

May 30, 2025

Re: Parallel Taxiway Construction
Sturgis Municipal Airport
Sturgis, South Dakota
A.I.P. #3-46-0054-024-2025
A-10027


Bid Opening: **June 11, 2025**
1:30 pm (local time)

ADDENDUM NUMBER 1

The following modifications are made to the plans and specifications for the Parallel Taxiway Construction Project at the Sturgis Municipal Airport.

Electrical Plans are attached to this addendum.

ALL OTHER ITEMS OF THE PLANS AND SPECIFICATIONS REMAIN
UNCHANGED

BY:  _____
PROJECT ENGINEER – HELMS & ASSOCIATES

Acknowledge receipt of the Addendum by inserting its number on the Bid Form. Failure to do so may subject bidder to disqualification. This Addendum forms a part of the Contract Documents. It modifies them as above.

X:\4669049\251779_01\TECH\CAD\DRAWINGS\IE-201 ELECTRIC LAYOUT PLAN.DWG
5/23/2025 11:12:22 AM

EXISTING

LEGEND:

	BASE CAN L-867, WITH LID
	BASE CAN L-868, WITH LID
	RWY C/L BASE
	RGL (ELEVATED BASE MOUNTED)
	RGL (INSET)
	LIRL (ELEVATED BASE MOUNTED)
	LIRL (ELEVATED STAKE MOUNTED)
	LIRL (INSET)
	MIRL (ELEVATED BASE MOUNTED)
	MIRL (ELEVATED STAKE MOUNTED)
	MIRL (INSET)
	HIRL (ELEVATED BASE MOUNTED)
	HIRL (ELEVATED STAKE MOUNTED)
	HIRL (INSET)
	MITL (ELEVATED BASE MOUNTED)
	MITL (ELEVATED STAKE MOUNTED)
	MITL (INSET)
	TW C/L BIDIRECTIONAL
	TW C/L UNIDIRECTIONAL
	AVIATION CONE
	MALS (ELEVATED BASE MOUNTED)
	MALS (INSET)
	MALS WITH SEQUENCE FLASHER (ELEVATED)
	MALS WITH SEQUENCE FLASHER (INSET)
	PAPI
	REIL
	RETROREFLECTOR
	SEQUENCE FLASHER
	TDZ
	VASI
	ANTENNA
	CABLE MARKER
	DUCT MARKER
	GROUNDING LUG
	TIEDOWN
	WINDCONE
	DISTANCE REMAINING SIGN
	GUIDANCE SIGN
	CONDUIT LABEL (CABLE QTY)
	AIRFIELD RATED MANHOLE
	NON-AIRCRAFT RATED MANHOLE
	AIRFIELD RATED HANDHOLE
	NON-AIRCRAFT RATED HANDHOLE
	BASE CAN PLAZA
	LIGHT POLE
	FLOOD/AREA LIGHT
	DUCT BANK

PROPOSED

LEGEND:

	BASE CAN L-867, WITH LID
	BASE CAN L-868, WITH LID
	RWY C/L BASE
	RGL (ELEVATED BASE MOUNTED)
	RGL (INSET)
	LIRL (ELEVATED BASE MOUNTED)
	LIRL (ELEVATED STAKE MOUNTED)
	LIRL (INSET)
	MIRL (ELEVATED BASE MOUNTED)
	MIRL (ELEVATED STAKE MOUNTED)
	MIRL (INSET)
	HIRL (ELEVATED BASE MOUNTED)
	HIRL (ELEVATED STAKE MOUNTED)
	HIRL (INSET)
	MITL (ELEVATED BASE MOUNTED)
	MITL (ELEVATED STAKE MOUNTED)
	MITL (INSET)
	TW C/L BIDIRECTIONAL
	TW C/L UNIDIRECTIONAL
	AVIATION CONE
	MALS (ELEVATED BASE MOUNTED)
	MALS (INSET)
	MALS WITH SEQUENCE FLASHER (ELEVATED)
	MALS WITH SEQUENCE FLASHER (INSET)
	PAPI
	REIL
	RETROREFLECTOR
	SEQUENCE FLASHER
	TDZ
	VASI
	ANTENNA
	CABLE MARKER
	DUCT MARKER
	GROUNDING LUG
	TIEDOWN
	WINDCONE
	DISTANCE REMAINING SIGN
	GUIDANCE SIGN
	CONDUIT LABEL (CABLE QTY & CIRCUIT NAME)
	AIRFIELD RATED MANHOLE
	NON-AIRCRAFT RATED MANHOLE
	AIRFIELD RATED HANDHOLE
	NON-AIRCRAFT RATED HANDHOLE
	BASE CAN PLAZA
	LIGHT POLE
	FLOOD/AREA LIGHT
	DUCT BANK
	GROUND ROD

LINES

LEGEND:

	ACL
	AIRCRAFT PARKING LIMIT
	AIRPORT OPERATION AREA
	BUILDING RESTRICTION LINE
	DEPARTURE RUNWAY PROTECTION ZONE
	DEPARTURE SURFACE
	FAA
	GLIDE SLOPE CRITICAL AREA
	GROUND CONTROL APPROACH
	GROUNDING WIRE
	OBJECT FREE AREA
	OBJECT FREE ZONE
	RUNWAY OBJECT FREE AREA
	RUNWAY PROTECTION ZONE
	RUNWAY RESTRICTED AREA
	RUNWAY SAFETY AREA
	SECURITY IDENTIFICATION DISPLAY AREA
	TAXIWAY OBJECT FREE AREA
	TAXIWAY SAFETY AREA

CIRCUITS

LINE TYPE
(EXISTING TO REMAIN)

	TWY
	TWY 1
	RWY
	RWY 1

LINE TYPE
(REMOVAL)

	TWY
	TWY 1
	RWY
	RWY 1

NOTE: HASH MARKS INDICATE THE NUMBER OF CONDUCTORS.
NO HASH MARKS INDICATES ONE (1) CONDUCTOR.

SIGNS

SYMBOL

DESCRIPTION

TAXIWAY/RUNWAY HOLD POSITION
RUNWAY/RUNWAY HOLD POSITION
ILS CRITICAL AREA HOLD POSITION
NO ENTRY
TAXIWAY LOCATION
RUNWAY LOCATION
RUNWAY DISTANCE REMAINING
RUNWAY SAFETY AREA ZONE BOUNDARY
ILS CRITICAL AREA BOUNDARY
TAXIWAY DIRECTION

LINE TYPE
(PROPOSED)

	TWY
	TWY 1
	RWY
	RWY 1
	CP

DESCRIPTION

TAXIWAY A
TAXIWAY A - DOUBLE CONDUCTOR
RUNWAY 11-29
RUNWAY 11-29 - DOUBLE CONDUCTOR
COUNTERPOISE

GENERAL ELECTRICAL PROJECT NOTES

- FIELD VERIFY THE EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE COMMENCING WORK. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- ANY EXISTING UTILITIES OR EQUIPMENT SHOWN TO REMAIN IN PLACE SHALL BE PROTECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT. FAILURE TO PROPERLY PROTECT UTILITIES OR EQUIPMENT SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL CONSTRUCTION AFFECTING UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL AIRPORT OWNED UTILITIES. COST FOR LOCATING AIRPORT OWNED UTILITIES SHALL BE INCIDENTAL TO OTHER ITEMS.
- ALL WORK REQUIRED TO COMPLETE CONSTRUCTION COVERED BY THIS PLAN SHALL BE IN ACCORDANCE WITH FAA STANDARD SPECIFICATIONS. CONTRACTORS SHALL FAMILIARIZE THEMSELVES WITH ALL REQUIRED STANDARD SPECIFICATIONS, DETAILS, AND SUPPLEMENTS PRIOR TO BIDDING THE WORK ASSOCIATED WITH THE CONSTRUCTION COVERED BY THIS PLAN.
- CONTRACTOR IS RESPONSIBLE FOR ALL METHODS, SEQUENCING AND SAFETY USED DURING CONSTRUCTION UNLESS SPECIFICALLY ADDRESSED OTHERWISE.
- CONTRACTOR IS TO COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS APPLICABLE TO CONSTRUCTION COVERED BY THIS PLAN.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND COMPLYING WITH ALL PERMITS REQUIRED TO COMPLETE ALL WORK AS SPECIFIED.
- AIRPORT LIGHTING EQUIPMENT AND MATERIALS COVERED BY THE FAA SPECIFICATIONS SHALL BE LISTED IN ADVISORY CIRCULAR (AC) 150/5345-53D, AIRPORT LIGHTING EQUIPMENT CERTIFICATION PROGRAM.
- EQUIPMENT AND MATERIALS SUPPLIED BY THE CONTRACTOR REQUIRING ADDITIONAL WIRING, TRANSFORMERS, BOXES, MOUNTINGS, OR OTHER RELATED COMPONENTS TO THOSE SHOWN ON THE DRAWINGS AND/OR LISTING IN THE SPECIFICATIONS SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND BE NO ADDITIONAL COST TO THE PROJECT OR OWNER.
- CONTRACTOR SHALL ASCERTAIN THAT ALL COMPONENTS FURNISHED (INCLUDING FAA APPROVED EQUIPMENT) ARE COMPATIBLE WITH EACH OTHER ALONG WITH TYING INTO EXISTING SYSTEM.

Mead & Hunt

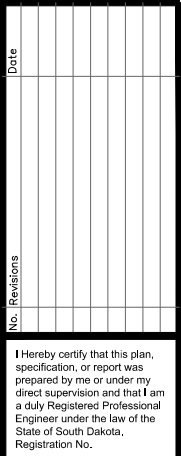
Mead and Hunt, Inc.
600 South 2nd Street,
Suite 120
Bismarck, ND 58504
phone: 701-566-6451
meadhunt.com



ELECTRICAL LEGEND

STURGIS PARALLEL TAXIWAY
CITY OF STURGIS
STURGIS, SOUTH DAKOTA

Drawn By: TJH,BTH
Chk' By: CGH
Proj. No: 4669049-251779
Dwg. No: ELECTRICAL
VP. No:
Date: MAY 16, 2025



ELECTRICAL REMOVAL PLAN

STURGIS PARALLEL TAXIWAY
CITY OF STURGIS
STURGIS, SOUTH DAKOTA

Drawn By:	TJH, BTH
Chk' By:	CGH
Proj. No:	4669049-251779
Dwg. No:	ELECTRICAL
VP. No:	
Date:	MAY 16, 2025

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OF
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1. FIELD VERIFY THE EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE COMMENCING WORK. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE THAT MIGHT OCCUR BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE CONTRACTOR MUST NOTIFY EACH UTILITY OWNER OF THEIR OPERATIONAL PLANS AFFECTING EACH UTILITY. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR DETAILED INFORMATION AND ASSISTANCE IN LOCATING ALL UTILITIES WITH THE RESPECTIVE RESPONSIBLE PARTIES. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE RESPECTIVE UTILITY COMPANY AND ENGINEER.
2. EXISTING INFRASTRUCTURE TO REMAIN SHALL BE PROTECTED BY THE CONTRACTOR. ANY DAMAGE DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR TO ITS ORIGINAL CONDITION AT NO COST TO THE OWNER.
3. EXISTING UTILITIES TO BE RECONNECTED SHALL BE SEALED AND WEATHERPROOFED UNTIL RECONNECTION.
4. VERIFY WITH THE CONSTRUCTION SAFETY PHASING PLAN AND COORDINATE WITH THE RPR ON DISCONNECTING AND REMOVING OF EXISTING TAXIWAY EDGE LIGHTS AND SERIES CIRCUITS TO MAINTAIN OPERATION OF THE AIRFIELD LIGHTING CIRCUIT.
5. REMOVAL OF AN EXISTING RUNWAY LIGHT IS NOT SHOWN ON THE REMOVAL SHEETS. REFER TO PROPOSED LAYOUT SHEET # FOR INFORMATION REGARDING A REMOVAL OF A RUNWAY LIGHT.

1. DISCONNECT AND REMOVE EXISTING TAXIWAY LIGHT AND TRANSFORMER. EXISTING BASE CAN REMAIN IN PLACE.
2. REMOVE AND DISPOSE OF EXISTING NON-LIGHTED SIGN AND CONCRETE FOUNDATION.
3. DISCONNECT AND REMOVE EXISTING TAXIWAY LIGHT AND TRANSFORMER. REMOVE AND DISPOSE OF EXISTING BASE CAN.
4. DISCONNECT AND REMOVE EXISTING SERIES CIRCUIT. CONDUIT TO REMAIN IN PLACE.
5. DISCONNECT AND REMOVE EXISTING SERIES CIRCUIT AND CONDUIT.



VICINITY MAP

A vicinity map showing a road network. A specific area, likely the project site, is highlighted with a thick black border. The map shows a main road with several side roads branching off. The highlighted area is located on one of the side roads.



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ELECTRICAL REMOVAL PLAN

STURGIS PARALLEL TAXIWAY
CITY OF STURGIS
STURGIS SOUTH DAKOTA

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OF
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- ## ELECTRICAL DEMOLITION KEY NOTES

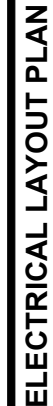
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phone: 701-566-6451
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Email: bobb@helmsengineering.com

STURGIS PARALLEL TAXIWAY
CITY OF STURGIS
STURGIS, SOUTH DAKOTA

Drawn By:	TJH,BTH
Chk' By:	CGH
Proj. No:	4669049-251779
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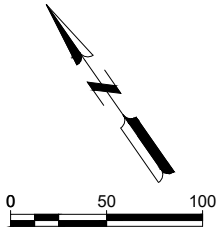
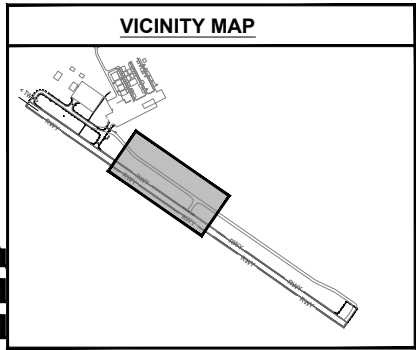
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OF
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- 1 INSTALL NEW L-861T(L) TAXIWAY LIGHT WITH ISOLATION TRANSFORMER ON NEW BASE CAN.
- 2 INSTALL NEW L-861T(L) TAXIWAY LIGHT WITH ISOLATION TRANSFORMER ON EXISTING BASE CAN.
- 3 INSTALL NEW L-858(L) LIGHTED LED GUIDANCE SIGN WITH ISOLATION TRANSFORMER ON NEW FOUNDATION
- 4 INSTALL NEW BASE CAN PLAZA (2 CANS) - SEE DETAILS

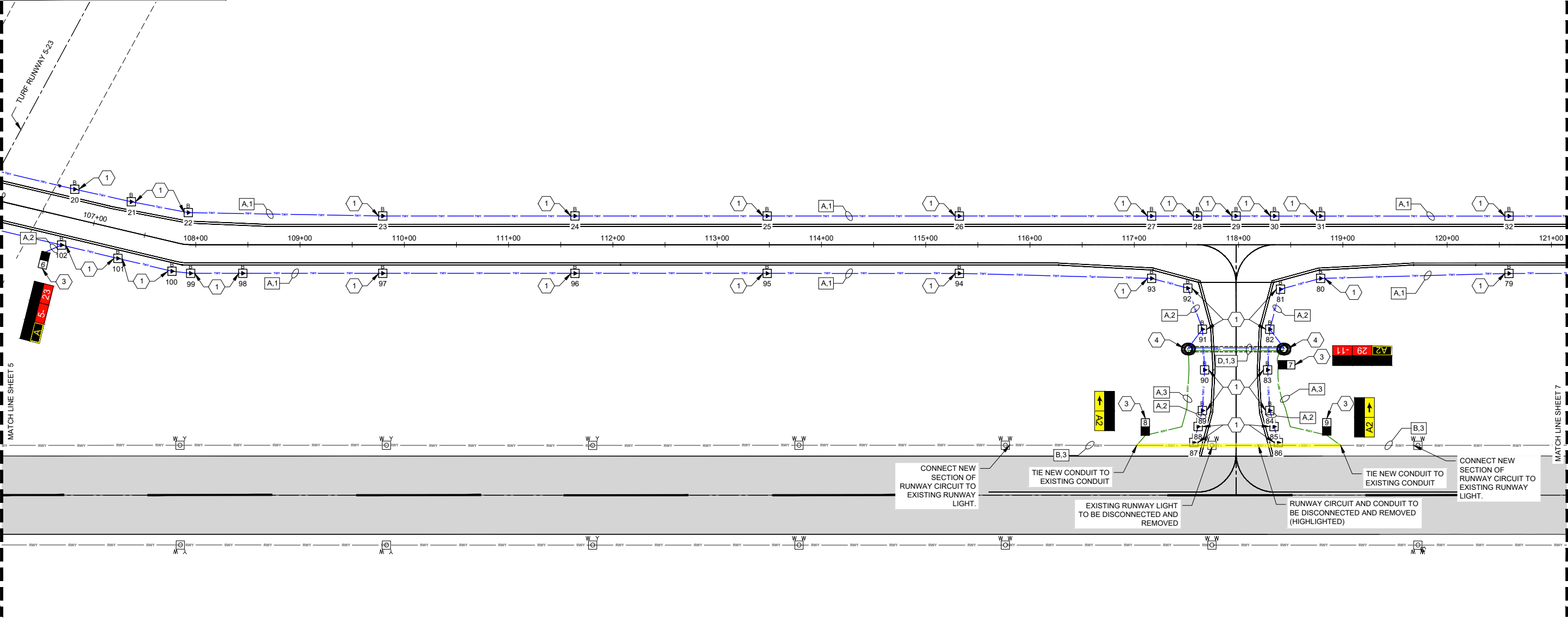
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2. REFER TO SHEETS 10 - 13 FOR COUNTERPOISE INSTALLATION REQUIREMENTS.

CIRCUIT CHART		
LABEL	NUMBER AND TYPE OF CABLE	CIRCUIT
1	1 - 1/C, #8 5KV, L-824, TYPE C	TWY A
2	2 - 1/C, #8 5KV, L-824, TYPE C	TWY A
3	1-1/C, #8 5KV, L-825, TYPE C	RWY 11-29
4	2-1/C, #8 5KV, L-824, TYPE C	RWY 11-29





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ELECTRICAL LAYOUT KEY NOTES

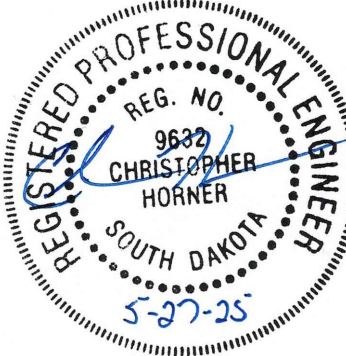
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3. INSTALL NEW L-858(L) LIGHTED LED GUIDANCE SIGN WITH ISOLATION TRANSFORMER ON NEW FOUNDATION
4. INSTALL NEW BASE CAN PLAZA (2 CANS) - SEE DETAILS

NOTES

1. FIELD VERIFY THE EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE COMMENCING WORK. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
2. REFER TO SHEETS 10 - 13 FOR COUNTERPOISE INSTALLATION REQUIREMENTS.

LABEL	NUMBER AND TYPE OF CONDUIT
A	1W-2", SCH. 40, PVC CONDUIT
B	EXISTING CONDUIT / DUCT BANK
C	DIRECT BURY - TEMPORARY
D	2W-2", CONCRETE ENCASED DUCT BANK

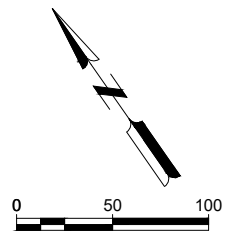
LABEL	NUMBER AND TYPE OF CABLE	CIRCUIT
1	1 - 1/C, #8 5kV, L-824, TYPE C	TWY A
2	2 - 1/C, #8 5kV, L-824, TYPE C	TWY A
3	1-1/C, #8 5kV, L-825, TYPE C	RWY 11-29
4	2-1/C, #8 5kV, L-824, TYPE C	RWY 11-29



ELECTRICAL LAYOUT PLAN

STURGIS PARALLEL TAXIWAY
CITY OF STURGIS
STURGIS, SOUTH DAKOTA

Drawn By: TJH,BTH
Chk' By: CGH
Proj. No: 4669049-251779
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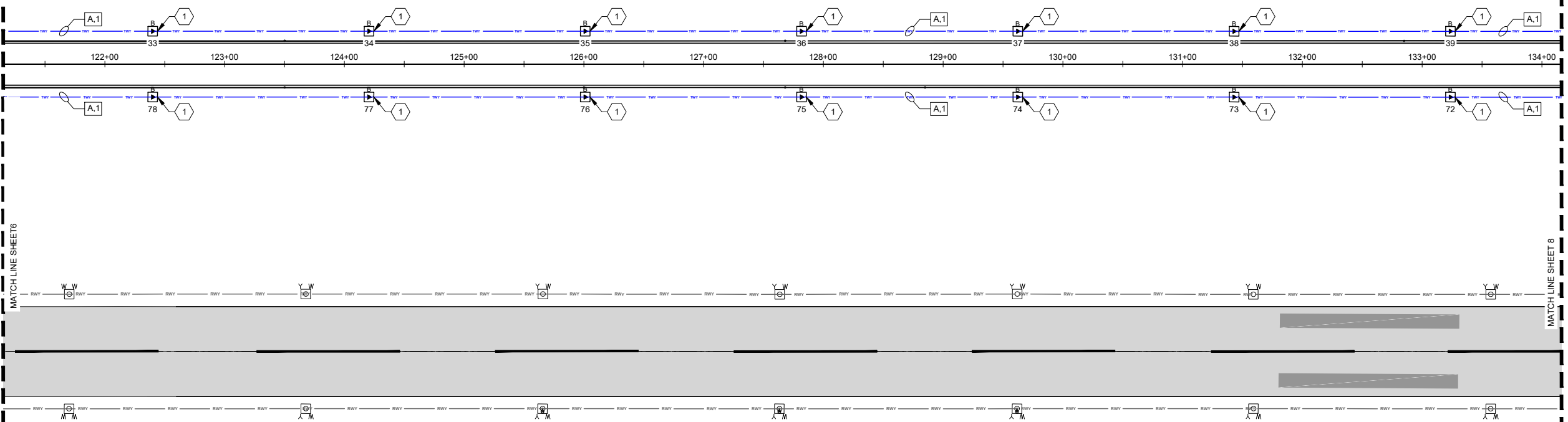


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& Hunt**
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ELECTRICAL LAYOUT KEY NOTES

1. INSTALL NEW L-861T(L) TAXIWAY LIGHT WITH ISOLATION TRANSFORMER ON NEW BASE CAN.
2. INSTALL NEW L-861T(L) TAXIWAY LIGHT WITH ISOLATION TRANSFORMER ON EXISTING BASE CAN.
3. INSTALL NEW L-858(L) LIGHTED LED GUIDANCE SIGN WITH ISOLATION TRANSFORMER ON NEW FOUNDATION
4. INSTALL NEW BASE CAN PLAZA (2 CANS) - SEE DETAILS

NOTES

1. FIELD VERIFY THE EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES BEFORE COMMENCING WORK. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR BY FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
2. REFER TO SHEETS 10 - 13 FOR COUNTERPOISE INSTALLATION REQUIREMENTS.

LABEL	NUMBER AND TYPE OF CONDUIT
A	1W-2", SCH. 40, PVC CONDUIT
B	EXISTING CONDUIT / DUCT BANK
C	DIRECT BURY - TEMPORARY
D	2W-2", CONCRETE ENCASED DUCT BANK

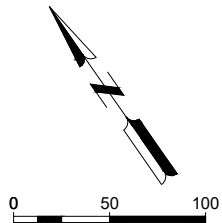
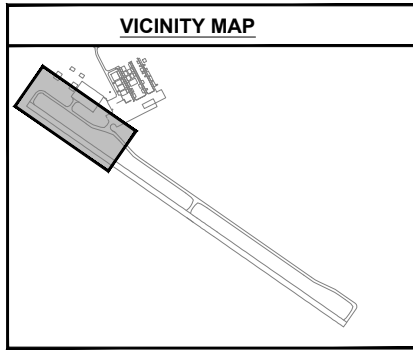
CIRCUIT CHART		
LABEL	NUMBER AND TYPE OF CABLE	CIRCUIT
1	1 - 1/C, #8 5kV, L-824, TYPE C	TWY A
2	2 - 1/C, #8 5kV, L-824, TYPE C	TWY A
3	1-1/C, #8 5kV, L-825, TYPE C	RWY 11-29
4	2-1/C, #8 5kV, L-824, TYPE C	RWY 11-29

ELECTRICAL LAYOUT PLAN

STURGIS PARALLEL TAXIWAY
CITY OF STURGIS
STURGIS, SOUTH DAKOTA

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No.	Revisions	Date

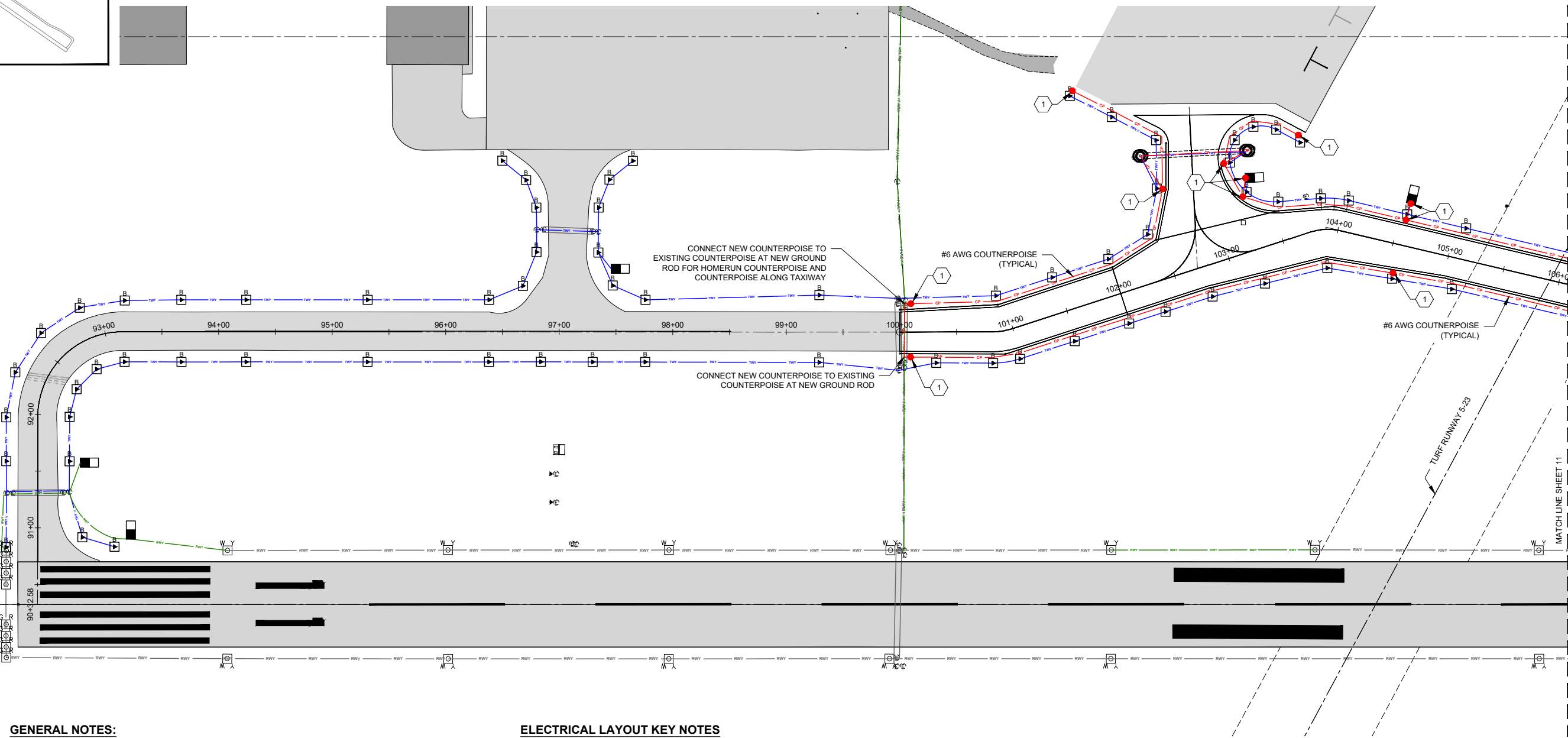
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ELECTRICAL COUNTERPOISE LAYOUT

STURGIS PARALLEL TAXIWAY
CITY OF STURGIS
STURGIS, SOUTH DAKOTA

Drawn By: BTH
Chk' By: CGH
Proj. No: 4669049-251779
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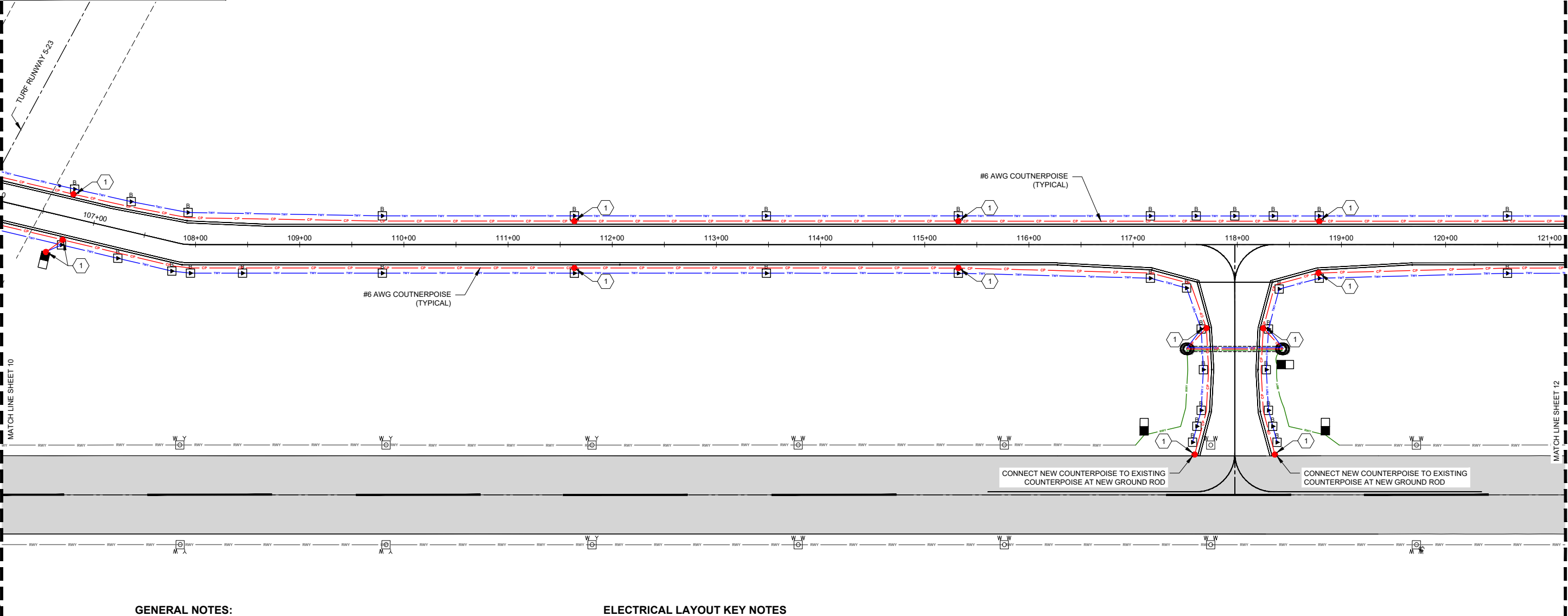
GENERAL NOTES:

- GROUND RODS SHALL BE INSTALLED AT LOCATIONS SHOWN AT A MINIMUM. PROVIDE AND INSTALL ANY ADDITIONAL GROUND RODS TO ACHIEVE THE DESIRED RESISTANCE TO GROUND OF 25 OHMS OR LESS.
- ALL GROUND RODS SHALL BE EXOTHERMICALLY WELDED TO THE COUNTERPOISE WIRE. CONTRACTOR SHALL VERIFY THE PROPER MOLDS THAT ARE NEEDED FOR EACH CONNECTION.
- COUNTERPOISE SHALL BE LOCATED 5' OFF THE EDGE OF PAVEMENT ALONG THE RUNWAY AND TAXIWAYS OR AS SHOWN ABOVE THE HOMERUN CONDUITS OR ABOVE CONDUITS THAT ARE AWAY FROM PAVEMENT EDGES.
- COUNTERPOISE SHALL BE LAID ABOVE ALL PROPOSED DUCT BANKS. IN AREAS WHERE THE CONDUIT IS BEING BORED, THE COUNTERPOISE SHALL BE PULLED ALONG THE BORE ALONG THE EXTERIOR SIDE OF THE CONDUIT. COUNTERPOISE SHALL TERMINATE AT A GROUND ROD ON BOTH SIDES OF THE DUCT BANK OR BORED CONDUIT.
- GROUND RODS SHALL BE SPACED AT A MAXIMUM DISTANCE OF 500'.
- WHERE PROPOSED COUNTERPOISE CONNECTS TO EXISTING COUNTERPOISE, CONNECTIONS SHALL BE MADE AT A NEW GROUND ROD PROVIDED BY THE CONTRACTOR WITH AN EXOTHERMIC WELD.

ELECTRICAL LAYOUT KEY NOTES

1 INSTALL NEW GROUND ROD





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ELECTRICAL COUNTERPOISE LAYOUT

STURGIS PARALLEL TAXIWAY
CITY OF STURGIS
STURGIS, SOUTH DAKOTA

Drawn By:	BTH
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Proj. No:	4669049-25177
Dwg. No:	ELECTRICAL
V.P. No:	
Date:	MAY 16, 2025

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OF
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1. GROUND RODS SHALL BE INSTALLED AT LOCATIONS SHOWN AT A MINIMUM. PROVIDE AND INSTALL ANY ADDITIONAL GROUND RODS TO ACHIEVE THE DESIRED RESISTANCE TO GROUND OF 25 OHMS OR LESS.
2. ALL GROUND RODS SHALL BE EXOTHERMICALLY WELDED TO THE COUNTERPOISE WIRE. CONTRACTOR SHALL VERIFY THE PROPER MOLDS THAT ARE NEEDED FOR EACH CONNECTION.
3. COUNTERPOISE SHALL BE LOCATED 5' OFF THE EDGE OF PAVEMENT ALONG THE RUNWAY AND TAXIWAYS OR AS SHOWN ABOVE THE HOMERUN CONDUITS OR ABOVE CONDUITS THAT ARE AWAY FROM PAVEMENT EDGES.
4. COUNTERPOISE SHALL BE LAID ABOVE ALL PROPOSED DUCT BANKS. IN AREAS WHERE THE CONDUIT IS BEING BORED, THE COUNTERPOISE SHALL BE PULLED ALONG THE BORE ALONG THE EXTERIOR SIDE OF THE CONDUIT. COUNTERPOISE SHALL TERMINATE AT A GROUND ROD ON BOTH SIDES OF THE DUCT BANK OR BORED CONDUIT.
5. GROUND RODS SHALL BE SPACED AT A MAXIMUM DISTANCE OF 500'.
6. WHERE PROPOSED COUNTERPOISE CONNECTS TO EXISTING COUNTERPOISE, CONNECTIONS SHALL BE MADE AT A NEW GROUND ROD PROVIDED BY THE CONTRACTOR USING AN EXOTHERMIC WELD.

1 INSTALL NEW GROUND ROD



VICINITY MAP

A vicinity map showing a road network. A thick black rectangle highlights a specific section of a road, indicating the project location. The map is oriented with a north arrow pointing towards the top right.



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ELECTRICAL COUNTERPOISE LAYOUT

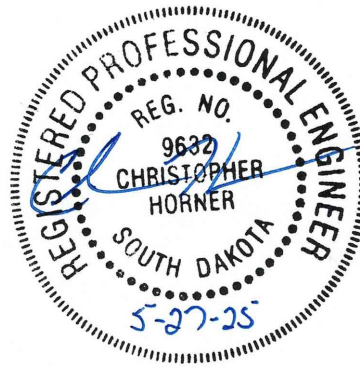
STURGIS PARALLEL TAXIWAY
CITY OF STURGIS
STURGIS, SOUTH DAKOTA

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OF
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1. GROUND RODS SHALL BE INSTALLED AT LOCATIONS SHOWN AT A MINIMUM. PROVIDE AND INSTALL ANY ADDITIONAL GROUND RODS TO ACHIEVE THE DESIRED RESISTANCE TO GROUND OF 25 OHMS OR LESS.
2. ALL GROUND RODS SHALL BE EXOTHERMICALLY WELDED TO THE COUNTERPOISE WIRE. CONTRACTOR SHALL VERIFY THE PROPER MOLDS THAT ARE NEEDED FOR EACH CONNECTION.
3. COUNTERPOISE SHALL BE LOCATED 5' OFF THE EDGE OF PAVEMENT ALONG THE RUNWAY AND TAXIWAYS OR AS SHOWN ABOVE THE HOMERUN CONDUITS OR ABOVE CONDUITS THAT ARE AWAY FROM PAVEMENT EDGES.
4. COUNTERPOISE SHALL BE LAID ABOVE ALL PROPOSED DUCT BANKS. IN AREAS WHERE THE CONDUIT IS BEING BORED, THE COUNTERPOISE SHALL BE PULLED ALONG THE BORE ALONG THE EXTERIOR SIDE OF THE CONDUIT. COUNTERPOISE SHALL TERMINATE AT A GROUND ROD ON BOTH SIDES OF THE DUCT BANK OR BORED CONDUIT.
5. GROUND RODS SHALL BE SPACED AT A MAXIMUM DISTANCE OF 500'.
6. WHERE PROVIDED COUNTERPOISE CONNECTS TO EXISTING COUNTERPOISE, CONNECTIONS SHALL BE MADE AT A NEW GROUND ROD PROVIDED BY THE CONTRACTOR WITH AN EXOTHERMIC WELD.

1 INSTALL NEW GROUND ROD





1. GROUND RODS SHALL BE INSTALLED AT LOCATIONS SHOWN AT A MINIMUM. PROVIDE AND INSTALL ANY ADDITIONAL GROUND RODS TO ACHIEVE THE DESIRED RESISTANCE TO GROUND OF 25 OHMS OR LESS.
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5. GROUND RODS SHALL BE SPACED AT A MAXIMUM DISTANCE OF 500'.
6. WHERE PROPOSED COUNTERPOISE CONNECTS TO EXISTING COUNTERPOISE, CONNECTIONS SHALL BE MADE AT A NEW GROUND ROD PROVIDED BY THE CONTRACTOR WITH AN EXOTHERMIC WELD.

1 INSTALL NEW GROUND ROD



STURGIS PARALLEL TAXIWAY
CITY OF STURGIS
STURGIS, SOUTH DAKOTA

Drawn By:	BTH
Chk' By:	CGH
Proj. No:	4669049-251779
Dwg. No:	ELECTRICAL
VP. No:	
Date:	MAY 16, 2025

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OF
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[illegible]

I Hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the law of the State of South Dakota, Registration No.

416 Production St N,
P.O. Box 111,
Aberdeen, S.D. 57402
Phone: 605.225.1212,
Fax: 605.225.3189
Email: bobb@helmsengineering.com

ELECTRICAL STRUCTURES SCHEDULE					
STRUCTURE NO.	NORTHING	EASTING	ALIGNMENT	STATION	OFFSET
1	232736.07	1085558.41	parallel taxiway 20250427	100+89.30	-31.67'
2	232721.03	1085608.26	parallel taxiway 20250427	101+46.77	-32.04'
3	232705.98	1085658.10	parallel taxiway 20250427	101+98.84	-32.15'
4	232704.10	1085698.93	parallel taxiway 20250427	102+38.44	-42.23'
5	232732.56	1085728.60	parallel taxiway 20250427	102+58.55	-78.10'
6	232767.91	1085752.38	parallel taxiway 20250427	102+71.01	-118.84'
7	232806.94	1085732.03	parallel taxiway 20250427	102+40.19	-150.26'
8	232843.32	1085712.27	parallel taxiway 20250427	102+10.70	-179.31'
9	232693.73	1085855.39	parallel taxiway 20250427	103+81.71	-78.77'
10	232715.06	1085844.59	parallel taxiway 20250427	103+74.61	-95.11'
11	232728.60	1085829.51	parallel taxiway 20250427	103+56.25	-103.67'
12	232728.43	1085809.25	parallel taxiway 20250427	103+36.92	-97.61'
13	232714.64	1085794.41	parallel taxiway 20250427	103+26.73	-80.10'
14	232684.96	1085791.74	parallel taxiway 20250427	103+32.82	-50.93'
15	232661.98	1085809.81	parallel taxiway 20250427	103+56.79	-34.20'
16	232642.99	1085842.17	parallel taxiway 20250427	103+87.11	-27.47'
17	232627.37	1085861.28	parallel taxiway 20250427	104+03.04	-27.50'
18	232587.90	1085896.62	parallel taxiway 20250427	104+56.22	-27.50'
19	232548.15	1085932.23	parallel taxiway 20250427	105+09.59	-27.50'
20	232425.26	1086042.30	parallel taxiway 20250427	106+74.56	-27.50'
21	232384.42	1086080.01	parallel taxiway 20250427	107+30.14	-28.34'
22	232344.67	1086118.87	parallel taxiway 20250427	107+89.24	-30.63'
23	232235.40	1086270.10	parallel taxiway 20250427	109+79.35	-27.50'
24	232130.08	1086421.36	parallel taxiway 20250427	111+63.66	-27.50'
25	232024.77	1086572.61	parallel taxiway 20250427	113+47.96	-27.50'
26	231919.46	1086723.87	parallel taxiway 20250427	115+32.27	-27.50'
27	231814.15	1086875.12	parallel taxiway 20250427	117+16.58	-27.50'
28	231788.96	1086911.30	parallel taxiway 20250427	117+60.66	-27.50'
29	231767.82	1086941.67	parallel taxiway 20250427	117+97.66	-27.50'
30	231746.68	1086972.03	parallel taxiway 20250427	118+34.66	-27.50'
31	231721.49	1087008.21	parallel taxiway 20250427	118+78.74	-27.50'
32	231618.29	1087156.42	parallel taxiway 20250427	120+59.34	-27.50'
33	231515.09	1087304.64	parallel taxiway 20250427	122+39.95	-27.50'
34	231411.90	1087452.86	parallel taxiway 20250427	124+20.55	-27.50'
35	231308.70	1087601.08	parallel taxiway 20250427	126+01.16	-27.50'
36	231205.50	1087749.30	parallel taxiway 20250427	127+81.77	-27.50'
37	231102.30	1087897.52	parallel taxiway 20250427	129+62.37	-27.50'
38	230999.10	1088045.74	parallel taxiway 20250427	131+42.98	-27.50'
39	230895.91	1088193.95	parallel taxiway 20250427	133+23.58	-27.50'
40	230792.71	1088342.17	parallel taxiway 20250427	135+04.19	-27.50'
41	230690.51	1088493.12	parallel taxiway 20250427	136+88.93	-29.80'
42	230624.91	1088625.81	parallel taxiway 20250427	138+39.39	-27.50'
43	230582.09	1088716.06	parallel taxiway 20250427	139+39.29	-27.50'
44	230560.67	1088761.25	parallel taxiway 20250427	139+89.16	-27.52'
45	230554.41	1088771.93	parallel taxiway 20250427	139+97.16	-27.50'
46	230525.88	1088813.00	parallel taxiway 20250427	140+47.15	-27.55'
47	230481.26	1088876.99	parallel taxiway 20250427	141+25.16	-27.50'
48	230408.16	1088981.98	parallel taxiway 20250427	142+53.10	-27.50'
49	230382.98	1089018.16	parallel taxiway 20250427	142+97.18	-27.50'
50	230357.46	1089039.69	parallel taxiway 20250427	143+16.55	-27.50'
51	230324.59	1089045.57	parallel taxiway 20250427	143+35.92	-27.50'

ELECTRICAL STRUCTURES SCHEDULE					
STRUCTURE NO.	NORTHING	EASTING	ALIGNMENT	STATION	OFFSET
52	230293.19	1089034.24	parallel taxiway 20250427	143+55.30	-27.50'
53	230257.01	1089009.05	parallel taxiway 20250427	143+99.38	-27.49'
54	230204.72	1088972.64	parallel taxiway 20250427	144+63.10	-27.49'
55	230152.12	1088936.02	parallel taxiway 20250427	145+27.20	-27.48'
56	230132.54	1088922.39	parallel taxiway 20250427	145+51.05	-27.47'
57	230165.84	1088862.73	parallel taxiway 20250427	145+57.80	40.51'
58	230176.04	1088874.87	parallel taxiway 20250427	145+42.49	36.38'
59	230186.24	1088887.00	parallel taxiway 20250427	145+27.19	32.25'
60	230236.77	1088926.27	parallel taxiway 20250427	144+63.28	28.88'
61	230291.17	1088959.99	parallel taxiway 20250427	143+99.37	32.29'
62	230328.64	1088973.47	parallel taxiway 20250427	142+91.55	42.63'
63	230359.10	1088947.82	parallel taxiway 20250427	142+53.10	32.28'
64	230436.13	1088845.57	parallel taxiway 20250427	141+25.16	27.50'
65	230508.26	1088737.81	parallel taxiway 20250427	139+93.05	29.80'
66	230573.53	1088605.80	parallel taxiway 20250427	138+43.34	27.50'
67	230615.73	1088516.86	parallel taxiway 20250427	137+44.90	27.50'
68	230637.11	1088471.81	parallel taxiway 20250427	136+95.03	27.50'
69	230644.37	1088458.97	parallel taxiway 20250427	136+84.80	27.50'
70	230672.94	1088417.93	parallel taxiway 20250427	136+34.80	27.50'
71	230747.57	1088310.75	parallel taxiway 20250427	135+04.19	27.50'
72	230850.77	1088162.53	parallel taxiway 20250427	133+23.58	27.50'
73	230953.97	1088014.31	parallel taxiway 20250427	131+42.98	27.50'
74	231057.17	1087866.09	parallel taxiway 20250427	129+62.37	27.50'
75	231160.36	1087717.87	parallel taxiway 20250427	127+81.77	27.50'
76	231263.56	1087569.65	parallel taxiway 20250427	126+01.16	27.50'
77	231366.76	1087421.43	parallel taxiway 20250427	124+20.55	27.50'
78	231469.96	1087273.22	parallel taxiway 20250427	122+39.95	27.50'
79	231573.16	1087125.00	parallel taxiway 20250427	120+59.34	27.50'
80	231672.43	1086974.04	parallel taxiway 20250427	118+78.74	32.28'
81	231685.91	1086936.58	parallel taxiway 20250427	118+40.29	42.63'
82	231660.26	1086906.12	parallel taxiway 20250427	118+29.94	81.08'
83	231629.47	1086882.14	parallel taxiway 20250427	118+27.86	120.05'
84	231596.29	1086861.58	parallel taxiway 20250427	118+29.94	159.03'
85	231581.35	1086856.20	parallel taxiway 20250427	118+34.07	174.37'
86	231566.40	1086850.82	parallel taxiway 20250427	118+38.20	189.71'
87	231612.75	1086784.31	parallel taxiway 20250427	117+57.12	189.68'
88	231622.97	1086796.45	parallel taxiway 20250427	117+61.25	174.35'
89	231633.19	1086808.59	parallel taxiway 20250427	117+65.37	159.03'
90	231663.98	1086832.57	parallel taxiway 20250427	117+67.46	120.05'
91	231697.16	1086853.13	parallel taxiway 20250427	117+65.37	81.08'
92	231737.53	1086864.16	parallel taxiway 20250427	117+51.36	41.64'
93	231765.08	1086840.96	parallel taxiway 20250427	117+16.58	32.28'
94	231874.32	1086692.44	parallel taxiway 20250427	115+32.27	27.50'
95	231979.64	1086541.19	parallel taxiway 20250427	113+47.96	27.50'
96	232084.95	1086389.93	parallel taxiway 20250427	111+63.66	27.50'
97	232190.26	1086238.68	parallel taxiway 20250427	109+79.35	27.50'
98	232267.00	1086128.45	parallel taxiway 20250427	108+45.04	27.50'
99	232295.57	1086087.42	parallel taxiway 20250427	107+95.04	27.50'
100	232307.47	1086073.97	parallel taxiway 20250427	107+83.43	27.50'
101	232347.16	1086038.42	parallel taxiway 20250427	107+30.14	27.50'
102	232388.57	1086001.33	parallel taxiway 20250427	106+74.56	27.50'

ELECTRICAL STRUCTURES SCHEDULE					
STRUCTURE NO.	NORTHING	EASTING	ALIGNMENT	STATION	OFFSET
103	232511.45	1085891.26	parallel taxiway 20250427	105+09.59	27.50'
104	232549.06	1085853.26	parallel taxiway 20250427	104+56.22	30.71'
105	232589.32	1085811.82	parallel taxiway 20250427	103+89.19	34.17'
106	232609.49	1085758.99	parallel taxiway 20250427	103+23.44	30.80'
107	232626.45	1085714.58	parallel taxiway 20250427	102+76.01	27.50'
108	232639.12	1085672.93	parallel taxiway 20250427	102+32.48	27.50'
109	232648.91	1085640.74	parallel taxiway 20250427	101+98.84	27.50'
110	232663.61	1085592.41	parallel taxiway 20250427	101+48.33	27.50'
111	232678.31	1085544.09	parallel taxiway 20250427	100+97.81	27.50'
112	232688.82	1085522.40	parallel taxiway 20250427	100+82.19	27.50'
113	232717.62	1085481.39	parallel taxiway 20250427	100+32.08	27.25'
114	232776.91	1085396.96	parallel taxiway 20250427	99+28.91	26.72'
115	232864.72	1085271.43	parallel taxiway 20250427	97+75.76	26.42'
116	232891.16	1085233.46	parallel taxiway 20250427	97+29.49	26.44'
117	232917.41	1085196.13	parallel taxiway 20250427	96+83.86	26.26'
118	232943.46	1085158.51	parallel taxiway 20250427	96+38.10	26.40'
119	233004.56	1085070.76	parallel taxiway 20250427	95+31.17	26.46'
120	233065.65	1084983.01	parallel taxiway 20250427	94+24.25	26.52'
121	233098.24	1084936.19	parallel taxiway 20250427	93+67.21	26.56'
122	233126.89	1084895.09	parallel taxiway 20250427	93+17.11	26.56'
123	233135.70	1084871.22	parallel taxiway 20250427	92+77.85	27.04'
124	233131.24	1084846.62	parallel taxiway 20250427	92+38.08	27.53'
125	233114.80	1084827.68	parallel taxiway 20250427	91+97.74	28.04'
126	233082.72	1084805.32	parallel taxiway 20250427	91+58.76	27.85'
127	233021.36	1084776.33	parallel taxiway 20250427	90+91.88	39.33'
128	232998.30	1084794.76	parallel taxiway 20250427	90+83.58	67.66'
129	233052.65	1084716.16	parallel taxiway 20250427	90+82.97	-27.89'
130	233114.70	1084759.62	parallel taxiway 20250427	91+58.73	-27.93'
131	233146.38	1084781.67	parallel taxiway 20250427	91+97.55	-27.77'
132	233174.27	1084810.85	parallel taxiway 20250427	92+27.22	-27.51'
133	233189.79	1084849.23	parallel taxiway 20250427	92+57.60	-28.20'
134	233188.59	1084889.90	parallel taxiway 20250427	92+87.34	-28.35'
135	233171.14	1084926.12	parallel taxiway 20250427	93+17.26	-27.48'
136	233143.14	1084967.34	parallel taxiway 20250427	93+67.08	-28.09'
137	233110.48	1085014.24	parallel taxiway 20250427	94+24.23	-28.11'
138	233049.39	1085102.06	parallel taxiway 20250427	95+31.21	-28.21'
139	232988.30	1085189.87	parallel taxiway 20250427	96+38.19	-28.31'
140	232981.27	1085221.32	parallel taxiway 20250427	96+68.01	-40.53'
141	232998.92	1085248.17	parallel taxiway 20250427	96+79.94	-70.36'
142	233031.16	1085270.51	parallel taxiway 20250427	96+79.82	-109.59'
143	233056.14	1085276.89	parallel taxiway 20250427	96+70.78	-133.74'
144	233082.08	1085269.42	parallel taxiway 20250427	96+49.82	-150.74'
145	233016.30	1085363.75	parallel taxiway 20250427	97+64.82	-150.72'
146	233014.52	1085337.30	parallel taxiway 20250427	97+44.14	-134.14'
147	232999.74	1085315.52	parallel taxiway 20250427	97+34.72	-109.55'
148	232967.37	1085292.68	parallel taxiway 20250427	97+34.49	-69.94'
149	232936.42	1085286.44	parallel taxiway 20250427	97+47.08	-40.98'
150	232909.50	1085302.96	parallel taxiway 20250427	97+76.02	-28.34'
151	232825.38	1085431.00	parallel taxiway 20250427	99+29.21	-32.51'

PROPOSED GUIDANCE SIGN SCHEDULE																					
SIGN NUMBER	LOCATION	SIDE A (PRIMARY SIDE)						SIDE B (SECONDARY SIDE)						SPECIFICATIONS							
		LEGEND 1	LEGEND 2	LEGEND 3	LEGEND 4	LEGEND 5	LEGEND 6	LEGEND 1	LEGEND 2	LEGEND 3	LEGEND 4	LEGEND 5	LEGEND 6	FAA TYPE	SIZE	STYLE	CLASS	MODE	MODULES	CIRCUIT	
1	RUNWAY 11-29	A1	→											L-858	1	2	2	2	2	RUNWAY	
2	TAXIWAY A1	A1	11											L-858	1	2	2	2	2	RUNWAY	
3	APRON	←A	→											L-858	1	2	2	2	2	TAXIWAY	
4	APRON	←A	→											L-858	1	2	2	2	2	TAXIWAY	
5	TAXIWAY A	A	23	-5										L-858	1	2	2	2	3	TAXIWAY	
6	TAXIWAY A	A	5-	23										L-858	1	2	2	2	3	TAXIWAY	
7	TAXIWAY A2	A2	29	-11										L-858	1	2	2	2	3	RUNWAY	
8	RUNWAY 11-29	←	A2											L-858	1	2	2	2	2	RUNWAY	
9	RUNWAY 11-29	A2	→											L-858	1	2	2	2	2	RUNWAY	
10	TAXIWAY A3	A3	29											L-858	1	2	2	2	2	RUNWAY	
11	RUNWAY 11-29	←	A3											L-858	1	2	2	2	2	RUNWAY	

I Herby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the law of the State of South Dakota, Registration No.

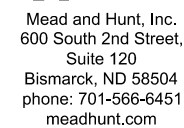
416 Production St. N.
P.O. Box 111,
Aberdeen, S.D. 57402
Phone: 605.225.1212,
Fax: 605.225.3189
Email: bobb@helmsengineering.com

SIGN SCHEDULE

STURGIS PARALLEL TAXIWAY
CITY OF STURGIS
STURGIS, SOUTH DAKOTA

Drawn By: BTH
Chk' By: CGH
Proj. No: 4669049-251779
Dwg. No: ELECTRICAL
VP. No:
Date: MAY 16, 2025





GENERAL: DIMENSIONS OF EXISTING ELECTRIC ROOM ARE APPROX 9'-11" BY 6'-7"

- 1 EXISTING 120 / 240v 200A MAIN PANEL TO BE REPLACED WITH NEW PANEL - REFER TO PANEL SCHEDULE
- 2 EXISTING SUB PANEL "A1" 100 AMP
- 3 EXISTING L-821 AIRFIELD LIGHTING CONTROL PANEL
- 4 EXISTING L-854 AIRFIELD CONTROL PANEL
- 5 PROVIDE NEW FERRORESONANT TWY 7.5 KW CONSTANT CURRENT REGULATOR WITH INTERNAL S-1 CUTOUT
- 6 PROVIDE NEW FERRORESONANT RWY 7.5 KW CONSTANT CURRENT REGULATOR WITH INTERNAL S-1 CUTOUT DISCONNECT AND SALVAGE 10 KW CCR
- 7 EXISTING ELECTRIC METER - UPGRADE AS REQUIRED BY UTILITY
- 8 NEMA 1, HEAVY DUTY, DISCONNECT
- 9 EXISTING NEMA 1, 5kVA, SINGLE PHASE 120 / 240-480V STEP-UP TRANSFORMER
- 10 EXISTING CONTROL INTERFACE CABINET

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN A WORKMAN LIKE MANNER
2. ALL WORK SHALL CONFORM TO THE NATIONAL ELECTRICAL CODE (NEC) AND LOCAL CODES
3. ALL METAL CABINETS SHALL BE GROUNDED TO GROUND BUS AS PER THE REQUIREMENTS OF THE NEC.
4. EXISTING L-821 CONTROL PANEL AND CONTROL INTERFACE CABINET IS TO BE MODIFIED TO INCLUDE THE OPERATION OF THE NEW TAXIWAY SERIES CIRCUIT. OPERATION SHALL MATCH THE OPERATION OF THE EXISTING RUNWAY SERIES CIRCUIT. INCLUDE A NEW SELECTOR SWITCH ON THE L-821 CONTROL PANEL TO ACCOMMODATE THE NEW CIRCUIT. ALL WIRING, CONDUIT, CONNECTIONS, RELAYS, AND MATERIAL SHALL BE INCLUDED IN THE MODIFICATION. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
5. BUILDING CONDUIT IS INCIDENTAL TO ELECTRICAL EQUIPMENT BID ITEM.
6. CONTRACTOR SHALL VERIFY EXISTING DIMENSIONS OF EQUIPMENT AND PLACE NEW EQUIPMENT MEETING PROPER WORKING SPACE REQUIREMENTS. CONTRACTOR IS PERMITTED TO REARRANGE EXISTING EQUIPMENT TO MAINTAIN WORKING SPACE CLEARANCES.
7. CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, CONDUIT, CONNECTIONS AND HARDWARE NECESSARY FOR AIRFIELD ELECTRICAL SYSTEM.
8. COORDINATE WITH LOCAL UTILITY ON UPGRADING THE ELECTRICAL SERVICE. CONTRACTOR TO PROVIDE NECESSARY CONDUIT SWEEPS, CONDUCTORS, GROUNDING, METER SOCKET, AND CONNECTIONS AS REQUIRED THE NEC.



ELECTRICAL VAULT PLAN

STURGIS PARALLEL TAXIWAY
CITY OF STURGIS
STURGIS, SOUTH DAKOTA

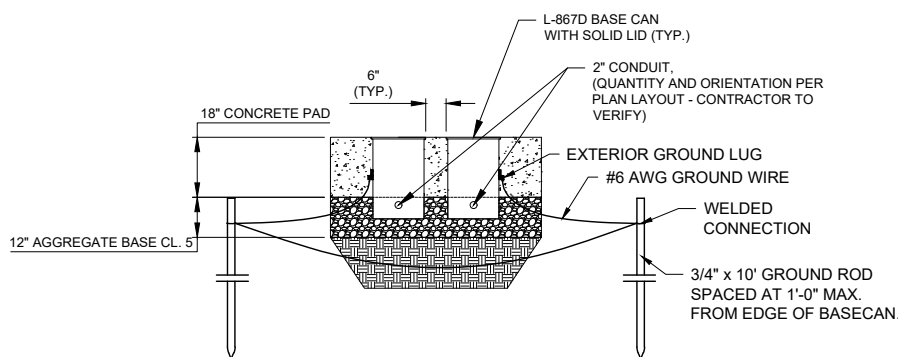
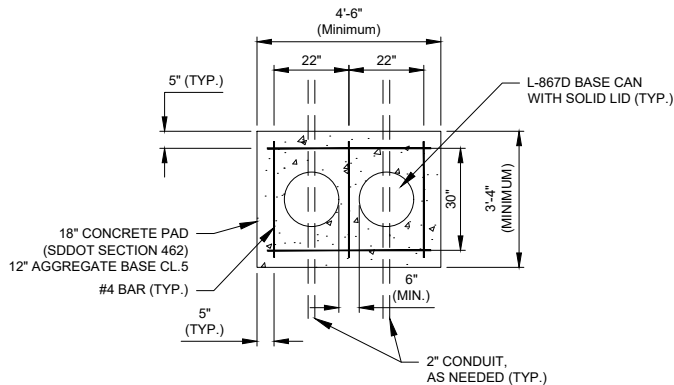
Drawn By: BTH

Chk' By: CGH

Proj. No: 4669049-251779

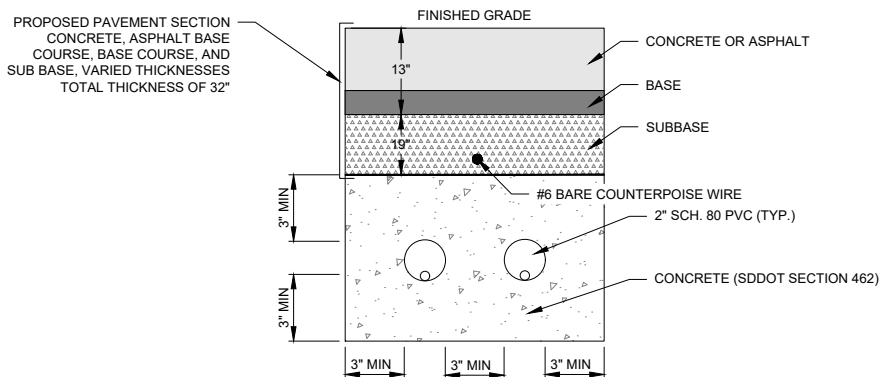
Dwg. No: ELECTRICAL

Date: MAY 16, 2025



1 BASE CAN PLAZA DETAILS

NOT TO SCALE



NOTES:

- WHERE 2 OR MORE CONDUITS ARE INSTALLED IN THE SAME TRENCH, PROVIDE 3" MINIMUM SPACING HORIZONTAL BETWEEN CONDUIT OUTSIDE EDGES, AND NO LESS THAN 6" VERTICAL. SPACERS ARE REQUIRED AT 5' INTERVALS, PER L-110.
- COUNTERPOISE SHALL BE INSTALLED 4" MINIMUM ABOVE THE CONCRETE-ENCASED CONDUIT FOR THE ENTIRE LENGTH OF CONDUIT INSTALLED.

2 CONCRETE-ENCASED CONDUIT INSTALLATION

NO SCALE

ELECTRICAL DETAILS

STURGIS PARALLEL TAXIWAY
CITY OF STURGIS
STURGIS, SOUTH DAKOTA

Drawn By: BTH

Chk' By: CGH

Proj. No: 4669049-251779

Dwg. No: ELECTRICAL

VP. No:

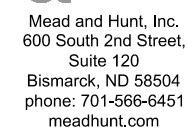
Date: MAY 16, 2025

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OF

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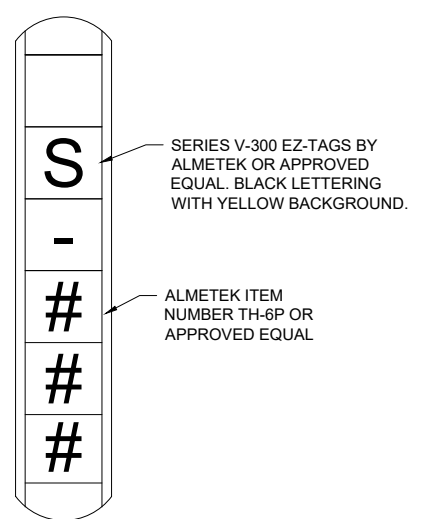
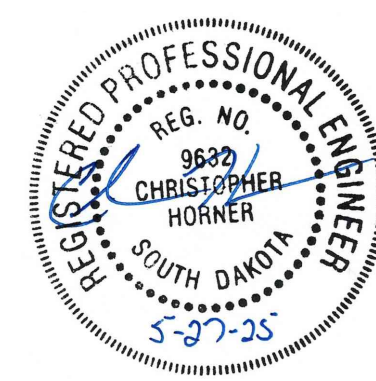
I Hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the law of the State of South Dakota, Registration No.

416 Production St N.
P.O. Box 111,
Aberdeen, S.D. 57402
Phone: 605.225.1212,
Fax: 605.225.3189
Email: bobb@helmsengineering.com

STURGIS PARALLEL TAXIWAY
CITY OF STURGIS
STURGIS, SOUTH DAKOTA

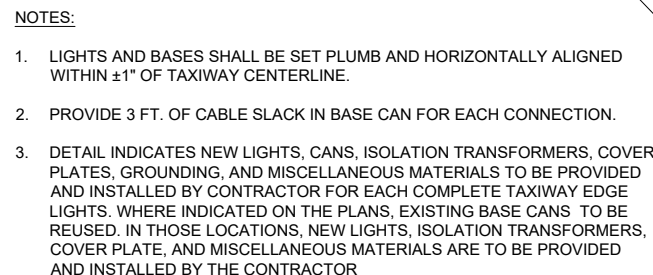
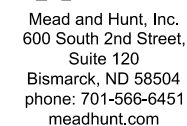
Drawn By:	BTH
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VP. No:	
Date:	MAY 16, 2025

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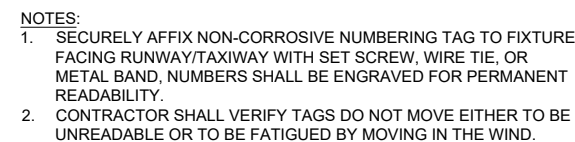


NOTE:
1. AFFIX TAG TO BOTH SIDES OF THE AIRFIELD SIGN
(TOTAL OF 2 PER SIGN).

- SIGN INSTALLATION NOTES:
1. FOLLOW MANUFACTURER'S RECOMMENDATION FOR L-823 CONNECTOR INSTALLATION.
 2. COUPLING WEEP HOLES SHALL NOT DRAIN TO THE OUTSIDE OF THE L-867 BASE CAN OR LID.
 3. PROVIDE ONE TETHER ON EACH END OF SIGN.
 4. BOND SIGN METAL SURFACES TO LIGHT BASE GROUNDING LUG USING #6 BARE COPPER WIRE.
 5. DIMENSION SIGN PAD PER PLAN VIEW.
 6. ALL HARDWARE SHALL BE STAINLESS STEEL. ALL MACHINE THREADED CONNECTIONS SHALL HAVE ANTI-SEIZING COMPOUND.

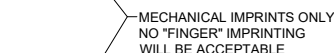


1. ALL BOLTS SHALL BE STAINLESS STEEL.
2. APPLY ANTI-SEIZE COMPOUND TO ALL MALE THREADS.
3. PROVIDE FORMS AS NECESSARY FOR CONCRETE PLACEMENT. COST INCIDENTAL TO THE INSTALLATION.
4. ALL NEW BASE CANS SHALL HAVE INTERNAL AND EXTERNAL GROUND LUGS.
5. ALL CABLES INSIDE THE CAN SHALL HAVE 36" OF SLACK TO ALLOW FOR MAINTENANCE CABLE SLACK IS INCIDENTAL TO CABLE INSTALLATION.
6. CONTRACTOR IS RESPONSIBLE FOR VERIFYING NUMBER, LOCATION, AND SIZE OF CONDUIT OPENINGS IN ALL BASE CANS.
7. ALL BASE CANS SHALL BE INSTALLED USING A "JIG". JIG SHALL HAVE FOUR ADJUSTABLE LEGS AND BE CAPABLE OF HOLDING CANS IN PLACE DURING CONCRETE PLACEMENT.
8. ALL MATERIALS AND WORK NECESSARY WHETHER SHOWN OR NOT IS INCIDENTAL TO THE INSTALLATION.



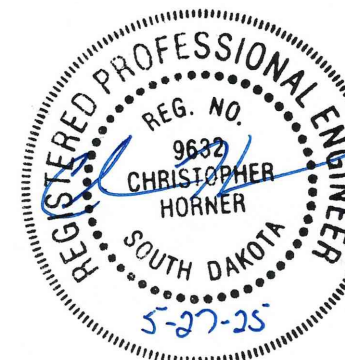
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NO SCALE

1. MARKERS SHALL BE PLACED WHERE SHOWN ON PLANS OR AS DESCRIBED IN THE ELECTRICAL INSTALLATION NOTES.
2. EDGE EXPOSED CONCRETE WITH A 1/4" RADIUS TOOL.
3. WHERE ADDITIONAL SPACE TO FIT THE LEGEND IS REQUIRED, SOME OF THE FOLLOWING METHODS SHALL BE EMPLOYED.
 - A. REDUCE LETTER SIZE TO 3" HIGH, 2" WIDE.
 - B. INCREASE THE MARKER SIZE TO 30" X 30" MAX.
 - C. PROVIDE ADDITIONAL MARKERS PLACED SIDE BY SIDE.
4. MARKERS TO BE ORANGE IN COLOR AS PER STANDARD FACTORY SPECIFICATION L-108 AND L-110.
5. A MIN. 6" LONG PIECE OF #3 STEEL REBAR SHALL BE EMBEDDED IN THE CENTER OF THE CABLE MARKER.



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