

**NOTES:**

1. EXOTHERMIC WELD #4/0 AWG BARE CU. GROUND CONDUCTOR TO FOOTING REBAR AND TO GROUND LOOP CONDUCTOR.
2. EXOTHERMIC WELD #4/0 AWG BARE STRANDED CU. GROUND CONDUCTOR TO 5/8"x10' GROUND ROD WITH CADWELD GYE312Q.
3. ALL BELOW GRADE CONNECTIONS SHALL BE EXOTHERMIC.
4. MINIMUM DEPTH OF GROUND LOOP SHALL BE 3'.
5. ONCE GROUND GRID IS INSTALLED, CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT THE INSTALLATION IS COMPLIANT WITH THE MET TOWER MANUFACTURER'S GROUNDING SPECIFICATION AND SECTION 10 OF STANDARD TIA-222-G PARTICULARLY: "THE TOTAL RESISTANCE OF A STRUCTURE'S ELECTRICALLY CONNECTED PRIMARY GROUNDS AS REFERENCED TO REMOTE EARTH SHALL NOT EXCEED 10 OHMS. THE TOTAL RESISTANCE SHALL BE MEASURED OR CALCULATED IN ACCORDANCE WITH THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) STANDARD 142-1991".
6. EXOTHERMIC WELD #4/0 BARE STRANDED CU. GROUND PIGTAIL TO MET TOWER GROUND LOOP. COIL AT LEAST 12 FEET OF PIGTAIL ABOVE GRADE FOR CONNECTION TO MET TOWER EQUIPMENT STAND AND MET TOWER.
7. UNLESS NOTED OTHERWISE ON DRAWINGS, CABLE SECTIONS TRANSITIONING FROM UNDERGROUND TO ABOVE GROUND SHALL BE ROUTED IN RGS OR SCH. 80 PVC CONDUIT SIZED IN ACCORDANCE WITH THE NEC. CONDUIT SHALL BE SECURELY FASTENED TO SUPPORT STRUCTURE AT ENTRANCE TO EQUIPMENT IF POSSIBLE.
8. ELECTRICAL CONTRACTOR SHALL CONSTRUCT STRUCTURE OF MET TOWER SERVICE EQUIPMENT PANEL AND INSTALL PACKAGED POWER CENTER AND SURGE ARRESTOR, AND GROUNDING AS SHOWN ON THIS DRAWING. MET TOWER CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONDUIT AND NECESSARY WIRE TO PROPERLY INTERFACE ELECTRICAL EQUIPMENT TO MET TOWER EQUIPMENT.
9. CONTRACTOR SHALL PROVIDE PANEL FENCING AROUND MET TOWER EQUIPMENT STRUCTURE. PANELING SHOULD BE SUFFICIENT HEIGHT AND DISTANCE AWAY TO KEEP CATTLE AND WILD GAME FROM COMING INTO CONTACT WITH EQUIPMENT.
10. USE DWG # C29 FOR ORIENTATION AND GRADING PLAN OF MET TOWER.
11. REFER TO DWG # E-MT-01 FOR MET TOWER EQUIPMENT STAND DETAILS.

FOR REFERENCE SEE MINNESOTA POWER GROUNDING AND FENCE DETAIL DRAWINGS.

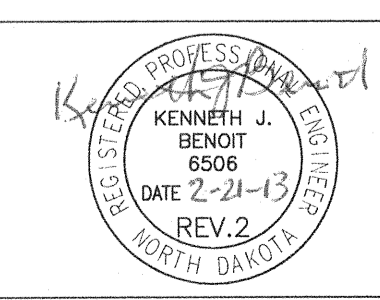
- B TEE
- G GATE
- F GROUND ROD
- L FENCE FABRIC
- T FENCE-CORNER POST
- X FENCE

**MET TOWER SITE PLAN**



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NO.	BY	CHK.	APP.	DATE	REVISION DESCRIPTION
0	BNK	CEG	CSF	10/7/11	ISSUED FOR REFERENCE
1	BNK	CEG	CSF	3/26/12	ISSUED FOR CONSTRUCTION
2	NJG	CEG	CSF	11/14/12	CONSTRUCTION REVISIONS



CLIENT	BID	CONSTRUCTION	PERMITTING	RELEASED TO/FOR	DATE RELEASED
				A B C O 1 2 3	10/7/11/3/26/12

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Scale	N.T.S.
Date	10/7/11
Drawn	BNK
Checked	CSF
Designed	CEG
Approved	JLM

**minnesota power**  
AN ALLETE COMPANY

**BISON**  
A WIND ENERGY INITIATIVE OF MINNESOTA POWER IN NORTH DAKOTA

BISON 2 WIND PROJECT  
MORTON & OLIVER COUNTIES, NORTH DAKOTA  
COLLECTOR SYSTEM  
MET TOWER SITE PLAN

BARR PROJECT No.	34/33-1007
CLIENT PROJECT No.	
DWG. No.	E-MT-02
REV. No.	2