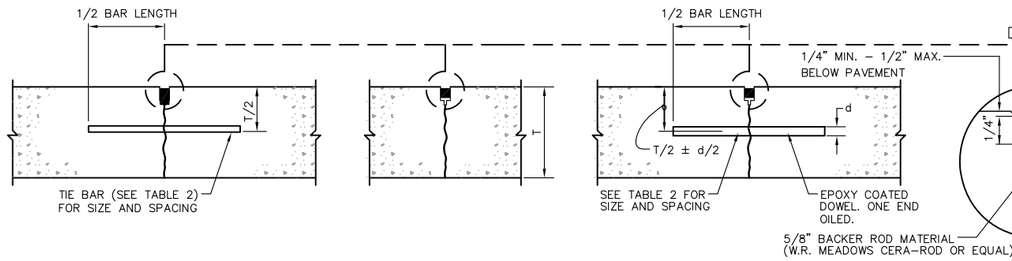
SHEET 10 OF 21 SHEETS



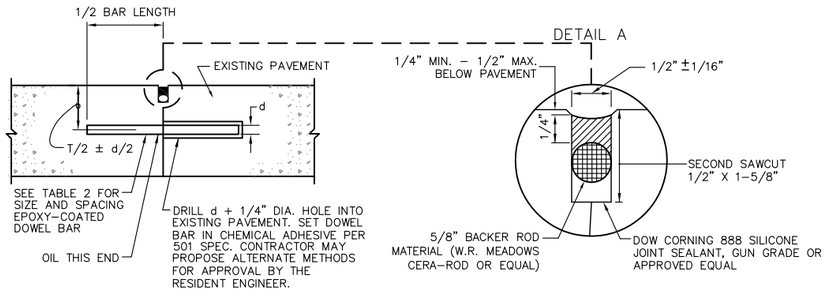
TYPE B HINGED (TIED)
SYMBOL —I—I—

TYPE D DUMMY
SYMBOL — —

TYPE C DOWELED
SYMBOL —XX—XX—

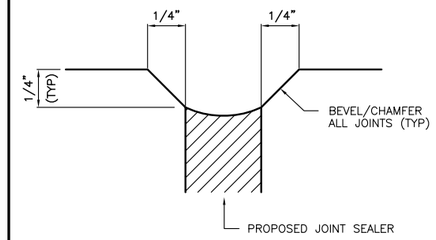
CONTRACTION JOINTS

NOTE: CONTRACTOR SHALL HAVE THE OPTION OF USING DETAIL A OR DETAIL B BUT NOT A COMBINATION OF BOTH

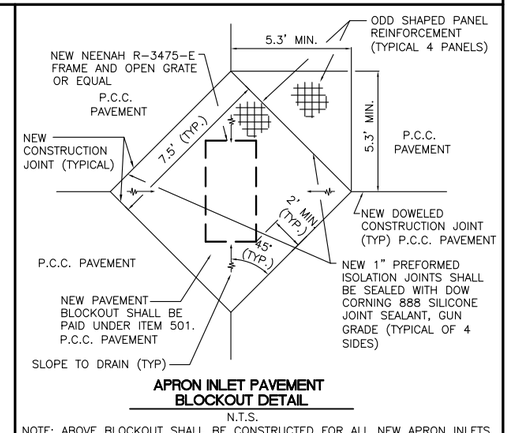


TYPE E DOWELED
SYMBOL —X—X—X—

CONSTRUCTION JOINTS



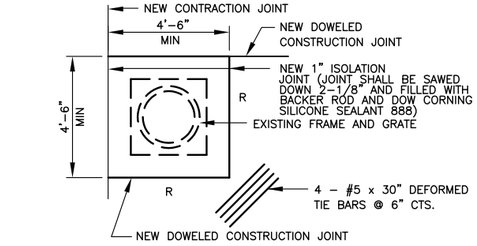
CHAMFER/BEVEL JOINT DETAIL
NOT TO SCALE



APRON INLET PAVEMENT BLOCKOUT DETAIL
N.T.S.
NOTE: ABOVE BLOCKOUT SHALL BE CONSTRUCTED FOR ALL NEW APRON INLETS

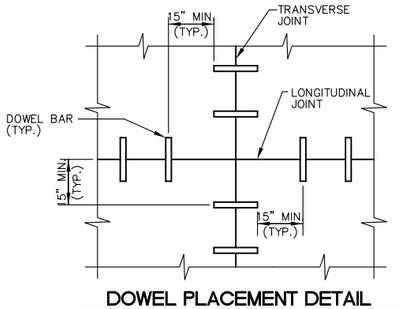
JOINT NOTES

1. ALL EDGES OF NEW SLABS, FREE STANDING OR CLOSURE, SHALL BE EDGED WITH AN APPROVED TOOL HAVING A RADIUS OF 1/8" TO 1/4" TO FACILITATE SAWING OF THE SEALANT RESERVOIR. A RADIUS > 1/4" WILL NOT BE ACCEPTABLE.
2. THE INITIAL SAWCUT FOR ALL LONGITUDINAL AND TRANSVERSE CONTRACTION JOINTS SHALL BE SAWED AS SOON AS POSSIBLE AFTER PLACEMENT OF THE PAVEMENT. SAWING OF LONGITUDINAL CONTRACTION JOINTS ADJACENT TO THE THICKENED EDGES SHALL BE GIVEN PRIORITY OVER OTHER LONGITUDINAL JOINT SAWING.
3. ALL DOWEL BARS SHALL BE SECURELY HELD IN PLACE BY MEANS OF A DOWEL BAR ASSEMBLY, WHICH WILL INSURE THAT THEY WILL REMAIN PARALLEL TO THE PAVEMENT LANES. THE DOWEL BAR ASSEMBLIES SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
4. ALL TIE BARS AND MESH SHALL BE SECURELY HELD IN PLACE BY SUPPORT PINS OR PLACED BY OTHER APPROVED METHODS TO PREVENT SHIFTING DURING AND AFTER CONCRETE PLACEMENT.
5. TIE BARS SHALL BE DEFORMED BARS IN CONFORMANCE WITH ASTM A615 OT ASTM A616, EXCEPT THAT RAIL STEEL BARS, GRADE 50 OR 60 SHALL NOT BE USED FOR THE BARS THAT ARE TO BE BENT OR RESTRAIGHTEND DURING CONSTRUCTION. TIE BARS DESIGNATED AS GRADE 40 IN ASTM A615 CAN BE USED FOR CONSTRUCTION REGARDING BENT BARS.
6. THE INITIAL SAWCUT SHALL BE MADE TO THE 1/8" WIDTH INDICATED. INITIAL SAWING TO THE DIMENSION OF THE SECOND SAWCUT WILL NOT BE ALLOWED.
7. JOINTS SHALL BE DRY AND CLEAN BEFORE SEALING OPERATIONS BEGIN.
8. COST OF ALL JOINT SAWING, CLEANING AND SEALING OF NEW CONCRETE PAVEMENT SHALL BE CONSIDERED INCIDENTAL TO THE ASSOCIATED PAY ITEM AND NO SEPARATE PAYMENT SHALL BE MADE.
9. SHOULD THE POURING OPERATIONS REQUIRE THE INSERTION OF AN INTERMEDIATE HEADER, A DOWEL BASKET ASSEMBLY OR OTHER APPROVED METHOD OF DOWEL BAR PLACEMENT SHALL BE REQUIRED.
10. DOWEL BASKET ASSEMBLIES MEETING IDOT APPROVAL MAY BE PROPOSED BY THE CONTRACTOR TO BE APPROVED BY THE ENGINEER. DOWELS IN THE APPROVED BASKET ASSEMBLIES SHALL CONFORM TO TABLE 2.
11. CONTRACTOR SHALL CONSTRUCT A 1/4" CHAMFER ON ALL CONCRETE JOINTS PER THE DETAIL ON THIS SHEET AT NO ADDITIONAL COST.

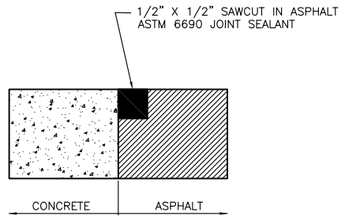


PAVEMENT BLOCKOUT DETAIL FOR EXISTING MANHOLES/INLETS
NOT TO SCALE

1. ABOVE BLOCKOUT SHALL BE CONSTRUCTED FOR EXISTING MANHOLE/ INLET CONSTRUCTION. DIMENSION OF BOXOUT MAY VARY TO FIT FIELD CONDITIONS.
2. R – DENOTES ODD SHAPED REINFORCED PANELS TO BE REINFORCED WITH WIRE FABRIC AS SHOWN ON THIS SHEET. ALL NON RECTANGULAR SHAPED PANELS SHALL BE REINFORCED. (REINFORCEMENT NOT SHOWN)



DOWEL PLACEMENT DETAIL
NOT TO SCALE



JOINT SEALING AT CONCRETE ASPHALT INTERFACE
N.T.S.
NOTE: JOINT DIMENSIONS SHALL MEET MANUFACTURER'S RECOMMENDATION

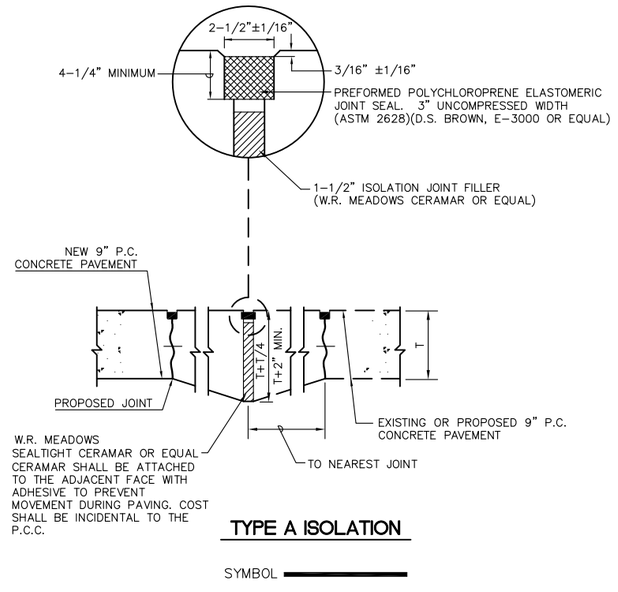
TABLE 1

PAVEMENT THICKNESS T – INCHES	DEPTH OF CONTRACTION JOINT INITIAL SAW CUT T, INCHES T=(T/4) ±1/4"
9	2.25"

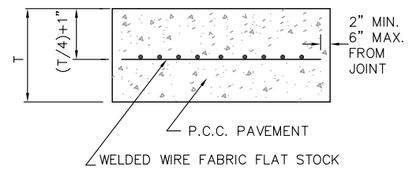
TABLE 2

PAVEMENT THICKNESS T – INCHES	DOWEL BAR DETAILS			TIE BAR DETAILS		
	DIA. (d)	LENGTH	SPACING	BAR SIZE	LENGTH	SPACING
9	1"	19"	12"	#5	30"	30"

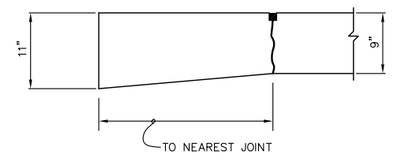
DIMENSION TABLES



TYPE A ISOLATION
SYMBOL ———



ODD SHAPED PANEL REINFORCEMENT
SYMBOL R
NOTE: REINFORCEMENT SHALL NOT CROSS ANY JOINT



THICKENED EDGE
SYMBOL

ISOLATION JOINTS

IL. CONTRACT: **PA054**
IL. LETTING ITEM: **15A**
IL. PROJECT: **PWK-4262**
S.B.G. PROJECT: **3-17-0018-B49**

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CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

PAVEMENT JOINTING DETAILS

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SHEET 11 OF 21 SHEETS

XREF DWG: rehab east quadrant apron base.dwg
IMAGE FILES: pwknewLOGO_CEA-4-Color-Small (2).jpg
tbcint_rehab.dwg

LEGEND

- 640.30 / 640.00 — NEW ELEVATION / EXISTING ELEVATION
- NEW PCC PAVEMENT LIMITS
- NEW BITUMINOUS PAVEMENT LIMITS
- ADDITIVE ALTERNATE #2 LIMITS
- CB — EXISTING MANHOLE/INLET/CATCH BASIN
- NEW STORM STRUCTURE
- A — STRUCTURE TO BE ADJUSTED
- REC — EXISTING INLET AND PCC BLOCKOUT TO BE RECONSTRUCTED (AR751980) (SEE DETAIL SHEET 15)(ADDITIVE ALTERNATE #2)
- 639 — EXISTING 0.2' CONTOUR
- 640 — NEW 0.2' CONTOUR
- EXISTING UNDERDRAIN COLLECTION STRUCTURE
- FS — EXISTING 3" FUEL SUPPLY LINE (FIBERGLASS)
- FD — EXISTING 2" FUEL DRAIN LINE (FIBERGLASS)
- FE — EXISTING FUELING ELECTRICAL
- FDU — EXISTING 4'± TALL FUEL DISPENSING CABINET
- UST — EXISTING UNDERGROUND FUEL STORAGE TANK

NORTH
0 30 60
SCALE IN FEET

HANGAR 12

HANGAR 15

BASE BID | ADDITIVE ALTERNATE #1 (SEE NOTES)

15.55' (TYP) 15.55' (TYP) 15.55' (TYP) 30' (TYPICAL)

15' (TYP) 15' (TYP)

30' (TYPICAL) 16.5' (TYP)

SEE NOTE 3

SEE NOTE 4

BASELINE A

UST (20,000 GAL)

TAXIWAY K3

25' (TYPICAL) 25'

REMOVE (AR501900) AND REPLACE (AR501509) EXISTING 9" PCC PAVEMENT PANELS AND INLET PCC BLOCKOUT INCLUDING FRAME AND GRATE (AR751980)(ADDITIVE ALTERNATE #2)(TYPICAL) (SEE DETAILS SHEET 15)

SEE NOTE 2. (TYPICAL)

EAST QUADRANT APRON

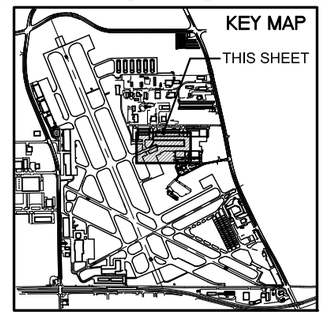
SFS

HANGAR 20

NOTES

1. SUBTRACT 0.24 FEET FROM GRADE SHOWN IN PLANS (1927 DATUM) TO OBTAIN 1988 NAVD DATUM.
2. CONTRACTOR TO MATCH EXISTING GRADE FROM ADJACENT EXISTING PCC PANELS AND SHALL VERIFY NEW GRADES WITH ENGINEER PRIOR TO PAVING BLOCKOUT (ADDITIVE ALTERNATE #2)
3. IF ADDITIVE ALTERNATE #2 IS NOT AWARDED, THE RIM ELEVATION FOR INLET A6 SHALL MATCH THE EXISTING GRADE @ APPROX. 639±.
4. IF ADDITIVE ALTERNATE #1 IS AWARDED, THIS BITUMINOUS TRANSITION SHALL NOT BE CONSTRUCTED.
5. IF ADDITIVE ALTERNATE #1 IS NOT AWARDED, THE ELEVATIONS SHOWN TO THE EAST IN THE ADDITIVE ALTERNATE #1 LIMITS SHALL NOT APPLY. THE RESIDENT ENGINEER SHALL PROVIDE THE CONTRACTOR WITH THE BASE BID BITUMINOUS PAVEMENT TRANSITION GRADES PRIOR TO START OF CONSTRUCTION.
6. FEMA BASE FLOOD ELEVATION (BFE) = 640.24 (NAVD 29 DATUM)

KEY MAP



IL. CONTRACT: **PA054**
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S.B.G. PROJECT: **3-17-0018-B49**

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CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

GRADING PLAN

CMT
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CHICAGO EXECUTIVE AIRPORT

DESIGN BY:	JRL
DRAWN BY:	JRO
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SHEET 12 OF 21 SHEETS

DATE: Wednesday, April 24, 2013 12:20:32 PM
FILE: K:\ChicagoExecAp\12290-07-00_Rehab East Quad Apron\Draw\Sheets\rehab-grading.dwg
UPDATE BY: Jeremy Linke
LAYOUT: 12 GRADING PLAN

LEGEND

- NEW PCC PAVEMENT LIMITS
- NEW BITUMINOUS PAVEMENT LIMITS
- ADDITIVE ALTERNATE #1 LIMITS
- ADDITIVE ALTERNATE #2 LIMITS
- EXISTING MANHOLE/INLET/CATCH BASIN
- NEW STORM STRUCTURE (AR751416)
- A — STRUCTURE TO BE ADJUSTED
- REC — EXISTING INLET AND PCC BLOCKOUT TO BE RECONSTRUCTED (AR751980) (ADDITIVE ALTERNATE #2)(SEE DETAIL SHEET 15)
- SS — EXISTING STORM SEWER
- UD — EXISTING UNDERDRAIN
- EXISTING UNDERDRAIN COLLECTION STRUCTURE
- UD — NEW 6" PERFORATED UNDERDRAIN (AR705506)
- SS — NEW 18" RCP STORM SEWER (AR701518)
- FS — EXISTING 3" FUEL SUPPLY LINE (FIBERGLASS)
- FD — EXISTING 2" FUEL DRAIN LINE (FIBERGLASS)
- FE — EXISTING FUELING ELECTRICAL
- FDU — EXISTING FUEL DISPENSING CABINET
- UST — EXISTING UNDERGROUND STORAGE TANK

NORTH
0 30 60
SCALE IN FEET

HANGAR 12

HANGAR 15

BASE BID | ADDITIVE ALTERNATE #1

NEW UNDERDRAIN INV. = 636.70 CONNECT NEW UNDERDRAIN TO EXISTING STRUCTURE (INCIDENTAL)

NEW UNDERDRAIN INV. = 637.40

NEW CAP H.P. INV. = 638.26 (SEE NOTE 2)

NEW 25 LF 6" UNDERDRAIN @ 0.35% (BASE BID)

NEW UNDERDRAIN INV. = 638.17 CONNECT NEW UNDERDRAIN TO NEW STRUCTURE (INCIDENTAL) (TYP.)

NEW UNDERDRAIN INV. = 638.50 (ADDITIVE ALTERNATE #1)

NEW 70 LF 6" UNDERDRAIN @ 0.35% (ADDITIVE ALTERNATE #1)

UST (20,000 GAL)

BASELINE A

NEW 200 LF 6" UNDERDRAIN @ 0.35%

NEW 220 LF 6" UNDERDRAIN @ 0.35%

STORM SEWER LATERAL A

NEW 89 LF 18" RCP @ 0.20%

NEW 105 LF 18" RCP @ 0.20%

NEW 105 LF 18" RCP @ 0.20%

NEW 105 LF 18" RCP @ 0.20%

NEW 89 LF 18" RCP @ 0.20% (BASE BID)

NEW 85 LF 6" UNDERDRAIN @ 1.27%

NEW 85 LF 6" UNDERDRAIN @ 0.35%

NEW 135 LF 6" UNDERDRAIN @ 0.35%

NEW 105 LF 6" UNDERDRAIN @ 0.35%

NEW 20 LF 6" UNDERDRAIN @ 0.35% (BASE BID)

NEW 105 LF 6" UNDERDRAIN @ 0.35%

NEW CAP H.P. INV. = 638.95

NEW CAP H.P. INV. = 638.93

NEW "T" INV. = 638.48

NEW H.P. INV. = 638.85 (NO CAP)

NEW "T" INV. = 638.47

NEW CAP H.P. INV. = 638.54 (SEE NOTE 2)

NEW CAP H.P. INV. = 639.15 (ADDITIVE ALTERNATE #1)

NEW 175 LF 6" UNDERDRAIN @ 0.35% (ADDITIVE ALTERNATE #1)

NEW 80 LF 6" UNDERDRAIN @ 0.50%

CONNECT NEW UNDERDRAIN TO EXISTING UNDERDRAIN (INCIDENTAL)

REMOVE (AR501900) AND REPLACE (AR501509) EXISTING 9" PCC PAVEMENT PANELS AND INLET PCC BLOCKOUT INCLUDING FRAME AND GRATE (AR751980)(ADDITIVE ALTERNATE #2)(TYPICAL) (SEE DETAIL SHEET 15)

TAXIWAY K3

EAST QUADRANT APRON

HANGAR 20

SFS

NOTES:

1. THE ENTIRE NEW STORM SEWER AND ALL NEW INLETS SHALL BE CONSTRUCTED AS PART OF THE BASE BID WORK.
2. IF ADDITIVE ALTERNATE #1 AWARDED, THIS CAP SHALL NOT BE INSTALLED.

KEY MAP
THIS SHEET

IL. CONTRACT: **PA054**
IL. LETTING ITEM: **15A**
IL. PROJECT: **PWK-4262**
S.B.G. PROJECT: **3-17-0018-B49**

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CHICAGO EXECUTIVE AIRPORT
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REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

DRAINAGE PLAN

CMT
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CONSULTING ENGINEERS
License No. 184-000613

CHICAGO EXECUTIVE AIRPORT

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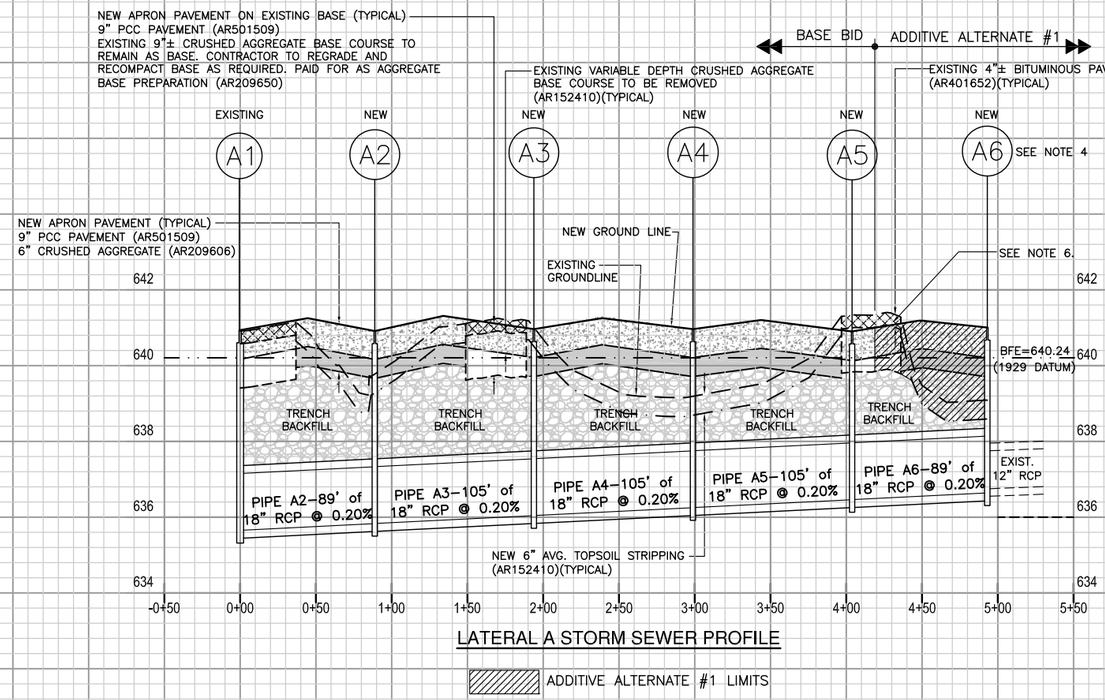
SHEET 13 OF 21 SHEETS



LATERAL A STORM SEWER PROFILE

ADDITIVE ALTERNATE #1 LIMITS

STRUCTURE SCHEDULE
STORM SEWER – LATERAL A (SEE NOTE 3 & 4)

STRUCTURE	TYPE	RIM	INVERT	NORTHING	EASTING	STATION/OFFSET
A1	EXISTING 4' MH	640.93	IN 635.65 (E)	1985769.53	617530.93	STA. 14+61.12, 36.18' RT. ℄ A
A2	NEW TYPE 1 INLET	640.91	IN 635.83 (E) OUT 635.83 (W)	1985767.69	617619.76	STA. 15+49.97, 36.64' RT. ℄ A
A3	NEW TYPE 1 INLET	640.96	IN 636.04 (E) OUT 636.04 (W)	1985766.06	617724.75	STA. 16+54.97, 36.64' RT. ℄ A
A4	NEW TYPE 1 INLET	640.96	IN 636.25 (E) OUT 636.25 (W)	1985764.44	617829.72	STA. 17+59.95, 36.64' RT. ℄ A
A5	NEW TYPE 1 INLET	640.90	IN 636.46 (E) OUT 636.46 (W)	1985762.79	617934.72	STA. 18+64.97, 36.64' RT. ℄ A
A6	NEW TYPE 1 INLET	641.00	OUT 636.64 (W) IN 636.75 (NE)	1985766.08	618023.84	STA. 19+54.02, 31.96' RT. ℄ A

NOTE: 1. THE STATION AND OFFSET IS MEASURED TO THE CENTER OF THE STRUCTURE.

2. ALL ELEVATIONS ARE IN 1929 DATUM.

3. THE ENTIRE NEW STORM SEWER AND ALL NEW INLETS SHALL BE CONSTRUCTED AS PART OF THE BASE BID WORK.

4. IF ADDITIVE ALTERNATE #1 IS NOT AWARDED, THE RIM ELEVATION FOR INLET A6 SHALL MATCH THE EXISTING GRADE @ APPROX. 639±.

5. FEMA BASE FLOOD ELEVATION (BFE) = 640.24 (NAVD 29 DATUM).

6. IF ADDITIVE ALTERNATE #1 IS AWARDED, THE BITUMINOUS TRANSITION AND REMOVAL & REPLACEMENT (WHICH IS NOT SHOWN FOR CLARITY) SHALL NOT BE CONSTRUCTED AT THIS LOCATION.

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WHEELING/PROSPECT HEIGHTS, ILLINOIS
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

STORM SEWER PROFILES AND SCHEDULE

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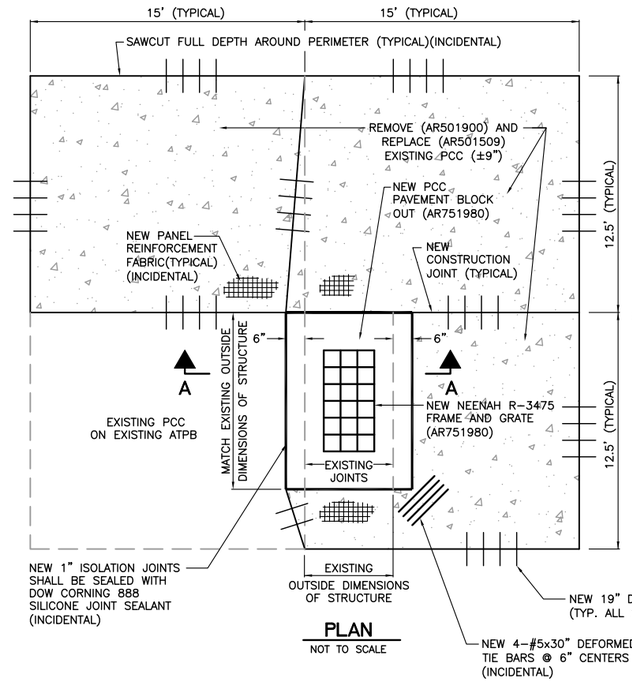
License No. 184-000613

CHICAGO EXECUTIVE AIRPORT

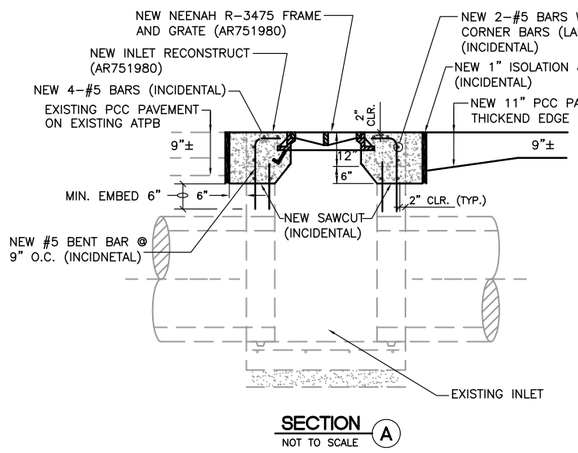
DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	JRL
APPROVED BY:	DKP
DATE:	4/19/2013
JOB No:	12290-07-00

FINAL

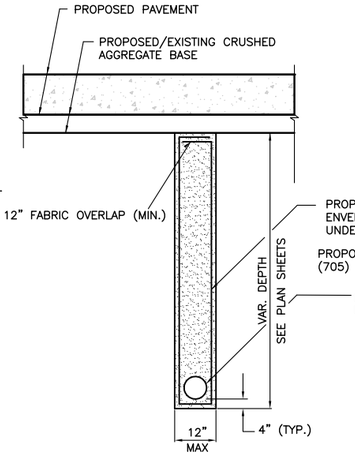
SHEET 14 OF 21 SHEETS



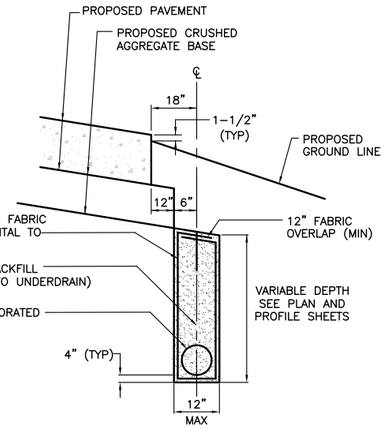
PLAN
NOT TO SCALE



SECTION (A)
NOT TO SCALE



UNDERDRAIN DETAIL - PAVED AREAS
NOT TO SCALE



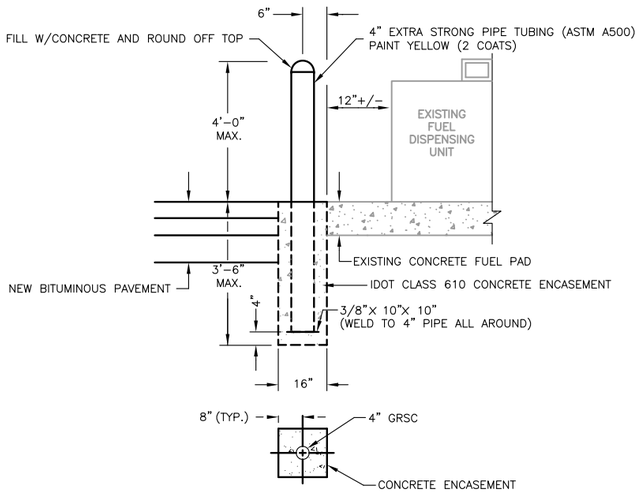
UNDERDRAIN DETAIL
EDGE OF P.C.C. PAVEMENT AREAS
NOT TO SCALE

NOTES

1. THE 6" UNDERDRAIN SHALL BE INSTALLED AFTER THE SUBGRADE IS COMPACTED.
2. THE SPOILS FROM THE 6" UNDERDRAIN CONSTRUCTION SHALL BE REMOVED DAILY FROM THE SURFACE OF THE CRUSHED AGGREGATE BASE.

STORM SEWER/UNDERDRAIN NOTES

1. CONTRACTOR SHALL FIELD VERIFY EXISTING STORM SEWER/UNDERDRAIN INVERTS BEFORE INSTALLING PROPOSED PIPE, CONNECTIONS AND ORDERING MATERIALS.
2. ALL UNDERDRAIN CONNECTIONS, CORING INTO STRUCTURES, CAPS, TEES, BENDS, STORM SEWER ETC. SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE UNDERDRAIN.
3. UNDERDRAIN SLOPES FOLLOW EDGE OF PAVEMENT SLOPE UNLESS OTHERWISE NOTED.
4. INSTALL PROPOSED ELECTRICAL DUCTS/CONDUITS TO BE CLEAR OF UNDERDRAIN, COST INCIDENTAL.
5. UNDERDRAIN CONFLICTS WITH EXISTING 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.

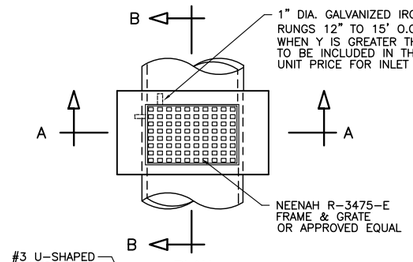


BOLLARD DETAIL
(ADDITIVE ALTERNATE #1)

NOT TO SCALE

NOTES:

1. LOCATION OF NEW BOLLARDS SHALL BE COORDINATED WITH FUEL LINES, UTILITIES AND TAXILANE OBJECT FREE AREA TO AVOID ANY CONFLICTS.

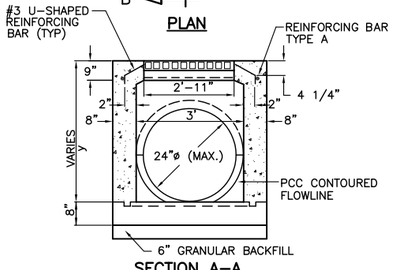


PLAN

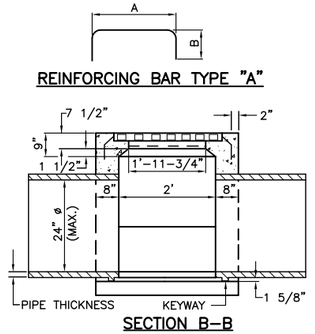
REINFORCING BAR SCHEDULE

TYPE	PER INLET	DIMENSIONS A	DIMENSIONS B	SIZE	APPROX.WT.OF BARS IN INLET
A	2	3'4"	2'4"	#5	16.7

REINFORCING STEEL BARS TYPES



SECTION A-A



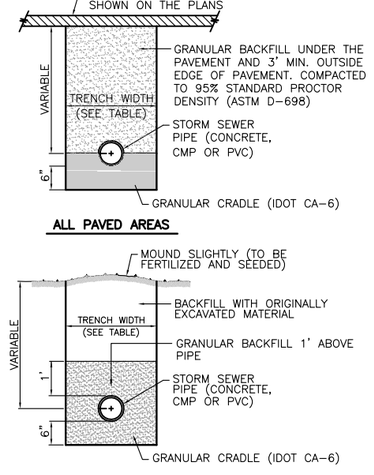
SECTION B-B

NOTES

1. 1/2" CHAMFER TO BE USED ON ALL EXPOSED CORNERS ON INLETS. BARS TO BE INSTALLED 2" FROM FACE OF WALL.
2. INLET TO BE CONSTRUCTED OF STRUCTURAL P.C. CONCRETE. THE CONTRACT UNIT PRICE FOR INLET SHALL INCLUDE THE GRATE AND FRAME AS SPECIFIED.

TYPE 1 INLET
N.T.S.

INSIDE DIAMETER OF STORM SEWER (INCHES)	MAXIMUM TRENCH WIDTH	MAXIMUM PAVEMENT REMOVAL WIDTH
6	3'-7"	5'-7"
8	3'-9"	5'-9"
12	4'-2"	6'-2"
15	4'-6"	6'-6"
18	4'-9"	6'-9"
21	5'-0"	7'-0"
24	5'-4"	7'-4"
27	5'-7"	7'-7"
30	5'-11"	7'-11"
36	6'-6"	8'-6"
42	7'-1"	9'-1"
48	7'-8"	9'-8"
54	8'-3"	10'-3"
60	8'-10"	10'-10"
66	9'-5"	11'-5"
72	10'-0"	12'-0"
78	10'-7"	12'-7"
84	11'-2"	13'-2"
90	11'-9"	13'-9"
96	12'-4"	14'-4"
102	12'-11"	14'-11"
108	13'-6"	15'-6"



TRENCH DETAILS
NOT TO SCALE

IL. CONTRACT: **PA054**
IL. LETTING ITEM: **15A**
IL. PROJECT: **PWK-4262**
S.B.G. PROJECT: **3-17-0018-B49**

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
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

DRAINAGE AND MISCELLANEOUS DETAILS

CMT
CRAWFORD, MURPHY & TILLY, INC.
CONSULTING ENGINEERS
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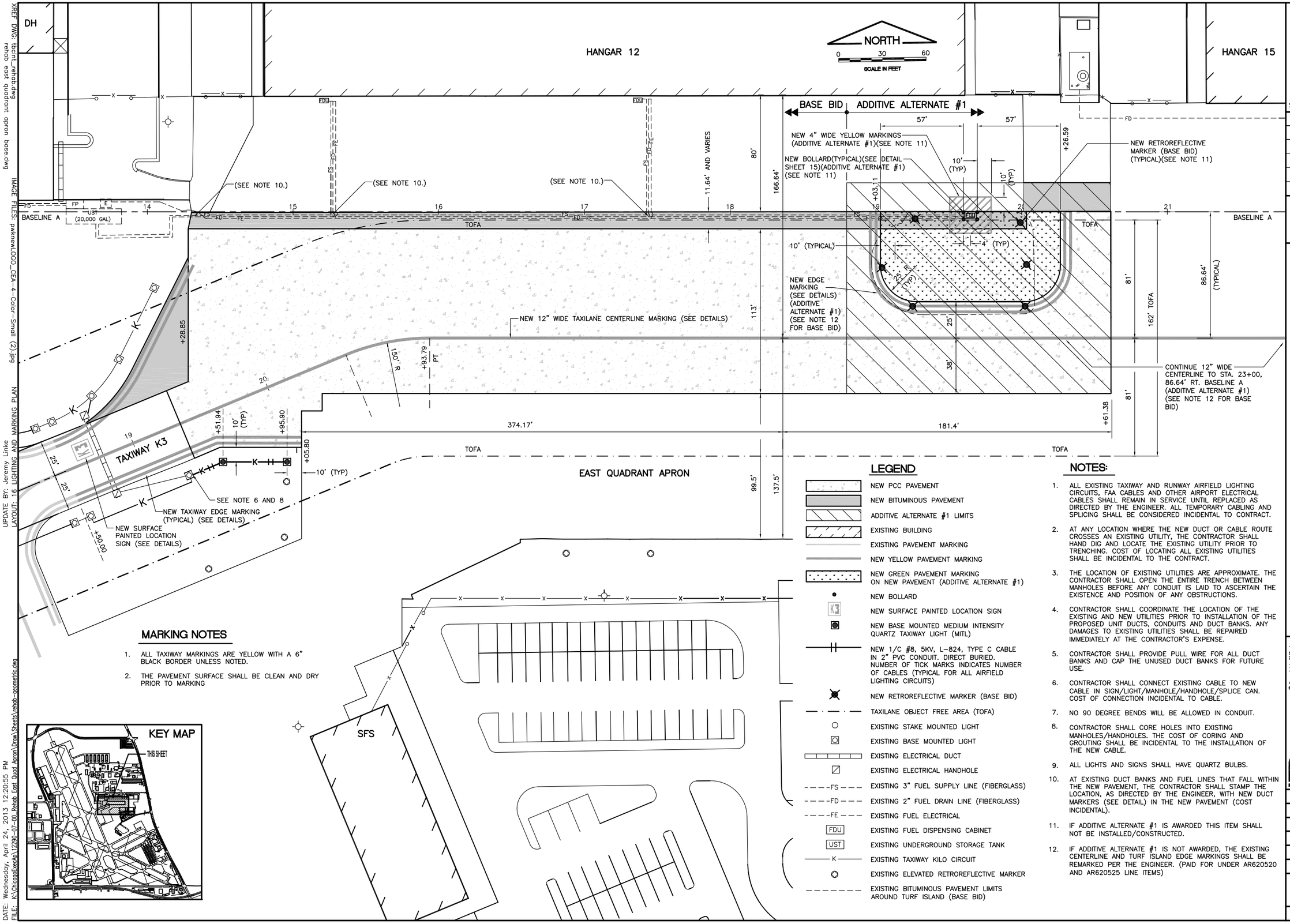

MARKING NOTES

1. ALL TAXIWAY MARKINGS ARE YELLOW WITH A 6" BLACK BORDER UNLESS NOTED.
2. THE PAVEMENT SURFACE SHALL BE CLEAN AND DRY PRIOR TO MARKING

LEGEND

- NEW PCC PAVEMENT
- NEW BITUMINOUS PAVEMENT
- ADDITIVE ALTERNATE #1 LIMITS
- EXISTING BUILDING
- EXISTING PAVEMENT MARKING
- NEW YELLOW PAVEMENT MARKING
- NEW GREEN PAVEMENT MARKING ON NEW PAVEMENT (ADDITIVE ALTERNATE #1)
- NEW BOLLARD
- K3 NEW SURFACE PAINTED LOCATION SIGN
- NEW BASE MOUNTED MEDIUM INTENSITY QUARTZ TAXIWAY LIGHT (MITL)
- NEW 1/C #8, 5KV, L-824, TYPE C CABLE IN 2" PVC CONDUIT. DIRECT BURIED. NUMBER OF TICK MARKS INDICATES NUMBER OF CABLES (TYPICAL FOR ALL AIRFIELD LIGHTING CIRCUITS)
- NEW RETROREFLECTIVE MARKER (BASE BID)
- TAXILANE OBJECT FREE AREA (TOFA)
- EXISTING STAKE MOUNTED LIGHT
- EXISTING BASE MOUNTED LIGHT
- EXISTING ELECTRICAL DUCT
- EXISTING ELECTRICAL HANDHOLE
- FS EXISTING 3" FUEL SUPPLY LINE (FIBERGLASS)
- FD EXISTING 2" FUEL DRAIN LINE (FIBERGLASS)
- FE EXISTING FUEL ELECTRICAL
- FDU EXISTING FUEL DISPENSING CABINET
- UST EXISTING UNDERGROUND STORAGE TANK
- K EXISTING TAXIWAY KILO CIRCUIT
- EXISTING ELEVATED RETROREFLECTIVE MARKER
- EXISTING BITUMINOUS PAVEMENT LIMITS AROUND TURF ISLAND (BASE BID)

NOTES:

1. ALL EXISTING TAXIWAY AND RUNWAY AIRFIELD LIGHTING CIRCUITS, FAA CABLES AND OTHER AIRPORT ELECTRICAL CABLES SHALL REMAIN IN SERVICE UNTIL REPLACED AS DIRECTED BY THE ENGINEER. ALL TEMPORARY CABLING AND SPLICING SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.
2. AT ANY LOCATION WHERE THE NEW DUCT OR CABLE ROUTE CROSSES AN EXISTING UTILITY, THE CONTRACTOR SHALL HAND DIG AND LOCATE THE EXISTING UTILITY PRIOR TO TRENCHING. COST OF LOCATING ALL EXISTING UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT.
3. 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.
4. CONTRACTOR SHALL COORDINATE THE LOCATION OF THE EXISTING AND NEW 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.
5. CONTRACTOR SHALL PROVIDE PULL WIRE FOR ALL DUCT BANKS AND CAP THE UNUSED DUCT BANKS FOR FUTURE USE.
6. CONTRACTOR SHALL CONNECT EXISTING CABLE TO NEW CABLE IN SIGN/LIGHT/MANHOLE/HANDHOLE/SPLICE CAN. COST OF CONNECTION INCIDENTAL TO CABLE.
7. NO 90 DEGREE BENDS WILL BE ALLOWED IN CONDUIT.
8. CONTRACTOR SHALL CORE HOLES INTO EXISTING MANHOLES/HANDHOLES. THE COST OF CORING AND GROUTING SHALL BE INCIDENTAL TO THE INSTALLATION OF THE NEW CABLE.
9. ALL LIGHTS AND SIGNS SHALL HAVE QUARTZ BULBS.
10. AT EXISTING DUCT BANKS AND FUEL LINES THAT FALL WITHIN THE NEW PAVEMENT, THE CONTRACTOR SHALL STAMP THE LOCATION, AS DIRECTED BY THE ENGINEER, WITH NEW DUCT MARKERS (SEE DETAIL) IN THE NEW PAVEMENT (COST INCIDENTAL).
11. IF ADDITIVE ALTERNATE #1 IS AWARDED THIS ITEM SHALL NOT BE INSTALLED/CONSTRUCTED.
12. IF ADDITIVE ALTERNATE #1 IS NOT AWARDED, THE EXISTING CENTERLINE AND TURF ISLAND EDGE MARKINGS SHALL BE REMARKED PER THE ENGINEER. (PAID FOR UNDER AR620520 AND AR620525 LINE ITEMS)

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IL. LETTING ITEM: **15A**
IL. PROJECT: **PWK-4262**
S.B.G. PROJECT: **3-17-0018-B49**

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CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

LIGHTING AND PAVEMENT MARKING PLAN

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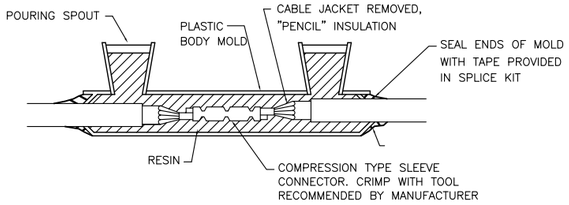
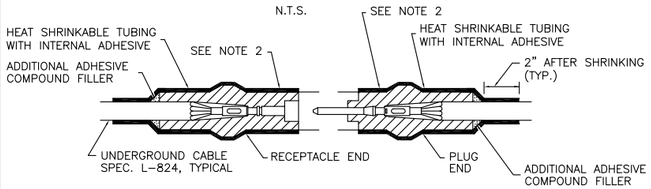
SHEET 16 OF 21 SHEETS

XREF DWG: tbcint_rehab.dwg rehab east quadrant apron base.dwg
IMAGE FILES: pwknewLOGO_CEA-4-Color-Small (2).jpg
UPDATE BY: Jeremy Linke
LAYOUT: 16 LIGHTING AND MARKING PLAN
DATE: Wednesday, April 24, 2013 12:20:55 PM
FILE: K:\ChicagoExecAp\12290-07-00_Rehab East Quad Apron\Drow\Sheets\rehab-geometric.dwg



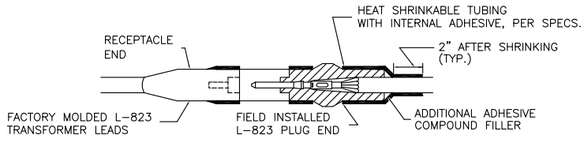
TYPE A - CABLE SPLICE

FOR SPLICES IN HOMERUNS AND FOR EXTENSIONS TO EXISTING CABLES ONLY



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

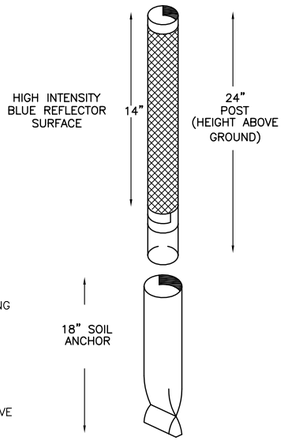
1. INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE.
2. WRAP WITH AT LEAST ONE LAYER OF RUBBER OR SYNTHETIC RUBBER TAPE AND ONE LAYER OF PLASTIC TAPE, ONE-HALF LAPPED, EXTENDING AT LEAST 1-1/2 INCHES ON EACH SIDE OF JOINT.
3. THE COST OF FURNISHING AND INSTALLING ALL SPLICE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

TURF AREA CABLE TRENCH DETAIL

NOT TO SCALE

NOTES

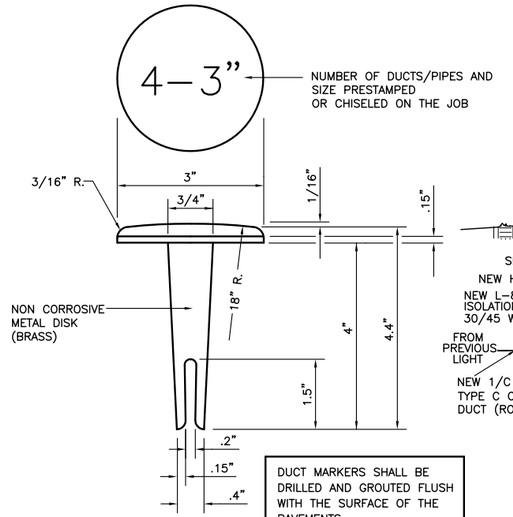
1. TRENCHES WITH MORE THAN 2 CABLES SHALL BE INCREASED 3" IN WIDTH FOR EACH ADDITIONAL CABLE. IF SPECIFIED ON PLANS, TWO PARALLEL TRENCHES MAY BE CONSTRUCTED.
2. DEPTH OF TRENCHES SHALL BE AS SHOWN UNLESS OTHERWISE SPECIFIED ON THE PLANS.
3. SAND BACKFILL SHALL BE USED IF THE EXISTING SOIL DOES NOT MEET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



TAXIWAY RETROFLECTIVE MARKER SOIL ANCHOR MOUNT

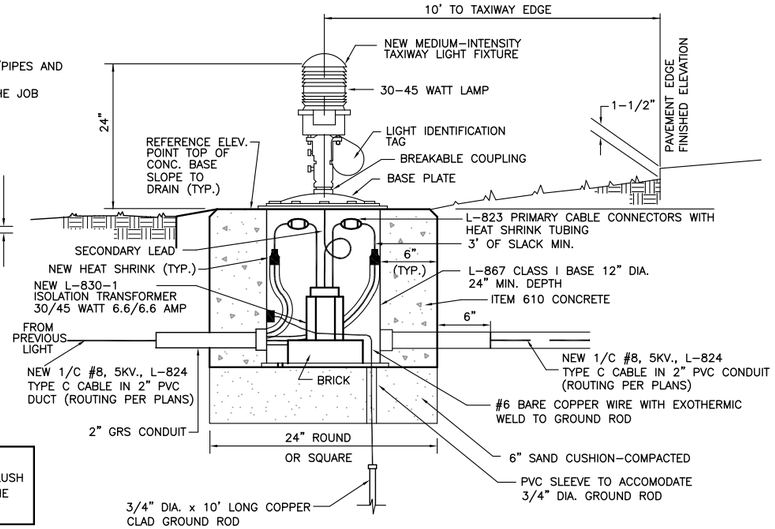
NOT TO SCALE

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



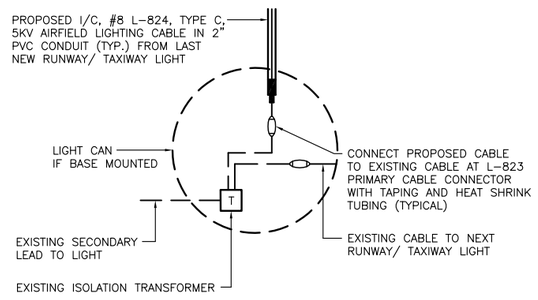
DUCT MARKER DETAIL

NOT TO SCALE



NEW BASE MOUNTED MEDIUM INTESITY TAXIWAY LIGHT

NOT TO SCALE

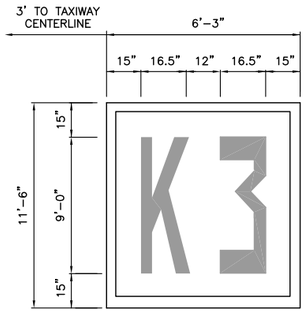


RUNWAY/TAXIWAY LIGHTING CIRCUIT CONNECTION DETAIL

NOT TO SCALE

GENERAL NOTES

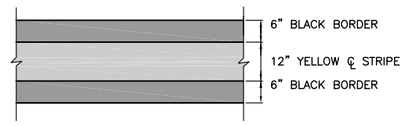
1. TRANSFORMER HOLDER MAY BE ANY COMMERCIALLY AVAILABLE BRICK.
2. BREAKING GROOVE COUPLINGS SHALL NOT BE OVER 1" ABOVE GROUND LINE.
3. ISOLATION TRANSFORMERS COME WITH A FACTORY INSTALLED PLUG (TYPE 1, CLASS A, STYLE 2) AND RECEPTACLE (TYPE 1, CLASS A, STYLE 9). A TYPE 1, CLASS B, STYLE 3 PLUG AND TYPE 1, CLASS B, STYLE 10 RECEPTACLE SHALL BE INSTALLED ON THE 1/C, No. 8, 5000 V., L-824 TYPE C CABLES FOR CONNECTION TO EACH TRANSFORMER.
4. TO FURTHER REDUCE THE POSSIBILITY OF WATER/MOISTURE ENTRANCE INTO THE CONNECTOR BETWEEN THE CABLE AND THE FIELD ATTACHED CONNECTOR, IT IS REQUIRED THAT A HEAT SHRINKABLE TUBING WITH INTERNAL ADHESIVE BE APPLIED OVER THE ENTIRE CABLE CONNECTOR.
5. ALL LIGHTS, CABLES AND TRANSFORMERS TO BE REMOVED SHALL REMAIN THE THE PROPERTY OF THE AIRPORT. AT THE DISCRETION OF THE AIRPORT MANAGER THE CONTRACTOR MAY BE REQUIRED TO DISPOSE OF THESE MATERIALS OFFSITE.
6. DUCT MARKERS SHALL BE INSTALLED AT EVERY NEW DUCT AND AT EVERY EXISTING DUCT USED FOR THIS PROJECT.



SURFACE PAINTED LOCATION SIGN

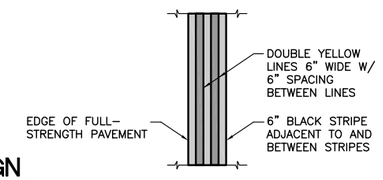
NO SCALE

1. ALL SURFACE PAINTED LOCATION SIGNS SHALL HAVE A BLACK BACKGROUND WITH A YELLOW INSCRIPTION, AND WILL BE OUTLINED WITH A 6" YELLOWK BORDER.
2. SURFACE PAINTED HOLD POSITION SIGNS SHALL MATCH TAXI GUIDANCE SIGN PANEL.
3. ALL LETTERS, NUMBERS AND SYMBOLS SHALL CONFORM TO FAA ADVISORY CIRCULAR 150/5340-1K (LATEST EDITION).



TAXIWAY CENTERLINE DETAIL

NOT TO SCALE



TAXIWAY EDGE MARKINGS CONTINUOUS

NOT TO SCALE

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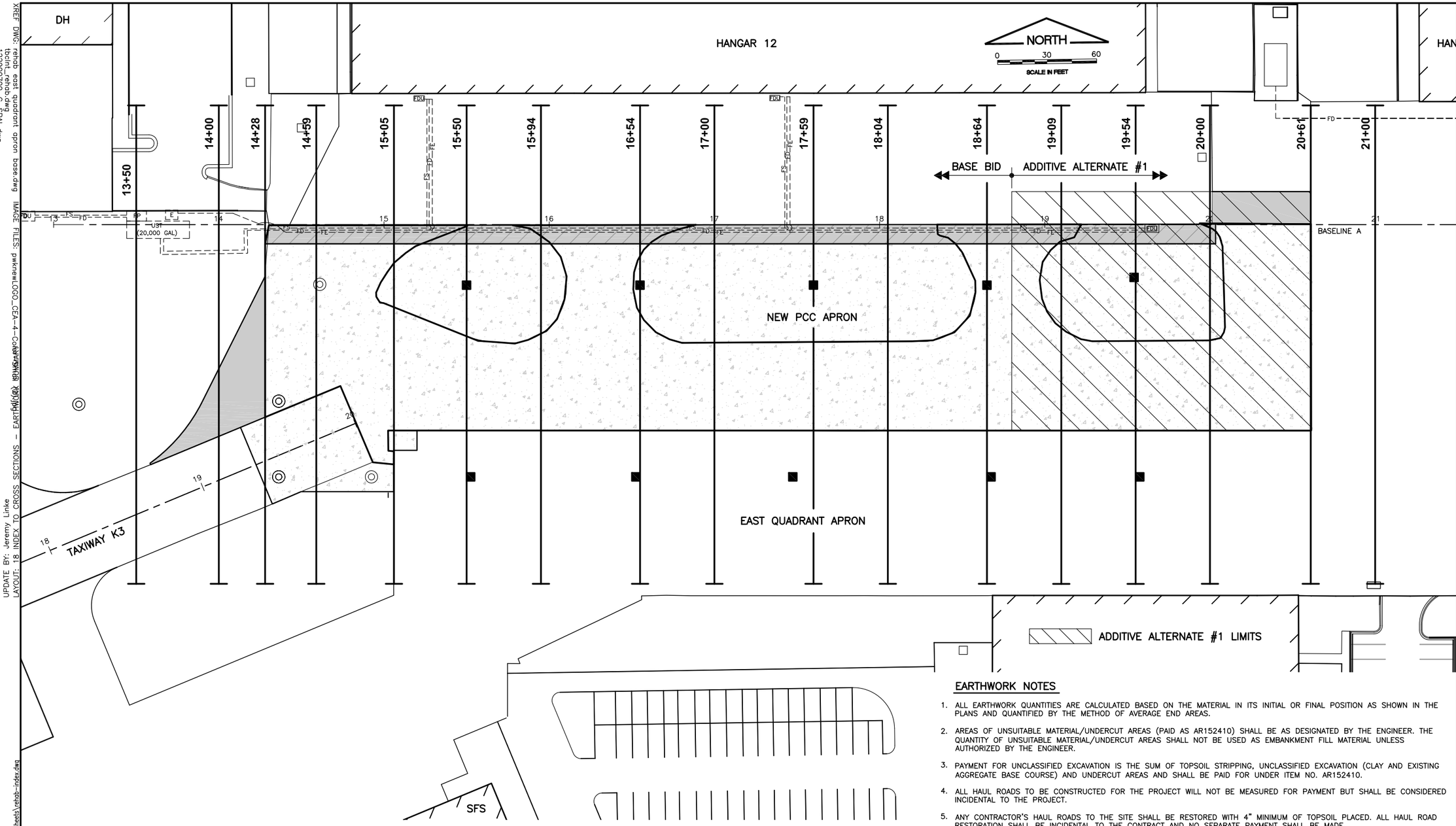

EARTHWORK SUMMARY TABLE (SEE NOTES)	BASE BID QUANTITY	ADD. ALT. #1 QUANTITY	TOTAL QUANTITY	UNIT
UNCLASSIFIED EXCAVATION (CLAY AND/OR AGGREGATE)(INITIAL POSITION)	835	231	1066	CY
TOPSOIL STRIPPING (INITIAL POSITION)	588	260	848	CY
EXCESS MILLINGS PLACED IN ADDITIONAL UNDERCUT AREAS (INITIAL POSITION)	323	65	388	CY
UNDERCUT / PGE AREAS (AS FIELD CONDITIONS WARRANT) (INITIAL POSITION)	200	85	285	CY
TOTAL CUT (UNCLASSIFIED EXCAVATION AR152410)	**1946**	**641**	**2587**	**CY**
EMBANKMENT FILL MILLINGS (FINAL POSITION)	255	182	437	CY
SHOULDER FILL (FINAL POSITION)	0	0	0	CY
TOPSOIL PLACEMENT (FINAL POSITION)	28	0	28	CY
TOTAL FILL	**283**	**182**	**465**	**CY**

NOTE: 1. BASE BID: AR401652 PAVEMENT GRINDINGS MATERIAL AT 4 INCHES THICK (AVG.) = 445 CY x 1.3 = 578 CY MILLINGS AVAILABLE (FINAL POSITION). 578 CY – 255 CY REQUIRED FOR EMBANKMENT FILL = 323 CY EXCESS MILLINGS.
2. ADDITIVE ALTERNATE #1: AR401652 PAVEMENT GRINDINGS MATERIAL AT 4 INCHES THICK (AVG.) = 190 CY x 1.3 = 247 CY MILLINGS AVAILABLE (FINAL POSITION). 247 CY – 182 CY REQUIRED FOR EMBANKMENT FILL = 65 CY EXCESS MILLINGS.

EARTHWORK NOTES

1. ALL EARTHWORK QUANTITIES ARE CALCULATED BASED ON THE MATERIAL IN ITS INITIAL OR FINAL POSITION AS SHOWN IN THE PLANS AND QUANTIFIED BY THE METHOD OF AVERAGE END AREAS.
2. AREAS OF UNSUITABLE MATERIAL/UNDERCUT AREAS (PAID AS AR152410) SHALL BE AS DESIGNATED BY THE ENGINEER. THE QUANTITY OF UNSUITABLE MATERIAL/UNDERCUT AREAS SHALL NOT BE USED AS EMBANKMENT FILL MATERIAL UNLESS AUTHORIZED BY THE ENGINEER.
3. PAYMENT FOR UNCLASSIFIED EXCAVATION IS THE SUM OF TOPSOIL STRIPPING, UNCLASSIFIED EXCAVATION (CLAY AND EXISTING AGGREGATE BASE COURSE) AND UNDERCUT AREAS AND SHALL BE PAID FOR UNDER ITEM NO. AR152410.
4. ALL HAUL ROADS TO BE CONSTRUCTED FOR THE PROJECT WILL NOT BE MEASURED FOR PAYMENT BUT SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.
5. ANY CONTRACTOR'S HAUL ROADS TO THE SITE SHALL BE RESTORED WITH 4" MINIMUM OF TOPSOIL PLACED. ALL HAUL ROAD RESTORATION SHALL BE INCIDENTAL TO THE CONTRACT AND NO SEPARATE PAYMENT SHALL BE MADE.
6. TOPSOIL PLACEMENT AND SHOULDER FILL SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE FOR TOPSOIL STRIPPING (ITEM AR152410). NO SEPARATE PAYMENT WILL BE MADE FOR TOPSOIL PLACEMENT AND SHOULDER FILL.
7. MILLINGS RESULTING FROM AR401652 BITUMINOUS PAVEMENT GRINDING SHALL BE USED FOR EMBANKMENT FILL (PAID UNDER AR401652.)
8. IT IS ANTICIPATED THAT THERE WILL BE MILLINGS REMAINING AFTER ALL EMBANKMENT FILL IS COMPLETED. A 30% EXPANSION FACTOR WAS USED TO DETERMINE THE AVAILABLE MILLINGS FOR EMBANKMENT FILL. THE REMAINING MILLINGS SHALL BE USED FOR BASE COURSE STABILIZATION IN ADDITIONAL UNDERCUT AREAS (AR152410) AS DETERMINED BY THE ENGINEER.
9. ANY EXCESS MATERIAL INCLUDING CLAY, EXISTING AGGREGATE BASE, MILLINGS, AND TOPSOIL SHALL BE HAULED OFF AND DISPOSED OF BY THE CONTRACTOR.
10. A 15% SHRINKAGE FACTOR WAS USED TO DETERMINE THE REQUIRED FILL IN ITS INITIAL POSITION. THE DIFFERENCE BETWEEN THE REQUIRED FILL AND REQUIRED CUT QUANTITY WAS USED TO DETERMINE THE NUMBER OF CUBIC YARDS OF MATERIAL TO BE DISPOSED OF OFF AIRPORT PROPERTY. NO ADJUSTMENTS IN EARTHWORK QUANTITIES WILL BE ALLOWED FOR VARIATIONS IN ACTUAL SHRINKAGE AND OR EXPANSION FACTORS ENCOUNTERED DURING CONSTRUCTION.
11. CCDD AND ENVIRONMENTAL TESTING RESULTS FOR THE TESTED SAMPLES ARE LOCATED IN THE APPENDIX OF THE CONTRACT DOCUMENTS. ANY ADDITIONAL TESTING AND HANDLING REQUIRED BY THE CONTRACTOR AND/OR CONTRACTORS DISPOSAL FACILITY, SHALL BE COMPLETED AT THE CONTRACTORS EXPENSE. IF THE CONTRACTOR ENCOUNTERS ANY SOIL FROM THIS SITE/PROJECT THAT IS POTENTIALLY CONTAMINATED, THE ENGINEER AND OWNER SHALL BE NOTIFIED PRIOR TO HAULING THE POTENTIALLY CONTAMINATED SOIL OFF SITE.

IL. CONTRACT: **PA054**
IL. LETTING ITEM: **15A**
IL. PROJECT: **PWK-4262**
S.B.G. PROJECT: **3-17-0018-B49**

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
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

INDEX TO CROSS SECTIONS - EARTHWORK SUMMARY

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

CHICAGO EXECUTIVE AIRPORT

DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	JRL
APPROVED BY:	DKP
DATE:	4/19/2013
JOB No:	12290-07-00

FINAL

SHEET 18 OF 21 SHEETS

XREF DWG: rehab east quadrant apron base.dwg
tbcint_rehab.dwg
12290700-C-SPAL.dwg
IMAGE FILES: pwknewLOGO_CEA-4-Color.jpg
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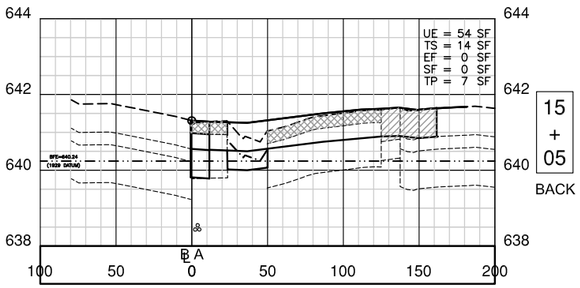
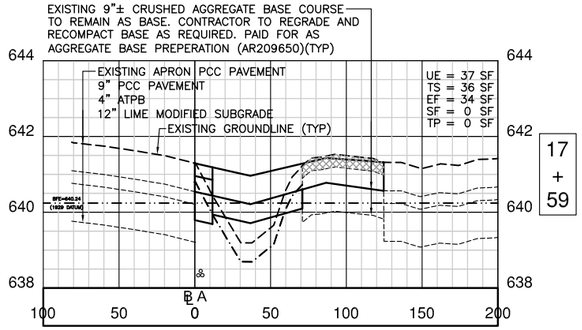
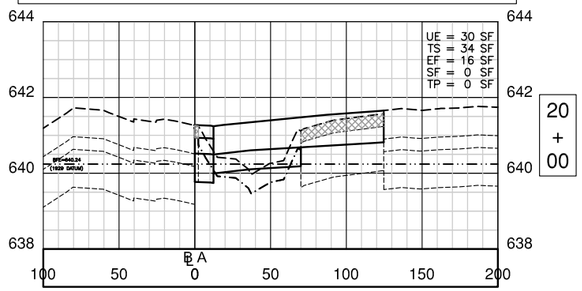
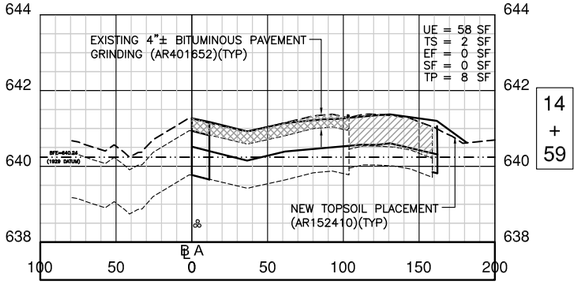
UPDATE BY: Jeremy Linke
LAYOUT: 18 INDEX TO CROSS SECTIONS
DATE: Wednesday, April 24, 2013 12:21:02 PM
FILE: K:\ChicagoExecAp\12290-07-00_Rehab East Quad Apron\Draw\Sheets\rehab-index.dwg

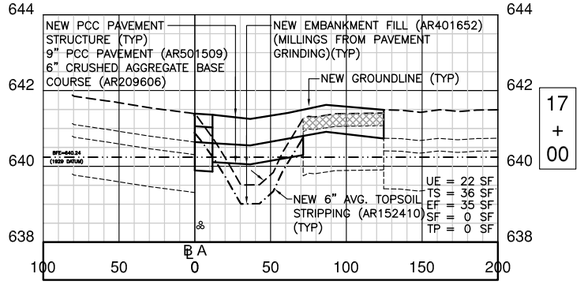
NOTES:1 .SUBTRACT 0.24 FEET FROM GRADES SHOWN IN PLANS (1929 DATUM) TO OBTAIN 1988 NAVD.
2. SEE GRADING PLAN FOR ELEVATIONS.
3. EXISTING FUEL LINES SHOWN FOR INFORMATION ONLY.

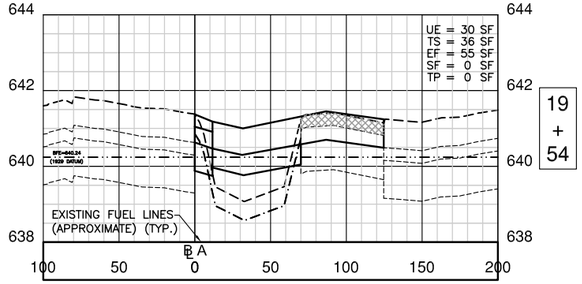


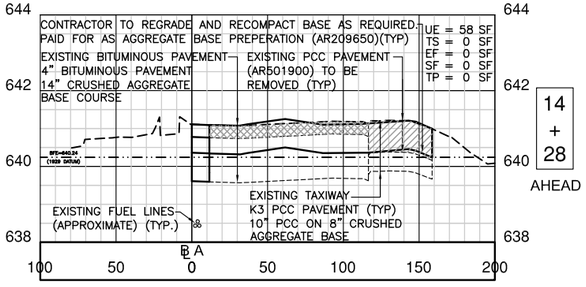


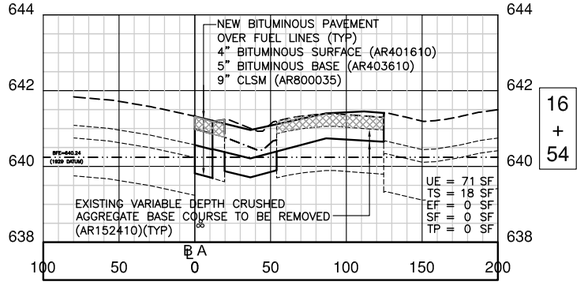


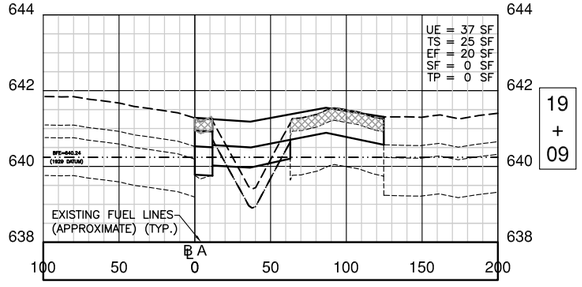












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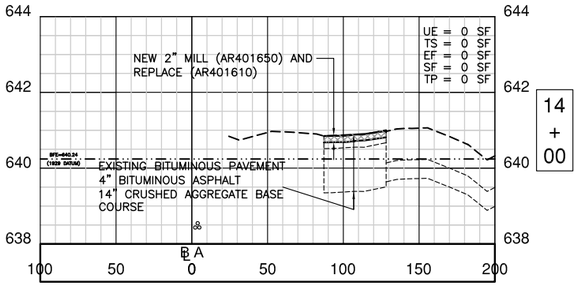

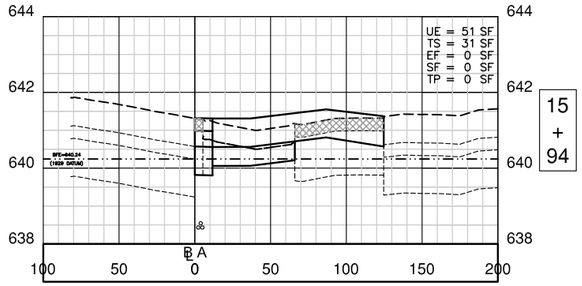

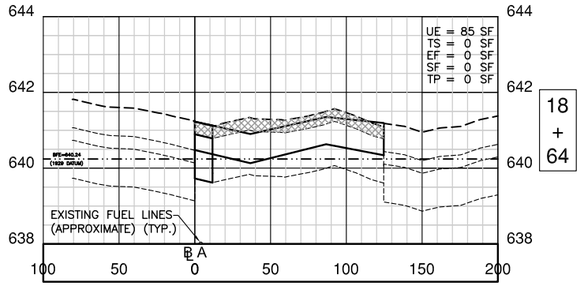

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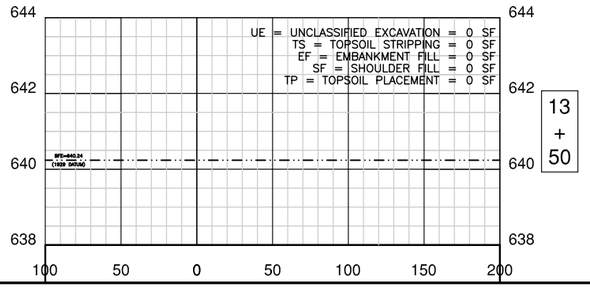

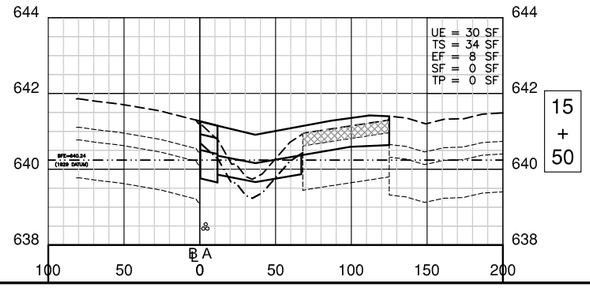

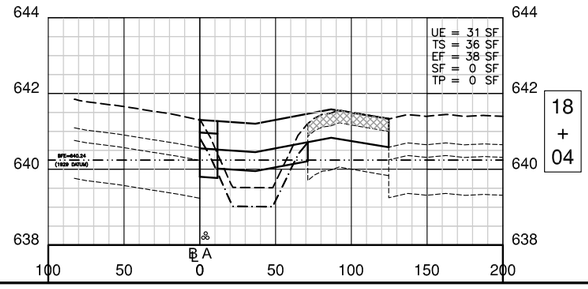

IL. CONTRACT: **PA054**
IL. LETTING ITEM: **15A**
IL. PROJECT: **PWK-4262**
S.B.G. PROJECT: **3-17-0018-B49**

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
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

CROSS SECTIONS - SHEET 1

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

CHICAGO EXECUTIVE AIRPORT

DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	JRL
APPROVED BY:	DKP
DATE:	4/19/2013
JOB No:	12290-07-00

FINAL

SHEET 19 OF 21 SHEETS

XREF DWG: rehab east quadrant apron base.dwg IMAGE FILES: pwknewLOGO_CEA-4-Color-Small (2).jpg tbcint_rehab.dwg
UPDATE BY: Jeremy Linke
LAYOUT: 19 CROSS SECTIONS - SHEET 1
DATE: Wednesday, April 24, 2013 12:21:11 PM
FILE: K:\ChicagoExecAp\12290-07-00_Rehab East Quad Apron\Draw\C3D\12290700-C-SPC6.dwg

NOTES:1 .SUBTRACT 0.24 FEET FROM GRADES SHOWN IN PLANS (1929 DATUM) TO OBTAIN 1988 NAVD.
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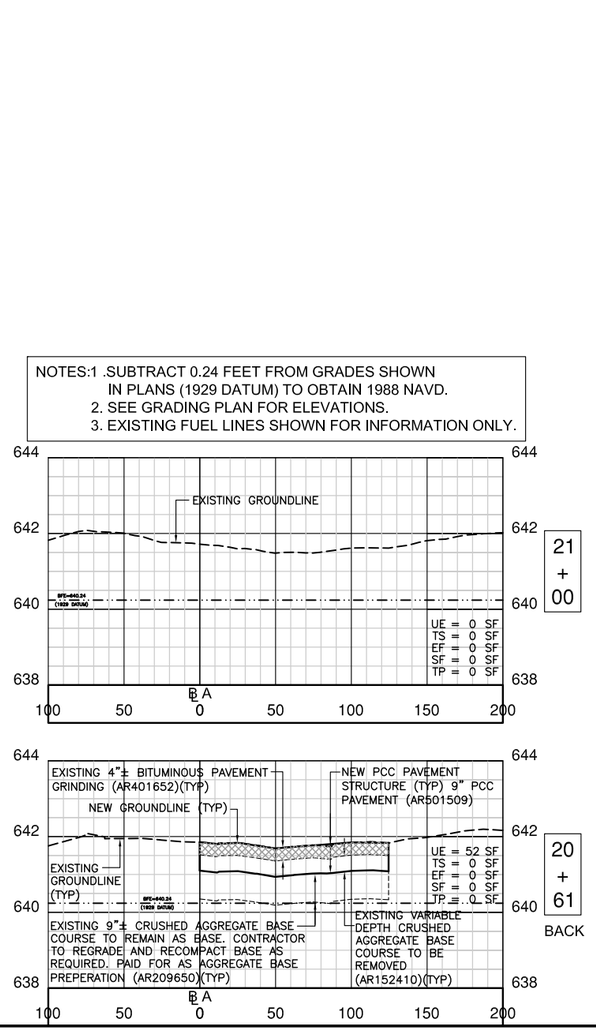
ADDITIVE ALTERNATE #1



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CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

CROSS SECTION - SHEET 2

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

CHICAGO EXECUTIVE AIRPORT

DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	JRL
APPROVED BY:	DKP
DATE:	4/19/2013
JOB No:	12290-07-00

FINAL

SHEET 20 OF 21 SHEETS

XREF DWG: tbcint_rehab.dwg
rehab east quadrant apron base.dwg

IMAGE FILES: Pages from 12227 CMT Chicago Executive Airport_East Quadrant Apron (121115)_Page-1.tiff
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Pages from 12227 CMT Chicago Executive Airport_East Quadrant Apron (121115)_Page-3.tiff
Pages from 12227 CMT Chicago Executive Airport_East Quadrant Apron (121115)_Page-4.tiff
Pages from 12227 CMT Chicago Executive Airport_East Quadrant Apron (121115)_Page-5.tiff
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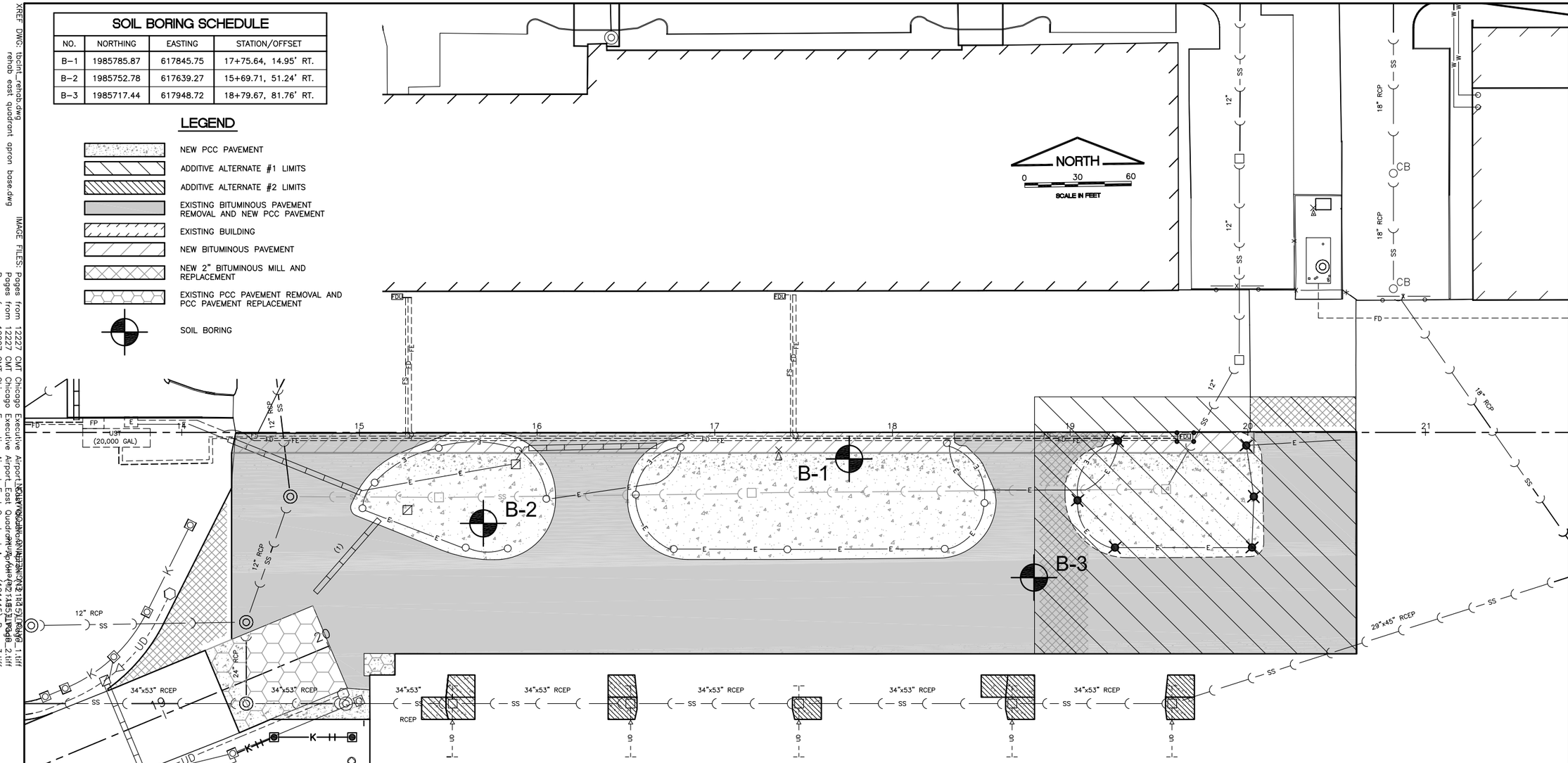
DATE: Wednesday, April 24, 2013 12:21:17 PM
FILE: K:\ChicagoExecAp\12290-07-00_Rehab East Quad Apron\Draw\Sheets\rehab-geotechnical.dwg

SOIL BORING SCHEDULE

NO.	NORTHING	EASTING	STATION/OFFSET
B-1	1985785.87	617845.75	17+75.64, 14.95' RT.
B-2	1985752.78	617639.27	15+69.71, 51.24' RT.
B-3	1985717.44	617948.72	18+79.67, 81.76' RT.

LEGEND

- NEW PCC PAVEMENT
- ADDITIVE ALTERNATE #1 LIMITS
- ADDITIVE ALTERNATE #2 LIMITS
- EXISTING BITUMINOUS PAVEMENT REMOVAL AND NEW PCC PAVEMENT
- EXISTING BUILDING
- NEW BITUMINOUS PAVEMENT
- NEW 2" BITUMINOUS MILL AND REPLACEMENT
- EXISTING PCC PAVEMENT REMOVAL AND PCC PAVEMENT REPLACEMENT
- SOIL BORING



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CHICAGO EXECUTIVE AIRPORT
WHEELING/PROSPECT HEIGHTS, ILLINOIS
REHABILITATE EAST QUADRANT GENERAL AVIATION APRON

ENGINEERING INFORMATION

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

CHICAGO EXECUTIVE AIRPORT

DESIGN BY:	JRL
DRAWN BY:	JRO
CHECKED BY:	JRL
APPROVED BY:	DKP
DATE:	4/19/2013
JOB No:	12290-07-00

FINAL

SHEET 21 OF 21 SHEETS

LOG OF BORING NO. B-01

CLIENT: Crawford, Murphy & Tilly, Inc.
BORING LOCATION: Station: 17+75.64, Offset: 14.95' Right
PROJECT LOCATION: Chicago Executive Airport, Wheeling/Prospect Heights, Illinois
PROJECT DESCRIPTION: Rehabilitate East Quadrant General Aviation Apron, Chicago Executive Airport
GROUND SURFACE ELEVATION 640.8

DEPTH (Ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.³	UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²	CALIBRATED PENETROMETER TONS/FT.²	WATER ● CONTENT %	STANDARD "N" PENETRATION (BLOWS/FT.)
1	AS				6.0" TOPSOIL-black					
2	SS				SILTY CLAY-dark brown spotted black-very stiff (CL)					
5.0	3	SS			LEAN CLAY-brown & gray-stiff to very stiff (CL)	101				
	4	SS								
10.0	5	SS				100				

END OF BORING

WATER LEVEL OBSERVATIONS
Water Level While Drilling 9.5'
Water Level After Boring 7.0'

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering, 805 Aptakisic Court, Suite 204, Wheeling, Illinois 60090, (630) 205-1818

BORING STARTED October 26, 2012
BORING COMPLETED October 26, 2012
RIG CME-75 FOREMAN RJ
DRAWN RMC APPROVED AJP
GSI JOB No. 12227 SHEET 1 OF 1

LOG OF BORING NO. B-02

CLIENT: Crawford, Murphy & Tilly, Inc.
BORING LOCATION: Station: 15+69.71, Offset: 51.24' Right
PROJECT LOCATION: Chicago Executive Airport, Wheeling/Prospect Heights, Illinois
PROJECT DESCRIPTION: Rehabilitate East Quadrant General Aviation Apron, Chicago Executive Airport
GROUND SURFACE ELEVATION 640.8

DEPTH (Ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.³	UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²	CALIBRATED PENETROMETER TONS/FT.²	WATER ● CONTENT %	STANDARD "N" PENETRATION (BLOWS/FT.)
1	AS				6.0" TOPSOIL-black					
2	SS				LEAN CLAY-brown & gray-stiff to very stiff (CL)	105				
5.0	3	SS				100				
	4	SS			Wet Silt seams from -6.0' to -7.5	96				
10.0	5	SS			SILTY CLAY-gray-very stiff (CL)					

END OF BORING

WATER LEVEL OBSERVATIONS
Water Level While Drilling 9.0'
Water Level After Boring 7.0'

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering, 805 Aptakisic Court, Suite 204, Wheeling, Illinois 60090, (630) 205-1818

BORING STARTED October 26, 2012
BORING COMPLETED October 26, 2012
RIG CME-75 FOREMAN RJ
DRAWN RMC APPROVED AJP
GSI JOB No. 12227 SHEET 1 OF 1

LOG OF BORING NO. B-03

CLIENT: Crawford, Murphy & Tilly, Inc.
BORING LOCATION: Station: 18+79.67, Offset: 81.76' Right
PROJECT LOCATION: Chicago Executive Airport, Wheeling/Prospect Heights, Illinois
PROJECT DESCRIPTION: Rehabilitate East Quadrant General Aviation Apron, Chicago Executive Airport
GROUND SURFACE ELEVATION 641.5

DEPTH (Ft.) BELOW GROUND SURFACE	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DISTANCE	SAMPLE RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS./FT.³	UNCONFINED COMPRESSIVE STRENGTH TONS/FT.²	CALIBRATED PENETROMETER TONS/FT.²	WATER ● CONTENT %	STANDARD "N" PENETRATION (BLOWS/FT.)
1	AS				4.0" ASPHALT, 9.0" CRUSHED STONE					
2	SS				LEAN CLAY-brown & gray-very stiff to hard (CL)	102				
5.0	3	SS								
	4	SS				97				
10.0	5	SS			SILTY CLAY-gray-stiff (CL)					

END OF BORING

WATER LEVEL OBSERVATIONS
Water Level While Drilling 9.0'
Water Level After Boring 5.0'

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering, 805 Aptakisic Court, Suite 204, Wheeling, Illinois 60090, (630) 205-1818

BORING STARTED October 26, 2012
BORING COMPLETED October 26, 2012
RIG CME-75 FOREMAN RJ
DRAWN RMC APPROVED AJP
GSI JOB No. 12227 SHEET 1 OF 1

PAVEMENT CORE SUMMARY

Page: 1 of 1

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering, 805 Aptakisic Court, Suite 204, Wheeling, Illinois 60090, (630) 205-1818

Project: Rehabilitate East Quadrant General Aviation Apron – Chicago Executive Airport — GSI Job No.: 12227
Location: Chicago Executive Airport, Wheeling/Prospect Heights, Illinois — Date: 10/26/2012
County: Cook — Cored By: RJ
Client: Crawford, Murphy & Tilly, Inc. — Checked By: AJP

CORE NO.	THICKNESS (in.)	MATERIAL DESCRIPTION
		Station 18+79.67, Offset 81.76' Right
B-03	2.0	ASPHALT-slightly porous, fine to medium coarse aggregate.
	2.0	ASPHALT-well consolidated, medium coarse aggregate.
	9.0	CRUSHED STONE

PAVEMENT CORE PHOTO LOG

Page: 1 of 1

Geo Services, Inc. Geotechnical, Environmental & Civil Engineering, 805 Aptakisic Court, Suite 204, Wheeling, Illinois 60090, (630) 205-1818

Project: Rehabilitate East Quadrant General Aviation Apron – Chicago Executive Airport — GSI Job No.: 12227
Location: Chicago Executive Airport, Wheeling/Prospect Heights, Illinois — Date: 10/26/2012
County: Cook — Cored By: RJ
Client: Crawford, Murphy & Tilly, Inc. — Checked By: AJP

Core No.: B-03 — Core Location: Station 18+79.67, Offset 81.76' Right