

DUPAGE AIRPORT AUTHORITY WEST CHICAGO, ILLINOIS

CONSTRUCTION PLANS FOR DUPAGE AIRPORT

RE-MARK RUNWAY 10-28 AND RE-LIGHT RUNWAY END 28
THRESHOLD; INSTALL RUNWAY 28 PAPI AND REIL LIGHTS

A.I.P. PROJECT: 3-17-0017-B21
ILLINOIS PROJECT: DPA-3695

APRIL 20, 2007

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY
AR108158	1/C #8 5 KV UG CABLE IN UG	LF	420
AR108404	1/C #4 600V UG CABLE	LF	3,723
AR108756	1/C #6 GROUND	LF	2,034
AR110314	4" STEEL DUCT, JACKED	LF	250
AR125615	PAPI(L-880 SYSTEM)	EACH	1
AR125902	REMOVE BASE MOUNTED LIGHT	EACH	6
AR125909	REMOVE VASI	EACH	1
AR125987	RELOCATE REILS	PAIR	1
AR155510	SILT FENCE	LF	200
AR155520	INLET PROTECTION	EACH	3
AR620520	PAVEMENT MARKING - WATERBORNE	SF	50,910
AR620525	PAVEMENT MARKING - BLACK BORDER	SF	23,811
AR620900	PAVEMENT MARKING REMOVAL	SF	42,727
AR800053	SOIL GUARD	SY	2885
AR800093	1/C #1 800V UG CABLE	LF	2379
AR800119	REMOVE GRAVEL	CY	200
AR800175	RETROFIT EXISTING ELEVATED LIGHT	EACH	22
AR800176	RETROFIT EXISTING IN-PAVEMENT LIGHT	EACH	2
AR800177	1/C #1/0 COUNTERPOISE	LF	2034
AR901510	SEEDING	ACRE	0.6

DUPAGE AIRPORT

TOWNSHIP: 40 NORTH WAYNE TOWNSHIP
RANGE: 9 EAST (SECTIONS: 31)
DUPAGE COUNTY

CALL J.U.L.I.E
BEFORE EXCAVATING
1-800-892-0123

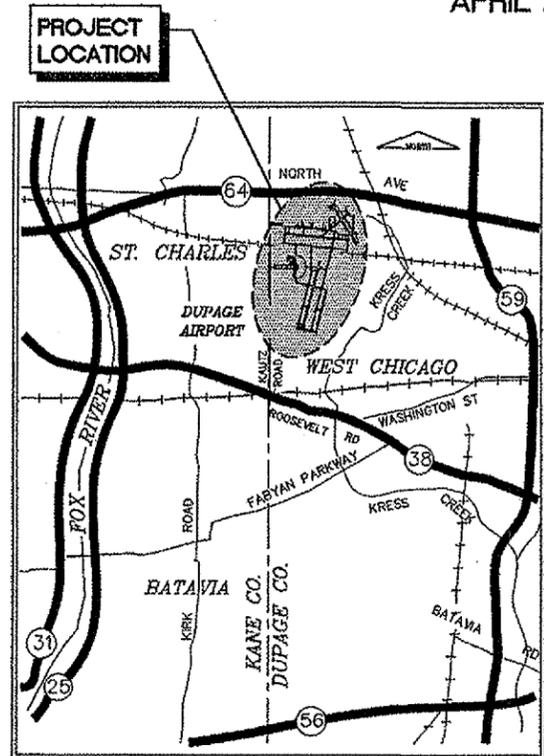
CMT
CRAWFORD, MURPHY & TILLY, INC.
CONSULTING ENGINEERS
600 N. COMMONS DRIVE
SUITE 107
AURORA, IL 60504
PHONE (630) 820-1022
FAX (630) 820-0350

07057-04
DANIEL L. PAPE
STATE OF ILLINOIS
5/21/07 3/1/2007

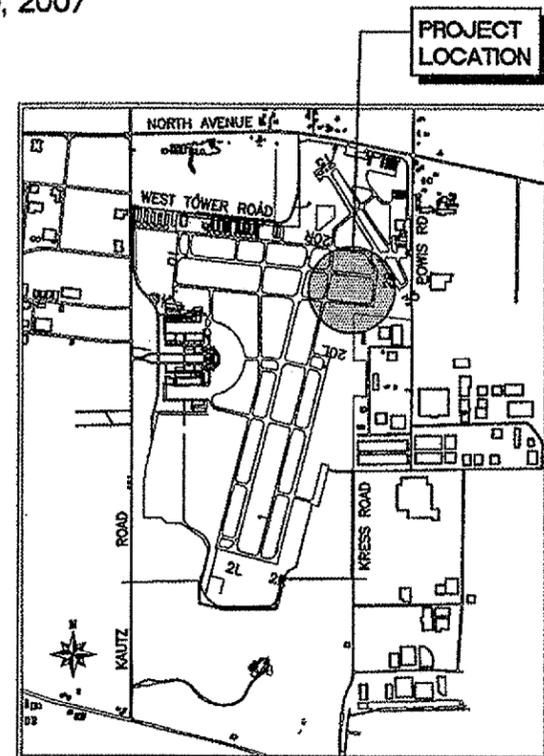
SUBMITTED BY: *[Signature]*
DATE: 4/20/07
DANIEL L. PAPE, P.E.

DDA
DuPage Airport
2700 INTERNATIONAL DRIVE
SUITE 200
WEST CHICAGO, IL 60185

APPROVED BY: *[Signature]*
DATE: _____
DAVID BIRD - EXECUTIVE DIRECTOR



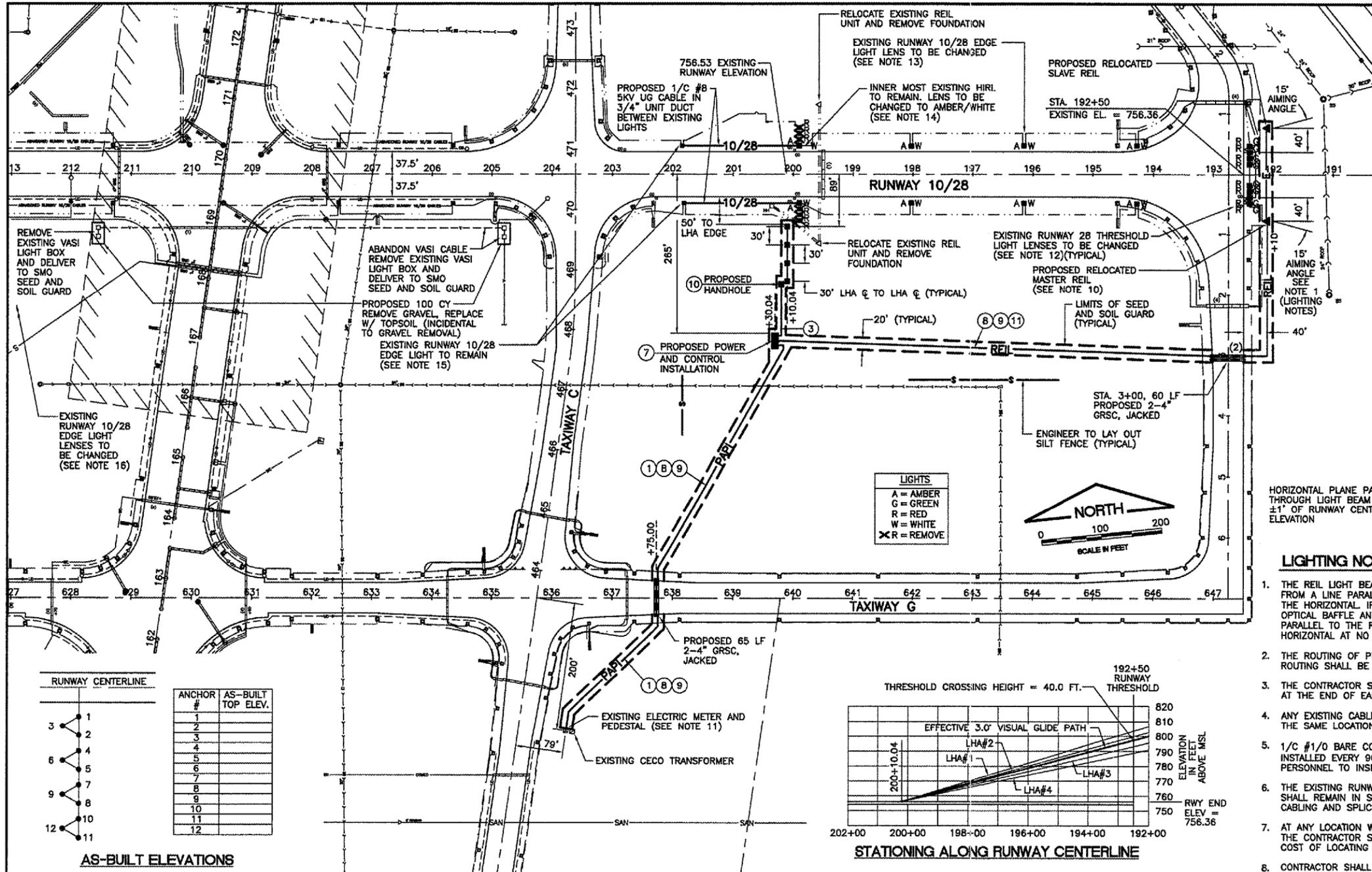
LOCATION MAP



SITE PLAN

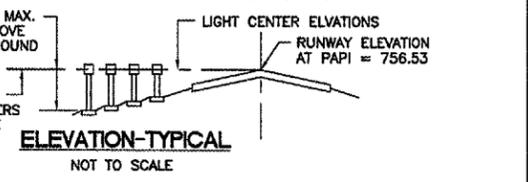
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- 9 RUNWAY 28 REIL RELOCATION AND DETAILS
- 10 REIL WIRING DIAGRAM



NUMBERED LEGEND **DU076**

- 1 3-1/C #1 TYPE U.S.E. POWER CABLES AND 1/C #6 BARE COPPER GROUND WIRE. SEE DWG. GL-D-2795-7-4.
- 2 JACKING OPERATION: JACK 3" GRG A MINIMUM OF 4 FEET UNDER TAXIWAYS AND SHOULDERS. EXTEND A MINIMUM OF 5 FEET BEYOND CONCRETE EDGE. RESTORE PIT AREAS TO PREVIOUS CONDITIONS. MARK CASING PIPE ENDS WITH ABOVE GROUND MARKERS.
- 3 8-1/C #8, 4-#6 GROUND, TYPE U.S.E. POWER CABLES, FOUR 6 PR #19 SHIELDED CONTROL CABLES AND 1/C #6 BARE COPPER BURIED GUARD WIRE, PER DWG. GL-D-2795-7-4.
- 4 PAPI LAMP HOUSING ASSEMBLY (LHA) PER DWG. GL-D-2795-7-2.
- 5 CRUSHED ROCK AREA, SEE NOTE 7.
- 6 3/4" x 10' COPPER CLAD GROUND ROD W/ EXOTHERMIC WELD CONNECTION SEE DETAIL "1" DWG. GL-D-2795-7-2.
- 7 POWER AND CONTROL INSTALL. SEE DETAIL "1", DWG. GL-D-2795-7-3.
- 8 CONTRACTOR TO INSTALL GROUND RODS ALONG CABLE RUN AT 90° MAXIMUM INTERVALS AND CONNECT TO #1/0 BARE COPPER GROUND WIRE PER SECTION 16A.4E OF SPECIFICATION FAA-GL-918C.
- 9 CONTRACTOR TO INSTALL CABLE MARKERS FOR BURIED CABLE PER SECT. 16F-3G OF SPECIFICATIONS FAA-GL-918C, AND SHEET 8 OF 10.
- 10 ELECTRIC HANDHOLE, SEE DETAIL 6, DWG. D-2795-7-12.
- 11 3-1/C #4, TYPE U.S.E. POWER CABLES AND 1/C #6 BARE COPPER GROUND WIRE TO REIL MASTER UNIT.
- 12 TRENCH SECTIONS, SEE DWG. GL-D-2795-7-6. THE NORMAL TRENCH DEPTH FOR THIS PROJECT IS 30".

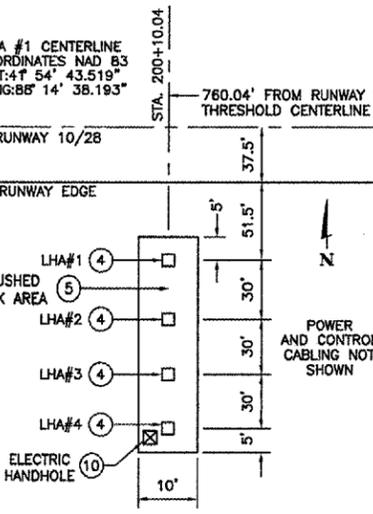


LIGHTING NOTES

1. THE REIL LIGHT BEAM CENTERLINE OF EACH LIGHT UNIT SHALL BE AIMED 15 DEGREES OUTWARD FROM A LINE PARALLEL TO RUNWAY CENTERLINE AND INCLINED AT AN ANGLE 10 DEGREES ABOVE THE HORIZONTAL. IF THIS ANGLE IS OPERATIONALLY OBJECTABLE, CONTRACTOR SHALL PROVIDE AN OPTICAL Baffle AND ORIENT THE BEAM AXIS OF UNIT 10 DEGREES OUTWARD FROM A LINE PARALLEL TO THE RUNWAY CENTERLINE AND INCLINED AT AN ANGLE OF 3 DEGREES ABOVE THE HORIZONTAL AT NO ADDITIONAL COST.
2. THE ROUTING OF PROPOSED AND EXISTING CABLE SHOWN IS FOR INFORMATION ONLY. THE EXACT ROUTING SHALL BE FIELD VERIFIED.
3. THE CONTRACTOR SHALL VERIFY THAT THE EXISTING RUNWAY LIGHTING CIRCUIT IS OPERATIONAL AT THE END OF EACH WORKING DAY.
4. ANY EXISTING CABLE MARKERS THAT ARE DISTURBED SHOULD BE REMOVED AND REINSTALLED AT THE SAME LOCATION. COST SHALL BE INCIDENTAL TO GRADING.
5. 1/C #1/0 BARE COPPER COUNTERPOISE COMPLETE WITH 3/4" x 10' GROUND RODS SHALL BE INSTALLED EVERY 90' AT 1" ABOVE ALL NON-ARMORED CABLE. CONTRACTOR SHALL REQUEST FAA PERSONNEL TO INSPECT GROUNDING BEFORE BACKFILLING.
6. THE EXISTING RUNWAY LIGHTING CIRCUIT, FAA CABLES AND OTHER AIRPORT ELECTRICAL CABLES SHALL REMAIN IN SERVICE UNTIL REPLACED AS DIRECTED BY THE ENGINEER. ALL TEMPORARY CABLING AND SPLICING REQUIRED SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.
7. AT ANY LOCATION WHERE THE PROPOSED DUCT OR CABLE ROUTE CROSSES AN EXISTING UTILITY, THE CONTRACTOR SHALL HAND DIG AND LOCATE THE EXISTING UTILITY PRIOR TO TRENCHING. COST OF LOCATING ALL EXISTING UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT.
8. CONTRACTOR SHALL PROVIDE PULL WIRE FOR ALL DUCT BANKS AND CAP THE UNUSED DUCT BANKS FOR FUTURE USE.
9. ALL SPLICES OF PROPOSED AND EXISTING CABLES IN ELECTRICAL HANDHOLES AND LIGHT BASES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
10. CONTRACTOR TO FURNISH AND INSTALL CONTROL WIRES BETWEEN REIL MASTER AND SLAVE UNITS, ISOLATION TRANSFORMER AND CURRENT SENSING UNIT TO MAKE REIL SYSTEM COMPLETE AND OPERATIONAL.
11. CONTRACTOR TO REMOVE EXISTING ELECTRIC SERVICE CONDUIT AND INSTALL NEW 2" CONDUIT WITH "LB" FOR NEW ELECTRIC SERVICE. COORDINATE NEW SERVICE CONNECTION WITH COMED. NEW ELECTRIC SERVICE SHALL BE 60A, 120/240V, SINGLE PHASE, 3-WIRE.
12. THE EXISTING EIGHT RUNWAY 10/28 THRESHOLD LIGHTS SHALL BE CHANGED TO EMIT RED LIGHT IN THE DIRECTION OF THE RUNWAY 28 END AND GREEN LIGHT OUTWARD.
13. SIX EXISTING RUNWAY 10/28 EDGE LIGHTS SHALL BE CHANGED TO EMIT WHITE LIGHT IN THE DIRECTION OF RUNWAY 28 THRESHOLD AND AMBER LIGHT IN THE OPPOSITE DIRECTION FROM STA. 194+27.50 TO STA. 198+02.50.
14. SIX OUTER MOST DISPLACED THRESHOLD LIGHTS TO BE REMOVED. TWO INNER MOST HIRLS TO REMAIN AND BE CHANGED TO EMIT WHITE LIGHT TOWARD THE 28 END OF THE RUNWAY AND AMBER IN THE OPPOSITE DIRECTION. REPLACE EXISTING LAMPS WITH 120W LAMP.
15. EXISTING RUNWAY EDGE LIGHT LENSES TO REMAIN AMBER/WHITE FROM STA. 201+81.43 TO STA. 211+28.
16. EIGHT EXISTING RUNWAY 10/28 EDGE LIGHTS TO BE CHANGED TO EMIT WHITE LIGHT IN BOTH DIRECTIONS FROM STA. 213+25 TO STA. 219+04.29 INCLUDING TWO IN-PAVEMENT LIGHTS.
17. THE CONTRACTOR SHALL CHANGE LENSES IN A TOTAL OF TWENTY-FOUR LIGHTS ON RUNWAY 10/28. TWENTY TWO BASE MOUNTED LIGHT LENS CHANGES TO BE PAID FOR AS AR800205 RETROFIT EXISTING ELEVATED LIGHT. TWO IN-PAVEMENT LIGHT LENS CHANGES TO BE PAID FOR AS AR800206 RETROFIT EXISTING IN-PAVEMENT LIGHT.
18. INSTALL CABLE MARKERS AT 200' SPACING ON RUNS OVER 200' IN LENGTH AND AT LOCATION OF CHANGE OF DIRECTION ON CABLE RUN AND AT SPLICES AS REQUIRED BY SPECIFICATION FAA-C-1391.

AS-BUILT ELEVATIONS
NOT TO SCALE

ANCHOR #	AS-BUILT TOP ELEV.
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	



	PAPI LHA #1	PAPI LHA #2	PAPI LHA #3	PAPI LHA #4
DISTANCE FROM RUNWAY CENTERLINE (NOTE 1)	89'	119'	149'	179'
AIMING ANGLE	3'30"	3'10"	2'50"	2'30"
APPROXIMATE GROUND ELEVATION (NOTE 2)	753.9	753.2	752.4	751.4
PAPI LHA (NOTE 3) APERTURE CENTERLINE ELEVATION	756.5	756.5	756.5	756.5

NOTES

1. DIMENSION LINES ARE REFERENCED TO THE CENTERLINE OF EACH PAPI LHA (MIDWAY BETWEEN THE FRONT TWO LEGS).
2. THIS ELEVATION IS NOT TO BE USED TO ESTABLISH LAMP HOUSING ASSEMBLY ELEVATIONS.
3. THESE ELEVATIONS ARE REFERENCED TO THE ADJACENT RUNWAY CENTERLINE ELEVATION WHICH IS 756.53.
4. CONTRACTOR TO SHOW ELEVATION OF ANCHOR TOPS ON AS BUILT DRAWINGS.
5. PRIOR TO BEGINNING ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT THE AIRPORT MANAGEMENT, LOCAL FAA PERSONNEL, AND UTILITY COMPANY TO HAVE UNDERGROUND CABLING/UTILITIES LOCATED AND MARKED. ALSO SEE NOTE 6.
6. PRIOR TO BEGINNING ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT THE AIRPORT MANAGEMENT, LOCAL FAA PERSONNEL, UTILITY COMPANY TO COORDINATE CONSTRUCTION ACTIVITIES AND TRENCHING OF UNDERGROUND CABLING.
7. CONTRACTOR SHALL REMOVE 6" OF TOPSOIL, COMPACT SUBGRADE AND PLACE GEOTEXTILE FABRIC CONFORMING TO SECTION 28.3 OF THE SPECIFICATION FAA-GL-918C OVER SUBGRADE PRIOR TO PLACING 6" COMPACTED DEPTH OF 3/4" CRUSHED AGGREGATE (209) OVER EXCAVATED AREA.

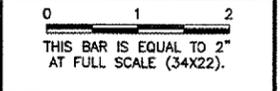
GENERAL NOTES

- FOUNDATIONS:**
FOUNDATIONS FOR MOUNTING LIGHT BOXES SHALL BE MADE OF ITEM 610 CONCRETE. ALL LIGHT BOXES SHALL BE FRANGIBLY MOUNTED TO THE FOUNDATION.
- AZIMUTHAL AIMING:**
EACH LIGHT UNIT SHALL BE AIMED OUTWARD INTO THE APPROACH ZONE ON A LINE PARALLEL TO THE RUNWAY CENTERLINE WITHIN A TOLERANCE OF ±1/2 DEGREE.
- MOUNTING HEIGHT TOLERANCES:**
THE BEAM CENTERS OF ALL LIGHT UNITS SHALL BE WITHIN ±1 INCH OF A HORIZONTAL PLANE AT THE ELEVATION GIVEN IN THE TABLE.
- TOLERANCE ALONG LINE PERPENDICULAR TO RUNWAY:**
THE FRONT FACE OF EACH LIGHT UNIT IN A BAR SHALL BE LOCATED ON A LINE PERPENDICULAR TO THE RUNWAY CENTERLINE WITHIN ±6 INCHES.
5. PROVIDE FRANGIBLE MOUNTS FOR ALL LEGS OF LIGHT UNITS AND POWER ADAPTERS.
 6. NUMBER AND CONFIGURATION OF LEGS PER MANUFACTURER. (3 LEGS MINIMUM)
 7. GROUND EACH LAMP HOUSING AND POWER ADAPTER PER MANUFACTURER
 8. THE POWER AND CONTROL UNIT SHALL BE STYLE A, CLASS II.
 9. THE DIFFERENCE IN LATERAL SPACING BETWEEN THE LIGHT UNITS SHALL NOT EXCEED ONE FOOT.
 10. EACH LIGHT UNIT SHALL HAVE TWO LAMPS AND SHALL PROVIDE A BEAM OF LIGHT SPLIT HORIZONTALLY TO PRODUCE: WHITE LIGHT IN THE TOP SECTOR AND RED LIGHT ON THE BOTTOM SECTOR. THEY SHALL HAVE A MINIMUM OF THREE MOUNTING LEGS WHICH SHALL BE ADJUSTABLE TO PERMIT LEVELING WHERE ONE SIDE OF THE UNIT IS INSTALLED UP TO 1 INCH LOWER THAN THE OPPOSITE SIDE.
 11. APPLY "NEVER SEEZ" OR APPROVED EQUAL TO ALL THREADED BOLTS AND CONNECTIONS.

K:\Dupage\p\0725704 Rwy 28 PAPI\Draw\Sheets
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REVISIONS

NUMBER	BY	DATE

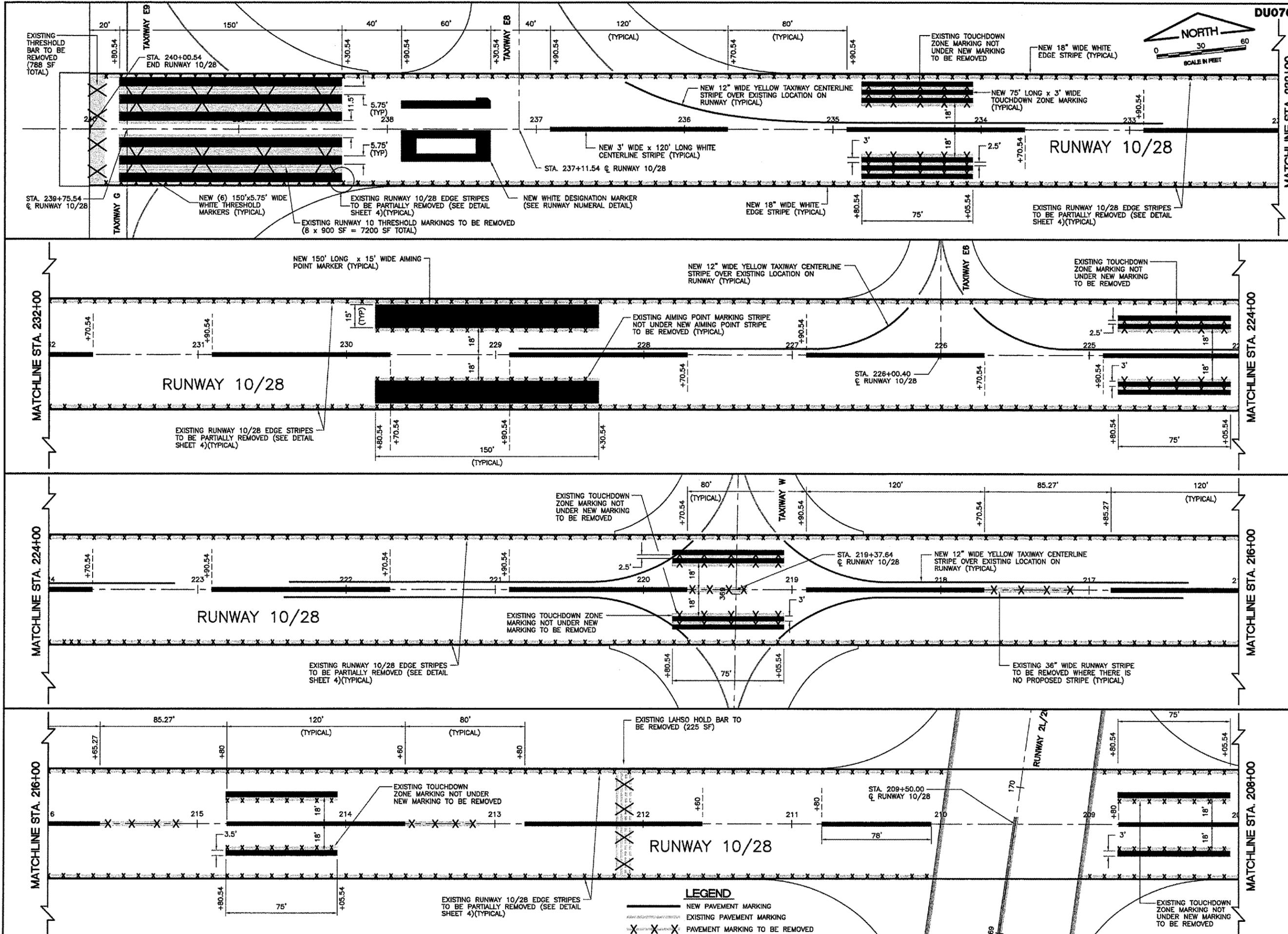


DUPAGE AIRPORT
WEST CHICAGO, ILLINOIS
REMARK RUNWAY 10-28, RUNWAY 28 PAPI
SITE PLAN/PROJECT LAYOUT

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APPROVED BY:	DLP
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JOB No:	07257-04
IL PROJECT:	DPA-3695
A.I.P. PROJECT:	3-17-0017-B21
SHEET	2 OF 10 SHEETS



DU076

NORTH

SCALE IN FEET

0 30 60

MATCHLINE STA. 232+00

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 tb.dwg
 papi-base.dwg

REVISIONS		
NUMBER	BY	DATE

0 1 2

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

**DUPAGE AIRPORT
 WEST CHICAGO, ILLINOIS**

**REMARK RUNWAY 10-28, RUNWAY 28 PAPI
 PAVEMENT MARKING PLAN
 SHEET 1**

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 CHECKED BY: DLP
 APPROVED BY:
 DATE: 04/20/07
 JOB No: 07257-04

IL PROJECT: DPA-3695
 A.I.P. PROJECT: 3-17-0017-B21

SHEET 3 OF 10 SHEETS

LEGEND

— NEW PAVEMENT MARKING

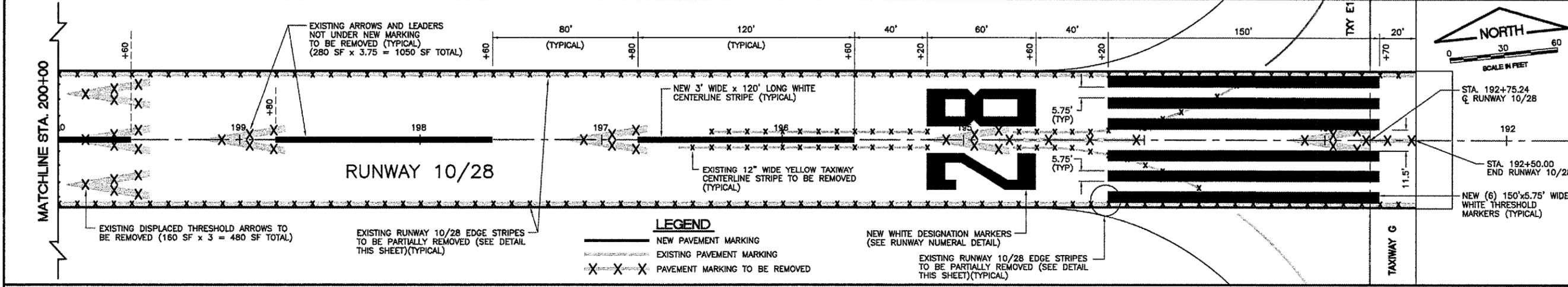
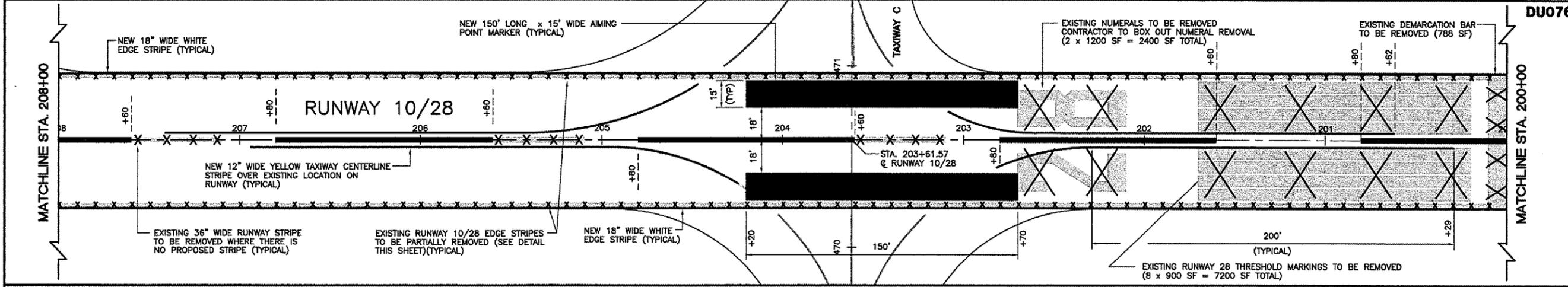
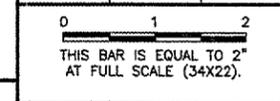
- - - EXISTING PAVEMENT MARKING

X X X X PAVEMENT MARKING TO BE REMOVED

DU076

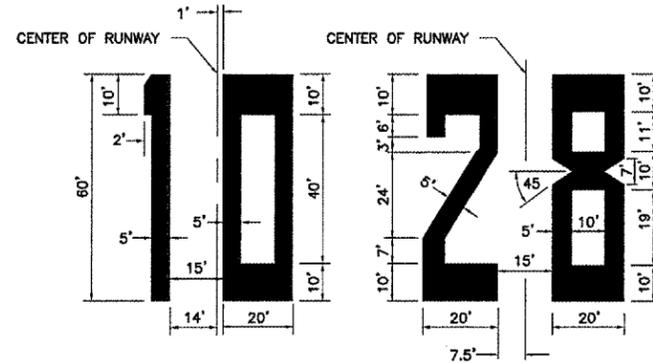
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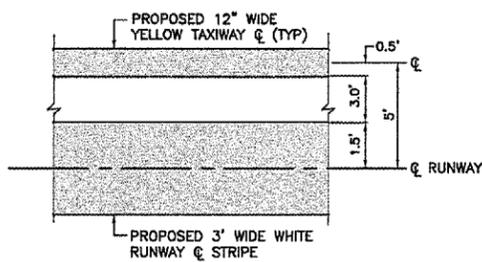


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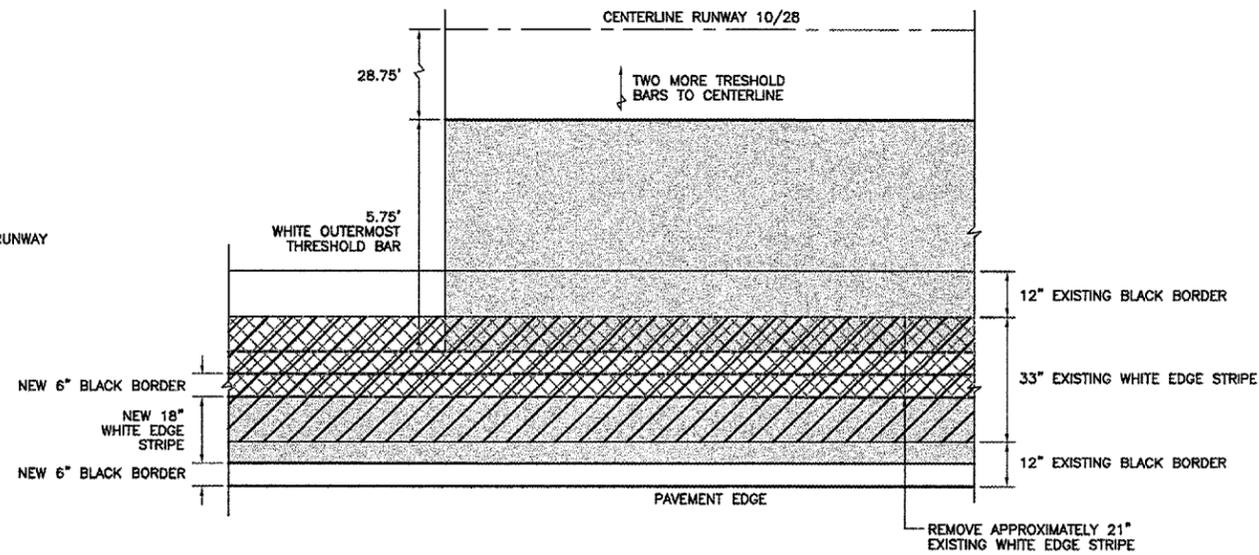
	NEW PAVEMENT MARKING
	EXISTING PAVEMENT MARKING
	PAVEMENT MARKING TO BE REMOVED



RUNWAY NUMERAL DETAILS
 NO SCALE



TAXIWAY TANGENT DETAIL
 NOT TO SCALE



RUNWAY EDGE STRIPE REMOVAL DETAIL
 NOT TO SCALE

PAVEMENT MARKING NOTES

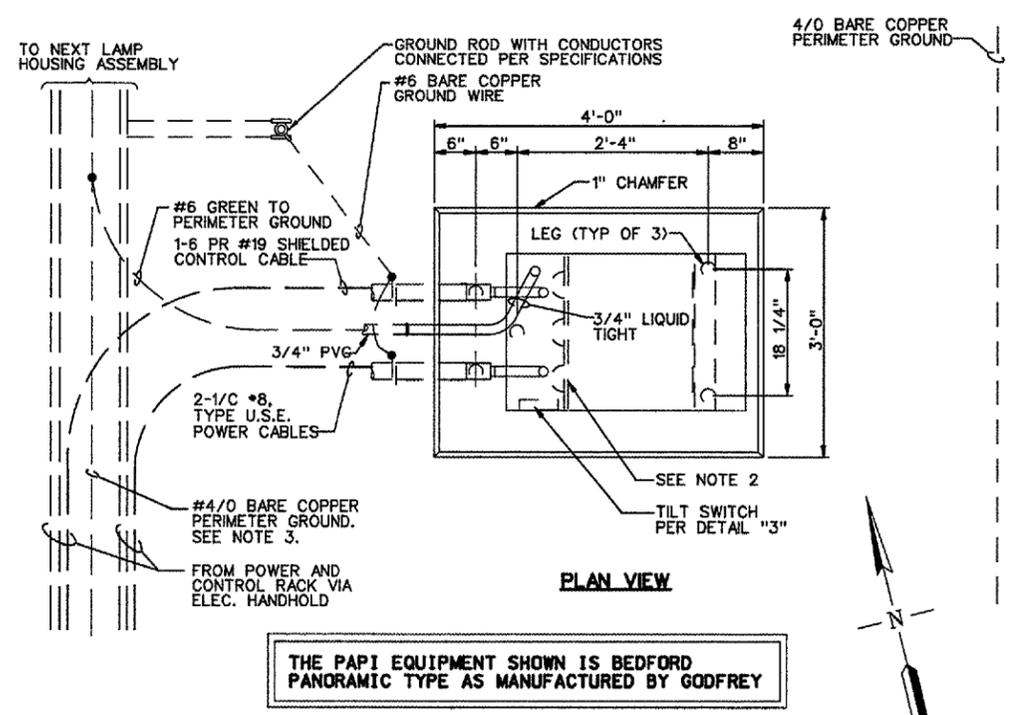
1. THE PAVEMENT SURFACE SHALL BE CLEAN AND DRY PRIOR TO MARKING.
2. WHEN YELLOW TAXIWAY STRIPING CROSSES ANY WHITE RUNWAY STRIPING, THE TAXIWAY STRIPE SHALL BE GAPPED 6" EACH SIDE OF RUNWAY STRIPE EXCEPT RUNWAY/RUNWAY HOLDLINES.
3. ALL RUNWAY MARKINGS ARE WHITE WITH A 6" BLACK BORDER. THE 6" BLACK BORDER WILL BE PAID FOR UNDER ITEM AR620525 - PAVEMENT MARKING - BLACK BORDER.
4. ALL TAXIWAY MARKINGS ARE YELLOW WITH A 6" BLACK BORDER. THE 6" BLACK BORDER WILL BE PAID FOR UNDER ITEM AR620525 - PAVEMENT MARKING - BLACK BORDER.

DUPAGE AIRPORT
WEST CHICAGO, ILLINOIS
REMARK RUNWAY 10-28, RUNWAY 28 PAPI
PAVEMENT MARKING PLAN
SHEET 2 AND DETAILS

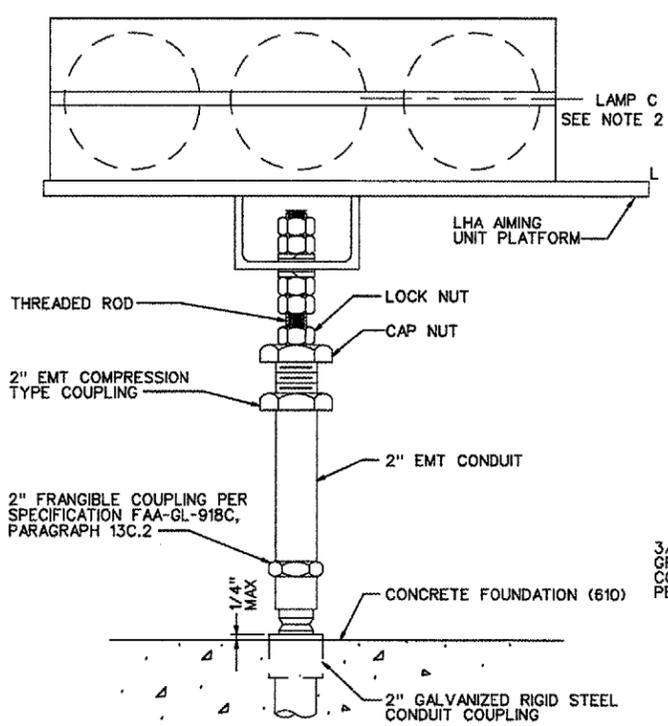
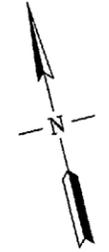
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SHEET 4 OF 10 SHEETS	

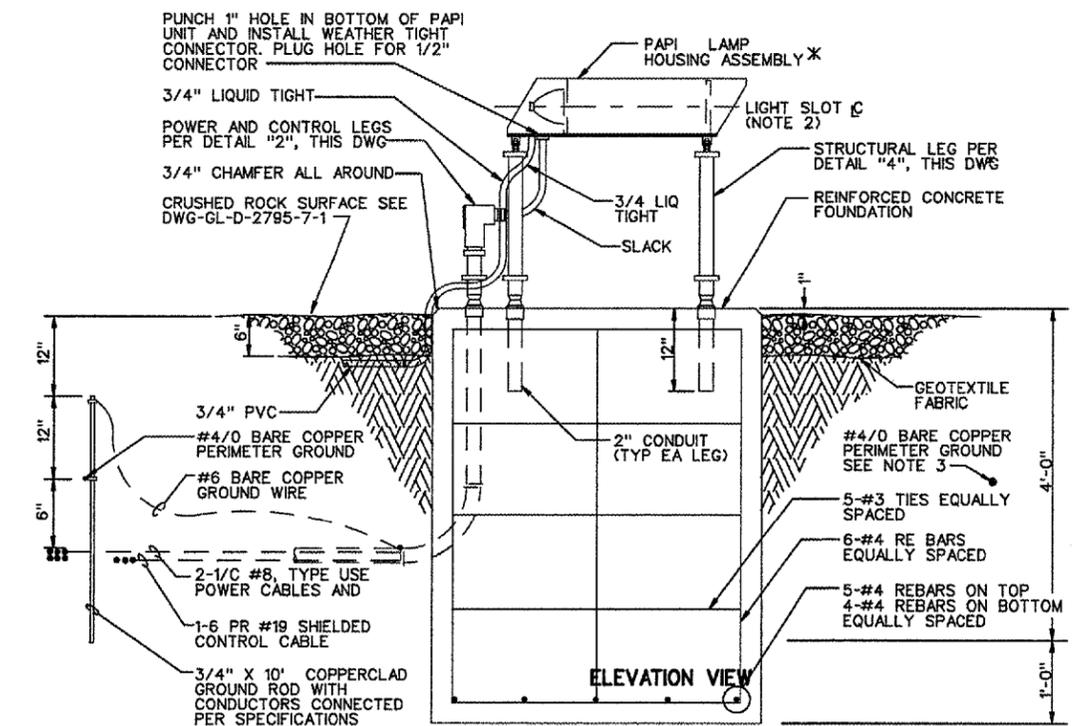
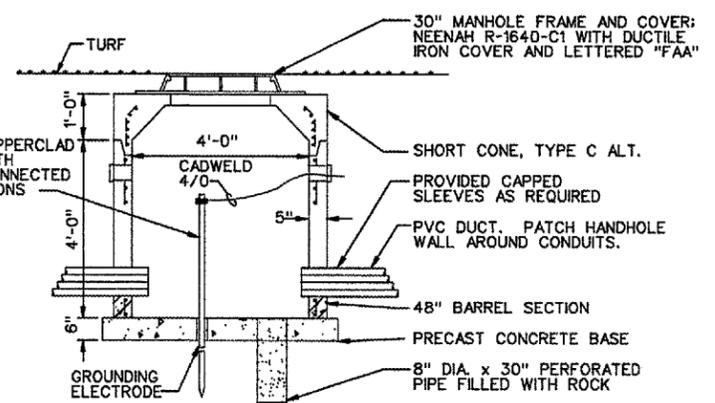


THE PAPI EQUIPMENT SHOWN IS BEDFORD PANORAMIC TYPE AS MANUFACTURED BY GODFREY

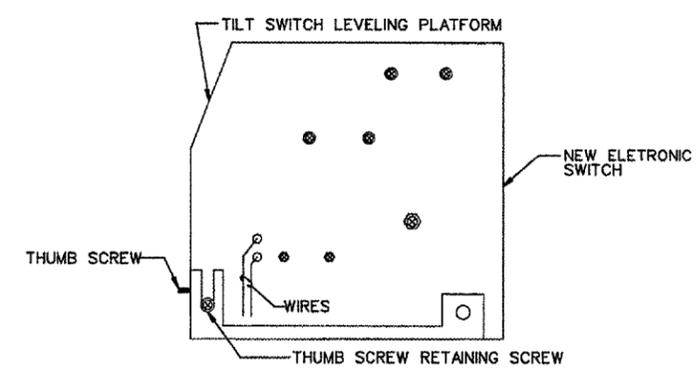
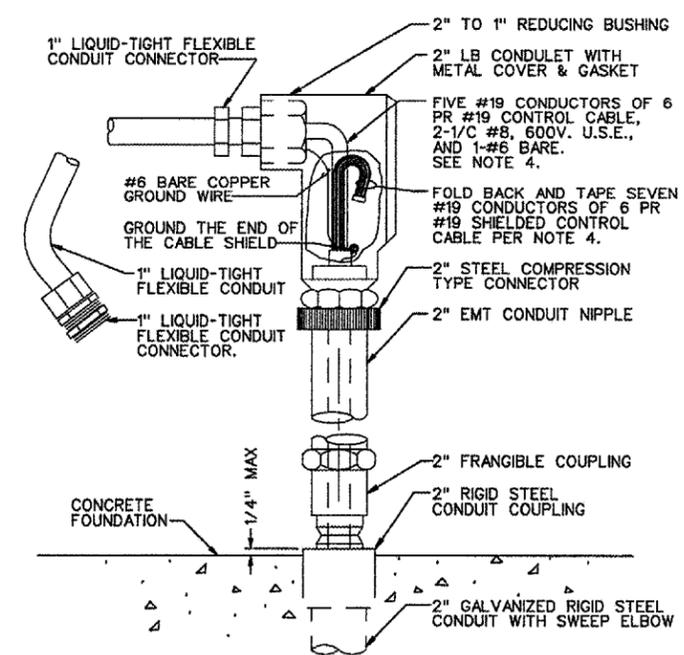
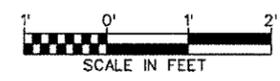


NOTES

1. REMOVE PENDULUM RETAINING BOLT PRIOR TO AIMING THE PAPI UNIT AND COVERED HOLE WITH TAPE. AIM PAPI UNIT USING THE SUPPLIED AIMING INSTRUMENT AND TIGHTENED ADJUSTING NUTS. SET AIMING INSTRUMENT TO 0 00" AND SET ON TOP OF TILT SWITCH PLATFORM, LOOSEN THUMB SCREW RETAINING SCREW AND ADJUST TILT SWITCH UNTIL PLATFORM IS LEVEL. TIGHTEN THUMB SCREW RETAINING SCREW. TILT SWITCH IS NOW SET. AIMING TO BE COMPLETED BY FAA PERSONNEL.
2. FOR LAMP HOUSING ASSEMBLY LAMP CENTERLINE ELEVATION AND AIMING ANGLE, SEE TABLE "A", DWG. GL-D-2795-7-1. THE LAMP HOUSING UNITS ARE INSTALLED SUCH THAT THE BEAM CENTERS OF ALL THE UNITS ARE WITHIN 1 INCH (+/-) OF ELEVATION FROM UNIT TO UNIT.
3. THE #4/0 AWG BARE COPPER PERIMETER GROUND INSTALLED IN A CLOSED LOOP ENCOMPASSING ALL FOUR LAMP HOUSING ASSEMBLIES. GROUNDING RODS INSTALLED AT FOUR CORNERS. THE #6 BURIED GUARD WIRE CAD WELDED WITH THE #4/0 TO A GROUND ROD. SEE SYSTEM WIRING DIAGRAM, DWG GL-D-2795-7-4.
4. INSULATION AND SHIELD REMOVED FROM A LENGTH OF 6 PR #19 SH CONTROL CABLE SUFFICIENT TO PERMIT 5 CONDUCTORS TO REACH THEIR TERMINATIONS IN THE PAPI LAMP HOUSING UNIT WITHOUT STRAIN. INSIDE THE CONDULET, THE END OF THE CABLE SHIELD IS GROUNDED TO THE #6 BARE COPPER GROUND WIRE AND FOLDED BACK WITHOUT CUTTING. THE ENDS OF THE UNUSED SEVEN #19 CONDUCTORS TAPED.

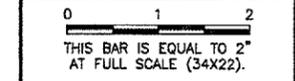


* FURNISHED BY FAA AND INSTALL BY THE CONTRACTOR. ALL OTHER ITEMS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.



REVISIONS

NUMBER	BY	DATE



DUPAGE AIRPORT
 WEST CHICAGO, ILLINOIS

REMARK RUNWAY 10-28, RUNWAY 28 PAPI

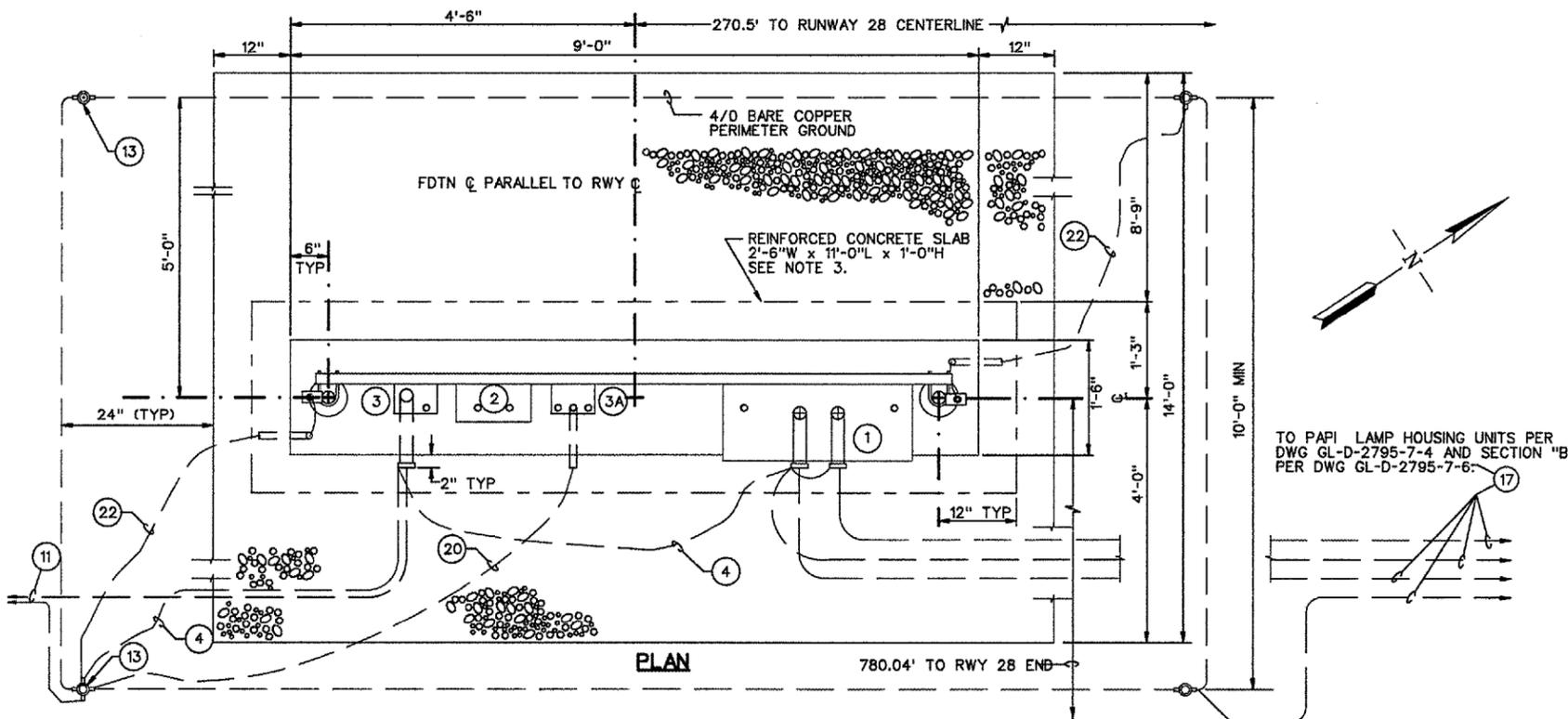
LAMP HOUSING DETAILS
 PAPI - RUNWAY 28

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APPROVED BY:	DLP
DATE:	04/20/07
JOB No:	07257-04

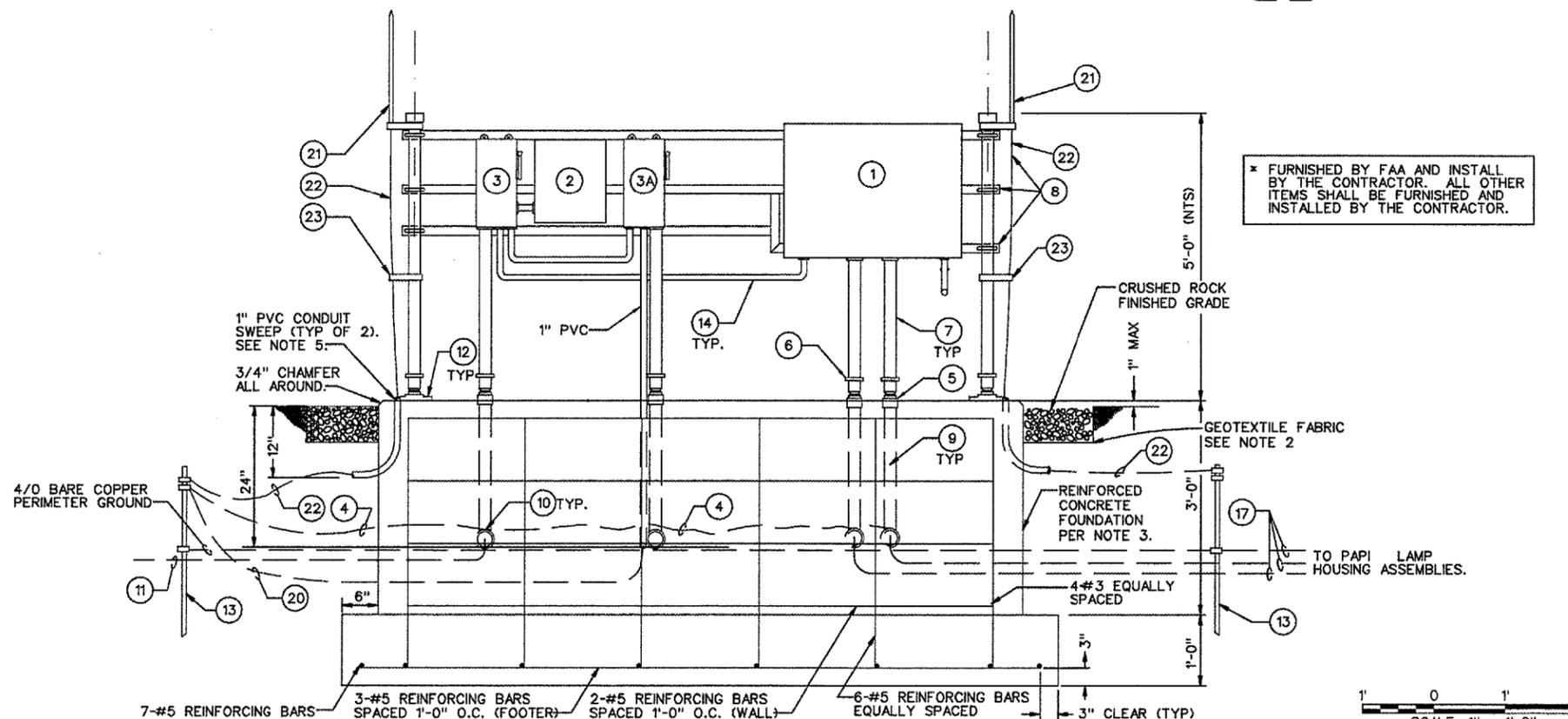


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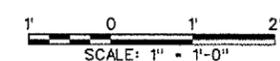
- 1 PAPI POWER AND CONTROL ASSEMBLY CABINET
- 2 SURGE ARRESTER: LPC 20206-7.
- 3 DISCONNECT SWITCH, SQUARE D CAT. NO. H222NRB.
- 3A DISCONNECT SWITCH, SQUARE D CAT. NO. H221NRB.
- 4 #6 BARE COPPER GROUND WIRE.
- 5 2" RIGID STEEL CONDUIT COUPLING. SEE NOTE 5.
- 6 2" FRANGIBLE COUPLING
- 7 2" EMT CONDUIT
- 8 UNISTRUT 3000 SERIES CHANNEL
- 9 2" GALVANIZED RIGID STEEL CONDUIT, AFTER GROUNDING BUSHING TRANSITION TO PVC CONDUIT
- 10 GROUNDING BUSHING
- 11 THREE 1/C #1, 600V TYPE U.S.E. POWER CABLES AND 1-#6 BARE COPPER GUARD WIRE PER SHEET 2 OF 7.
- 12 GALV. THREADED FLOOR FLANGE WITH MIN. 4 ANCHORS EACH (3 REQD.).
- 13 3/4" X 10' COPPERCLAD GROUND ROD WITH CONDUCTORS CONNECTED PER PARAGRAPH 16A.4C OF SPECIFICATION FAA-GL-918D. GROUND RODS ARE SPACED A MINIMUM OF 10' APART.
- 14 1" SEAL TIGHT
- 15 NOT USED
- 16 NOT USED
- 17 FOUR 6 PR#19 SH CONTROL CABLES IN 2" C, 4-#6 GREEN GND AND 8-1/C #8 POWER CABLES IN 2" C, AND 1-#6 COPPER GUARD WIRE PER SECTION "B", DWG GL-D-2795-7-6.
- 18 NOT USED
- 19 NOT USED
- 20 #2 GROUNDING ELECTRODE.
- 21 THOMPSON NO. 660 AIR TERMINAL, THOMPSON NO 27 SWIVEL AND THOMPSON NO. 240XP-4 PIPE BRACKET, 2 PLACES
- 22 THOMPSON NO. 32 DOWN CONDUCTOR
- 23 THOMPSON NO. 238 PIPE CLAMP

NOTES:

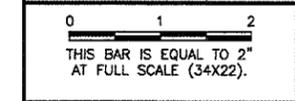
1. CONTRACTOR WAS RESPONSIBLE FOR LOCATING AND PROTECTING UTILITIES. THE CONTRACTOR HAND-DUG THE TRENCH IN THE VICINITY OF UNDERGROUND UTILITIES. ANY DAMAGE DONE TO UTILITIES WAS REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE CONTRACT.
2. CONTRACTOR REMOVED 6" OF TOPSOIL, COMPACT THE SUBGRADE, AND PLACED GEOTEXTILE FABRIC CONFORMING TO SECTION 2B.3 OF SPECIFICATION FAA-GL-918C OVER SUBGRADE PRIOR TO PLACING 6" COMPACTED DEPTH OF 3/4" CRUSHED ROCK OVER EXCAVATED AREA.
3. CONCRETE WAS PLACED AND CURED IN ACCORDANCE WITH SECTION 3B.2 OF THE SPECIFICATION FAA-GL-918C (ITEM 610).
4. FOR WIRING DIAGRAM, SEE DWG GL-D-2795-7-4.
5. TOPS OF COUPLINGS 5 AND PVC CONDUITS FOR THOMPSON DOWN CONDUCTORS ARE NO MORE THAN 1/4" ABOVE FOUNDATION TOP.



* FURNISHED BY FAA AND INSTALL BY THE CONTRACTOR. ALL OTHER ITEMS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.



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DUPAGE AIRPORT
 WEST CHICAGO, ILLINOIS
 REMARK RUNWAY 10-28, RUNWAY 28 PAPI
 POWER AND CONTROL INSTALLATION
 PAPI - RUNWAY 28

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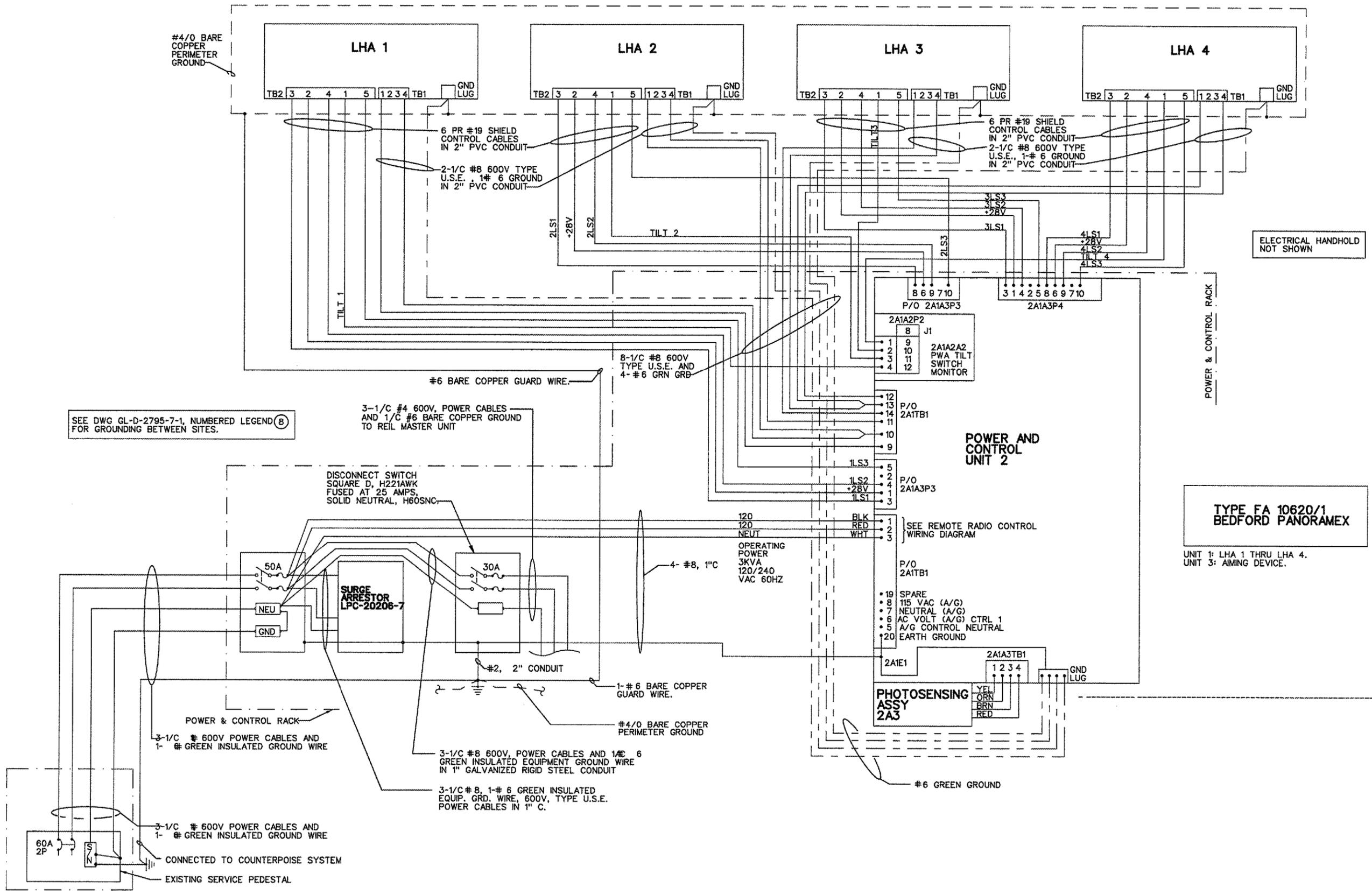
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GL-D-2795-7-3

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



**DUPAGE AIRPORT
 WEST CHICAGO, ILLINOIS**

**REMARK RUNWAY 10-28, RUNWAY 28 PAPI
 SYSTEM WIRING DIAGRAM
 PAPI - RUNWAY 28**

**TYPE FA 10620/1
 BEDFORD PANORAMEX**

UNIT 1: LHA 1 THRU LHA 4.
 UNIT 3: AIMING DEVICE.

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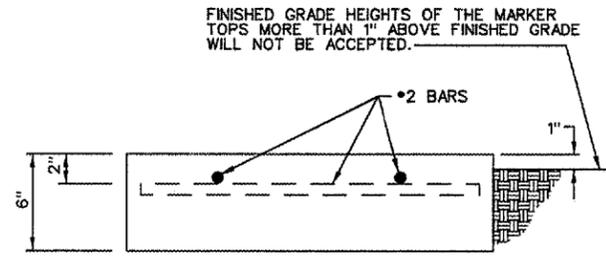
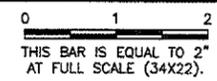
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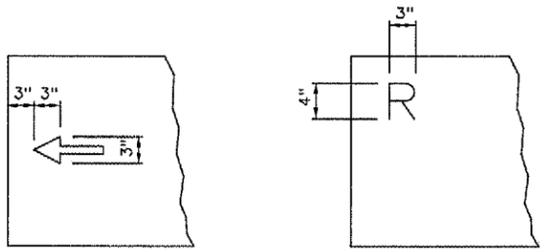
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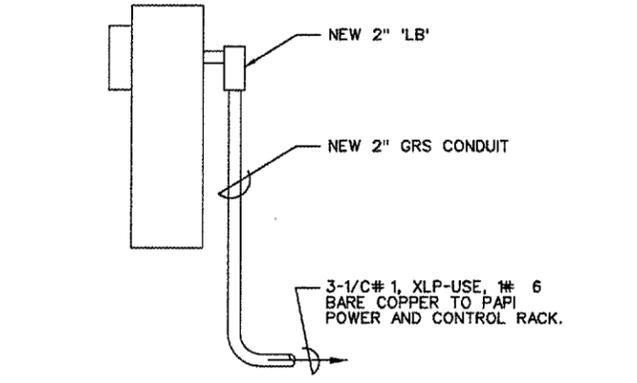
SECTION 'A-A'



DETAIL "A"

DETAIL "B"

CABLE MARKER DETAILS
SCALE: NONE



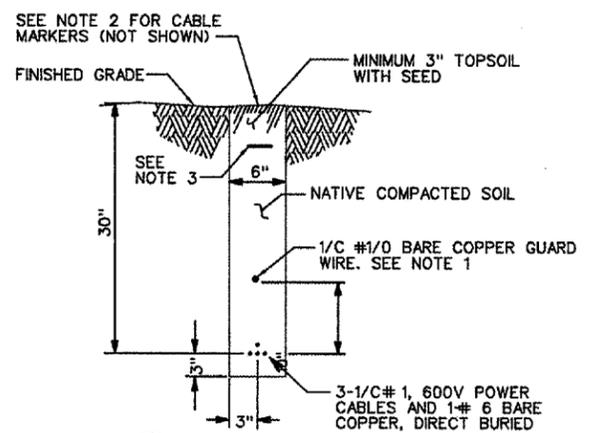
EXISTING ELECTRIC SERVICE PEDESTAL DETAIL
SCALE: NONE

NOTES:

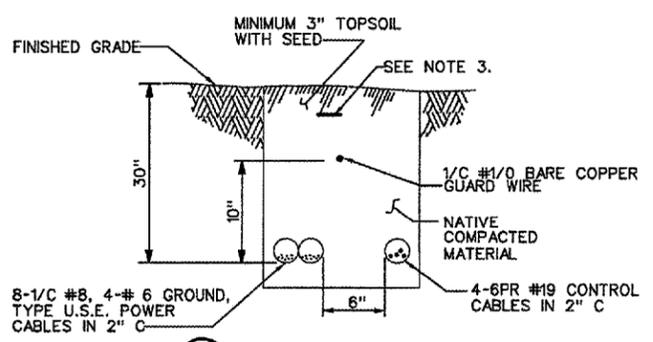
1. CONTRACTOR WAS RESPONSIBLE FOR LOCATING AND PROTECTING UTILITIES. THE CONTRACTOR HAND-DUG THE TRENCH IN THE VICINITY OF UNDERGROUND UTILITIES. ANY DAMAGE DONE TO UTILITIES WAS REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE GOVERNMENT.
2. CONTRACTOR INSTALLED CABLE MARKERS FOR BURIED CABLING PER SECT. 16F.3g OF SPEC. FAA-GL-918C AND DWG GL-D-5388G.
3. CONTRACTOR INSTALLED WARNING TAPE "CAUTION-UNDERGROUND CABLE". ALLEN SYSTEMS P.N. 0761315 OR EQUAL, INSTALLED 6" BELOW GRADE.
4. CONTRACTOR REPAIRED ALL DAMAGED SURFACES IN ACCORDANCE WITH FAA-GL-918C-2A.9d.

NOTES:

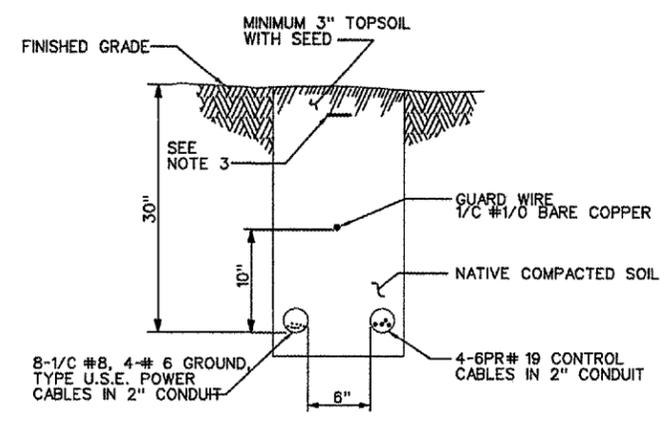
GROUND RODS NOT SHOWN IN TRENCH DETAILS.
 SEE SITE PLAN FOR TRENCH TYPE LOCATION.



(A) TRENCH DETAIL
SCALE: NONE
 BETWEEN SERVICE PEDESTAL AND PAPI POWER AND CONTROL RACK



(C) TRENCH DETAIL
SCALE: NONE
 COMMON TRENCH AT POWER CONTROL RACK
 (SEE SITE PLAN DWG GL-D-2795-7-1)



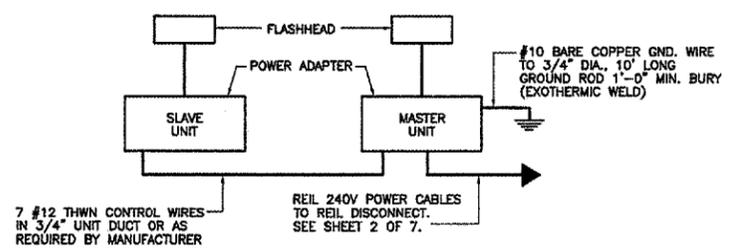
(B) SECTION
SCALE: NONE
 TRENCH BETWEEN PAPI POWER AND CONTROL RACK AND ELEC. HANDHOLE
 (SEE SITE PLAN DWG GL-D-2795-7-1)

DUPAGE AIRPORT
 WEST CHICAGO, ILLINOIS
 REMARK RUNWAY 10-28, RUNWAY 28 PAPI
 MISCELLANEOUS DETAILS

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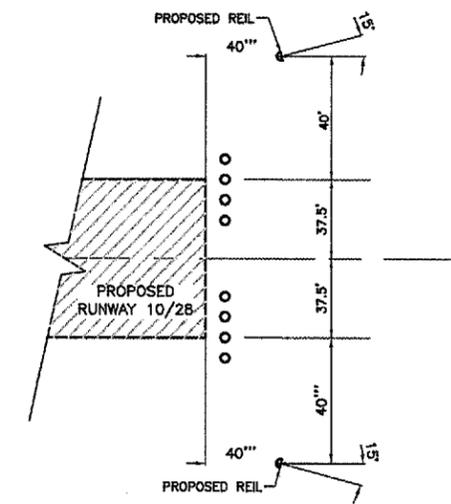
GL-D-2795-7-6



REIL DETAIL

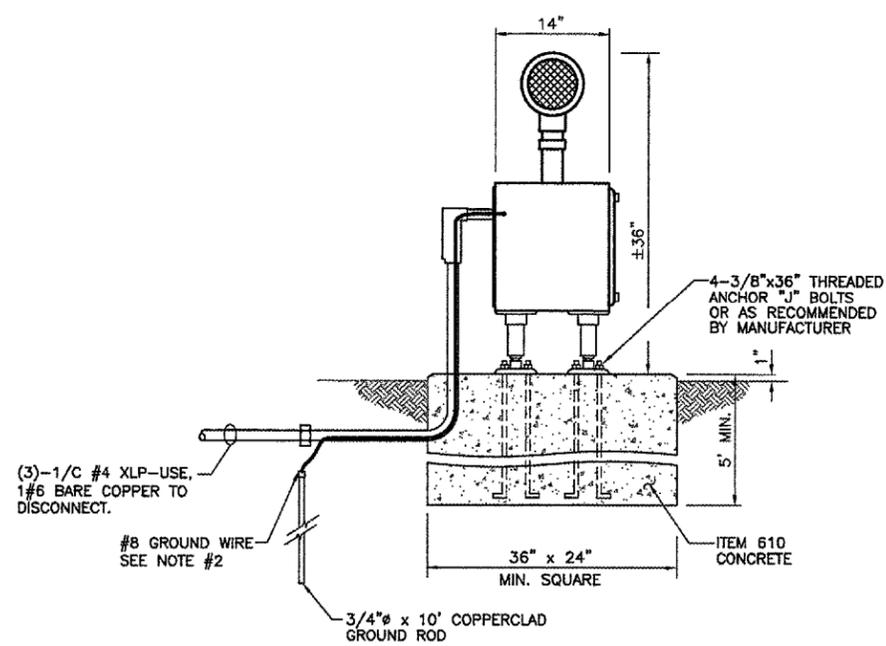
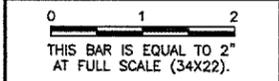
NOT TO SCALE

1. THE RELOCATE REIL SYSTEM SHALL BE COMPLETED WITH FLASHHEADS, SPLICE CANS, CURRENT SENSOR, FRANGIBLE FITTINGS AND ALL NECESSARY EQUIPMENT FOR A COMPLETE AND OPERATIONAL SYSTEM. REIL UNIT FAA APPROVED TYPE L-849.
2. THE CONTRACTOR SHALL INSTALL AND ADJUST CURRENT SENSOR AND ISOLATION TRANSFORMER FOR REIL'S TO OPERATE AT 100% BRIGHTNESS OF RUNWAY CIRCUIT ONLY.



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REIL DETAIL

NOT TO SCALE

REIL NOTES

1. THE BEAM CENTERLINE OF EACH LIGHT UNIT SHALL BE AIMED 15 DEGREES OUTWARD FROM A LINE PARALLEL TO RUNWAY CENTERLINE AND INCLINED AT AN ANGLE 10 DEGREES ABOVE THE HORIZONTAL. IF THIS ANGLE IS OPERATIONALLY OBJECTABLE, CONTRACTOR SHALL PROVIDE AN OPTICAL BAFFLE AND ORIENT THE BEAM AXIS OF UNIT 10 DEGREES OUTWARD FROM A LINE PARALLEL TO THE RUNWAY CENTERLINE AND INCLINED AT AN ANGLE OF 3 DEGREES ABOVE THE HORIZONTAL AT NO ADDITIONAL COST.
2. ALL CONNECTIONS TO GROUND ROD SHALL BE ONE-SHOT EXOTHERMIC CADWELD OR EQUAL.
3. REIL MASTER AND SLAVE UNITS SHALL BE RELOCATED BY THE CONTRACTOR. ALL OTHER ITEMS INCLUDING SPLICE CAN, GROUNDING, POWER AND CONTROL WIRES, AND CURRENT SENSOR SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

**DUPAGE AIRPORT
 WEST CHICAGO, ILLINOIS**

**REMARK RUNWAY 10-28, RUNWAY 28 PAPI
 RUNWAY 28 REIL RELOCATION
 AND DETAILS**

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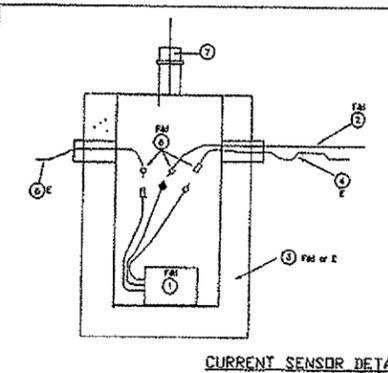
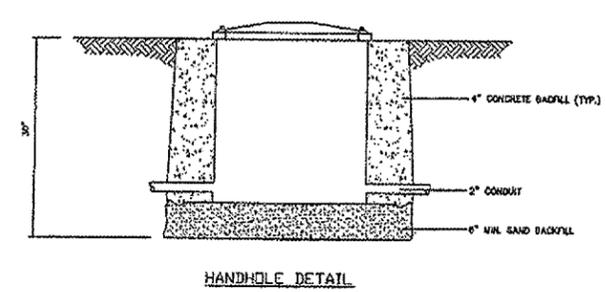
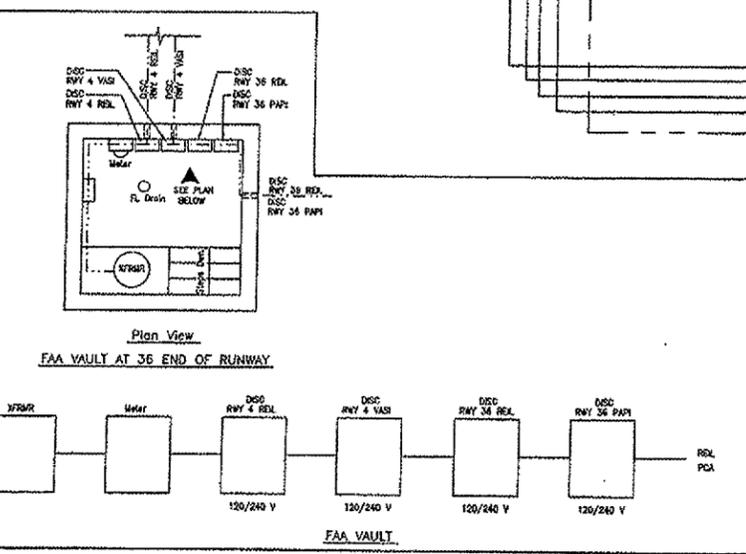
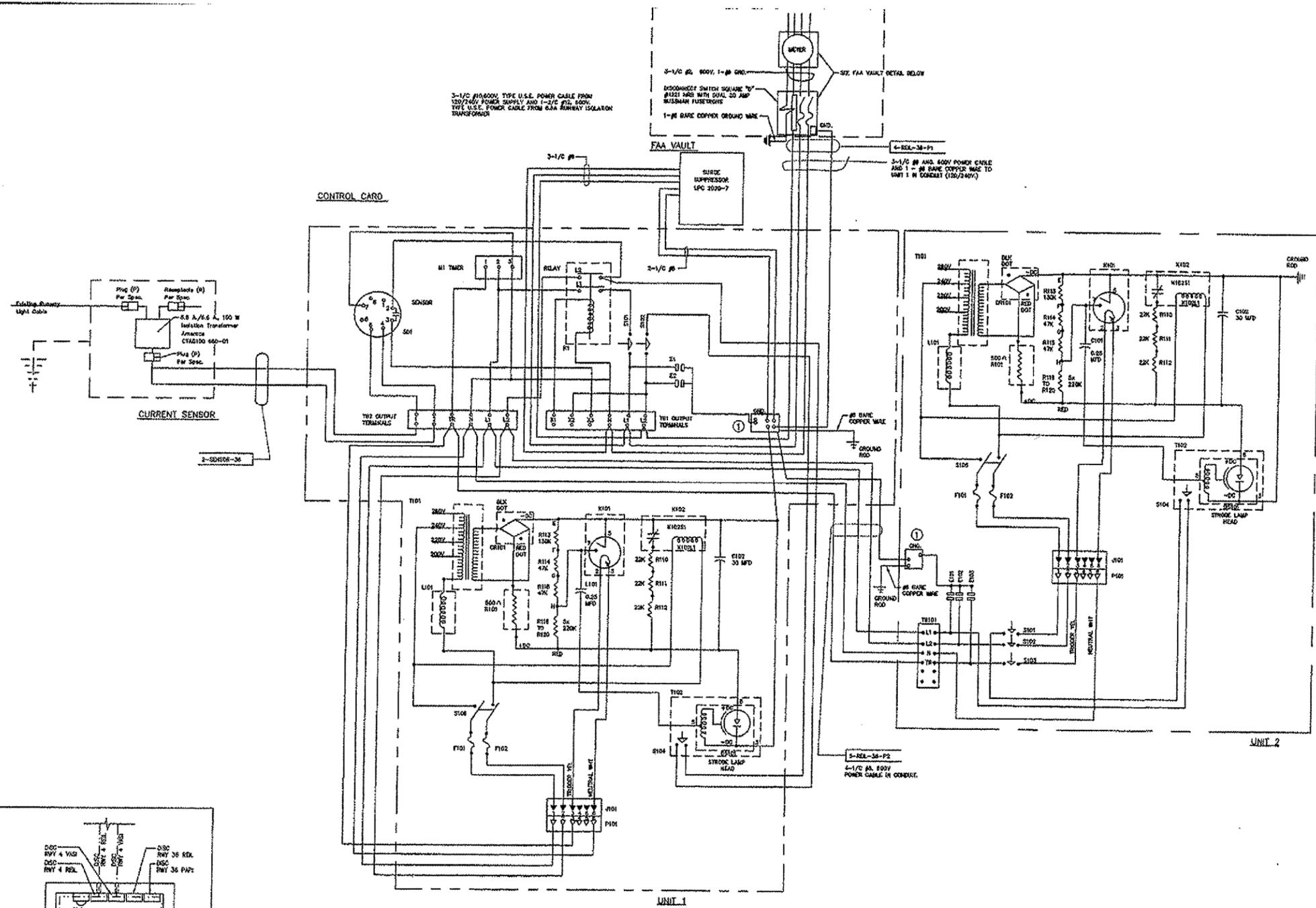
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A.I.P. PROJECT: 3-17-0017-B21	
SHEET 9 OF 10 SHEETS	

REIL WIRING DIAGRAM IS SHOWN FOR INFORMATION ONLY. COORDINATE WITH EXISTING REIL MANUFACTURER.

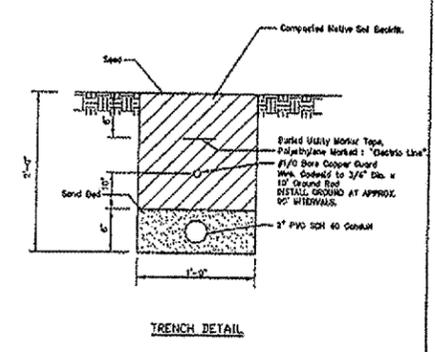
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0 1 2
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NOTES
 ① CONTRACTOR TO FURNISH AND INSTALL GROUND BASS ON THE UNIT 1 AND UNIT 2 CABINETS.



- Notes
- FAI ① Ammance Isolation Transformer to match existing airport REIL system.
 - FAI ② 1-2/3 500V #10 AWG Armored cable.
 - FAI or E ③ Existing runway light can or Joquahs LD-1 Light Base can.
 - E ④ Existing Airport lighting circuit.
 - E ⑤ Existing Airport lighting circuit.
 - FAI ⑥ Compatible lock connectors.
 - E ⑦ Existing Airport runway or Unmanned light.
- FAI = Furnish and Install
 E = Existing
 FAI or E = Furnish and Install or Existing



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