

PLAN VIEW

MINIMUM CLASS 1 MATERIAL REQUIREMENTS			
TYPE OF CONDUCTOR	PARAMETER	COPPER	
		U.S.	ALUMINUM
AIR TERMINAL SOLID	DIAMETER	3/8"	1/2"
AIR TERMINAL TUBULAR	DIAMETER	5/8"	5/8"
MAIN CONDUCTOR CABLE	WALL THICKNESS	0.033 in.	0.064 in.
	SIZE EACH STRAND	17 AWG	14 AWG
BONDING CONDUCTOR CABLE (SOLID OR STRANDED)	WEIGHT PER LENGTH	187 lb/1000 ft	95 lb/1000 ft
	CROSS SECTION AREA	57,400 sq. mils	98,800 sq. mils
BONDING CONDUCTOR SOLID STRIP	SIZE EACH STRAND	17 AWG	14 AWG
	CROSS SECTION AREA	26,240 sq. mils	41,100 sq. mils
MAIN CONDUCTOR SOLID STRIP	THICKNESS	0.051 in.	0.064 in.
	WIDTH	1/2"	1/2"
MAIN CONDUCTOR SOLID STRIP	THICKNESS	0.051 in.	0.064 in.
	CROSS SECTION AREA	57,400 sq. mils	98,800 sq. mils

NOTES

1. MAIN CONDUCTOR TO BE ATTACHED BETWEEN BASE OF AIR TERMINAL AND EXISTING GROUNDING GRID. SIZING TO BE DETERMINED USING MINIMUM CLASS 1 MATERIAL REQUIREMENTS

REV	DATE	DESCRIPTION	BY	CHKD	APD
0	8-23-16	ISSUED FOR CLIENT REVIEW	MTS	JC	KSD

**BNN ENERGY**

WILDHORSE 16 SWD  
TANK BATTERY  
LIGHTNING PROTECTION  
PLAN

Drawing No.: **E-1**

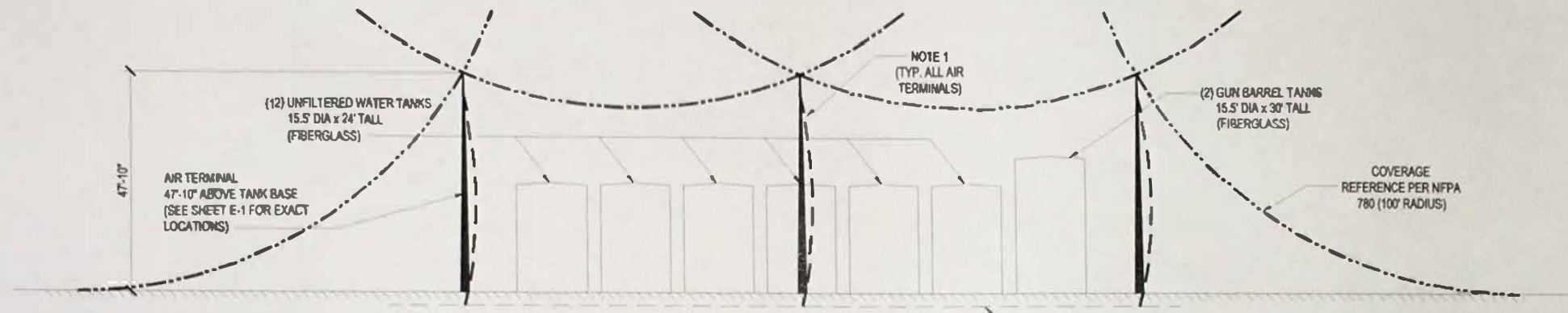
Project No.:	212C-PB-00493
Drawn By:	MTS
Checked By:	JL
Approved By:	KSD
Scale:	
Drawing Size:	22x34
Sheet:	
REV:	0

8/23/2016 1:43:15 PM - K.WILDHORSE SWD - KEITH DAVISOVIC/AD/LECTRICAL/LIGHTNING PROTECTION PLAN DWG - SCHON, M/DE

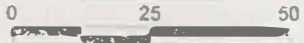
**TETRA TECH**

www.tetrattech.com  
370 Indiana Street - Suite 500  
Golden, CO 80401  
Phone: 720.235.5191

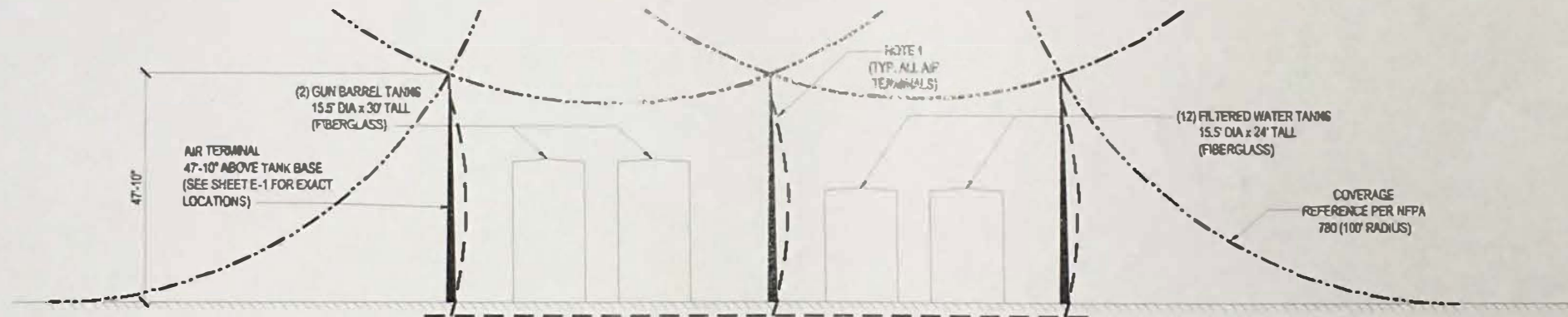
Bar Measures 1 inch



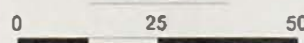
SECTION A



EXISTING GROUNDING GRID  
SEE WILDHORSE 16 SWD  
ELECTRICAL DRAWINGS DATED  
8-21-15  
GROUNDING KEY PLAN  
SHEET WH16-00-ETB-000



SECTION B



EXISTING GROUNDING GRID  
SEE WILDHORSE 16 SWD  
ELECTRICAL DRAWINGS DATED  
8-21-15  
GROUNDING KEY PLAN  
SHEET WH16-00-ETB-000

MINIMUM CLASS 1 MATERIAL REQUIREMENTS			
TYPE OF CONDUCTOR	PARAMETER	COPPER	
		U.S.	U.S.
AIR TERMINAL SOLID	DIAMETER	3/8"	1/2"
	DIAMETER	5/8"	5/8"
AIR TERMINAL TUBULAR	WALL THICKNESS	0.033 in.	0.064 in.
	SIZE EACH STRAND	17 AWG	14 AWG
MAIN CONDUCTOR, CABLE	WEIGHT PER LENGTH	187 lbs/1000 ft	85 lbs/1000 ft
	CROSS SECTION AREA	57,400 sq. mils	98,800 sq. mils
	SIZE EACH STRAND	17 AWG	14 AWG
BONDING CONDUCTOR, CABLE (SOLID OR STRANDED)	CROSS SECTION AREA	26,246 sq. mils	41,199 sq. mils
	THICKNESS	0.051 in.	0.064 in.
BONDING CONDUCTOR, SOLID STRIP	WIDTH	1/2"	1/2"
	THICKNESS	0.051 in.	0.064 in.
MAIN CONDUCTOR, SOLID STRIP	THICKNESS	0.051 in.	0.064 in.
	CROSS SECTION AREA	87,400 sq. mils	98,800 sq. mils

NOTES:  
1. MAIN CONDUCTOR TO BE ATTACHED BETWEEN BASE OF AIRTERMINAL AND EXISTING GROUNDING GRID. SIZING TO BE DETERMINED USING MINIMUM CLASS 1 MATERIAL REQUIREMENTS

REV	DATE	DESCRIPTION	BY	CHKD	APD
0	8-23-16	ISSUED FOR CLIENT REVIEW	MTS	JC	KSD

**BNN ENERGY**  
WILDHORSE 16 SWD  
TANK BATTERY  
LIGHTNING PROTECTION  
PLAN

Project No.: 212C-PB-00483  
Drawn By: MTS  
Checked By: JS  
Approved By: KSD  
Scale: -  
Drawing Size: 22x34  
Sheet: -  
Rev: -

Drawing No.: E-2

**TETRA TECH**  
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8/23/2016 1:45:04 PM - K. WILDHORSE BND - WETH DAVIDSON CAD ELECTRICAL LIGHTNING PROTECTION PLAN DWG - SCHON MIKE