

02A

WHITESIDE COUNTY AIRPORT BOARD WHITESIDE COUNTY, ILLINOIS

WH014
TOTAL SHEETS:
25

Whiteside
COUNTY AIRPORT
JOSEPH H. BITTORF FIELD
WHITESIDE COUNTY AIRPORT BOARD

APPROVED BY *[Signature]*
DREW WILKENS, PRESIDENT
DATE 02-27-2020

CONSTRUCTION PLANS FOR WHITESIDE COUNTY AIRPORT REHABILITATE RUNWAY 18/36 LIGHTING CIRCUIT

FINAL SUBMITTAL

ILLINOIS PROJECT: SQI-4766
SBG PROJECT: 3-17-SBGP-XXX

FEBRUARY 28, 2020
(APRIL 24, 2020 LETTING)

DESIGN INFORMATION

RUNWAY 18/36
AIRCRAFT DESIGN GROUP II
DESIGN APPROACH CATEGORY B
RUNWAY SAFETY AREA WIDTH = 150'

RUNWAY 7/25
AIRCRAFT DESIGN GROUP III
DESIGN APPROACH CATEGORY C
RUNWAY SAFETY AREA WIDTH = 500'

MAXIMUM EQUIPMENT HEIGHT - 25'
UNICOM FREQUENCY - 123.00

INDEX TO SHEETS

1. COVER SHEET / INDEX TO SHEETS
2. SUMMARY OF QUANTITIES
3. SITE PLAN
4. SEQUENCE OF CONSTRUCTION 1
5. SEQUENCE OF CONSTRUCTION 2
6. SEQUENCE OF CONSTRUCTION 3
7. SEQUENCE OF CONSTRUCTION NOTES
8. SEQUENCE OF CONSTRUCTION DETAILS
9. EXISTING CONDITIONS AND REMOVALS 1
10. EXISTING CONDITIONS AND REMOVALS 2
11. EXISTING CONDITIONS AND REMOVALS 3
12. EXISTING CONDITIONS AND REMOVALS 4
13. EXISTING CONDITIONS AND REMOVALS 5
14. ELECTRICAL PLAN 1
15. ELECTRICAL PLAN 2
16. ELECTRICAL PLAN 3
17. ELECTRICAL PLAN 4
18. ELECTRICAL PLAN 5
19. PROPOSED REIL PLAN
20. ELECTRICAL DETAILS 1
21. ELECTRICAL DETAILS 2
22. ELECTRICAL DETAILS 3
23. ELECTRICAL DETAILS 4
24. ELECTRICAL DETAILS 5
25. VAULT PLAN

811 Know what's below.
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COMMON GROUND ALLIANCE
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Phone: 811

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 THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING SERVICE CONNECTIONS TO UNDERGROUND UTILITIES, PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE 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. THE ENGINEER SHALL ALSO BE IMMEDIATELY NOTIFIED. ANY SUCH MAINS AND SERVICES SHALL BE RESTORED TO SERVICE AT ONCE AND PAID FOR BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT.

TOWNSHIP: 20 NORTH COUNTY: WHITESIDE
RANGE: 7 EAST TOWNSHIP: MONTMORENCY
SECTION: 10

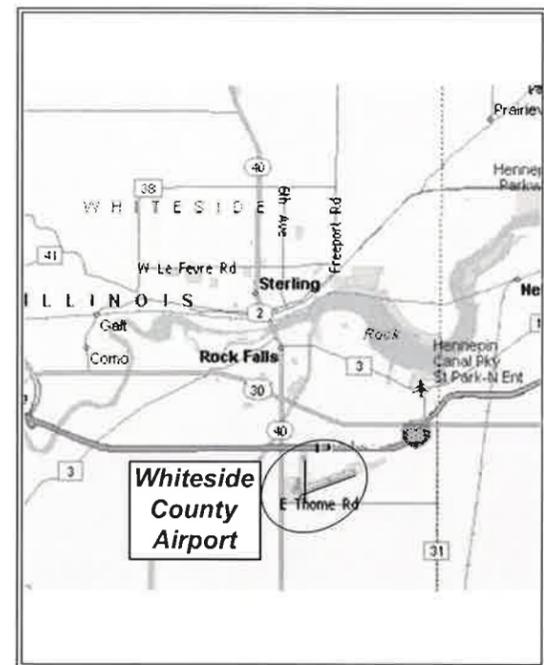
Illinois Professional Engineering Practice Act of 1989

CMT
Engineers and Consultants

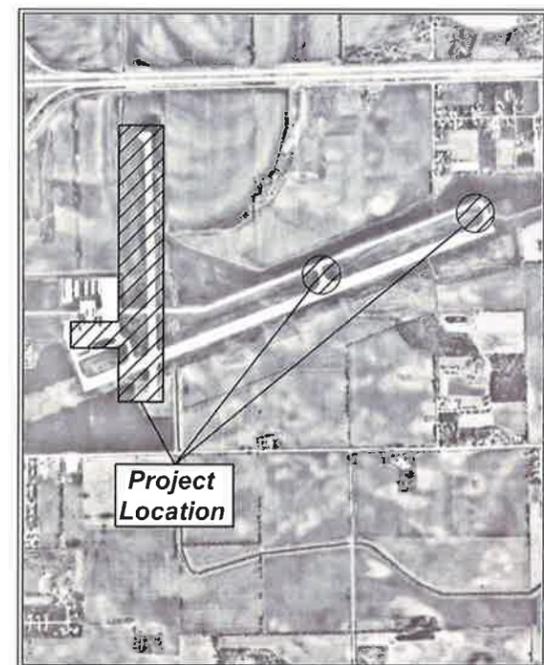


SUBMITTED BY *[Signature]*
TRAVIS A. STRAIT, P.E.

DATE 2/28/20
License Expires 11/30/2021



LOCATION MAP



SITE PLAN

18029203.00

WH014

WHITESIDE
COUNTY AIRPORT
STERLING/ROCKFALLS, IL

WHITESIDE COUNTY
AIRPORT BOARD

SBG Proj: 3-17-SBGP-XXX
IL Proj: SQI-4766

APPROVED AS WORKING PLAN
BY:

REV	DATE	DESCRIPTION

PROJECT NAME:

**REHABILITATE
RUNWAY 18/36
LIGHTING CIRCUIT**

SHEET TITLE:

**SUMMARY OF
QUANTITIES**

DESIGNED: CMT-MLI DRAWN: CMT-MLI CHECKED: CMT-MLI

PROJECT NO.: 18029203.00
DATE: FEBRUARY 28, 2020

SHEET NO. **2** REVISION

SHEET 02 OF 25 SHEETS

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	RECORD QUANTITY
AR108158	1/C #8 5 KV UG CABLE IN UD	LF	13,030.00	
AR108258	2/C #8 5 KV UG CABLE IN UD	LF	1,580.00	
AR109321	10 KW REGULATOR, STYLE 1	EA	1.00	
AR109342	20 KW REGULATOR, STYLE 2	EA	1.00	
AR110212	2" STEEL DUCT, DIRECT BURY	LF	110.00	
AR110610	ELECTRICAL HANDHOLE	EA	1.00	
AR110906	REMOVE ELECTRICAL HANDHOLE	EA	1.00	
AR125410	MITL - STAKE MOUNTED	EA	4.00	
AR125442	TAXI GUIDANCE SIGN, 2 CHARACTER	EA	2.00	
AR125445	TAXI GUIDANCE SIGN, 5 CHARACTER	EA	3.00	
AR125505	MIRL, STAKE MOUNTED	EA	24.00	
AR125510	MIRL, BASE MOUNTED	EA	12.00	
AR125545	MI THRESHOLD LIGHT BASE MTD	EA	8.00	
AR125610	REILS	PAIR	2.00	
AR125901	REMOVE STAKE MOUNTED LIGHT	EA	38.00	
AR125902	REMOVE BASE MOUNTED LIGHT	EA	16.00	
AR125904	REMOVE TAXI GUIDANCE SIGN	EA	6.00	
AR125906	REMOVE SPLICE CAN	EA	10.00	
AR125907	REMOVE REILS	PAIR	2.00	
AR125942	ADJUST BASE MOUNTED LIGHT	EA	3.00	
AR150510	ENGINEER'S FIELD OFFICE	LS	1.00	
AR150520	MOBILIZATION	LS	1.00	
AR800872	2 #4 XLP-USE 600V, 1 #8 GND IN 1-1/4" UD	LF	7,280.00	
AR800873	REPLACE BASE MOUNTED RUNWAY THRESHOLD LIGHT, FIXTURE ONLY	EA	8.00	
AR800874	REPLACE 5 CHARACTER SIGN ON EXISTING FOUNDATION	EA	1.00	
AR800875	RELOCATE EXISTING 2 CHARACTER SIGN TO NEW FOUNDATION	EA	2.00	
AR800876	RELOCATE EXISTING 5 CHARACTER SIGN TO NEW FOUNDATION	EA	2.00	
AR800877	RELOCATE EXISTING 6 CHARACTER SIGN TO NEW FOUNDATION	EA	1.00	
AR800878	REMOVE BITUMINOUS PAVEMENT AND REPLACE WITH NEW PCC PAVEMENT	SY	65.00	

APPROVED AS WORKING PLAN
BY:

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PROJECT NAME:
**REHABILITATE
RUNWAY 18/36
LIGHTING CIRCUIT**

SHEET TITLE:

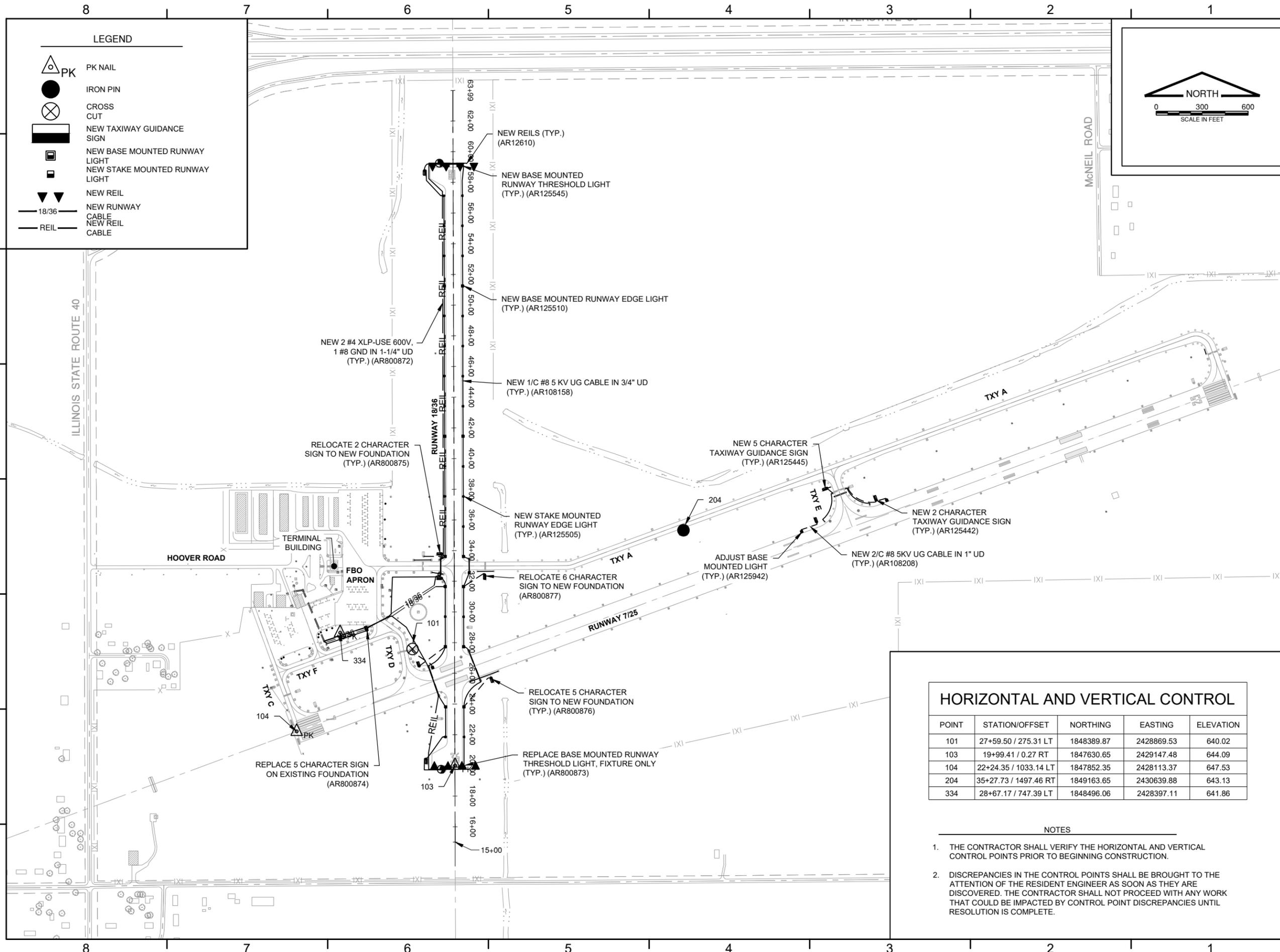
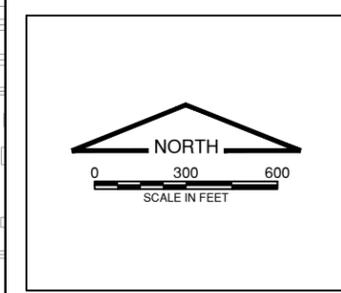
SITE PLAN

DESIGNED: CMT-MLI DRAWN: CMT-MLI CHECKED: CMT-MLI

PROJECT NO.: 18029203.00
DATE: FEBRUARY 28, 2020

SHEET NO. **3** REVISION

SHEET 03 OF 25 SHEETS



LEGEND

- PK NAIL
- IRON PIN
- CROSS CUT
- NEW TAXIWAY GUIDANCE SIGN
- NEW BASE MOUNTED RUNWAY LIGHT
- NEW STAKE MOUNTED RUNWAY LIGHT
- NEW REIL
- NEW RUNWAY CABLE
- NEW REIL CABLE

HORIZONTAL AND VERTICAL CONTROL

POINT	STATION/OFFSET	NORTHING	EASTING	ELEVATION
101	27+59.50 / 275.31 LT	1848389.87	2428869.53	640.02
103	19+99.41 / 0.27 RT	1847630.65	2429147.48	644.09
104	22+24.35 / 1033.14 LT	1847852.35	2428113.37	647.53
204	35+27.73 / 1497.46 RT	1849163.65	2430639.88	643.13
334	28+67.17 / 747.39 LT	1848496.06	2428397.11	641.86

- NOTES**
- THE CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL CONTROL POINTS PRIOR TO BEGINNING CONSTRUCTION.
 - DISCREPANCIES IN THE CONTROL POINTS SHALL BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER AS SOON AS THEY ARE DISCOVERED. THE CONTRACTOR SHALL NOT PROCEED WITH ANY WORK THAT COULD BE IMPACTED BY CONTROL POINT DISCREPANCIES UNTIL RESOLUTION IS COMPLETE.

APPROVED AS WORKING PLAN
BY:

REV	DATE	DESCRIPTION

PROJECT NAME:

REHABILITATE
RUNWAY 18/36
LIGHTING CIRCUIT

SHEET TITLE:

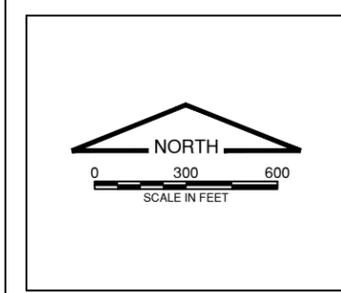
SEQUENCE OF
CONSTRUCTION 1

DESIGNED: CMT-MLI DRAWN: CMT-MLI CHECKED: CMT-MLI

PROJECT NO.: 18029203.00
DATE: FEBRUARY 28, 2020

SHEET NO. **4** REVISION

SHEET 04 OF 25 SHEETS



PHASING 1 SUGGESTED SEQUENCE

1. AT THE START OF EACH WORKDAY, CONTRACTOR SHALL CLOSE RUNWAY 18/36 AND INSTALL CLOSED RUNWAY MARKERS AND BARRICADES AS SHOWN OR AS DIRECTED BY THE RESIDENT ENGINEER. ONLY DAILY CLOSURES OF RUNWAY 18/36 WILL BE PERMITTED.
2. REMOVE EXISTING RUNWAY EDGE LIGHTS AND CABLE.
3. INSTALL NEW RUNWAY EDGE LIGHTS AND CABLE.
4. CONNECT NEW LIGHT CIRCUIT TO EXISTING LIGHT CIRCUIT AND VERIFY OPERATION.
5. REMOVE RUNWAY CLOSURE MARKERS AND BARRICADES AT THE END OF EACH WORKDAY AND REOPEN RUNWAY 18/36.

PHASING NOTES (ALL PHASES)

1. CLOSURE OF MORE THAN ONE RUNWAY AT A TIME WILL NOT BE PERMITTED EXCEPT WHEN WORKING IN THE RUNWAY INTERSECTION. ALL WORK REQUIRING THE CLOSURE OF A RUNWAY SHALL BE EXPEDITED TO MINIMIZE IMPACT TO THE AIRPORT.
2. ALL RUNWAYS, TAXIWAYS, AND APRONS SHALL BE KEPT OPEN TO AIRPORT TRAFFIC DURING CONSTRUCTION EXCEPT AS NOTED IN THE CONSTRUCTION ACTIVITY PLAN.
3. ANY TIME THE HAUL ROUTE USES OR CROSSES EXISTING AIRPORT PAVEMENT, THE PAVEMENT SHALL BE SWEEPED AND CLEANED AS REQUIRED TO THE SATISFACTION OF THE AIRPORT AND/OR RESIDENT ENGINEER.
4. WHEN CONFLICTS ARISE BETWEEN CONSTRUCTION ACTIVITIES AND AIRCRAFT OPERATIONS AND SAFETY, AIRCRAFT OPERATIONS AND SAFETY SHALL TAKE PRECEDENCE AND SHALL GOVERN. FINAL AUTHORITY IN THE APPROVAL OF CONSTRUCTION SEQUENCING LIES WITH THE AIRPORT MANAGER.
5. CONSTRUCTION TRAFFIC SHALL STOP AND YIELD TO AIRCRAFT TRAFFIC WHEN ENTERING AIRCRAFT OPERATIONAL AREA.
6. ONLY DAILY RUNWAY AND TAXIWAY CLOSURES WILL BE ALLOWED. NO OVERNIGHT CLOSURES WILL BE ALLOWED.
7. ALL CLOSED TAXIWAY SECTIONS SHALL HAVE THE TAXIWAY EDGE LIGHT AND TAXIWAY GUIDANCE SIGNS REMOVED FROM SERVICE. IF DEACTIVATING THE CIRCUIT IMPACTS AN OPEN TAXIWAY SECTION, THE EDGE LIGHTS AND GUIDANCE SIGNS MAY BE COVERED IN A MANNER THAT PREVENTS VISIBLE LIGHT. ADDITIONALLY, A TEMPORARY JUMPER MAY BE INSTALLED TO REMOVE THE LIGHTS FROM THE ACTIVE CIRCUIT. METHOD OF DEACTIVATION SHALL BE APPROVED BY THE RESIDENT ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
8. CONTRACTOR SHALL INSTALL TAXIWAY CLOSURE MARKERS AS SHOWN OR AS DIRECTED BY THE RESIDENT ENGINEER. SEE SEQUENCE OF CONSTRUCTION DETAILS SHEET FOR TAXIWAY CLOSURE MARKER DETAILS AND NOTES.
9. EXISTING TURF AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY HIM AT HIS EXPENSE TO THE SATISFACTION OF THE ENGINEER AND THE AIRPORT.
10. DAMAGE TO AIRPORT SERVICE ROADS, CONTRACTOR STAGING AREA AND AIRFIELD PAVEMENTS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
11. AT THE END OF EACH DAY ALL LIGHTS AND SIGNS SHALL BE FULLY FUNCTIONAL.
12. CONTRACTOR SHALL INSTALL AND MAINTAIN RUNWAY CLOSURE MARKERS AT BOTH ENDS OF THE RUNWAY WHEN THE RUNWAY IS CLOSED. SEE SEQUENCE OF CONSTRUCTION DETAILS SHEET FOR RUNWAY CLOSURE MARKER DETAILS AND NOTES.
13. CONSTRUCTION ACTIVITIES WILL REQUIRE THE CLOSURE OF VARIOUS AIRFIELD PAVEMENTS THROUGHOUT THE DURATION OF THE PROJECT. ALL PAVEMENT CLOSURES SHALL BE COORDINATED WITH THE AIRPORT AND/OR RESIDENT ENGINEER A MINIMUM OF 72 HOURS PRIOR TO CLOSURE.
14. THE LOCATION OF THE BARRICADES SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER. SHOULD THE PHASING REQUIRE THE BARRICADES TO BE REPOSITIONED THE WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
15. THE CONTRACTOR WILL BE PERMITTED TO STORE EQUIPMENT AND MATERIALS AT THE CONTRACTOR'S STAGING AREA. THE MAXIMUM HEIGHT OF EQUIPMENT, MATERIALS AND STOCKPILES SHALL BE 25' ABOVE GROUND ELEVATION.

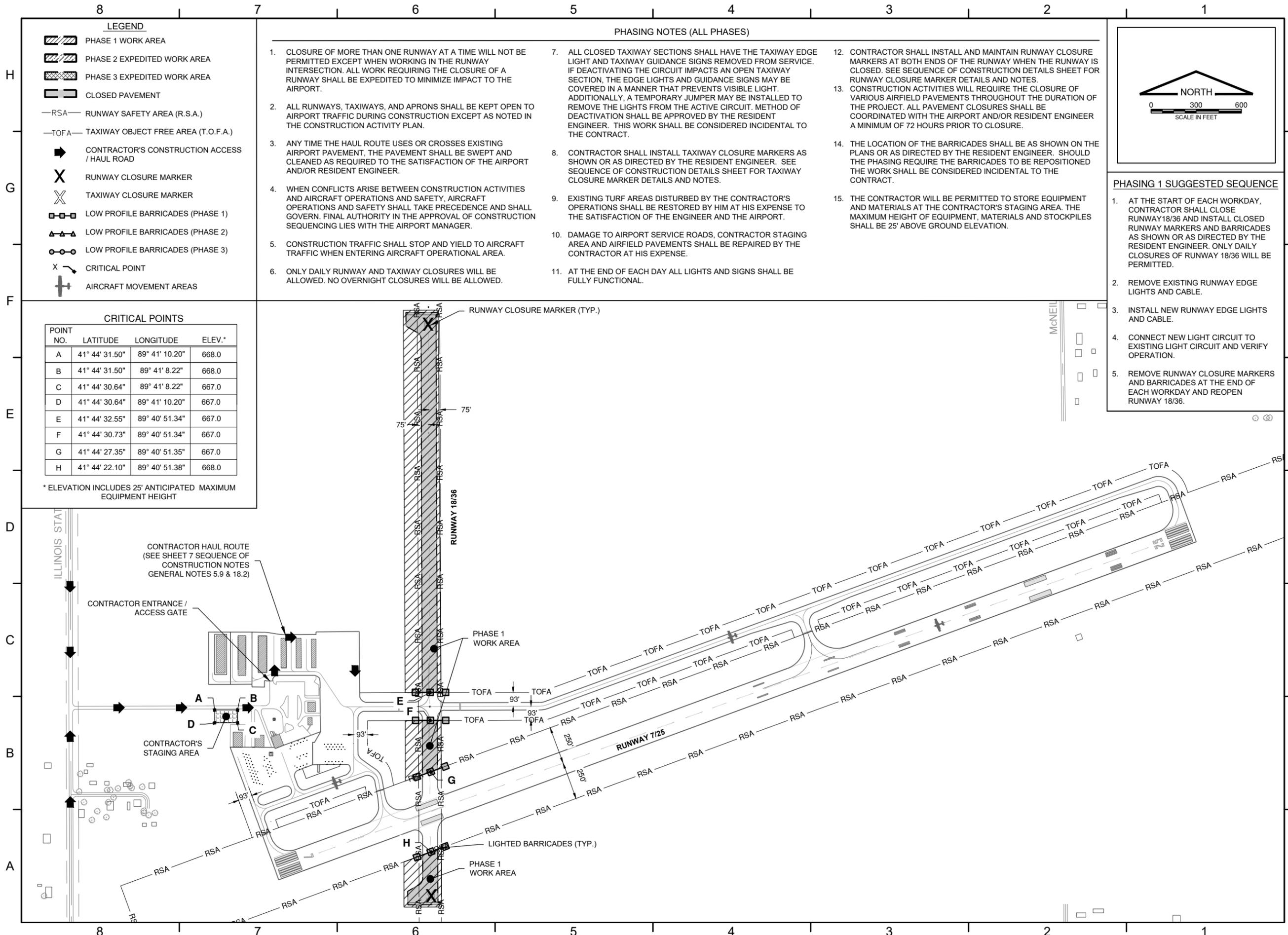
LEGEND

- PHASE 1 WORK AREA
- PHASE 2 EXPEDITED WORK AREA
- PHASE 3 EXPEDITED WORK AREA
- CLOSED PAVEMENT
- RSA— RUNWAY SAFETY AREA (R.S.A.)
- TOFA— TAXIWAY OBJECT FREE AREA (T.O.F.A.)
- CONTRACTOR'S CONSTRUCTION ACCESS / HAUL ROAD
- RUNWAY CLOSURE MARKER
- TAXIWAY CLOSURE MARKER
- LOW PROFILE BARRICADES (PHASE 1)
- LOW PROFILE BARRICADES (PHASE 2)
- LOW PROFILE BARRICADES (PHASE 3)
- CRITICAL POINT
- AIRCRAFT MOVEMENT AREAS

CRITICAL POINTS

POINT NO.	LATITUDE	LONGITUDE	ELEV.*
A	41° 44' 31.50"	89° 41' 10.20"	668.0
B	41° 44' 31.50"	89° 41' 8.22"	668.0
C	41° 44' 30.64"	89° 41' 8.22"	667.0
D	41° 44' 30.64"	89° 41' 10.20"	667.0
E	41° 44' 32.55"	89° 40' 51.34"	667.0
F	41° 44' 30.73"	89° 40' 51.34"	667.0
G	41° 44' 27.35"	89° 40' 51.35"	667.0
H	41° 44' 22.10"	89° 40' 51.38"	668.0

* ELEVATION INCLUDES 25' ANTICIPATED MAXIMUM EQUIPMENT HEIGHT



APPROVED AS WORKING PLAN
BY:

REV	DATE	DESCRIPTION

PROJECT NAME:

**REHABILITATE
RUNWAY 18/36
LIGHTING CIRCUIT**

SHEET TITLE:

**SEQUENCE OF
CONSTRUCTION 2**

DESIGNED: CMT-MLI DRAWN: CMT-MLI CHECKED: CMT-MLI

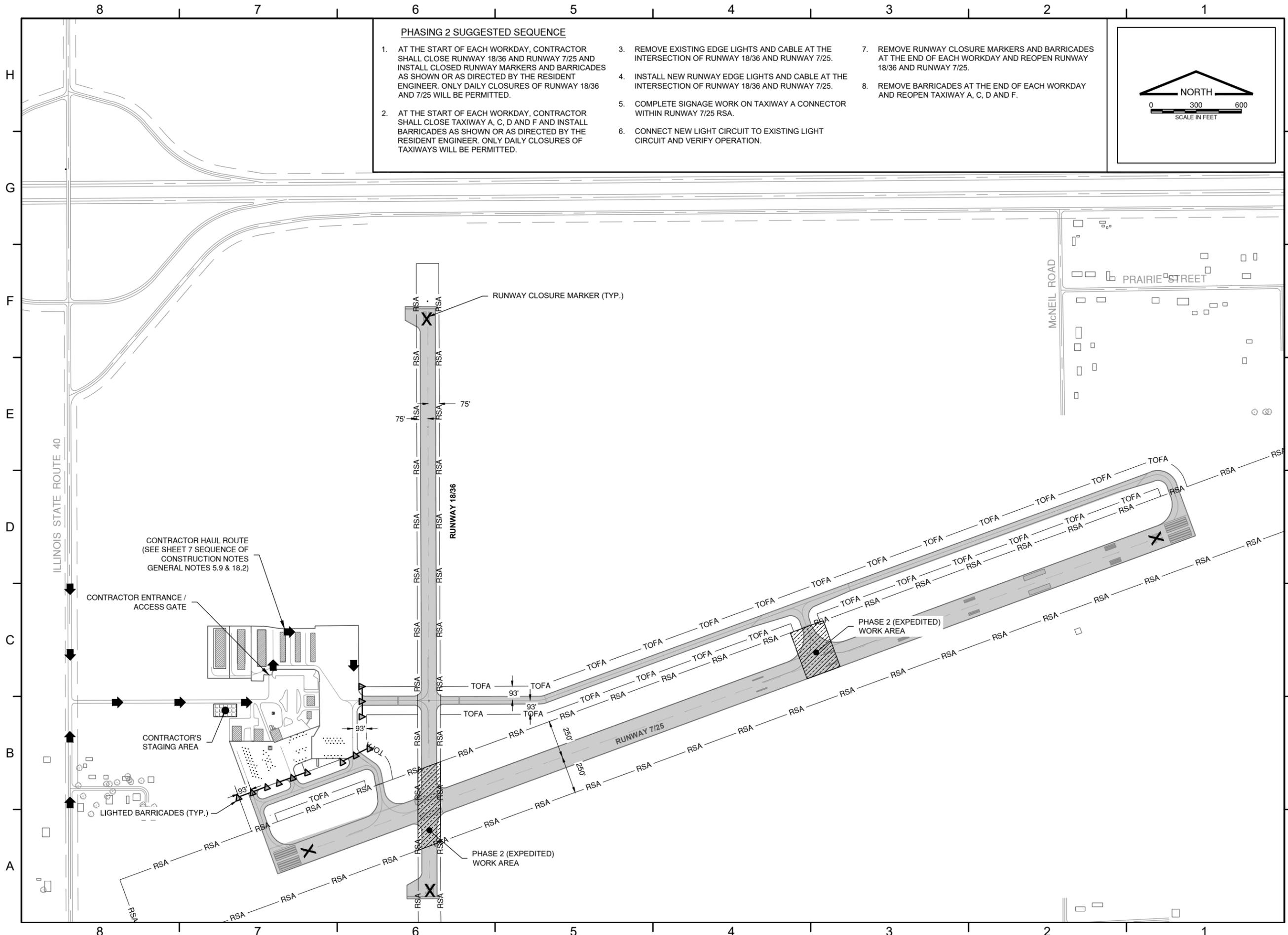
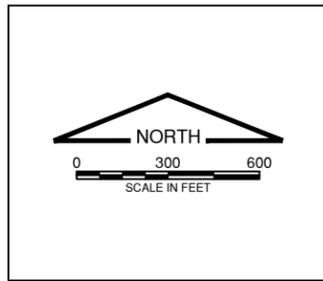
PROJECT NO.: 18029203.00
DATE: FEBRUARY 28, 2020

SHEET NO. **5** REVISION

SHEET 05 OF 25 SHEETS

PHASING 2 SUGGESTED SEQUENCE

1. AT THE START OF EACH WORKDAY, CONTRACTOR SHALL CLOSE RUNWAY 18/36 AND RUNWAY 7/25 AND INSTALL CLOSED RUNWAY MARKERS AND BARRICADES AS SHOWN OR AS DIRECTED BY THE RESIDENT ENGINEER. ONLY DAILY CLOSURES OF RUNWAY 18/36 AND 7/25 WILL BE PERMITTED.
2. AT THE START OF EACH WORKDAY, CONTRACTOR SHALL CLOSE TAXIWAY A, C, D AND F AND INSTALL BARRICADES AS SHOWN OR AS DIRECTED BY THE RESIDENT ENGINEER. ONLY DAILY CLOSURES OF TAXIWAYS WILL BE PERMITTED.
3. REMOVE EXISTING EDGE LIGHTS AND CABLE AT THE INTERSECTION OF RUNWAY 18/36 AND RUNWAY 7/25.
4. INSTALL NEW RUNWAY EDGE LIGHTS AND CABLE AT THE INTERSECTION OF RUNWAY 18/36 AND RUNWAY 7/25.
5. COMPLETE SIGNAGE WORK ON TAXIWAY A CONNECTOR WITHIN RUNWAY 7/25 RSA.
6. CONNECT NEW LIGHT CIRCUIT TO EXISTING LIGHT CIRCUIT AND VERIFY OPERATION.
7. REMOVE RUNWAY CLOSURE MARKERS AND BARRICADES AT THE END OF EACH WORKDAY AND REOPEN RUNWAY 18/36 AND RUNWAY 7/25.
8. REMOVE BARRICADES AT THE END OF EACH WORKDAY AND REOPEN TAXIWAY A, C, D AND F.



H
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B
A

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1

WH014

WHITESIDE
COUNTY AIRPORT
STERLING/ROCKFALLS, IL

WHITESIDE COUNTY
AIRPORT BOARD

SBG Proj: 3-17-SBGP-XXX
IL Proj: SQI-4766

APPROVED AS WORKING PLAN
BY:

REV	DATE	DESCRIPTION

PROJECT NAME:

REHABILITATE
RUNWAY 18/36
LIGHTING CIRCUIT

SHEET TITLE:

SEQUENCE OF
CONSTRUCTION 3

DESIGNED: CMT-MLI DRAWN: CMT-MLI CHECKED: CMT-MLI

PROJECT NO.: 18029203.00
DATE: FEBRUARY 28, 2020

SHEET NO. **6** REVISION

SHEET 06 OF 25 SHEETS

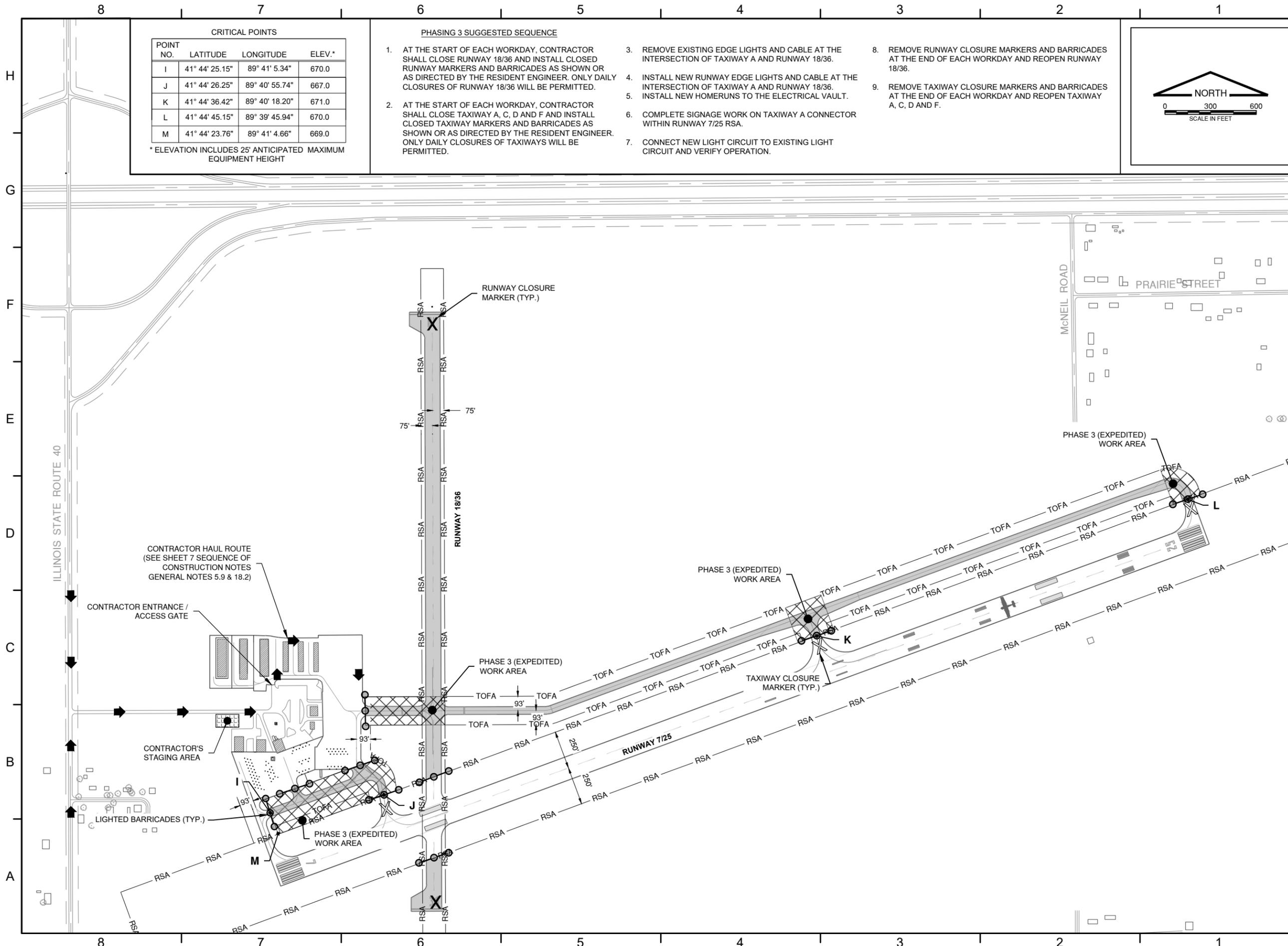
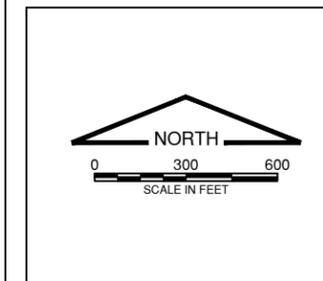
CRITICAL POINTS

POINT NO.	LATITUDE	LONGITUDE	ELEV.*
I	41° 44' 25.15"	89° 41' 5.34"	670.0
J	41° 44' 26.25"	89° 40' 55.74"	667.0
K	41° 44' 36.42"	89° 40' 18.20"	671.0
L	41° 44' 45.15"	89° 39' 45.94"	670.0
M	41° 44' 23.76"	89° 41' 4.66"	669.0

* ELEVATION INCLUDES 25' ANTICIPATED MAXIMUM EQUIPMENT HEIGHT

PHASING 3 SUGGESTED SEQUENCE

1. AT THE START OF EACH WORKDAY, CONTRACTOR SHALL CLOSE RUNWAY 18/36 AND INSTALL CLOSED RUNWAY MARKERS AND BARRICADES AS SHOWN OR AS DIRECTED BY THE RESIDENT ENGINEER. ONLY DAILY CLOSURES OF RUNWAY 18/36 WILL BE PERMITTED.
2. AT THE START OF EACH WORKDAY, CONTRACTOR SHALL CLOSE TAXIWAY A, C, D AND F AND INSTALL CLOSED TAXIWAY MARKERS AND BARRICADES AS SHOWN OR AS DIRECTED BY THE RESIDENT ENGINEER. ONLY DAILY CLOSURES OF TAXIWAYS WILL BE PERMITTED.
3. REMOVE EXISTING EDGE LIGHTS AND CABLE AT THE INTERSECTION OF TAXIWAY A AND RUNWAY 18/36.
4. INSTALL NEW RUNWAY EDGE LIGHTS AND CABLE AT THE INTERSECTION OF TAXIWAY A AND RUNWAY 18/36.
5. INSTALL NEW HOMERUNS TO THE ELECTRICAL VAULT.
6. COMPLETE SIGNAGE WORK ON TAXIWAY A CONNECTOR WITHIN RUNWAY 7/25 RSA.
7. CONNECT NEW LIGHT CIRCUIT TO EXISTING LIGHT CIRCUIT AND VERIFY OPERATION.
8. REMOVE RUNWAY CLOSURE MARKERS AND BARRICADES AT THE END OF EACH WORKDAY AND REOPEN RUNWAY 18/36.
9. REMOVE TAXIWAY CLOSURE MARKERS AND BARRICADES AT THE END OF EACH WORKDAY AND REOPEN TAXIWAY A, C, D AND F.



APPROVED AS WORKING PLAN
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REV	DATE	DESCRIPTION

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**REHABILITATE
RUNWAY 18/36
LIGHTING CIRCUIT**

SHEET TITLE:

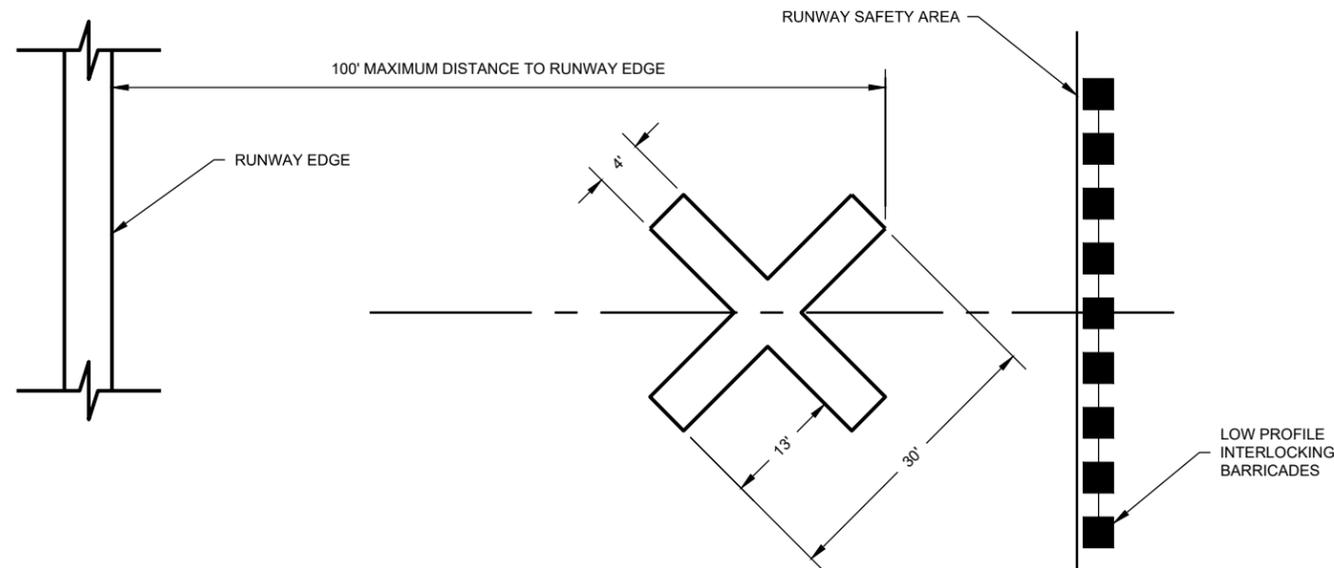
**SEQUENCE OF
CONSTRUCTION DETAILS**

DESIGNED: CMT-MLI DRAWN: CMT-MLI CHECKED: CMT-MLI

PROJECT NO.: 18029203.00
DATE: FEBRUARY 28, 2020

SHEET NO. **8** REVISION

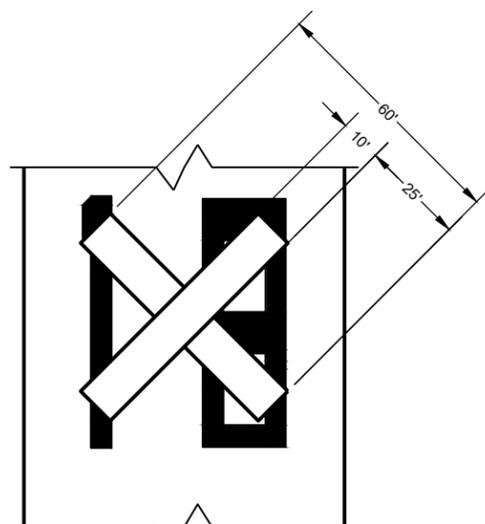
SHEET 08 OF 25 SHEETS



TYPICAL TAXIWAY CLOSURE MARKER DETAIL
NOT TO SCALE

TAXIWAY CLOSURE MARKER NOTES

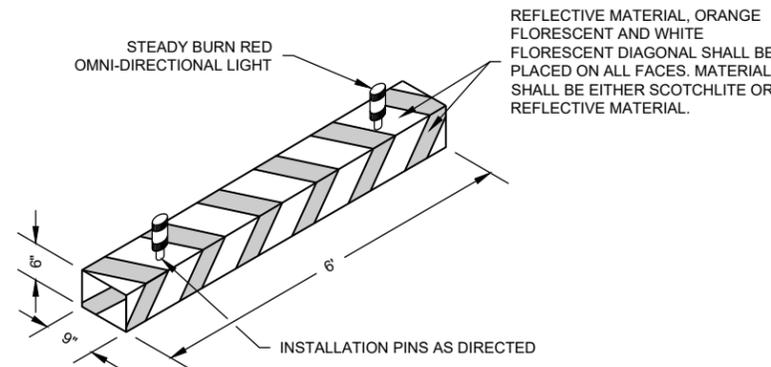
1. THE TAXIWAY CLOSURE MARKER CAN BE PAINTED WITH TEMPORARY MARKING CAPABLE OF BEING REMOVED WITH LOW PRESSURE WATER BLASTING, OR CAN BE ANOTHER MATERIAL THAT DOES NOT VIOLATE THE OFA CRITERIA AND IS APPROVED BY THE ENGINEER AND THE AIRPORT.
2. THE TAXIWAY CLOSURE MARKER SHALL BE YELLOW AND ADEQUATELY SECURED TO WITHSTAND JET BLAST OF 100 MPH.
3. THE MARKER SHALL BE PLACED OVER THE TAXIWAY CENTERLINE.
4. THE INSTALLATION AND REMOVAL OF THE TAXIWAY CLOSURE MARKERS SHALL BE CONSIDERED INCIDENTAL TO CONTRACT.



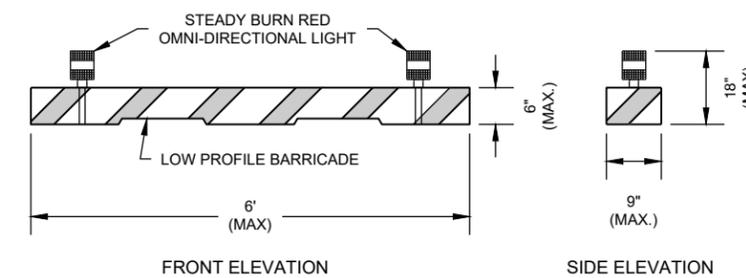
CLOSED RUNWAY MARKER DETAIL
ON PAVEMENT - NO SCALE

RUNWAY CLOSURE MARKERS NOTES

1. CLOSED RUNWAY MARKERS SHALL BE YELLOW.
2. MARKERS SHALL BE A MATERIAL APPROVED BY THE RESIDENT ENGINEER.
3. CONTRACTOR SHALL MAINTAIN AND RELOCATE MARKERS AS DIRECTED BY THE RESIDENT ENGINEER.
4. MARKERS SHALL BE PLACED OVER EXISTING RUNWAY NUMERALS AS SHOWN.
5. COST OF FURNISHING, INSTALLING, MAINTAINING AND REMOVING MARKERS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
6. DURING VARIOUS PHASES OF WORK, IT WILL BE NECESSARY TO CLOSE RUNWAYS TO AIR TRAFFIC ON A TEMPORARY BASIS AS COORDINATED WITH THE AIRPORT. THE CONTRACTOR SHALL MARK THE RUNWAYS TO BE CLOSED BY PLACING A YELLOW CROSS AT THE LOCATION AND DIMENSIONS DETAILED ON THIS SHEET. THE CROSSES ARE SHOWN ON THE RESPECTIVE RUNWAYS ACCORDING TO THE VARIOUS PHASES OF WORK AS DELINEATED IN THE SUGGESTED SEQUENCE OF CONSTRUCTION.



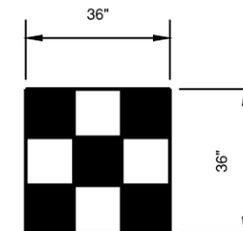
ISOMETRIC



INTERLOCKING LOW PROFILE BARRICADE DETAILS
NOT TO SCALE

INTERLOCKING LOW PROFILE BARRICADE NOTES

1. LOW PROFILE BARRICADES SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE BARRICADES SHALL BE INTERLOCKED WITH NO GAPS BETWEEN BARRICADES.
2. BARRICADES SHALL BE WEIGHTED TO WITHSTAND DISPLACEMENT BY JET OR PROP BLAST.
2. THE BARRICADE LINE SHALL EXTEND ONE BARRICADE PAST THE EDGE OF PAVEMENT INTO THE TURF.
4. FACING OF BARRICADE SHALL BE COVERED WITH REFLECTIVE TAPE OR PAINT.
5. BARRICADES SHALL BE OF LOW MASS, EASILY COLLAPSIBLE UPON CONTACT WITH AN AIRCRAFT OR ANY OF ITS COMPONENTS, AND WEIGHTED OR STURDILY ATTACHED TO THE SURFACE. IF AFFIXED TO THE SURFACE, THE BARRICADE MUST BE FRANGIBLE AT GRADE LEVEL OR AS LOW POSSIBLE, BUT NOT TO EXCEED 3 INCHES ABOVE THE GROUND.
6. ALL COST ASSOCIATED WITH THE LOW PROFILE BARRICADES SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.



**CONSTRUCTION EQUIPMENT AND
TRUCK SIGNAL FLAG**
NOT TO SCALE

WH014

WHITESIDE COUNTY AIRPORT
STERLING/ROCKFALLS, IL

WHITESIDE COUNTY AIRPORT BOARD

SBG Proj: 3-17-SBGP-XXX
IL Proj: SQI-4766

APPROVED AS WORKING PLAN
BY:

REV	DATE	DESCRIPTION

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RUNWAY 18/36
LIGHTING CIRCUIT**

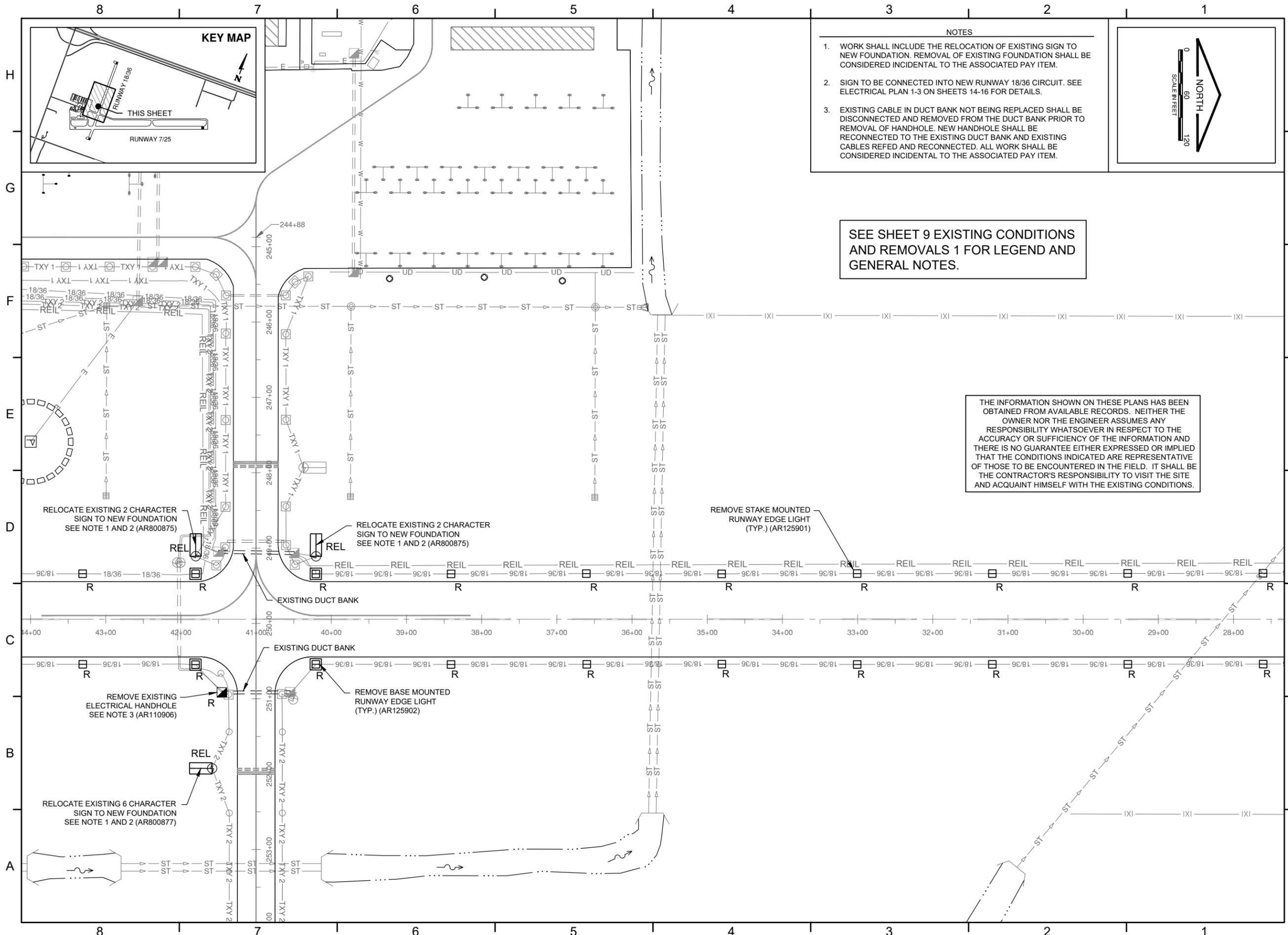
SHEET TITLE:
**EXISTING CONDITIONS
AND REMOVALS 2**

DESIGNED: CMT-MLI DRAWN: CMT-MLI CHECKED: CMT-MLI

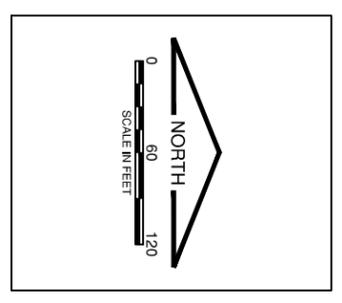
PROJECT NO.: 18029203.00
DATE: FEBRUARY 28, 2020

SHEET NO. **10** REVISION

SHEET 10 OF 25 SHEETS

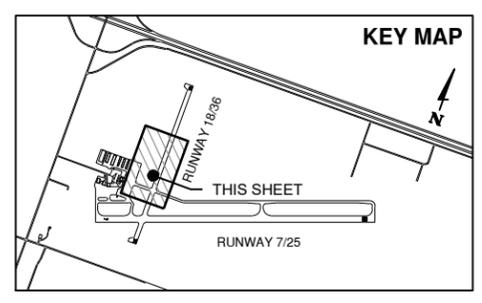


- NOTES**
1. WORK SHALL INCLUDE THE RELOCATION OF EXISTING SIGN TO NEW FOUNDATION. REMOVAL OF EXISTING FOUNDATION SHALL BE CONSIDERED INCIDENTAL TO THE ASSOCIATED PAY ITEM.
 2. SIGN TO BE CONNECTED INTO NEW RUNWAY 18/36 CIRCUIT. SEE ELECTRICAL PLAN 1-3 ON SHEETS 14-16 FOR DETAILS.
 3. EXISTING CABLE IN DUCT BANK NOT BEING REPLACED SHALL BE DISCONNECTED AND REMOVED FROM THE DUCT BANK PRIOR TO REMOVAL OF HANDHOLE. NEW HANDHOLE SHALL BE RECONNECTED TO THE EXISTING DUCT BANK AND EXISTING CABLES REFEED AND RECONNECTED. ALL WORK SHALL BE CONSIDERED INCIDENTAL TO THE ASSOCIATED PAY ITEM.



SEE SHEET 9 EXISTING CONDITIONS AND REMOVALS 1 FOR LEGEND AND GENERAL NOTES.

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



WH014

WHITESIDE
COUNTY AIRPORT
STERLING/ROCKFALLS, IL

WHITESIDE COUNTY
AIRPORT BOARD

SBG Proj: 3-17-SBGP-XXX
IL Proj: SQI-4766

APPROVED AS WORKING PLAN
BY:

REV	DATE	DESCRIPTION

PROJECT NAME:
**REHABILITATE
RUNWAY 18/36
LIGHTING CIRCUIT**

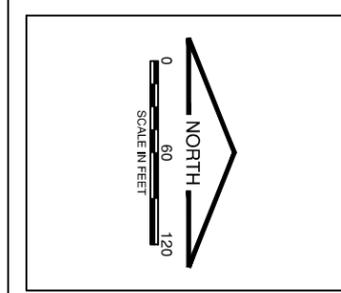
SHEET TITLE:
**EXISTING CONDITIONS
AND REMOVALS 3**

DESIGNED: CMT-MLI DRAWN: CMT-MLI CHECKED: CMT-MLI

PROJECT NO.: 18029203.00
DATE: FEBRUARY 28, 2020

SHEET NO.	11	REVISION
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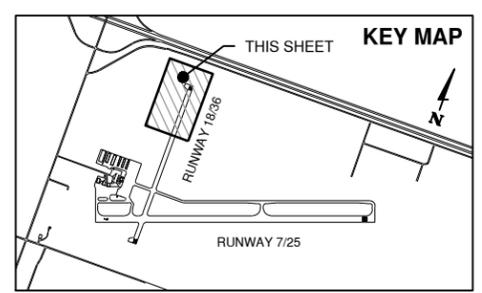
SHEET 11 OF 25 SHEETS



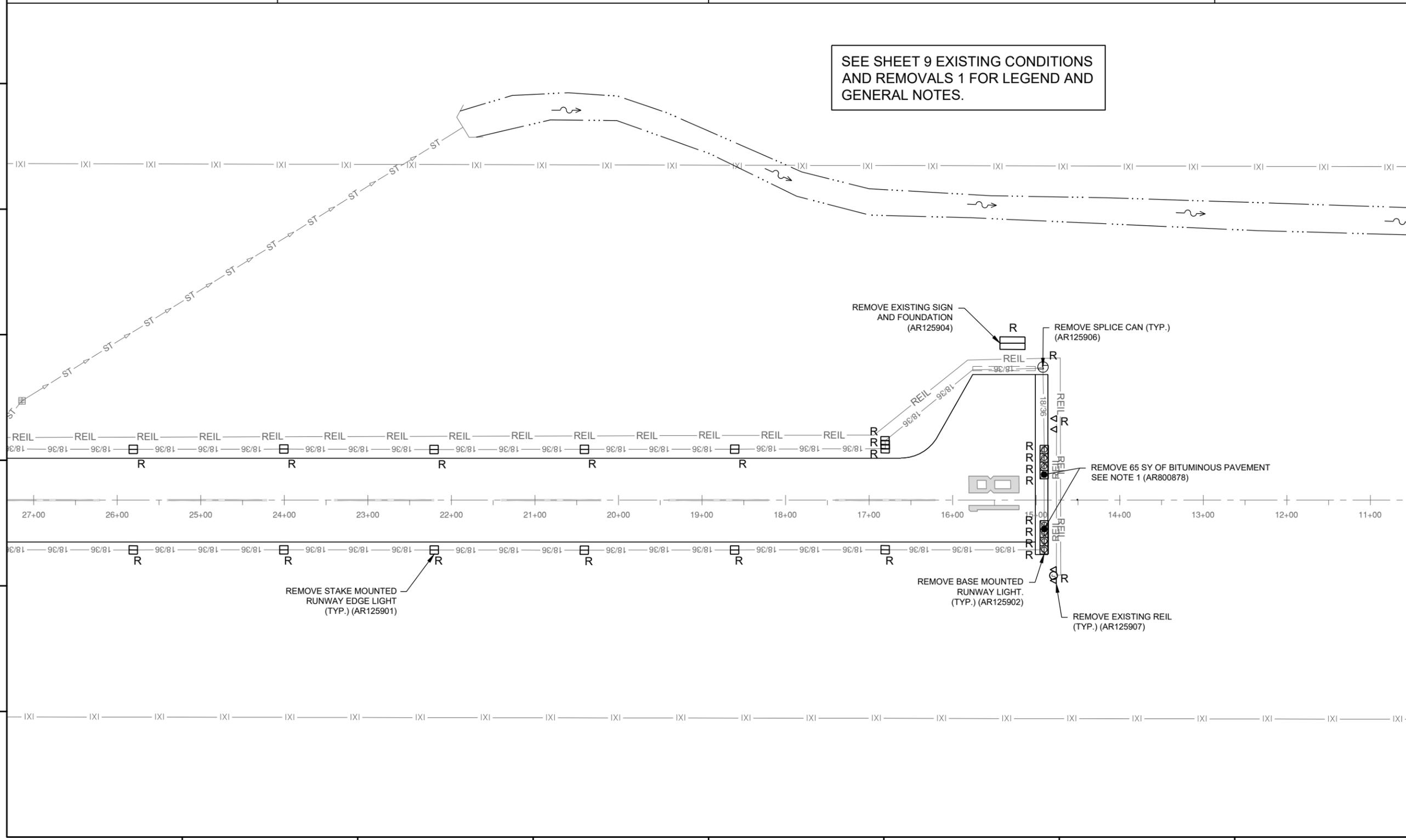
NOTES

- REMOVAL EXTENTS SHALL BE VERIFIED BY THE ENGINEER PRIOR TO REMOVAL. BITUMINOUS PAVEMENT TO BE REMOVED SHALL BE SAWCUT TO FULL DEPTH. REMOVAL OF THE EXISTING BASE MOUNTED RUNWAY THRESHOLD LIGHT FIXTURES SHALL BE PAYABLE UNDER PAY ITEM AR125902. SEE ELECTRICAL DETAILS 5 SHEET 24 FOR REMOVAL AND RESTORATION DETAILS.

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SEE SHEET 9 EXISTING CONDITIONS AND REMOVALS 1 FOR LEGEND AND GENERAL NOTES.



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WHITESIDE COUNTY
AIRPORT BOARD

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IL Proj: SQI-4766

APPROVED AS WORKING PLAN
BY:

REV	DATE	DESCRIPTION

PROJECT NAME:

REHABILITATE
RUNWAY 18/36
LIGHTING CIRCUIT

SHEET TITLE:

EXISTING CONDITIONS
AND REMOVALS 4

DESIGNED: CMT-MLI DRAWN: CMT-MLI CHECKED: CMT-MLI

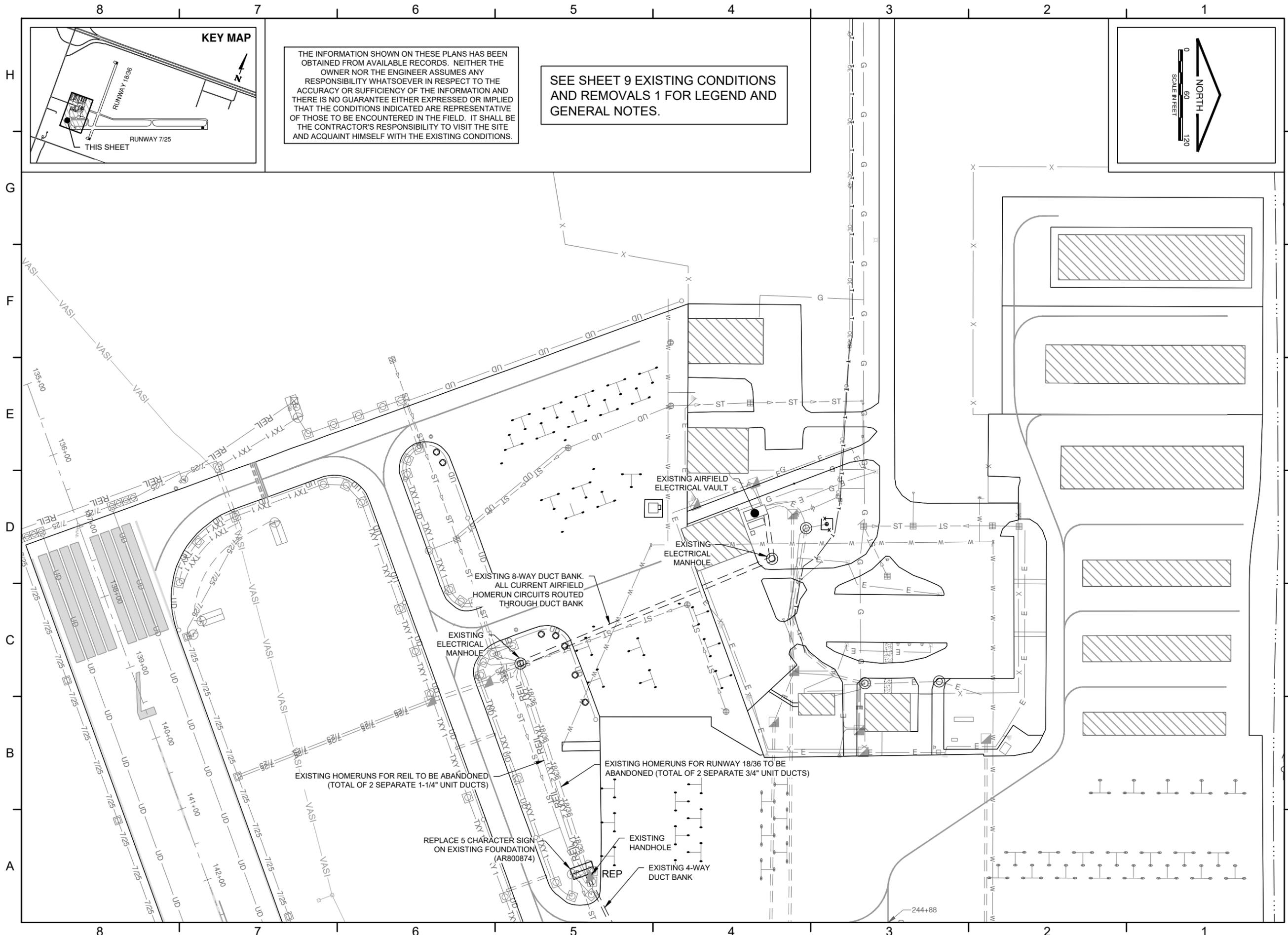
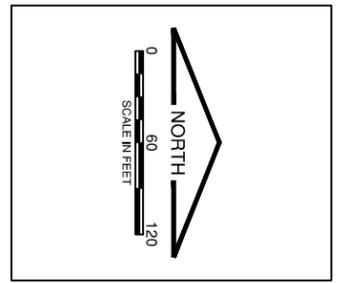
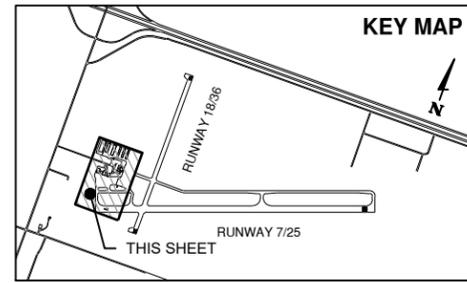
PROJECT NO.: 18029203.00
DATE: FEBRUARY 28, 2020

SHEET NO.	REVISION
12	

SHEET 12 OF 25 SHEETS

SEE SHEET 9 EXISTING CONDITIONS
AND REMOVALS 1 FOR LEGEND AND
GENERAL NOTES.

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



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SBG Proj: 3-17-SBGP-XXX
IL Proj: SQI-4766

APPROVED AS WORKING PLAN
BY:

REV DATE DESCRIPTION

PROJECT NAME:

REHABILITATE
RUNWAY 18/36
LIGHTING CIRCUIT

SHEET TITLE:

EXISTING CONDITIONS
AND REMOVALS 5

DESIGNED: CMT-MLI DRAWN: CMT-MLI CHECKED: CMT-MLI

PROJECT NO.: 18029203.00
DATE: FEBRUARY 28, 2020

SHEET NO. **13** REVISION

SHEET 13 OF 25 SHEETS

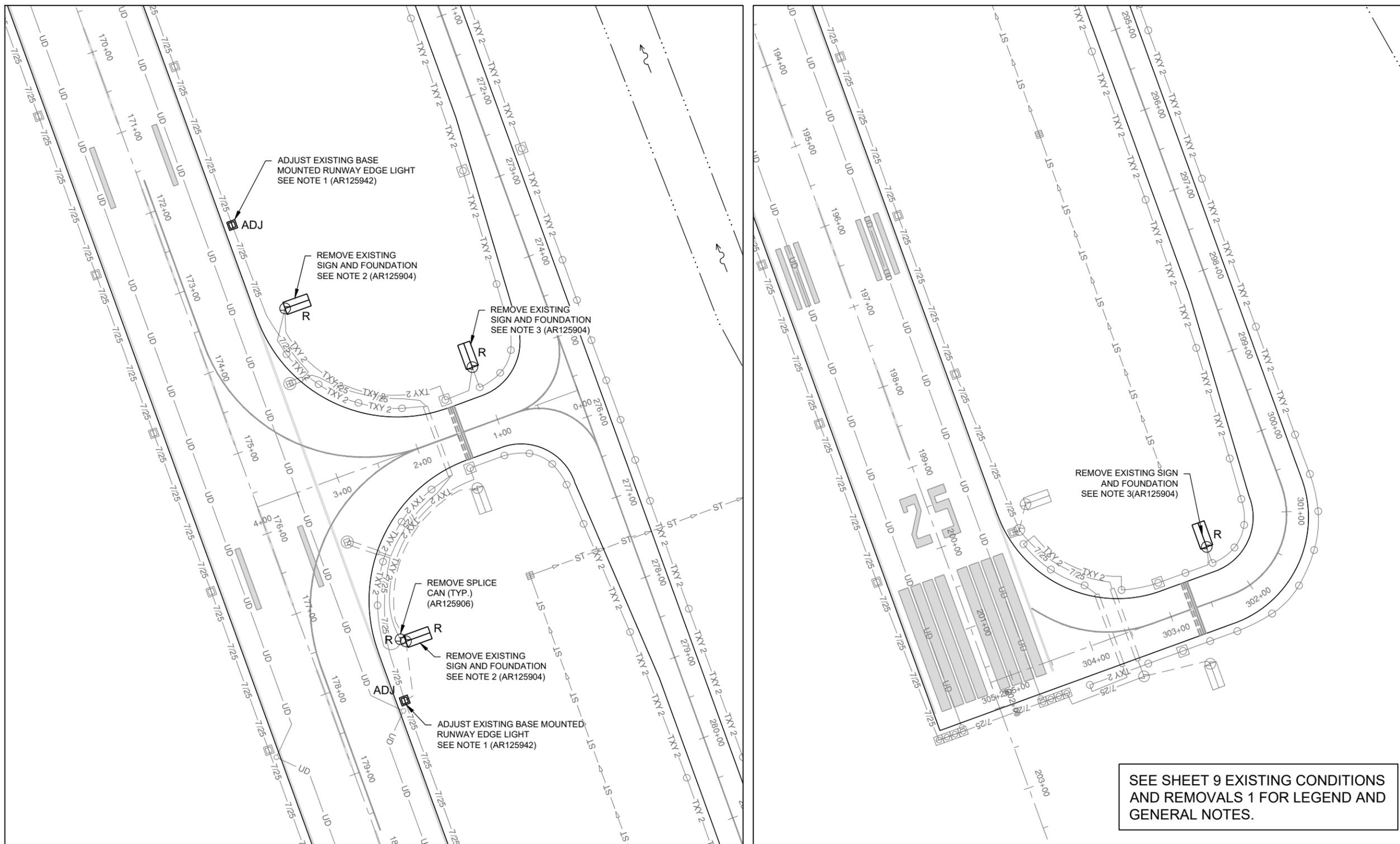
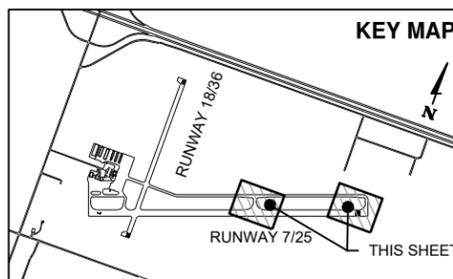
NOTES

- ADJUSTMENT OF EXISTING BASE MOUNTED RUNWAY EDGE LIGHT SHALL INCLUDE REMOVAL AND REINSTALLATION OF EXISTING LIGHT FIXTURE ON NEW CONCRETE ENCASED BASE CAN WITH THE APPROPRIATE NUMBER OF CONDUIT STUBS.
- SIGN TO BE CONNECTED INTO RUNWAY 7/25 CIRCUIT. SEE ELECTRICAL PLAN 5 ON SHEET 18 FOR DETAILS.
- SIGN TO BE CONNECTED INTO TAXIWAY 2 CIRCUIT. SEE ELECTRICAL PLAN 5 ON SHEET 18 FOR DETAILS.



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KEY MAP



SEE SHEET 9 EXISTING CONDITIONS
AND REMOVALS 1 FOR LEGEND AND
GENERAL NOTES.

WH014

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WHITESIDE COUNTY
AIRPORT BOARD

SBG Proj: 3-17-SBGP-XXX
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APPROVED AS WORKING PLAN
BY:

REV	DATE	DESCRIPTION

PROJECT NAME:
**REHABILITATE
RUNWAY 18/36
LIGHTING CIRCUIT**

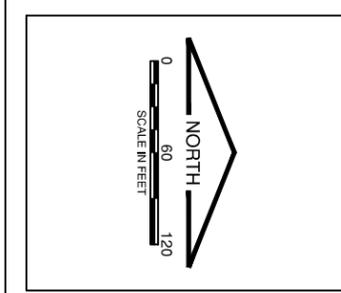
SHEET TITLE:
ELECTRICAL PLAN 1

DESIGNED: CMT-MLI DRAWN: CMT-MLI CHECKED: CMT-MLI

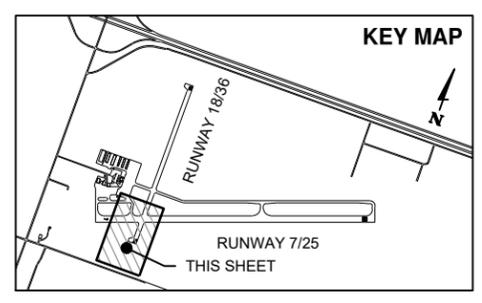
PROJECT NO.: 18029203.00
DATE: FEBRUARY 28, 2020

SHEET NO. **14** REVISION

SHEET 14 OF 25 SHEETS

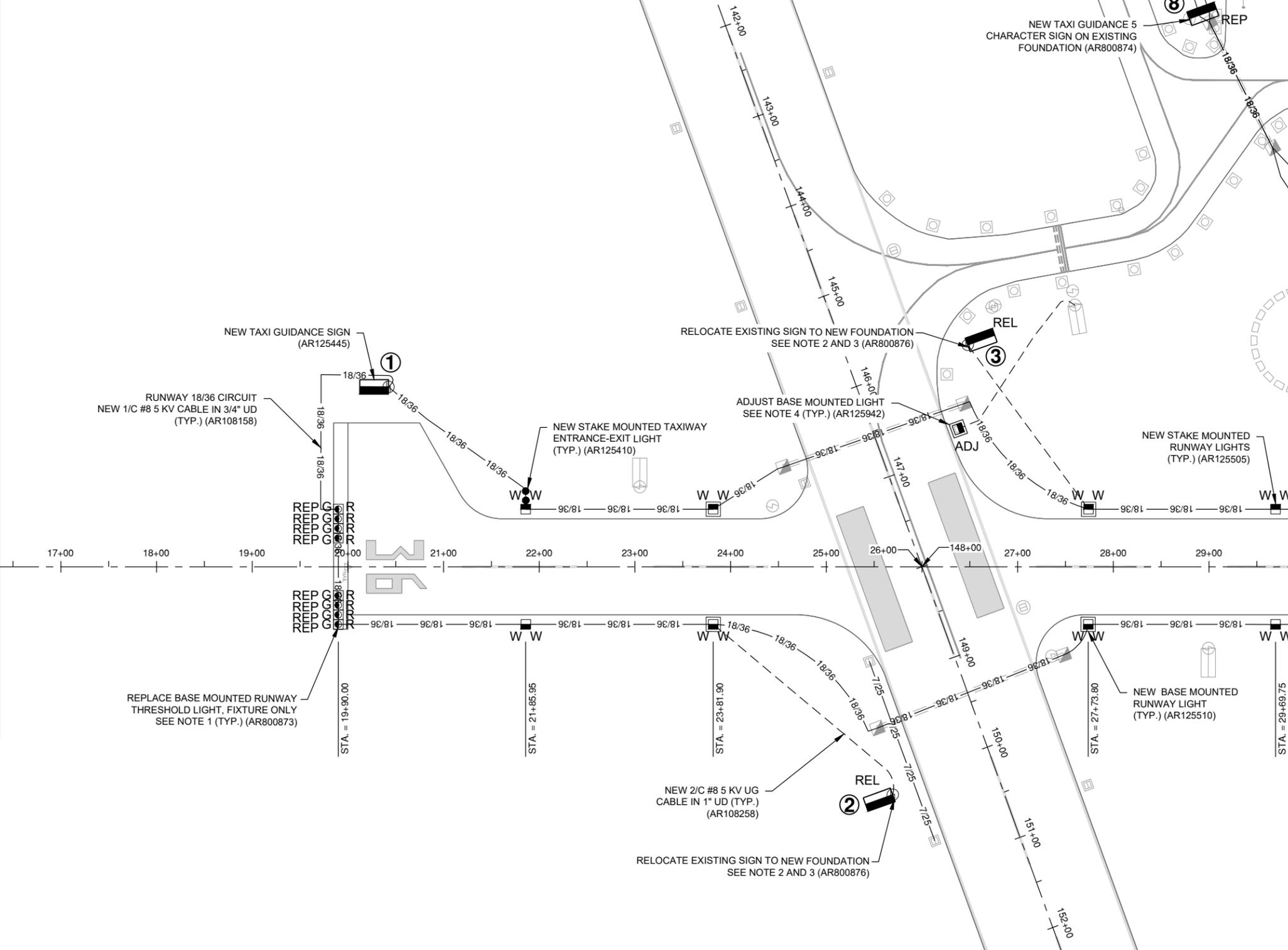


- GENERAL NOTES (ALL SHEETS)**
- EXISTING LIGHTS, GUIDANCE SIGNS, AND AIRFIELD CIRCUITS, OTHER THAN THOSE INDICATED FOR REMOVAL, ARE TO BE PROTECTED FROM DAMAGE AND REMAIN OPERATIONAL. CONTRACTOR IS TO REPAIR ALL DAMAGED EQUIPMENT AND CIRCUITS AT HIS EXPENSE.
 - LIGHT FIXTURES, LAMPS AND TRANSFORMERS TO BE REMOVED SHALL BE TURNED OVER TO AIRPORT MAINTENANCE. LIGHT BASES AND SIGN FOUNDATIONS SHALL BE DISPOSED OF OFF AIRPORT PROPERTY.
 - WHEN POSSIBLE, CONTRACTOR SHALL REMOVE EXISTING CABLES FROM ALL ITEMS TO BE REMOVED. COST SHALL BE INCIDENTAL TO THE CONTRACT.
 - ALL LIGHT BASES AND SIGN FOUNDATIONS REMOVED OR RELOCATED SHALL BE BACKFILLED IN ACCORDANCE WITH THE SPECIFICATIONS. COST OF BACKFILL SHALL BE INCIDENTAL TO THE ASSOCIATED PAY ITEM.
 - ANY TEMPORARY CABLING REQUIRED FOR THIS PROJECT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.
 - TAXIWAY GUIDANCE SIGNS ON NEW CIRCUITS SHALL BE RECABLED USING 2/C #8 5KV CABLE IN 1" UD UNLESS NOTED OTHERWISE.
 - CIRCUITS ROUTED THROUGH EXISTING CONDUITS SHALL BE CABLE IN UNIT DUCT UNLESS OTHERWISE NOTED.
 - ALL EDGE LIGHTS SHALL BE OFFSET 10' FROM THE EDGE OF RUNWAY AND TAXIWAY PAVEMENT.
 - FOR CLARITY, UNDERGROUND UTILITIES ARE NOT SHOWN.
 - REFER TO EXISTING CONDITION SHEETS FOR UTILITIES LOCATION. CONTRACTOR IS RESPONSIBLE TO LOCATE ALL UNDERGROUND UTILITIES. ANY DAMAGE TO EXISTING EQUIPMENT OR UTILITIES DUE TO CONTRACTOR NEGLIGENCE SHALL BE REPAIRED IMMEDIATELY AT HIS EXPENSE.
 - SYMBOLS FOR PROPOSED LIGHTS, TAXIWAY GUIDANCE SIGNS, HANDHOLES ARE ENLARGED FOR CLARITY.
 - NEW AIRFIELD SIGNS SHALL BE INSTALLED DIRECTLY ADJACENT TO THE EXISTING SIGN TO BE REPLACED, BUT NO CLOSER TO THE ADJACENT RUNWAY OR TAXIWAY CENTERLINE. EACH EXISTING AIRFIELD SIGN SHALL REMAIN IN PLACE AND OPERATIONAL UNTIL THE NEW SIGN IS ALSO IN PLACE AND OPERATIONAL.
 - ALL NEW LIGHTS, SIGNS AND REIS SHALL BE LED.



- LEGEND**
- NEW BASE MOUNTED RUNWAY LIGHT
 - ▣ NEW STAKE MOUNTED RUNWAY LIGHT
 - ◻ NEW RUNWAY THRESHOLD LIGHT
 - EXISTING STAKE MOUNTED TAXIWAY LIGHT
 - NEW STAKE MOUNTED TAXIWAY LIGHT
 - ⊙ EXISTING WINDCONE
 - ◻ EXISTING ELECTRICAL HANDHOLE
 - NEW ELECTRICAL HANDHOLE
 - ▭ EXISTING TAXI GUIDANCE SIGN
 - ▭ NEW TAXI GUIDANCE SIGN/FOUNDATION
 - ⊙ EXISTING SPLICE CAN
 - ADJ ADJUST ITEM
 - REL RELOCATE ITEM
 - REP REPLACE ITEM
 - G R GREEN LENS / RED LENS
 - W W WHITE LENS / WHITE LENS
 - EXISTING ELECTRICAL DUCT
 - 18/36 NEW RUNWAY 18/36 CIRCUIT IN 3/4" UD
 - 7/25 NEW RUNWAY 7/25 CIRCUIT IN 3/4" UD
 - TXY 1 NEW TAXIWAY 1 CIRCUIT IN 3/4" UD
 - TXY 2 NEW TAXIWAY 2 CIRCUIT IN 3/4" UD
 - NEW 2/C #8 5KV UG CABLE IN 1" UD

- NOTES**
- REPLACE BASE MOUNTED RUNWAY THRESHOLD LIGHTS SHALL REUSE THE EXISTING LIGHT BASE CAN AND CONNECTING CONDUIT. ANY BASE CAN OR CONDUIT DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
 - WORK SHALL INCLUDE THE RELOCATION OF EXISTING SIGN TO NEW FOUNDATION. REMOVAL OF EXISTING FOUNDATION SHALL BE CONSIDERED INCIDENTAL TO THE ASSOCIATED PAY ITEM.
 - SIGN TO BE CONNECTED INTO NEW RUNWAY 18/36 CIRCUIT. SEE ELECTRICAL PLAN 1-3 ON SHEETS 14-16 FOR DETAILS.
 - ADJUSTMENT OF EXISTING BASE MOUNTED RUNWAY EDGE LIGHT SHALL INCLUDE REMOVAL AND REINSTALLATION OF EXISTING LIGHT FIXTURE ON NEW CONCRETE ENCASED BASE CAN WITH THE APPROPRIATE NUMBER OF CONDUIT STUBS.



WH014

WHITESIDE
COUNTY AIRPORT
STERLING/ROCKFALLS, IL

WHITESIDE COUNTY
AIRPORT BOARD

SBG Proj: 3-17-SBGP-XXX
IL Proj: SQI-4766

APPROVED AS WORKING PLAN
BY:

REV	DATE	DESCRIPTION

PROJECT NAME:
**REHABILITATE
RUNWAY 18/36
LIGHTING CIRCUIT**

SHEET TITLE:
ELECTRICAL PLAN 2

DESIGNED: CMT-MLI DRAWN: CMT-MLI CHECKED: CMT-MLI

PROJECT NO.: 18029203.00
DATE: FEBRUARY 28, 2020

SHEET NO. **15** REVISION

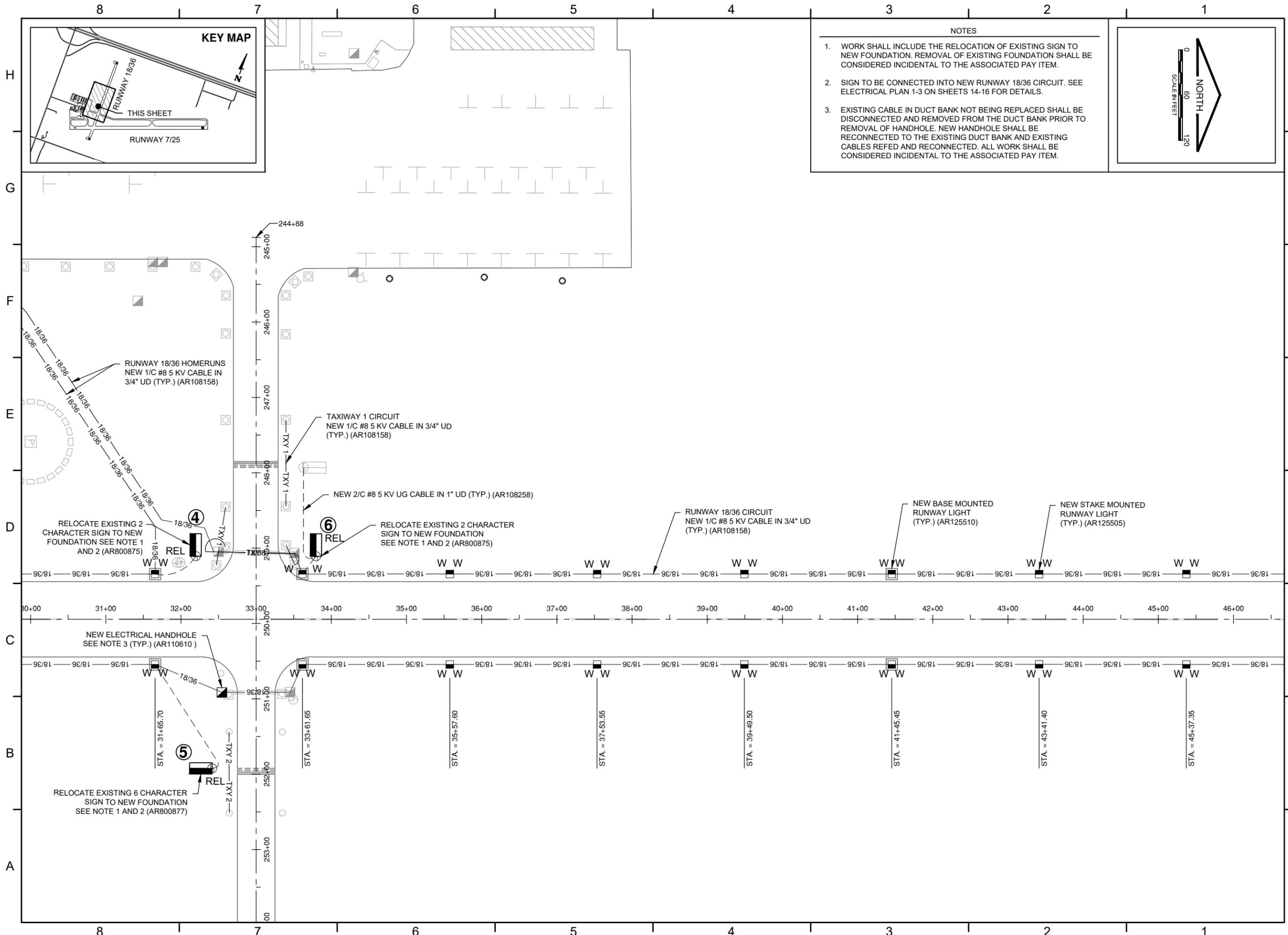
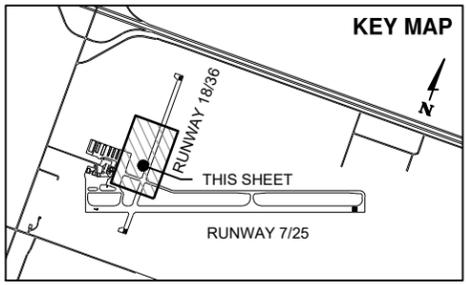
SHEET 15 OF 25 SHEETS

NOTES

1. WORK SHALL INCLUDE THE RELOCATION OF EXISTING SIGN TO NEW FOUNDATION. REMOVAL OF EXISTING FOUNDATION SHALL BE CONSIDERED INCIDENTAL TO THE ASSOCIATED PAY ITEM.
2. SIGN TO BE CONNECTED INTO NEW RUNWAY 18/36 CIRCUIT. SEE ELECTRICAL PLAN 1-3 ON SHEETS 14-16 FOR DETAILS.
3. EXISTING CABLE IN DUCT BANK NOT BEING REPLACED SHALL BE DISCONNECTED AND REMOVED FROM THE DUCT BANK PRIOR TO REMOVAL OF HANDHOLE. NEW HANDHOLE SHALL BE RECONNECTED TO THE EXISTING DUCT BANK AND EXISTING CABLES REFEED AND RECONNECTED. ALL WORK SHALL BE CONSIDERED INCIDENTAL TO THE ASSOCIATED PAY ITEM.



KEY MAP



WH014

WHITESIDE
COUNTY AIRPORT
STERLING/ROCKFALLS, IL

WHITESIDE COUNTY
AIRPORT BOARD

SBG Proj: 3-17-SBGP-XXX
IL Proj: SQI-4766

APPROVED AS WORKING PLAN
BY:

REV	DATE	DESCRIPTION

PROJECT NAME:
**REHABILITATE
RUNWAY 18/36
LIGHTING CIRCUIT**

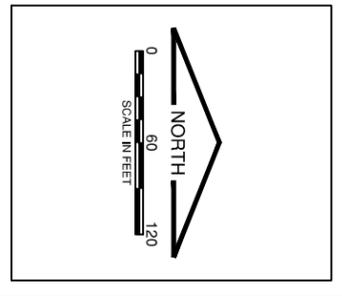
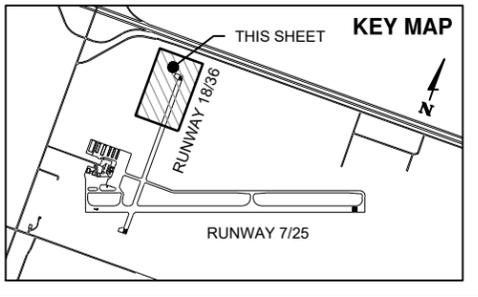
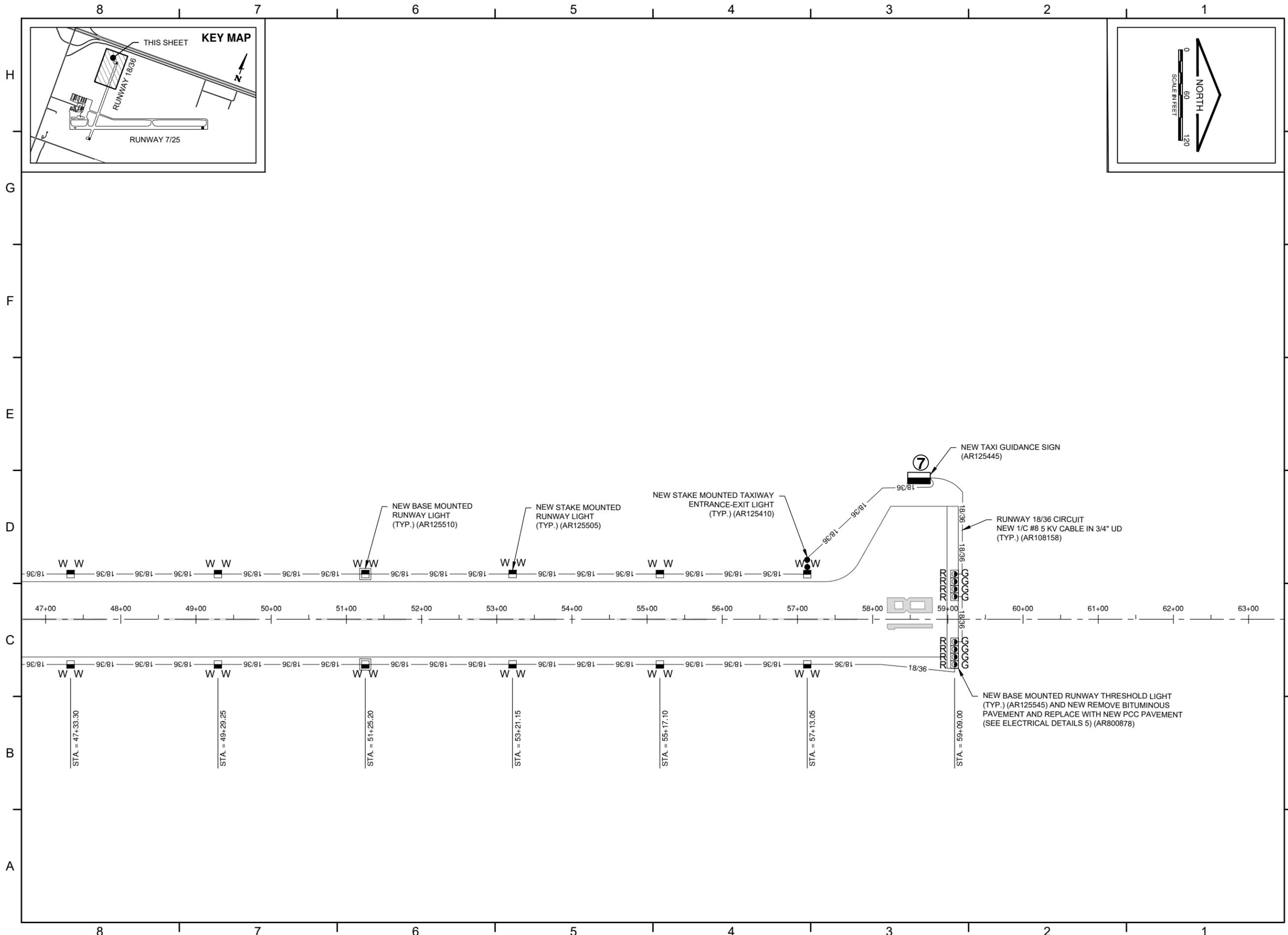
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ELECTRICAL PLAN 3

DESIGNED: CMT-MLI DRAWN: CMT-MLI CHECKED: CMT-MLI

PROJECT NO.: 18029203.00
DATE: FEBRUARY 28, 2020

SHEET NO. **16** REVISION

SHEET 16 OF 25 SHEETS



WH014

WHITESIDE
COUNTY AIRPORT
STERLING/ROCKFALLS, IL

WHITESIDE COUNTY
AIRPORT BOARD

SBG Proj: 3-17-SBGP-XXX
IL Proj: SQI-4766

APPROVED AS WORKING PLAN
BY:

REV DATE DESCRIPTION

PROJECT NAME:

**REHABILITATE
RUNWAY 18/36
LIGHTING CIRCUIT**

SHEET TITLE:

ELECTRICAL PLAN 5

DESIGNED: CMT-MLI DRAWN: CMT-MLI CHECKED: CMT-MLI

PROJECT NO.: 18029203.00
DATE: FEBRUARY 28, 2020

SHEET NO. **18** REVISION

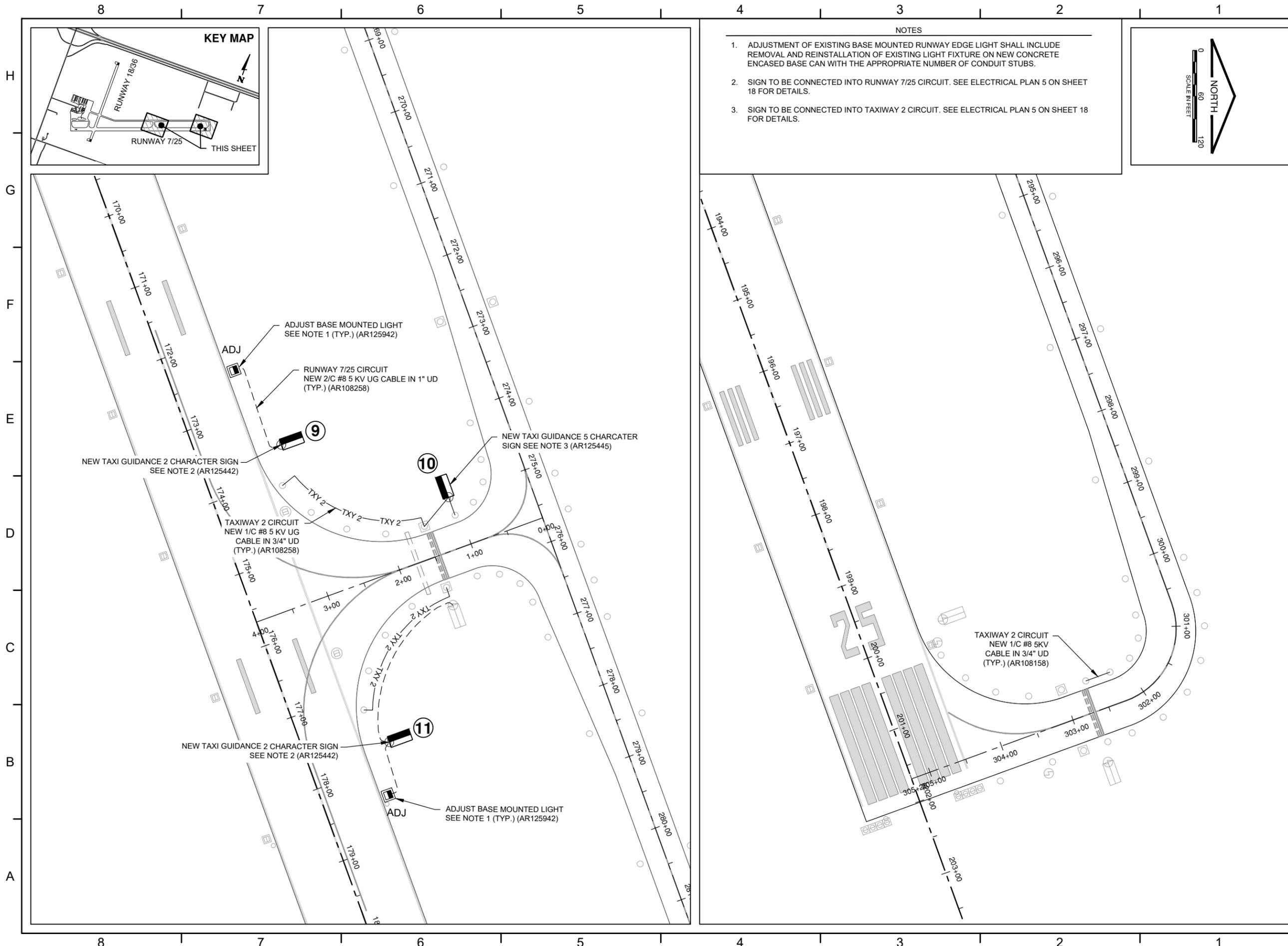
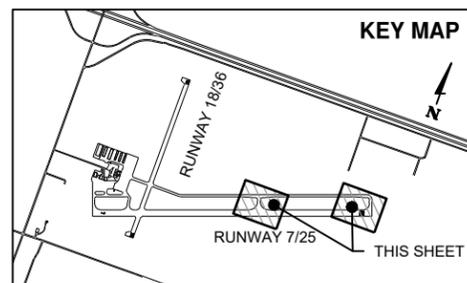
SHEET 18 OF 25 SHEETS

NOTES

1. ADJUSTMENT OF EXISTING BASE MOUNTED RUNWAY EDGE LIGHT SHALL INCLUDE REMOVAL AND REINSTALLATION OF EXISTING LIGHT FIXTURE ON NEW CONCRETE ENCASED BASE CAN WITH THE APPROPRIATE NUMBER OF CONDUIT STUBS.
2. SIGN TO BE CONNECTED INTO RUNWAY 7/25 CIRCUIT. SEE ELECTRICAL PLAN 5 ON SHEET 18 FOR DETAILS.
3. SIGN TO BE CONNECTED INTO TAXIWAY 2 CIRCUIT. SEE ELECTRICAL PLAN 5 ON SHEET 18 FOR DETAILS.



KEY MAP



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COUNTY AIRPORT
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WHITESIDE COUNTY
AIRPORT BOARD

SBG Proj: 3-17-SBGP-XXX
IL Proj: SQI-4766

APPROVED AS WORKING PLAN
BY:

REV	DATE	DESCRIPTION

PROJECT NAME:

**REHABILITATE
RUNWAY 18/36
LIGHTING CIRCUIT**

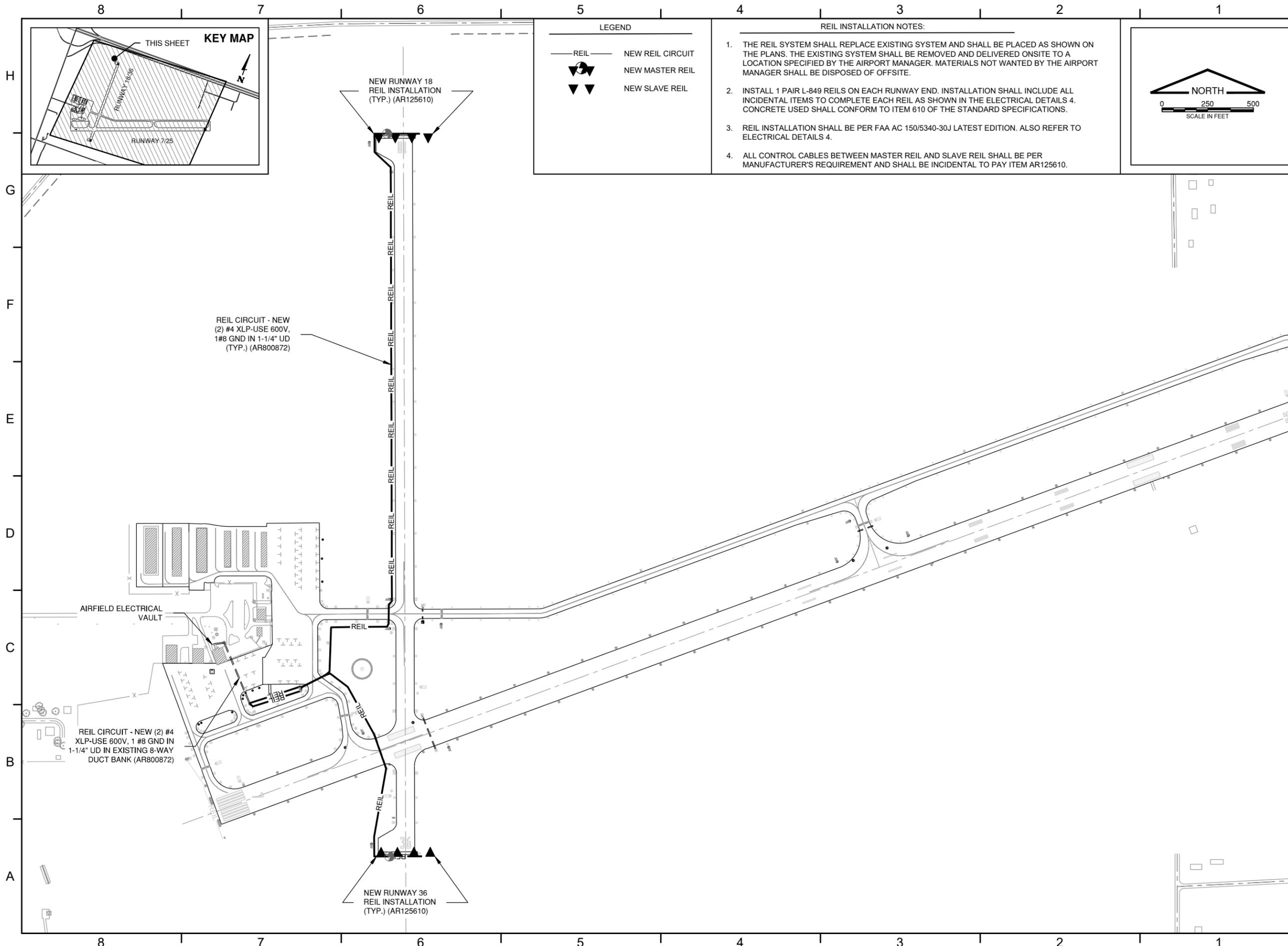
SHEET TITLE:

REIL PLAN

DESIGNED: CMT-MLI DRAWN: CMT-MLI CHECKED: CMT-MLI

PROJECT NO.: 18029203.00
DATE: FEBRUARY 28, 2020

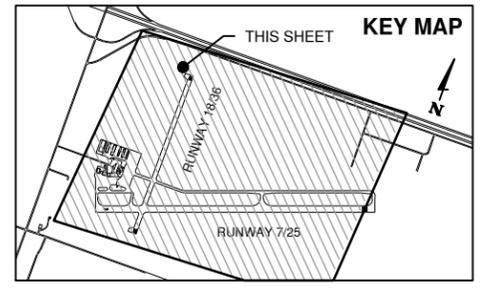
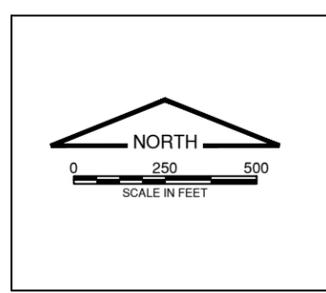
SHEET NO.	19	REVISION
SHEET 19 OF 25 SHEETS		



LEGEND

- REIL — NEW REIL CIRCUIT
- ▲ NEW MASTER REIL
- ▼ NEW SLAVE REIL

- REIL INSTALLATION NOTES:**
1. THE REIL SYSTEM SHALL REPLACE EXISTING SYSTEM AND SHALL BE PLACED AS SHOWN ON THE PLANS. THE EXISTING SYSTEM SHALL BE REMOVED AND DELIVERED ONSITE TO A LOCATION SPECIFIED BY THE AIRPORT MANAGER. MATERIALS NOT WANTED BY THE AIRPORT MANAGER SHALL BE DISPOSED OFFSITE.
 2. INSTALL 1 PAIR L-849 REILS ON EACH RUNWAY END. INSTALLATION SHALL INCLUDE ALL INCIDENTAL ITEMS TO COMPLETE EACH REIL AS SHOWN IN THE ELECTRICAL DETAILS 4. CONCRETE USED SHALL CONFORM TO ITEM 610 OF THE STANDARD SPECIFICATIONS.
 3. REIL INSTALLATION SHALL BE PER FAA AC 150/5340-30J LATEST EDITION. ALSO REFER TO ELECTRICAL DETAILS 4.
 4. ALL CONTROL CABLES BETWEEN MASTER REIL AND SLAVE REIL SHALL BE PER MANUFACTURER'S REQUIREMENT AND SHALL BE INCIDENTAL TO PAY ITEM AR125610.



REIL CIRCUIT - NEW
(2) #4 XLP-USE 600V,
1#8 GND IN 1-1/4" UD
(TYP.) (AR800872)

AIRFIELD ELECTRICAL
VAULT

REIL CIRCUIT - NEW (2) #4
XLP-USE 600V, 1 #8 GND IN
1-1/4" UD IN EXISTING 8-WAY
DUCT BANK (AR800872)

NEW RUNWAY 18
REIL INSTALLATION
(TYP.) (AR125610)

NEW RUNWAY 36
REIL INSTALLATION
(TYP.) (AR125610)

APPROVED AS WORKING PLAN BY:

REV	DATE	DESCRIPTION

PROJECT NAME:

REHABILITATE RUNWAY 18/36 LIGHTING CIRCUIT

SHEET TITLE:

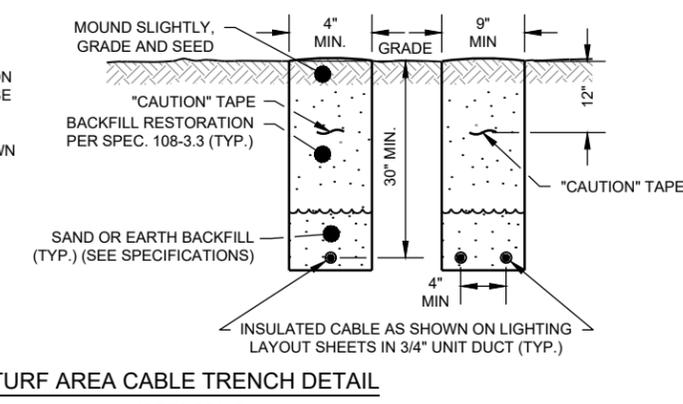
ELECTRICAL DETAILS 1

DESIGNED: CMT-MLI DRAWN: CMT-MLI CHECKED: CMT-MLI

PROJECT NO.: 18029203.00
DATE: FEBRUARY 28, 2020

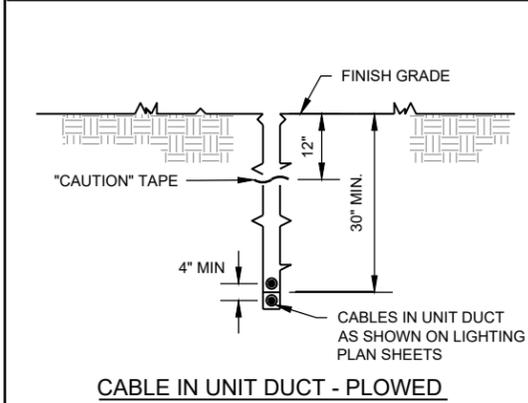
SHEET NO. 20 REVISION

SHEET 20 OF 25 SHEETS

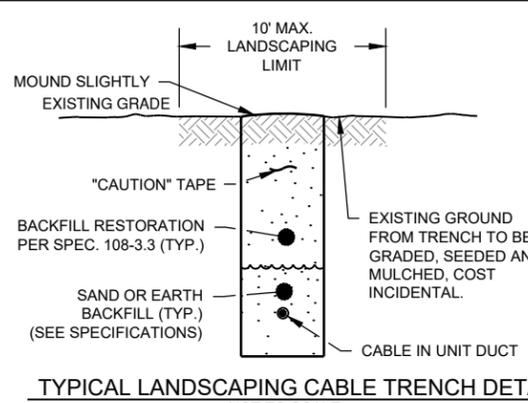


TURF AREA CABLE TRENCH DETAIL
NOT TO SCALE

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

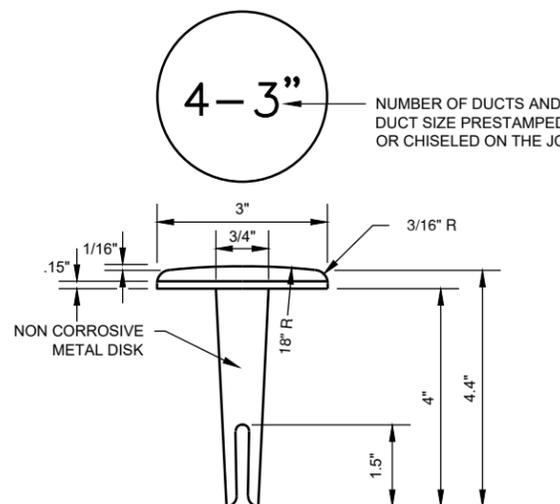


CABLE IN UNIT DUCT - PLOWED
NOT TO SCALE

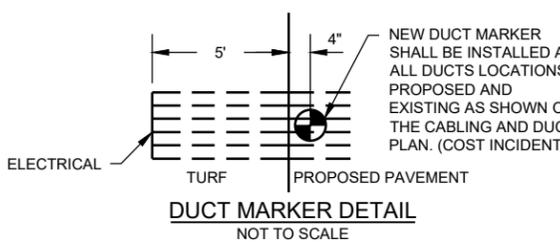


TYPICAL LANDSCAPING CABLE TRENCH DETAIL
NOT TO SCALE

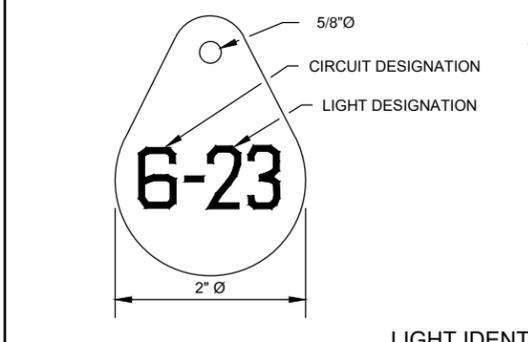
- NOTES:**
- CONTRACTOR SHALL HAVE THE OPTION TO TRENCH OR PLOW UNIT DUCT. NO ADDITIONAL PAYMENT SHALL BE MADE FOR TRENCHING.



DUCT MARKER DETAIL
NOT TO SCALE



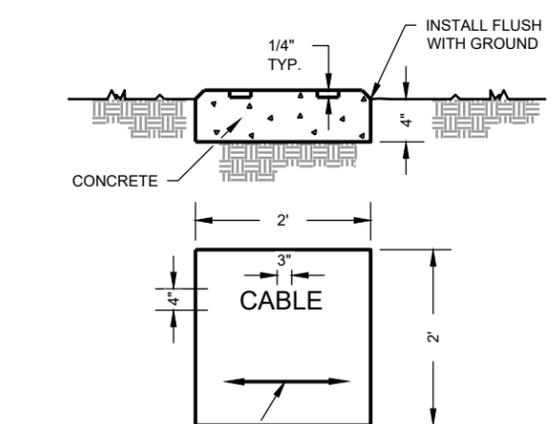
DUCT MARKER DETAIL
NOT TO SCALE



LIGHT IDENTIFICATION DETAIL
NOT TO SCALE

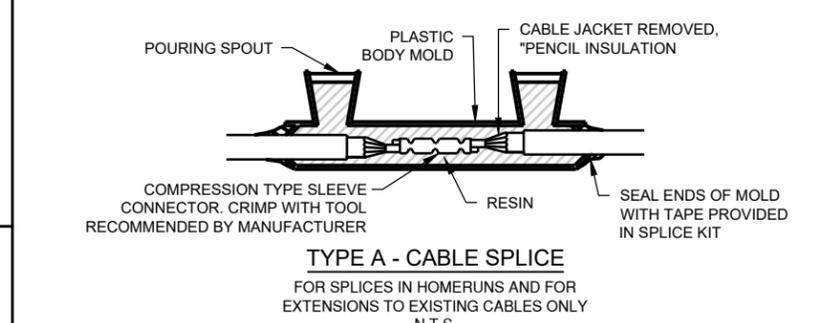
GENERAL NOTES:

- THE CONCRETE BASE FOR BASE MTD. LIGHTS AND SIGNS SHALL BE TROWEL FINISHED WITH A 45° BEVELED EDGE. SLOPE TO DRAIN (ITEM 610).
- TRANSFORMER HOLDER SHALL BE ANY COMMERCIALY AVAILABLE BRICK.
- BREAKING GROOVE COUPLINGS SHALL NOT BE OVER 1" ABOVE GROUND LINE.
- ISOLATION TRANSFORMERS COME WITH A FACTORY INSTALLED PLUG (TYPE 1, CLASS A, STYLE 2) AND RECEPTACLE (TYPE 1, CLASS A, STYLE 9). A TYPE 1, CLASS B, STYLE 3 PLUG AND TYPE 1, CLASS B, STYLE 10 RECEPTACLE SHALL BE INSTALLED ON THE 1/C, No. 8, 5000 V., L-824 TYPE C CABLES FOR CONNECTION TO EACH TRANSFORMER.
- TO FURTHER REDUCE THE POSSIBILITY OF WATER/MOISTURE ENTRANCE INTO THE CONNECTOR BETWEEN THE CABLE AND THE FIELD ATTACHED CONNECTOR, IT IS REQUIRED THAT A HEAT SHRINKABLE TUBING WITH INTERNAL ADHESIVE BE APPLIED OVER THE ENTIRE CABLE CONNECTOR.
- ALL SIGNS, LIGHTS, CABLES AND TRANSFORMERS TO BE REMOVED SHALL REMAIN THE PROPERTY OF THE AIRPORT. AT THE DISCRETION OF THE AIRPORT DIRECTOR, THE CONTRACTOR MAY BE REQUIRED TO DISPOSE OF THESE MATERIALS OFFSITE.
- ALL RUNWAY/TAXIWAY EDGE LIGHTS SHALL HAVE 1.5" DIA. COLUMN AND FRANGIBLE COUPLINGS, UNLESS NOTED OTHERWISE.
- INSTALL SAFETY GROUND TO EXISTING SIGNS AND L-867 CANS. ATTACH GROUND LUG TO EXISTING CAN AND INSTALL GROUND ROD AS SHOWN ON PLANS.
- DUCT MARKER SHALL BE INSTALLED AT EVERY NEW DUCT AND AT EVERY EXISTING DUCT USED FOR THIS PROJECT.
- LAMP FOR FIXTURES SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS. ISOLATION TRANSFORMERS SHALL BE SIZED PER THE FIXTURE MANUFACTURER, 6.6 AMP.



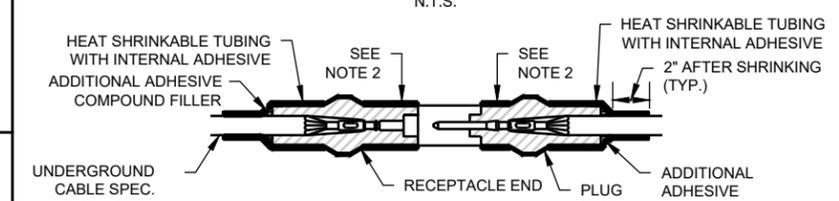
TURF CABLE MARKER DETAIL
NOT TO SCALE

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



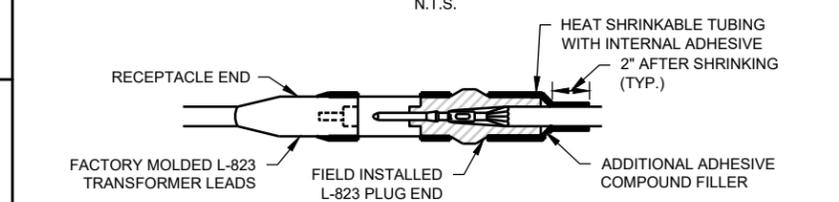
TYPE A - CABLE SPLICE

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



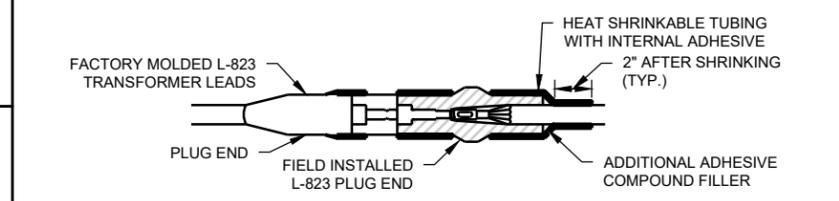
TYPE B - CABLE SPLICE

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

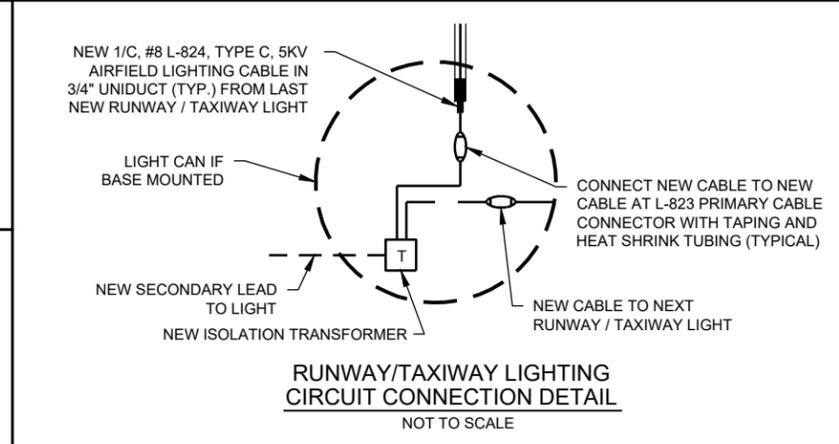


TYPE C AND D - CABLE SPLICE

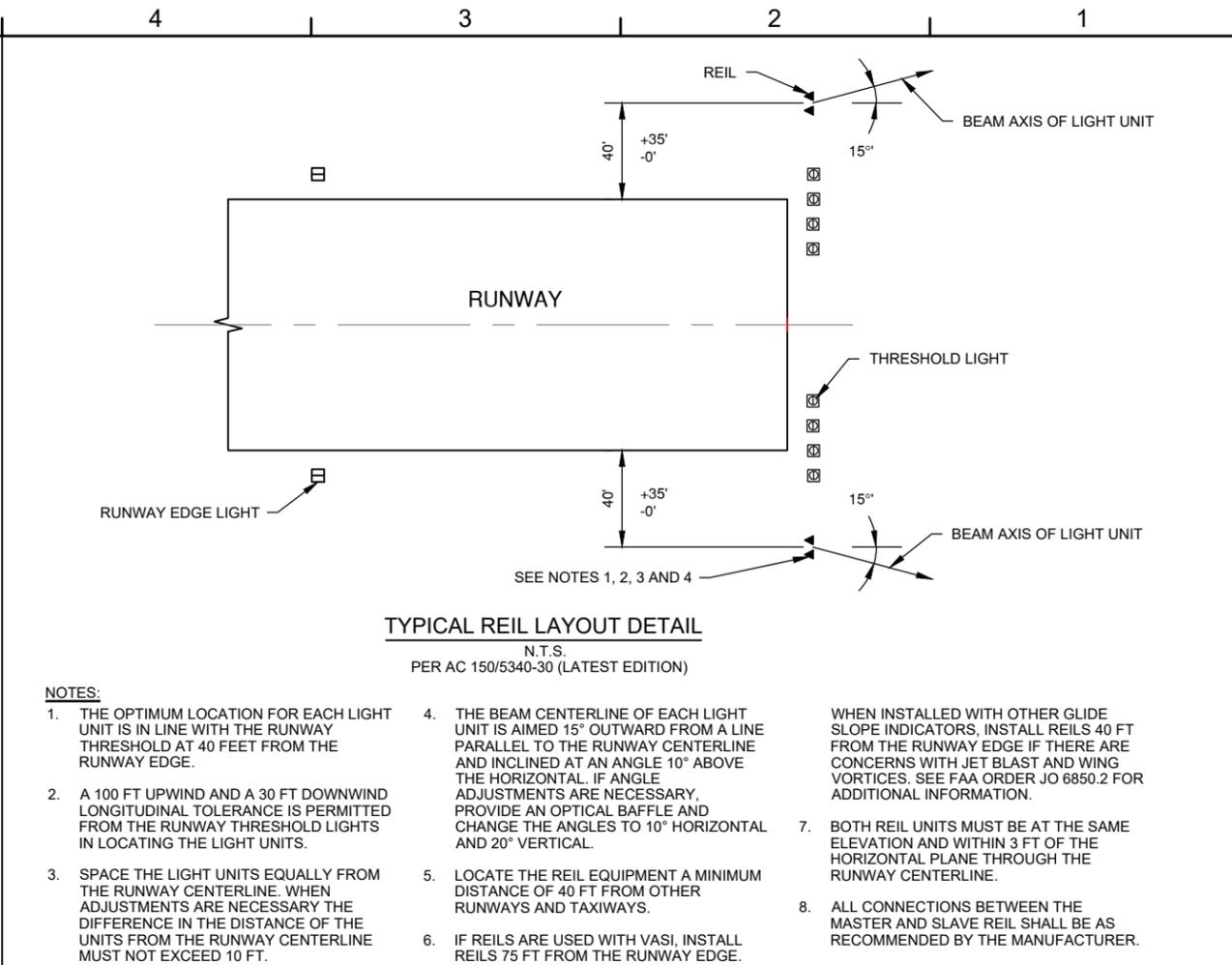
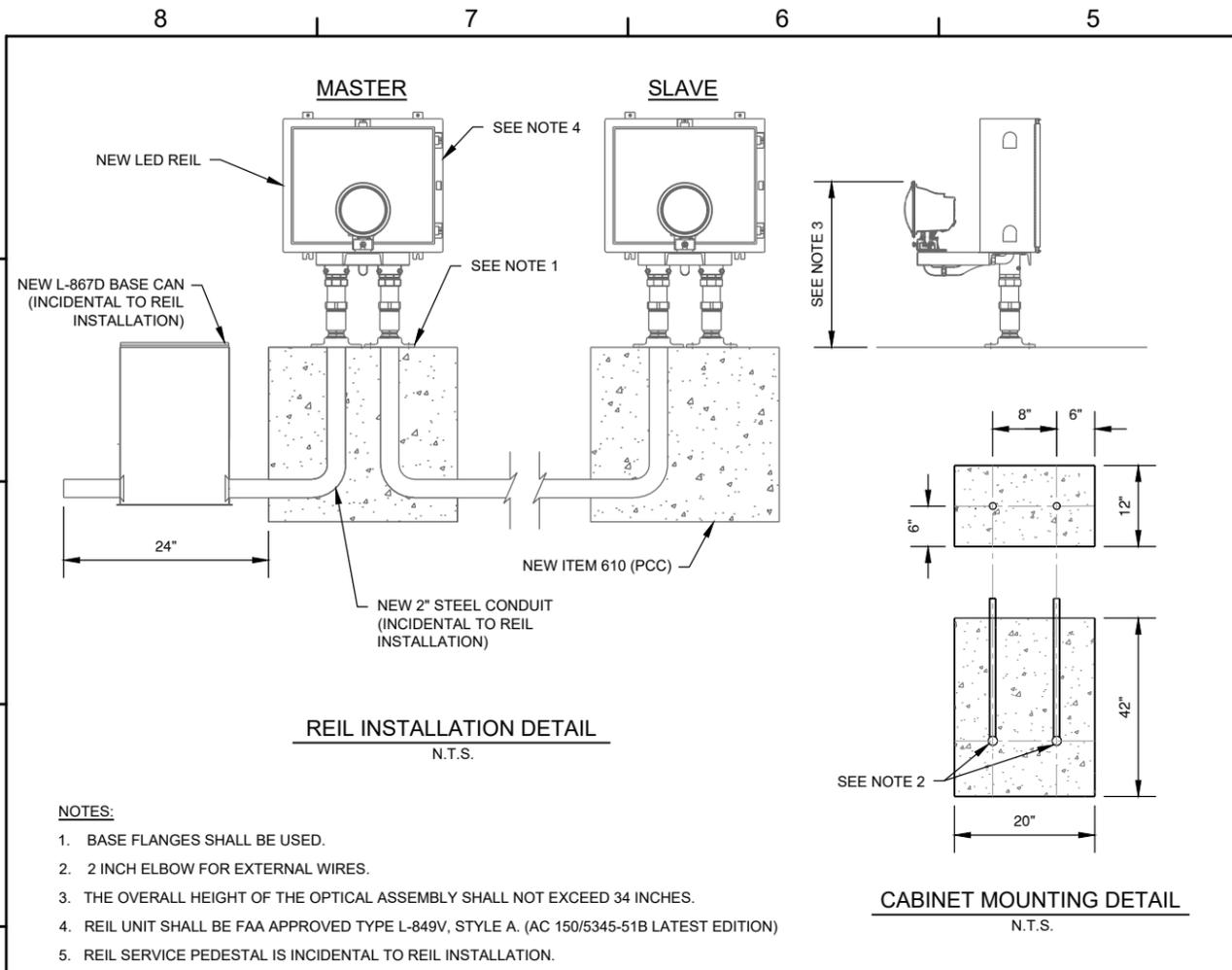
FOR SPLICES AT RUNWAY/TAXIWAY LIGHTS AND SIGNS
N.T.S.



- CABLE SPLICE NOTES:**
- INSIDE DIAMETER OF CONNECTOR SHALL PROPERLY MATCH THE OUTSIDE DIAMETER OF CABLE.
 - WRAP WITH AT LEAST ONE LAYER OF RUBBER OR SYNTHETIC RUBBER TAPE AND ONE LAYER OF PLASTIC TAPE, ONE-HALF LAPPED, EXTENDING AT LEAST 1-1/2 INCHES ON EACH SIDE OF JOINT.
 - THE COST OF FURNISHING AND INSTALLING ALL SPLICE MATERIALS SHALL BE INCIDENTAL TO THE ASSOCIATED CABLE ITEMS.
 - THE CONTRACTOR SHALL HAVE A MINIMUM OF TWO (2) TYPE A SPLICE KITS ON THE JOB SITE AT ALL TIMES FOR EMERGENCY REPAIRS.
 - THE CONTRACTOR MAY ELECT TO USE AN FAA APPROVED PRIMARY CONNECTOR KIT IN LIEU OF HEAT SHRINK KIT AT NO ADDITIONAL COST.

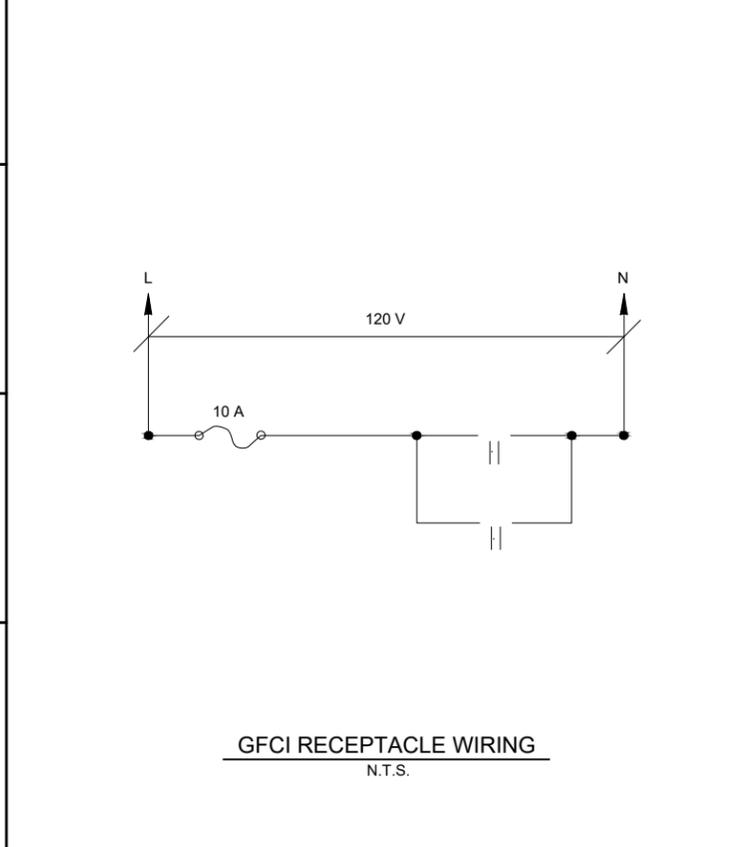


RUNWAY/TAXIWAY LIGHTING CIRCUIT CONNECTION DETAIL
NOT TO SCALE

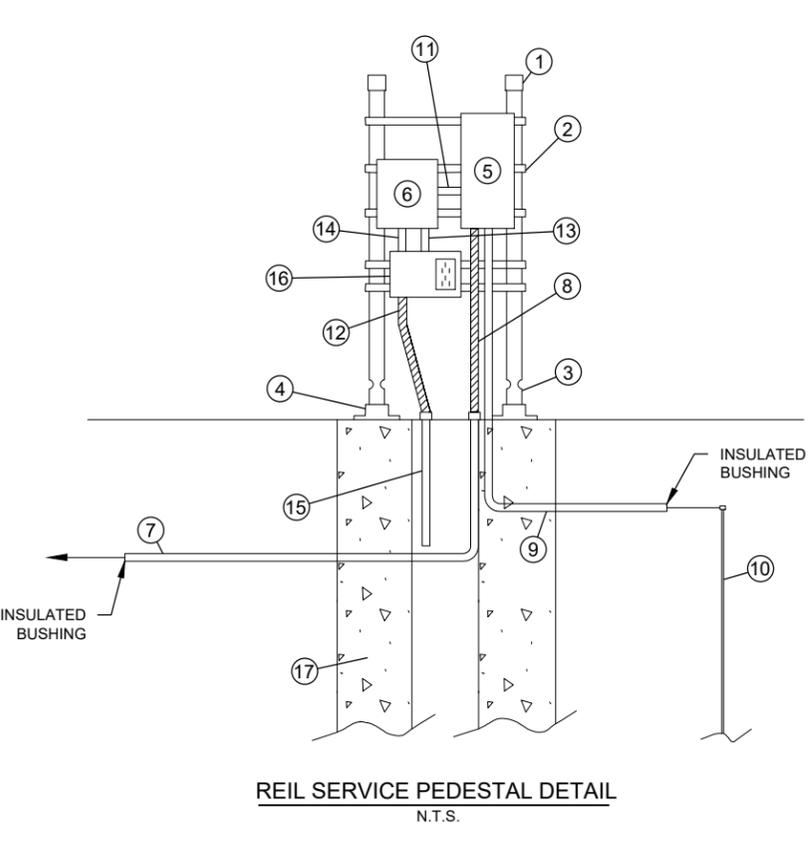


TYPICAL REIL LAYOUT DETAIL
N.T.S.
PER AC 150/5340-30 (LATEST EDITION)

- NOTES:**
1. THE OPTIMUM LOCATION FOR EACH LIGHT UNIT IS IN LINE WITH THE RUNWAY THRESHOLD AT 40 FEET FROM THE RUNWAY EDGE.
 2. A 100 FT UPWIND AND A 30 FT DOWNWIND LONGITUDINAL TOLERANCE IS PERMITTED FROM THE RUNWAY THRESHOLD LIGHTS IN LOCATING THE LIGHT UNITS.
 3. SPACE THE LIGHT UNITS EQUALLY FROM THE RUNWAY CENTERLINE. WHEN ADJUSTMENTS ARE NECESSARY THE DIFFERENCE IN THE DISTANCE OF THE UNITS FROM THE RUNWAY CENTERLINE MUST NOT EXCEED 10 FT.
 4. THE BEAM CENTERLINE OF EACH LIGHT UNIT IS AIMED 15° OUTWARD FROM A LINE PARALLEL TO THE RUNWAY CENTERLINE AND INCLINED AT AN ANGLE 10° ABOVE THE HORIZONTAL. IF ANGLE ADJUSTMENTS ARE NECESSARY, PROVIDE AN OPTICAL BAFFLE AND CHANGE THE ANGLES TO 10° HORIZONTAL AND 20° VERTICAL.
 5. LOCATE THE REIL EQUIPMENT A MINIMUM DISTANCE OF 40 FT FROM OTHER RUNWAYS AND TAXIWAYS.
 6. IF REILS ARE USED WITH VASI, INSTALL REILS 75 FT FROM THE RUNWAY EDGE.
 7. BOTH REIL UNITS MUST BE AT THE SAME ELEVATION AND WITHIN 3 FT OF THE HORIZONTAL PLANE THROUGH THE RUNWAY CENTERLINE.
 8. ALL CONNECTIONS BETWEEN THE MASTER AND SLAVE REIL SHALL BE AS RECOMMENDED BY THE MANUFACTURER.



GFCI RECEPTACLE WIRING
N.T.S.



REIL SERVICE PEDESTAL DETAIL
N.T.S.

LEGEND FOR REIL POWER DETAIL

- 1 2" GALVANIZED STEEL SUPPORT POST (TYP. OF 2)
- 2 STRUT-TYPE SUPPORT, UNISTRUT 2000, OR EQUIVALENT.
- 3 FRANGIBLE COUPLINGS (TYP. OF 2)
- 4 FLOOR FLANGE (TYP. OF 2).
- 5 HEAVY-DUTY 30A, 600V UNFUSED DISCONNECT IN NEMA 3R ENCLOSURE. PROVIDE GROUND LUGS. PROVIDE LABEL READING: "CAUTION: 480 VOLTS."
- 6 REIL STEP-DOWN TRANSFORMER, 5KVA, 480-120/240, 1-PHASE, 3-WIRE, IN WEATHERPROOF ENCLOSURE SQUARE D MODEL 5SIF, OR EQUIVALENT.
- 7 REIL 18: TWO #4 USE (480V), ONE #8 GROUND IN 1-1/4" UNIT DUCT, INSTALL IN 2" GRS CONDUIT. REIL 36: TWO #4 USE (480V), ONE #8 GROUND IN 1-1/4" UNIT DUCT, INSTALL IN 2" GRS CONDUIT.
- 8 1-1/2" OR 2" LIQUIDTIGHT FLEXIBLE CONDUIT.
- 9 #2 GROUND WIRE IN 1/2" PVC CONDUIT TO GROUND ROD.
- 10 3/4" DIAMETER X 10' LONG COPPERCLAD GROUND ROD. MIN BURIAL: 1'-0." BOND GROUND WIRES TO GROUND ROD USING EXOTHERMIC WELD, CADWELD., OR EQUIVALENT. CLAMPED CONNECTIONS SHALL NOT BE ACCEPTABLE.
- 11 TWO #12 (480V POWER), ONE #10 GROUND IN 3/4" GRS CONDUIT.
- 12 THREE #12 (120V/240V POWER) ONE #10 GROUND IN 3/4" LIQUIDTIGHT FLEXIBLE CONDUIT.
- 13 TWO #12 (120V POWER), ONE #10 GROUND IN 3/4" GRS CONDUIT.
- 14 THREE #12 (120V POWER), ONE #10 GROUND IN 3/4" GRS CONDUIT.
- 15 THREE #12 (120V POWER), ONE #10 GROUND IN 3/4" GRS CONDUIT TO REIL MASTER UNIT.
- 16 NEMA 4 HINGED COVER JUNCTION BOX SIZED AS REQUIRED TO HOUSE WEATHERPROOF GFCI CONVENIENCE OUTLET. IN-LINE 10A FUSE FOR RECEPTABLE AND 15A, 2P CIRCUIT BREAKER FOR REIL. PROVIDE LABEL READING: "CIRCUIT BREAKERS INSIDE."
- 17 CONCRETE FOUNDATION, 12" DIA., MIN. 4'-0" DEEP (TYP. OF 2)

APPROVED AS WORKING PLAN
BY:

REV	DATE	DESCRIPTION

PROJECT NAME:

REHABILITATE
RUNWAY 18/36
LIGHTING CIRCUIT

SHEET TITLE:

ELECTRICAL DETAILS 4

DESIGNED: CMT-MLI DRAWN: CMT-MLI CHECKED: CMT-MLI

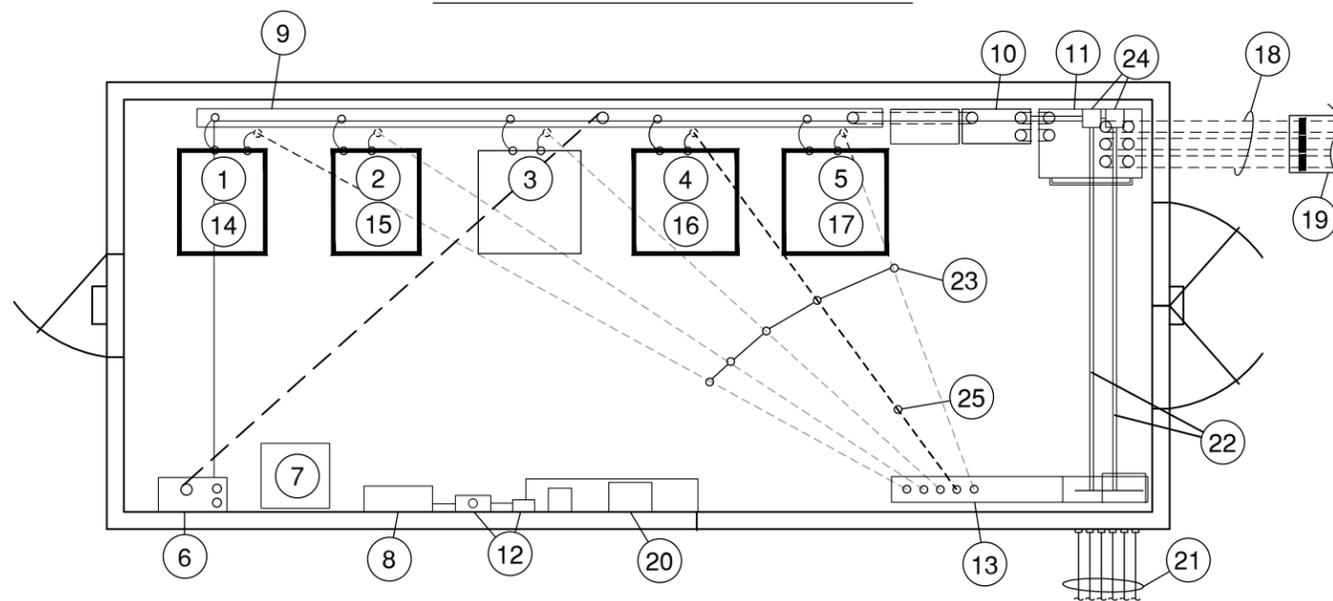
PROJECT NO.: 18029203.00
DATE: FEBRUARY 28, 2020

SHEET NO. **23** REVISION

SHEET 23 OF 25 SHEETS

REV	DATE	DESCRIPTION

ELECTRICAL VAULT PLAN VIEW



EXISTING VAULT NOMENCLATURE

- | | |
|--|--|
| ① EXISTING 10 KW REGULATOR (SPARE), TO BE REMOVED. | ⑭ RELOCATED 10KW, 3 STEP, 480V REGULATOR FROM EXISTING TAXIWAY #1 REGULATOR TO BE USED AS SPARE. (SEE NOTE 1) |
| ② EXISTING 10KW REGULATOR FOR TAXIWAY #1, TO BE RELOCATED. | ⑮ RELOCATED 15KW, 3-STEP, 480V REGULATOR FROM EXISTING RUNWAY 18/36 REGULATOR. (SEE NOTE 2) |
| ③ EXISTING 15KW REGULATOR FOR TAXIWAY #2. | ⑯ NEW 15KW, 3-STEP, 480V REGULATOR FOR RUNWAY 18/36 CIRCUIT. (SEE NOTE 3) |
| ④ EXISTING 15KW REGULATOR FOR RUNWAY 18/36, TO BE RELOCATED. | ⑰ NEW 20KW, 5-STEP, 480V REGULATOR FOR RUNWAY 7/25 CIRCUIT. (SEE NOTE 4) |
| ⑤ EXISTING 20KW REGULATOR FOR RUNWAY 7/25, TO BE REMOVED | ⑱ EXISTING 6-4" GRS CONDUITS TO LOW VOLTAGE MANHOLE. (SEE NOTE 5) |
| ⑥ EXISTING HIGH VOLTAGE POWER DISTRIBUTION PANEL. 480V, 3-PHASE WITH 400A MAIN C.B. INSTALL NEW (2) 20A, 2-POLE C.B. | ⑲ EXISTING 6-WAY CONCRETE ENCASED DUCT BANK TO LOW VOLTAGE MANHOLE. |
| ⑦ EXISTING 50KVA, 480V-120/240V, 1-PHASE LIGHTING TRANSFORMER. | ⑳ EXISTING APRON LIGHTING CONTROL CABINET. |
| ⑧ EXISTING LOW VOLTAGE LIGHTING PANEL, 120/240V, 1-PHASE WITH 225A MAIN C.B.. | ㉑ EXIST 8-2" CONDUITS TO HIGH VOLTAGE MANHOLE. |
| ⑨ EXISTING 8" X 8" LOW VOLTAGE WIREWAY. | ㉒ EXISTING (2) #4 AWG 5KV, (1) #8 AWG 5KV IN 3/4" UD REIL CABLES IN GRS |
| ⑩ EXISTING RELAY PANEL FOR L-821 PANEL CONTROLS. | ㉓ EXIST 2-1/C #8 5KV, L-824 TYPE C IN EXISTING CONDUITS. |
| ⑪ EXISTING LOW VOLTAGE CABLE PULL BOX. | ㉔ EXISTING (2) 20A, 480V, 2-POLE CONTACTORS IN NEMA 1 ENCLOSURES WITH HAND-OFF-AUTO SELECTOR SWITCHES FOR RUNWAY 18 REIL AND RUNWAY 36 REIL CIRCUITS. (SEE NOTE 5) |
| ⑫ EXISTING LIGHTING CONTACTOR AND DIGITAL TIMER FOR EXISTING ENTRANCE ROAD LIGHTING. | ㉕ NEW (2) 1/C #8 5KV UG CABLE IN 3/4" UD FOR RUNWAY 18/36 HOMERUNS. |
| ⑬ EXISTING 8" X 8" HIGH VOLTAGE WIREWAY. | |

NOTES:

- REMOVE EXISTING PRIMARY FEED AND INSTALL NEW (2) #10 THWN, (1) #12 GND. IN EXISTING CONDUIT TO 480V POWER DISTRIBUTION PANEL. REPLACE EXISTING CIRCUIT BREAKER WITH NEW 30A, 2-POLE C.B. RE-CONNECT CONTROL AND AIRFIELD LIGHTING CABLES.
- REMOVE EXISTING PRIMARY FEED AND INSTALL NEW (2) #8 THWN, (1) #10 GND. IN EXISTING CONDUIT TO 480V POWER DISTRIBUTION PANEL. REPLACE EXISTING CIRCUIT BREAKER WITH NEW 40A, 2-POLE C.B. RE-CONNECT EXISTING CONTROL WIRES AND AIRFIELD LIGHTING CABLES.
- REMOVE EXISTING PRIMARY FEED AND INSTALL NEW (2) #8 THWN, (1) #10 GND. IN EXISTING CONDUIT TO 480V POWER DISTRIBUTION PANEL. REPLACE EXISTING CIRCUIT BREAKER WITH NEW 40A, 2-POLE C.B. CONNECT NEW CONTROL WIRES AND AIRFIELD LIGHTING CABLES.
- REMOVE EXISTING PRIMARY FEED AND INSTALL NEW (2) #8 THWN, (1) #10 GND. IN EXISTING CONDUIT TO 480V POWER DISTRIBUTION PANEL. REPLACE EXISTING CIRCUIT BREAKER WITH NEW 50A, 2-POLE C.B. RE-CONNECT EXISTING CONTROL WIRES AND AIRFIELD LIGHTING CABLES.
- INSTALL NEW REIL 18 AND REIL 36 CIRCUITS IN EXISTING LOW VOLTAGE DUCT BANK AND CONNECT TO EXISTING LIGHTING CONTACTORS.
- ALL REQUIRED VAULT MODIFICATIONS SHALL BE INCIDENTAL TO THE ASSOCIATED PAY ITEM.