



# NORTH DAKOTA PARKS AND RECREATION DEPARTMENT

## ELECTRICAL UPGRADES LAKE METIGOSHE STATE PARK 2023



### PROJECT CONTACTS

#### CLIENT

NORTH DAKOTA PARKS AND RECREATION DEPARTMENT  
Brendan Ternes  
604 E. BOULEVARD AVE, DEPT. 750  
BISMARCK, ND 58505  
701-328-5355

LAKE METIGOSHE STATE PARK  
Eric Lang  
2514 2ND ST. E.  
BOTTINEAU, ND 58318  
701-263-4651

#### PROJECT ENGINEERS

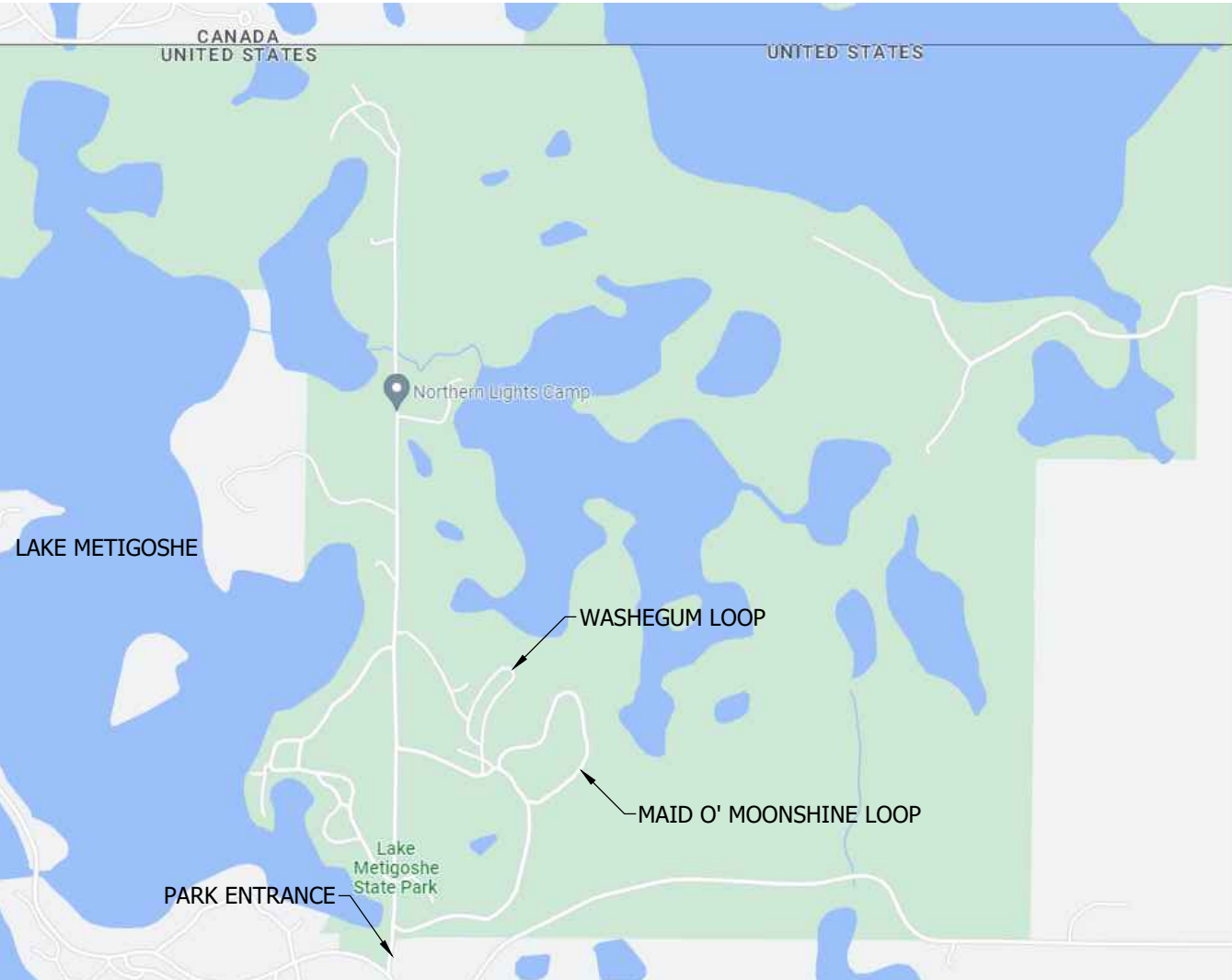
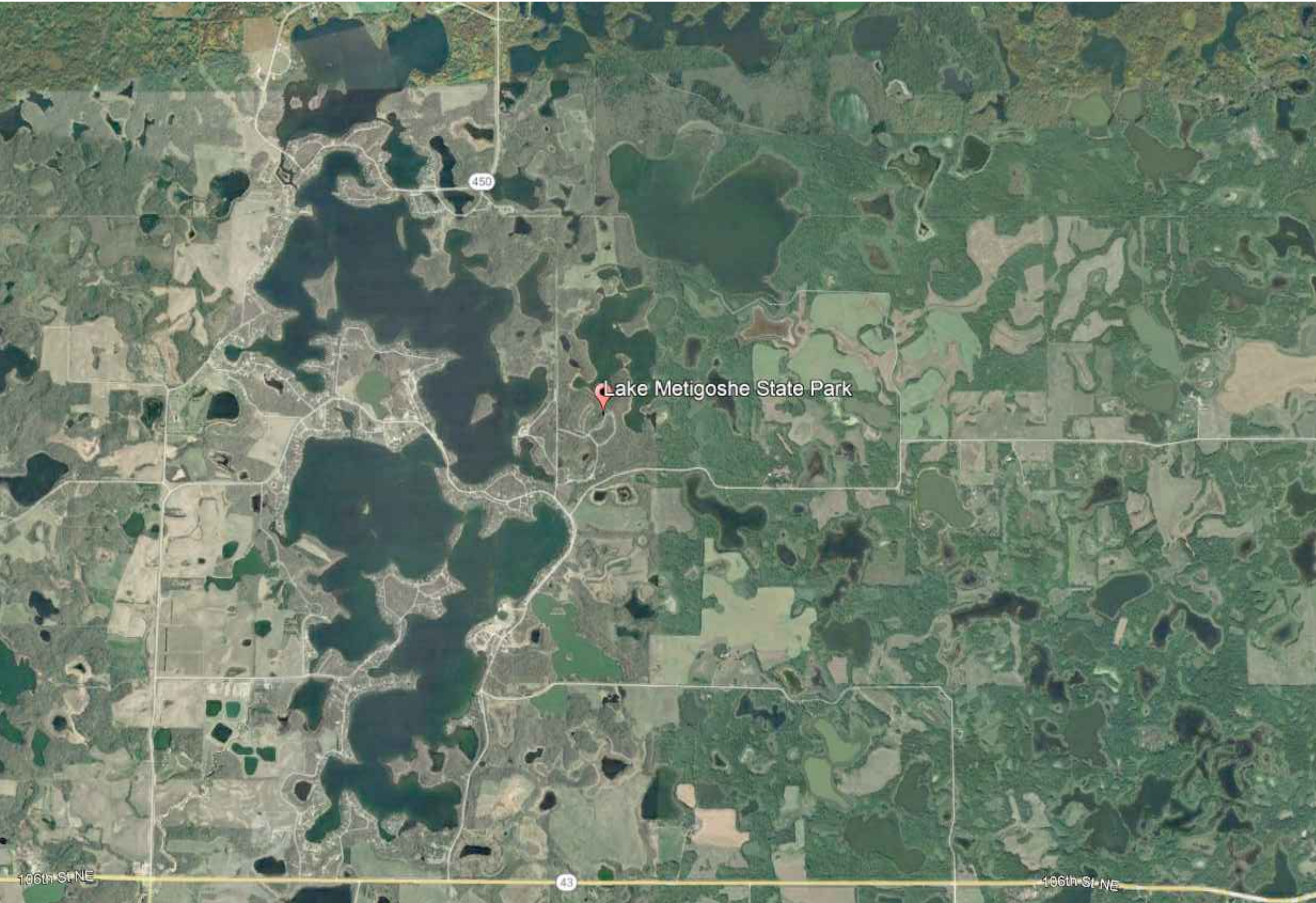
BARTLETT & WEST  
Mike Van Duyne  
3456 E. CENTURY AVE.  
BISMARCK, ND 58503  
701-221-8362

#### UTILITIES

NORTH CENTRAL ELECTRIC CO-OP  
Tyler Lee  
538 11TH ST. W., #1  
BOTTINEAU, ND 58318  
701-228-2202  
t.lee@nceci.com

- GENERAL NOTES:
- IT IS UNDERSTOOD THAT THESE PLANS WERE DESIGNED IN ACCORDANCE WITH STANDARD PRACTICES WIDELY ACCEPTED THROUGH THE FIELD OF ELECTRICAL ENGINEERING AND SURVEYING AT THE TIME THEY WERE ISSUED. ALTHOUGH THE PLANS REPRESENTED HERE HAVE BEEN DESIGN BY, OR UNDER THE DIRECT SUPERVISION OF, A REGISTERED PROFESSIONAL ENGINEER, BARTLETT & WEST WILL NOT BE RESPONSIBLE FOR THE ACCURACY OF ANY PHYSICAL WORK THAT IS NOT CONSTRUCTED UNDER THE DIRECT FULL TIME OBSERVATION OF PERSONNEL EMPLOYED BY BARTLETT & WEST.
  - LOCATIONS OF EXISTING UTILITIES SHOWN ARE APPROXIMATE AND BASED UPON INFORMATION PROVIDED TO BARTLETT & WEST AND/OR FIELD OBSERVED. ACCURACY OF LOCATIONS OF ALL UNDERGROUND UTILITIES IS NEITHER GUARANTEED NOR WARRANTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND VERIFYING ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.
  - ALL CONSTRUCTION SHALL CONFORM WITH LOCAL AND STATE BUILDING, PLUMBING, AND ELECTRICAL CODES.

INDEX OF SHEETS	
DRAWING NO.	DESCRIPTION
LM-CS	COVER SHEET
LM-UC-101	UTILITY COORDINATION SITE PLAN - NORTH WASHEGUM CAMPGROUND
LM-UC-102	UTILITY COORDINATION SITE PLAN - SOUTH WASHEGUM CAMPGROUND
LM-E-101	ELECTRICAL DEMOLITION SITE PLAN - NORTH WASHEGUM CAMPGROUND
LM-E-102	ELECTRICAL DEMOLITION SITE PLAN - SOUTH WASHEGUM CAMPGROUND
LM-E-103	ELECTRICAL IMPROVE SITE PLAN - NORTH WASHEGUM CAMPGROUND
LM-E-104	ELECTRICAL IMPROVE SITE PLAN - SOUTH WASHEGUM CAMPGROUND
LM-E-501	ELECTRICAL SITE DETAILS
LM-E-502	ELECTRICAL DETAILS
LM-E-503	ELECTRICAL DETAILS
LM-E-601	ELECTRICAL SCHEDULES & DETAILS
LM-E-602	ELECTRICAL RISER DIAGRAMS



**NORTH DAKOTA ONE CALL**  
1-800-795-0555

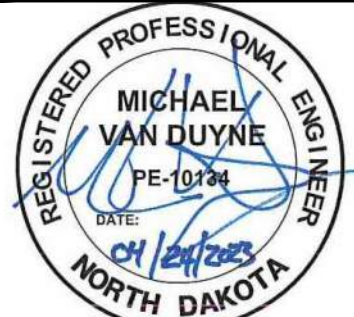


**Bartlett & West**

3456 E CENTURY AVENUE - BISMARCK, ND 58503  
PHONE 701-258-1110 - FAX 701-258-1111  
WWW.BARTLETTANDWEST.COM

**LAKE METIGOSHE STATE PARK  
COVER SHEET**

**NORTH DAKOTA PARKS & RECREATION DEPARTMENT  
ELECTRICAL UPGRADES  
BISMARCK, NORTH DAKOTA**



DESIGNED BY:	ARH
DRAWN BY:	SDM
APPROVED BY:	MSV
DESIGN PROJ:	21219.000
CONST PROJ:	
SCALE:	AS NOTED
DATE:	04-24-2023
DRAWING NO:	LM-CS
SHEET NO:	1 of 13



LIGHTING / ELECTRICAL

	POLE MOUNTED LIGHTING FIXTURE WITH TENNON ARM		BRANCH CIRCUIT IN CONDUIT CONCEALED IN CEILING OR WALL
	POLE MOUNTED LIGHTING FIXTURE		BRANCH CIRCUIT BELOW GRADE OR SLAB
	CEILING MOUNTED LIGHTING FIXTURE 1x4 AND ID TAG		BRANCH CIRCUIT IN EXPOSED CONDUIT
	CEILING MOUNTED LIGHTING FIXTURE 2x2 AND ID TAG		BRANCH CIRCUIT HOMERUN TO PANEL
	CEILING MOUNTED LIGHTING FIXTURE 2x4 AND ID TAG		DIAGONAL LINES INDICATE NUMBER OF CONDUCTORS
	EMERGENCY LIGHTING FIXTURE		GROUND WIRE - INCLUDED IN ALL BRANCH CIRCUITS UNLESS OTHERWISE NOTED
	CEILING MOUNTED DAYLIGHT CONTROLLED		#18 WIRE
	CEILING MOUNTED WITH EMERGENCY BALLAST		#16 WIRE
	CEILING MOUNTED LIGHT FIXTURE WITH NIGHT LIGHT		#14 WIRE
	PADDLE CEILING FAN		#12 WIRE
	CEILING MOUNTED EXIT LIGHT		BRANCH CIRCUIT OR FEEDER - SEE SCHEDULE FOR CONDUCTOR & CONDUIT QUANTITY & SIZE
	EXIT LIGHT (WALL MOUNTED)		FLEXIBLE CONDUIT
	CEILING MOUNT		TWISTED PAIR
	WALL MOUNT		LIGHTING CONTROL WIRING
	LIGHT TRACK WITH LIGHT TYPES AS INDICATED		MOTOR CONTROLLER
	SINGLE RECEPTACLE		MANUAL MOTOR CONTROLLER
	DUPLEX RECEPTACLE		COMBINATION MOTOR CONTROLLER
	FOURPLEX RECEPTACLE		DISCONNECT SWITCH
	RECESSED FLOOR MOUNTED JUNCTION BOX		EQUIPMENT MOTOR
	SURFACE MOUNTED JUNCTION BOX		UTILITY METER
	CEILING MOUNTED JUNCTION BOX		
	PHOTOCELL		
	ELECTRICAL POWER PEDESTAL		
	JUNCTION BOX		
	TYPE 1 JUNCTION BOX		
	TYPE 2 JUNCTION BOX		
	PLUGMOLD - OUTLETS AT 12" O.C. UNLESS OTHERWISE NOTED		
	TIME SWITCH		
	LIGHTING CONTACTOR		
	SPRING WOUND TIMER		
	HAND-OFF-AUTO SELECTOR SWITCH		
	MANUAL STARTER WITH THERMAL OVERLOADS		
	LIGHTING PANEL		
	DISTRIBUTION PANEL		
	TELEPHONE TERMINAL PANEL		
	THERMOSTAT		
	HUMIDISTAT		
	(1) RJ-45 COMMUNICATION/DATA OUTLET		
	(2) RJ-45 COMMUNICATION/DATA OUTLET		
	(4) RJ-45 COMMUNICATION/DATA OUTLET		
	CEILING MOUNTED COMMUNICATION/DATA OUTLET		
	FLOOR MOUNTED COMMUNICATION/DATA OUTLET		
	TELEVISION OUTLET		
	WALL SPEAKER		
	CEILING SPEAKER		
	COLUMN SPEAKER		
	HORN SPEAKER		
	CALL-IN STATION		
	MOTION DETECTOR		
	CLOSED CIRCUIT TELEVISION OUTLET		
	PUSHBUTTON STATION		
	RELAY CABINET		
	CLOCK SPEAKER		
	CARD READER		
	MAGNETIC LOCK		
	ALARM CONTACTS		
	SECURITY CAMERA		
	SINGLE POLE SWITCH		
	DOUBLE POLE SWITCH		
	3-WAY SWITCH		
	4-WAY SWITCH		
	SINGLE POLE SWITCH WITH PILOT LAMP		
	MOMENTARY CONTACT		
	SINGLE POLE SWITCH, KEY OPERATED		
	DIMMER SWITCH		
	LOW VOLTAGE SWITCH		
	VACANCY SENSOR SWITCH		
	OCCUPANCY SENSOR		
	POWER PACK		

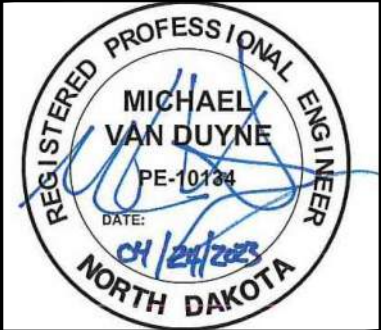
GENERAL SYMBOLS

	INDICATES DIRECTION OF PLAN NORTH
	DETAIL REFERENCE - UPPER NUMBER INDICATES DETAIL NUMBER, LOWER NUMBER INDICATES SHEET NUMBER
	PLAN NOTE REFERENCE
	REVISION DELTA
	ROOM NUMBER REFERENCE
	SECTION CUT REFERENCE - UPPER NUMBER INDICATES DETAIL NUMBER, LOWER NUMBER INDICATES SHEET NUMBER
	CONTINUATION
	INDICATES CONNECTION TO EXISTING SYSTEM
	BREAK LINE
	MATCHLINE

ABBREVIATIONS

GENERAL:			
AFF	ABOVE FINISHED FLOOR	G/C	GENERAL CONTRACTOR
AFG	ABOVE FINISHED GRADE	M/C	MECHANICAL CONTRACTOR
CL	CENTERLINE ELEVATION	E/C	ELECTRICAL CONTRACTOR
DN	DOWN	P/C	PLUMBING CONTRACTOR
EX	EXISTING		
ELECTRICAL:			
AC	ALTERNATING CURRENT		
BKR	BREAKER		
CTCB	CONTROL TRANSFORMER CIRCUIT BREAKER		
DISC	DISCONNECT SWITCH		
DR	DUPLEX RECEPTACLE, GFI		
DCB	DISCONNECT CIRCUIT BREAKER		
GFCB	GROUND FAULT CIRCUIT BREAKER		
HBCB	HOT BOX CIRCUIT BREAKER		
LCB	LIGHT CIRCUIT BREAKER		
MCB	MAIN CIRCUIT BREAKER		
MD	MOTORIZED DAMPER		
MPCB	MOTOR POWER CIRCUIT BREAKER		
PCB	PUMP CIRCUIT BREAKER		
PHCB	PANEL HEATER CIRCUIT BREAKER		
RCB	RECEPTACLE CIRCUIT BREAKER		
SCB	SPARE CIRCUIT BREAKER		
TR	TRANSFORMER		
TCB	TRANSFORMER CIRCUIT BREAKER		
TR	TELEMETRY RADIO		
VCCB	VALVE CONTROLS CIRCUIT BREAKER		
VFD	VARIABLE FREQUENCY DRIVE		
" "	QUOTATION AROUND TEXT INDICATES A SCHEDULED ITEM		
*	THESE LETTERS ADJACENT TO ANY SYMBOL INDICATES DEVICE BOTTOM TO BE MOUNTED 4" ABOVE COUNTER TOP BACKSPASH		
GFCI	THESE LETTERS ADJACENT TO ANY SYMBOL INDICATES GROUND FAULT INTERRUPTER		
IG	THESE LETTERS ADJACENT TO ANY SYMBOL INDICATES ISOLATED GROUND SERVICE		
TL	THESE LETTERS ADJACENT TO ANY SYMBOL INDICATES LOCKING OR TWIST-LOCK TYPE DEVICE		
WP	THESE LETTERS ADJACENT TO ANY SYMBOL INDICATES WEATHER-PROOF ENCLOSURE		
XP	THESE LETTERS ADJACENT TO ANY SYMBOL INDICATES EXPLOSION-PROOF ENCLOSURE		
##"	THESE NUMBERS ADJACENT TO ANY SYMBOL INDICATES THE MOUNTING HEIGHT AFF TO TOP OF OF DEVICE		
TP	THESE LETTERS ADJACENT TO ANY SYMBOL INDICATES TAMPER PROOF		

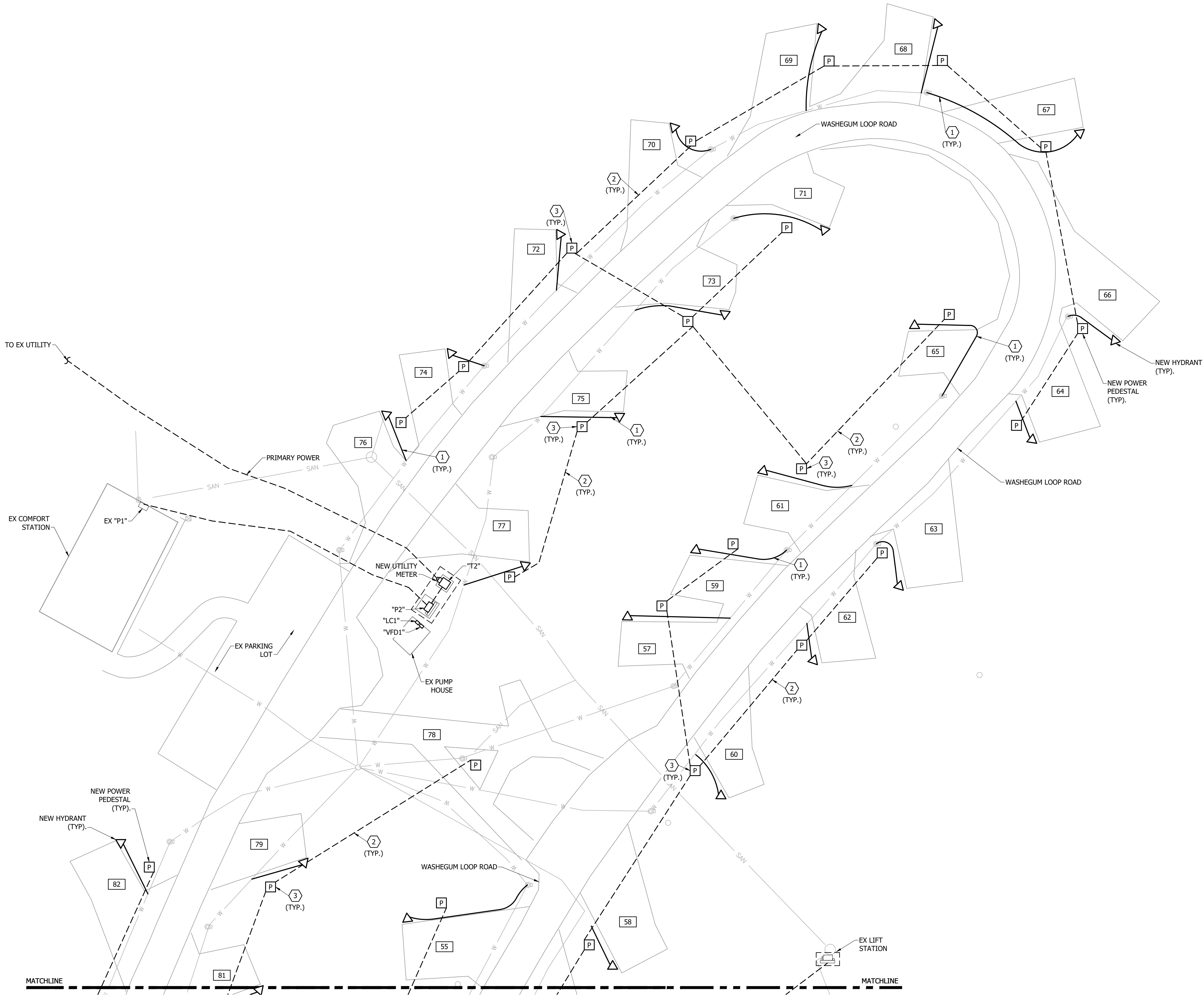
ELECTRICAL SYMBOLS  
LAKE METIGOSHE STATE PARK  
NORTH DAKOTA PARKS & RECREATION DEPARTMENT  
ELECTRICAL UPGRADES  
BISMARCK, NORTH DAKOTA




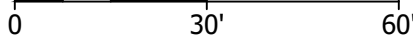
DESIGNED BY:	ARH
DRAWN BY:	SDM
APPROVED BY:	MSV
DESIGN PROJ:	21219.000
CONST PROJ:	
SCALE:	AS NOTED
DATE:	04-24-2023
DRAWING NO:	LM-E-000
SHEET NO:	2 of 13



Last edit on: 4/21/2023 12:02 PM by: NP801926 Drawing Name: F:\Proj\21000\21219\21219.000\AutoCad\Plan Set\Lake Metigoshe\21219.000E - Electrical Improvement Site Plans - LMSF.dwg Layout Name: UTILITY COORDINATION SITE PLAN NORTH Plotted on: 4/24/2023 2:18:31 PM



 UTILITY COORDINATION SITE PLAN - NORTH WASHEGUM CAMPGROUND  
SCALE: 1"=30'



REFERENCE NOTES:

- 1 ALL NEW WATER PIPE TO BE BURIED APPROXIMATELY 36" TO TOP OF PIPE BELOW FINISHED GRADE BY P/C. REFER TO WATER IMPROVEMENT SITE PLANS - PINTAIL LOOP FOR NEW WATER IMPROVEMENTS.
- 2 ALL NEW DIRECT BURY WIRE TO BE A MINIMUM DEPTH OF 24" BELOW FINISHED GRADE BY E/C. REFER TO ELECTRICAL IMPROVEMENT SITE PLANS - PINTAIL LOOP FOR NEW ELECTRICAL IMPROVEMENTS.
- 3 REFER TO ELECTRICAL DETAIL 1/LM-E-501 FOR BACK-IN SITE DETAIL AND DIMENSIONS FOR ALL NEW PEDESTALS.

BY	
DESCRIPTION	
DATE	
#	

**Bartlett & West**

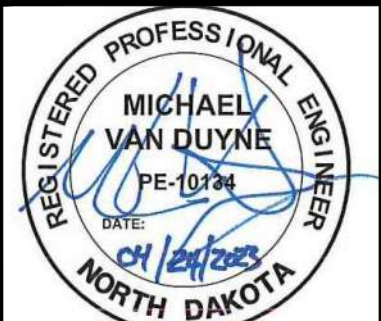
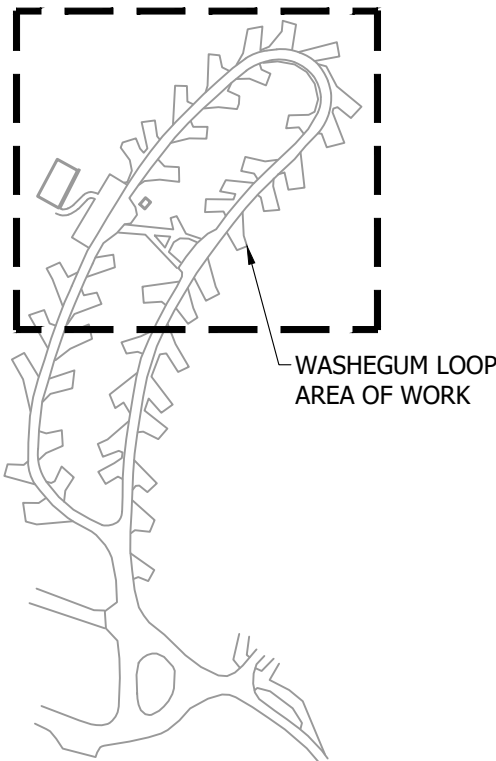
3456 E CENTURY AVENUE - BISMARCK, ND 58503  
PHONE 701-258-1110 - FAX 701-258-1111  
WWW.BARTLETTWEST.COM

GENERAL NOTES:

1. ALL UTILITY COORDINATION TO BE COMPLETED BEFORE START OF CONSTRUCTION. THE SEQUENCE OF CONSTRUCTION SHALL TAKE PLACE AS DESCRIBED IN ONE OF THE BELOW OPTIONS.
  - 1.1. THE REMOVAL OF EXISTING ELECTRICAL PEDESTALS, DIRECT BURY WIRE AND INSTALLATION OF NEW PEDESTALS, DIRECT BURY WIRE SHALL BE DONE PRIOR TO INSTALLATION OF NEW ELECTRICAL WATER PIPE AND HYDRANTS.
  - 1.2. CONSTRUCTION OF BOTH ELECTRICAL DEMOLITION/IMPROVEMENT AND WATER IMPROVEMENT SHALL TAKE PLACE AT THE SAME TIME.
2. E/C TO FIELD COORDINATE ALL WORK WITH OTHER TRADES.

UTILITY COORDINATION SITE PLAN  
NORTH WASHEGUM CAMPGROUND  
LAKE METIGOSHE STATE PARK  
NORTH DAKOTA PARKS & RECREATION DEPARTMENT  
ELECTRICAL UPGRADES  
BISMARCK, NORTH DAKOTA

KEY PLAN:

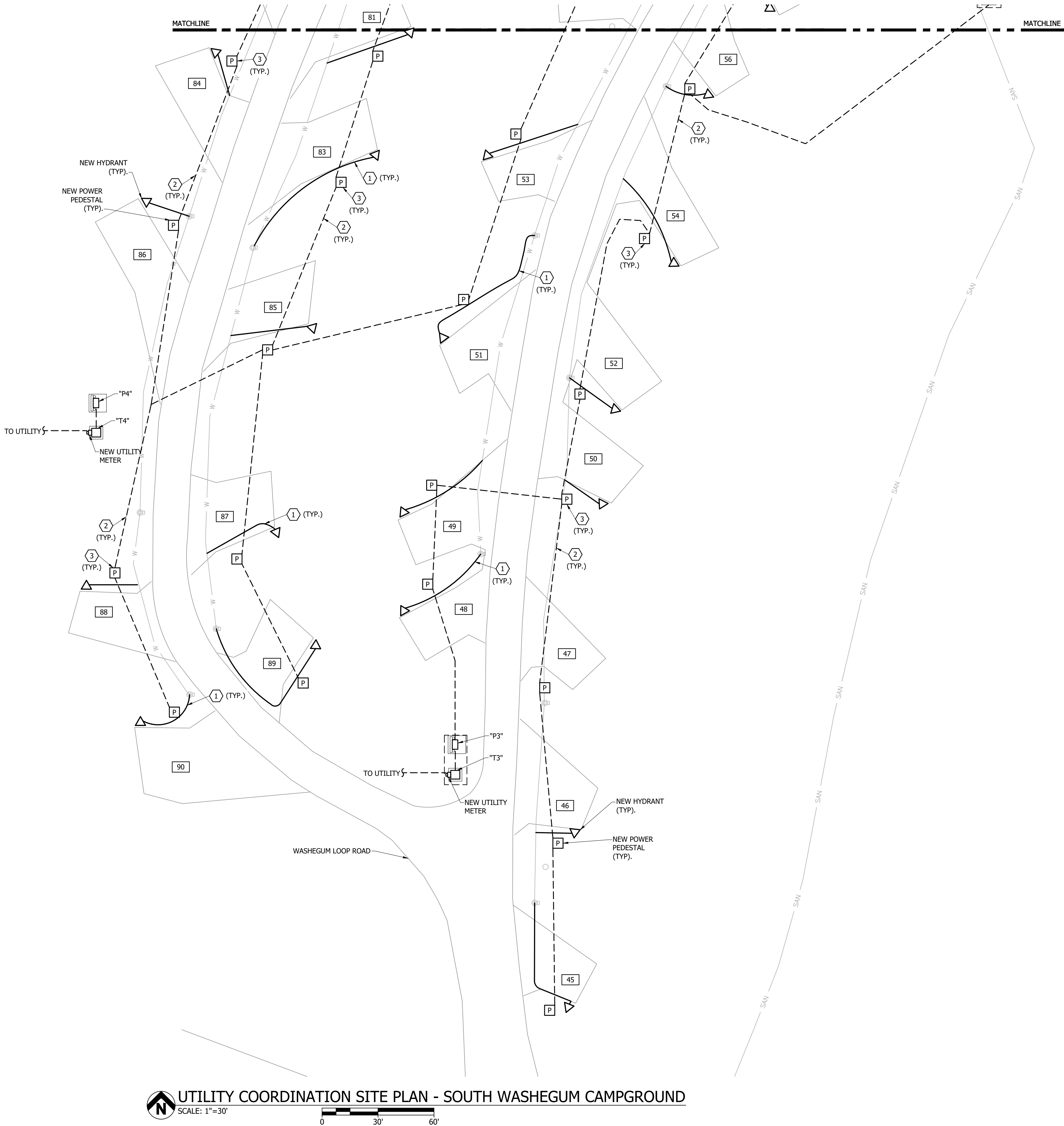


DESIGNED BY:	ARH
DRAWN BY:	SDM
APPROVED BY:	MSV
DESIGN PROJ:	21219.000
CONST PROJ:	
SCALE:	AS NOTED
DATE:	04-24-2023
DRAWING NO:	LM-UC-101
SHEET NO:	



Drawing Name: F:\proj\21000\21219\21219.000\AutoCad\Plan Set\Lake Metigoshe\21219.000E - Electrical Improvement Site Plans - LMSF.dwg Layout Name: UTILITY COORDINATION SITE PLAN SOUTH Plotted on: 4/24/2023 2:18:26 PM  
Last edit on: 4/21/2023 12:02 PM by: NPB01926

BAR IS ONE INCH ON OFFICIAL DRAWINGS. 0 1" IF NOT ONE INCH, ADJUST SCALE ACCORDINGLY.



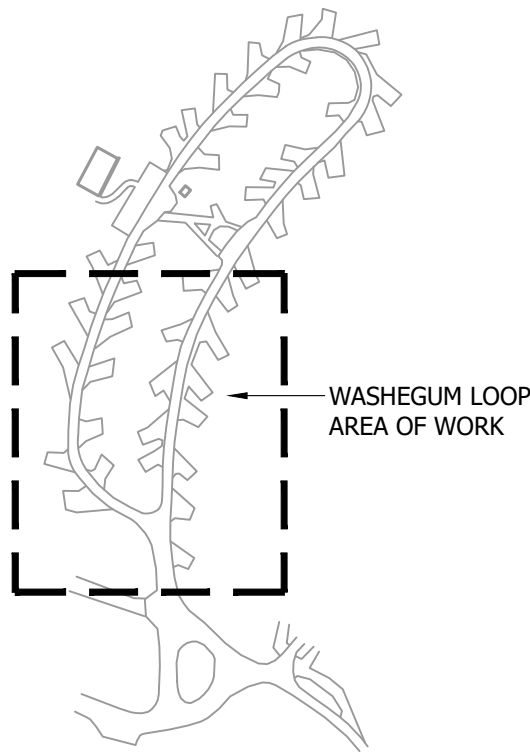
REFERENCE NOTES:

- 1 ALL NEW WATER PIPE TO BE BURIED APPROXIMATELY 36" TO TOP OF PIPE BELOW FINISHED GRADE BY P/C. REFER TO WATER IMPROVEMENT SITE PLANS - PINTAIL LOOP FOR NEW WATER IMPROVEMENTS.
- 2 ALL NEW DIRECT BURY WIRE TO BE A MINIMUM DEPTH OF 24" BELOW FINISHED GRADE BY E/C. REFER TO ELECTRICAL IMPROVEMENT SITE PLANS - PINTAIL LOOP FOR NEW ELECTRICAL IMPROVEMENTS.
- 3 REFER TO ELECTRICAL DETAIL 1/LM-E-501 FOR BACK-IN SITE DETAIL AND DIMENSIONS FOR ALL NEW PEDESTALS.

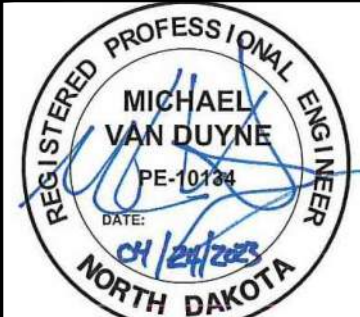
GENERAL NOTES:

1. ALL UTILITY COORDINATION TO BE COMPLETED BEFORE START OF CONSTRUCTION. THE SEQUENCE OF CONSTRUCTION SHALL TAKE PLACE AS DESCRIBED IN ONE OF THE BELOW OPTIONS.
  - 1.1. THE REMOVAL OF EXISTING ELECTRICAL PEDESTALS, DIRECT BURY WIRE AND INSTALLATION OF NEW PEDESTALS, DIRECT BURY WIRE SHALL BE DONE PRIOR TO INSTALLATION OF NEW ELECTRICAL WATER PIPE AND HYDRANTS.
  - 1.2. CONSTRUCTION OF BOTH ELECTRICAL DEMOLITION/IMPROVEMENT AND WATER IMPROVEMENT SHALL TAKE PLACE AT THE SAME TIME.
2. E/C TO FIELD COORDINATE ALL WORK WITH OTHER TRADES.

KEY PLAN:

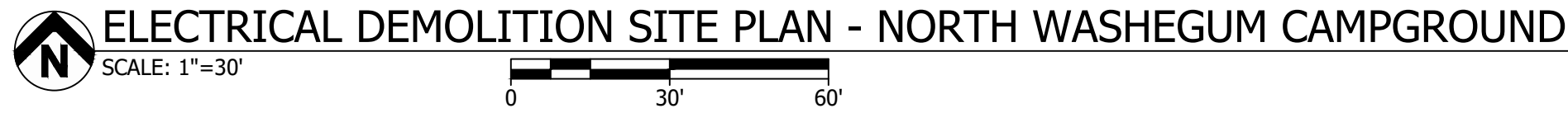


UTILITY COORDINATION SITE PLAN  
SOUTH WASHEGUM CAMPGROUND  
LAKE METIGOSHE STATE PARK  
NORTH DAKOTA PARKS & RECREATION DEPARTMENT  
ELECTRICAL UPGRADES  
BISMARCK, NORTH DAKOTA



DESIGNED BY:	ARH
DRAWN BY:	SDM
APPROVED BY:	MSV
DESIGN PROJ:	21219.000
CONST PROJ:	
SCALE:	AS NOTED
DATE:	04-24-2023
DRAWING NO:	LM-UC-102
SHEET NO:	





- ① EX RV POWER PEDESTAL, POWER CONNECTION AND ALL ASSOCIATED ABOVE GRADE WIRE AND CONDUIT TO BE REMOVED. EX BELOW GRADE DIRECT BURY WIRE TO BE CUT BACK AND REMOVED TO 1'-0" BELOW GRADE. EX BELOW GRADE DIRECT BURY WIRE BELOW 1'-0" TO BE DISCONNECTED, LABELED "ABANDONED", AND ABANDONED IN PLACE. REFER TO ELECTRICAL IMPROVEMENT SITE PLAN - WASHEGUM CAMPGROUND FOR NEW POWER PEDESTAL IMPROVEMENTS.
- ② EX PANELBOARDS, POWER CONNECTIONS, WOOD STRUCTURE, TRANSFORMERS, SECTIONALIZER, AND ALL ASSOCIATED ABOVE GRADE WIRE AND CONDUIT TO BE REMOVED. EX BELOW GRADE DIRECT BURY WIRE TO BE CUT BACK AND REMOVED TO 1'-0" BELOW GRADE. EX BELOW GRADE DIRECT BURY WIRE BELOW 1'-0" TO BE DISCONNECTED, LABELED "ABANDONED", AND ABANDONED IN PLACE. REFER TO ELECTRICAL IMPROVEMENT SITE PLAN - WASHEGUM CAMPGROUND FOR NEW PANELBOARD IMPROVEMENTS.
- ③ EX PANELBOARD TO REMAIN. EX POWER CONNECTION AND ALL ASSOCIATED ABOVE GRADE WIRE AND CONDUIT TO REMAIN. EX BELOW GRADE DIRECT BURY WIRE TO BE CUT BACK AND REMOVED TO 1'-0" BELOW GRADE. EX BELOW GRADE DIRECT BURY WIRE BELOW 1'-0" TO BE DISCONNECTED, LABELED "ABANDONED", AND ABANDONED IN PLACE. REFER TO ELECTRICAL IMPROVEMENT SITE PLAN - WASHEGUM CAMPGROUND FOR NEW PANELBOARD IMPROVEMENTS. E/C TO REFER TO ELECTRICAL DETAILS 5/LM-E-501 AND 1/LM-E-602.
- ④ E/C TO REFER TO ELECTRICAL DETAILS 3/LM-E-501 AND 1/LM-E-602.
- ⑤ E/C TO REFER TO ELECTRICAL DETAILS 4/LM-E-501 AND 1/LM-E-602.
- ⑥ EX PANELBOARD, DISCONNECT, AND WOOD STRUCTURE TO REMAIN. EX POWER CONNECTION AND ALL ASSOCIATED ABOVE GRADE WIRE AND CONDUIT TO REMAIN. EX BELOW GRADE DIRECT BURY WIRE TO BE CUT BACK AND REMOVED TO 1'-0" BELOW GRADE. EX BELOW GRADE DIRECT BURY WIRE BELOW 1'-0" TO BE DISCONNECTED, LABELED "ABANDONED", AND ABANDONED IN PLACE. REFER TO ELECTRICAL IMPROVEMENT SITE PLAN - WASHEGUM CAMPGROUND FOR NEW PANELBOARD IMPROVEMENTS. E/C TO REFER TO ELECTRICAL DETAILS 5/LM-E-501 AND 1/LM-E-602.
- ⑦ E/C TO REFER TO ELECTRICAL DETAILS 6/LM-E-501 AND 1/LM-E-602.
- ⑧ EX PANELBOARD, POWER CONNECTION, WIRE GUTTER AND ALL ASSOCIATED ABOVE GRADE WIRE AND CONDUIT TO BE REMOVED. EX BELOW GRADE DIRECT BURY WIRE TO BE CUT BACK AND REMOVED TO 1'-0" BELOW GRADE. EX BELOW GRADE DIRECT BURY WIRE BELOW 1'-0" TO BE DISCONNECTED, LABELED "ABANDONED", AND ABANDONED IN PLACE. REFER TO ELECTRICAL IMPROVEMENT SITE PLAN - WASHEGUM CAMPGROUND FOR NEW PANELBOARD IMPROVEMENTS. E/C TO REFER TO ELECTRICAL DETAILS 7/LM-E-501 AND 1/LM-E-602.

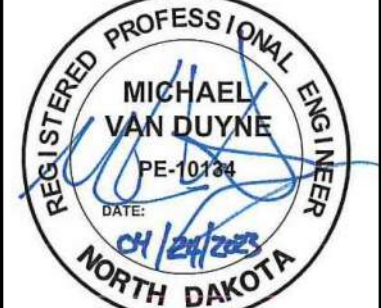
1. THE EX CONDITIONS HAVE BEEN SHOWN BASED ON CASUAL ON-SITE INVESTIGATION WITH NO GUARANTEE TO THEIR ACCURACY, CONTRACTOR TO BE RESPONSIBLE TO FIELD VERIFY EX CONDITIONS.
2. E/C TO FIELD COORDINATE ALL WORK WITH OTHER TRADES.
3. E/C TO FIELD COORDINATE WITH NORTH CENTRAL ELECTRIC CO-OP (NCE) FOR ALL UTILITY COORDINATION  
NCE CONTACT: TYLER LEE  
PHONE: 701-774-7120  
EMAIL: tlee@nceci.com
4. E/C TO BE RESPONSIBLE FOR A NEW UTILITY ELECTRICAL CONNECTION COSTS.

- ① EX UNDERGROUND DIRECT BURY MAIN FEEDER TO REMAIN AND BE ABANDONED IN PLACE.
- ② EX UNDERGROUND DIRECT BURY BRANCH FEEDER TO REMAIN AND BE ABANDONED IN PLACE.
- ③ EX UNDERGROUND UTILITY MAIN FEEDER TO REMAIN AND BE ABANDONED IN PLACE.

A diagram of a washegum loop, which is a type of knot used in climbing. The diagram shows a rope forming a loop with several small, rectangular pieces (likely carabiners or clips) attached to it. A dashed rectangular box highlights a specific section of the loop, labeled "WASHEGUM LOOP AREA OF WORK".

**Bartlett & West**  
3456 E CENTURY AVENUE - BIRMGHAM, AL 35203  
PHONE 701-258-1110 - FAX 701-258-1111  
[www.bartlettwest.com](http://www.bartlettwest.com)

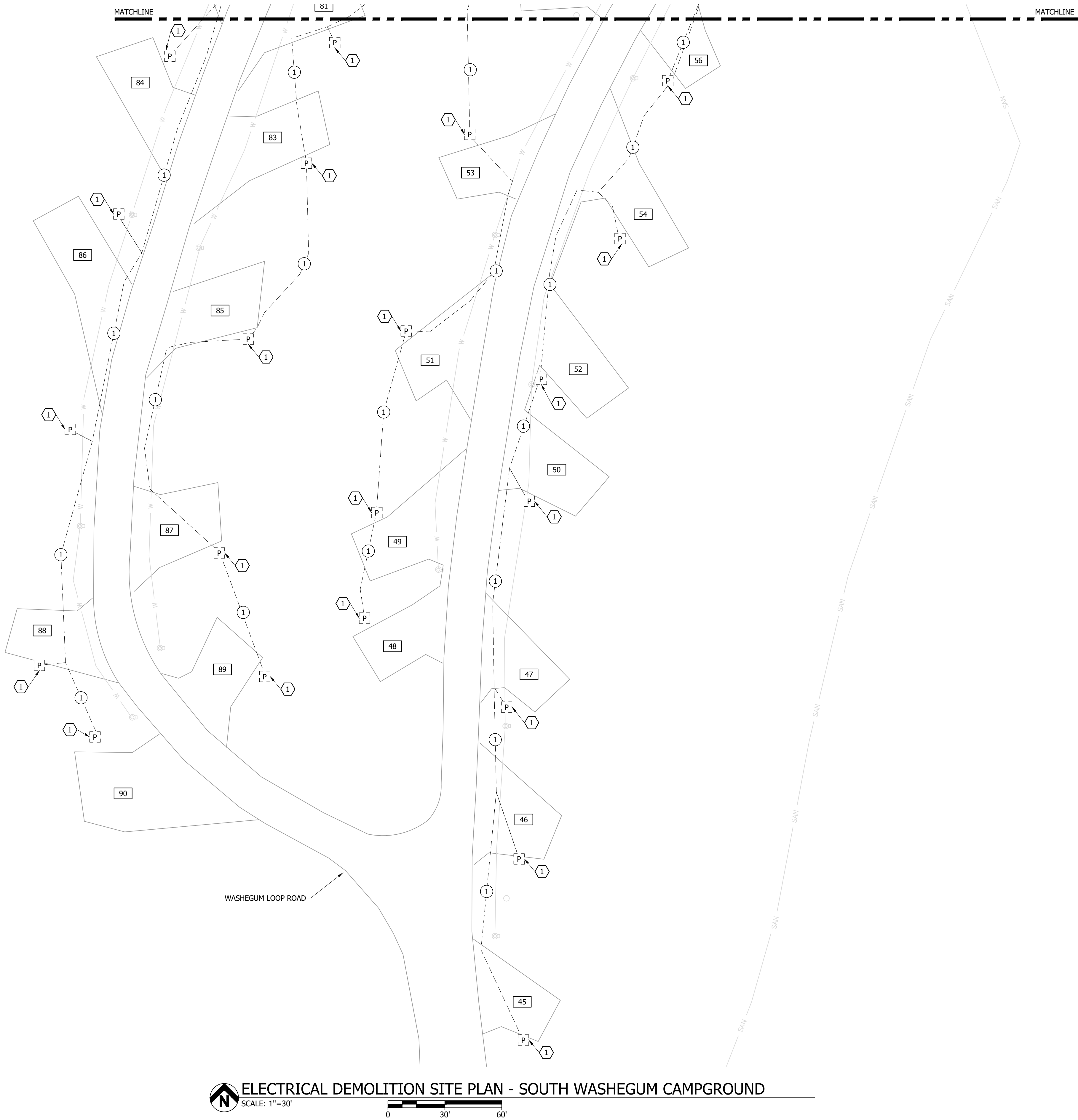
**ELECTRICAL DEMOLITION SITE PLAN**  
**NORTH WASHEGUM CAMPGROUND**  
**LAKE METIGOSHE STATE PARK**  
**NORTH DAKOTA PARKS & RECREATION DEPARTMENT**  
**ELECTRICAL UPGRADES**  
**BISMARCK, NORTH DAKOTA**




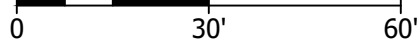
DESIGNED BY:	ARH
DRAWN BY:	SDM
APPROVED BY:	MSV
DESIGN PROJ:	21219.000
CONST PROJ:	
SCALE:	AS NOTED
DATE:	04-24-2023
DRAWING NO:	<b>LM-E-101</b>
SHEET NO:	



Last edit on: 4/21/2023 11:39 AM by: NPB01926 Drawing Name: F:\proj\21000\21219\21219\000\AutoCad\Plan Set\Lake Metigoshe\21219.000E - Electrical Demolition Site Plans - LMSP.dwg Layout Name: DEMO SITE PLAN SOUTH PLotted By: NPB01926 Plotted on: 4/24/2023 2:18:20 PM



 **ELECTRICAL DEMOLITION SITE PLAN - SOUTH WASHEGUM CAMPGROUND**  
SCALE: 1"=30'



REFERENCE NOTES:

- ① EX RV POWER PEDESTAL, POWER CONNECTION AND ALL ASSOCIATED ABOVE GRADE WIRE AND CONDUIT TO BE REMOVED. EX BELOW GRADE DIRECT BURY WIRE TO BE CUT BACK AND REMOVED TO 1'-0" BELOW GRADE. EX BELOW GRADE DIRECT BURY WIRE BELOW 1'-0" TO BE DISCONNECTED, LABELED "ABANDONED", AND ABANDONED IN PLACE. REFER TO ELECTRICAL IMPROVEMENT SITE PLAN - WASHEGUM CAMPGROUND FOR NEW POWER PEDESTAL IMPROVEMENTS.

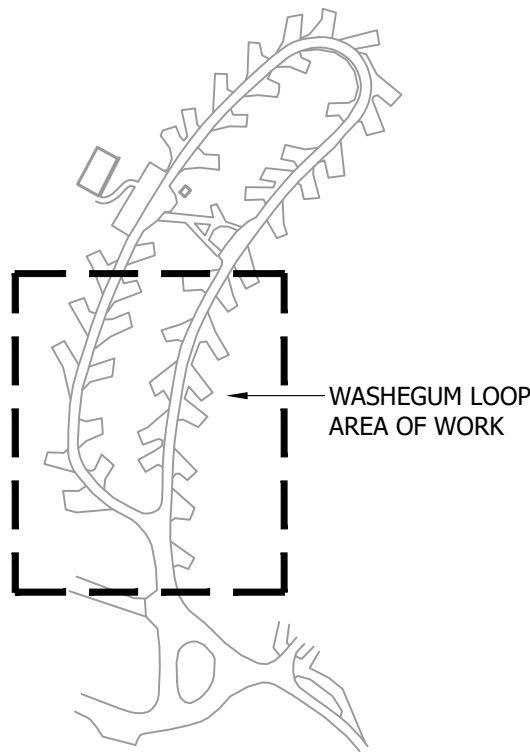
GENERAL NOTES:

- THE EX CONDITIONS HAVE BEEN SHOWN BASED ON CASUAL ON-SITE INVESTIGATION WITH NO GUARANTEE TO THEIR ACCURACY, CONTRACTOR TO BE RESPONSIBLE TO FIELD VERIFY EX CONDITIONS.
- E/C TO FIELD COORDINATE ALL WORK WITH OTHER TRADES.
- E/C TO FIELD COORDINATE WITH NORTH CENTRAL ELECTRIC CO-OP (NCE) FOR ALL UTILITY COORDINATION. NCE CONTACT: TYLER LEE  
PHONE: 701-774-7120  
EMAIL: t.lee@nceci.com
- E/C TO BE RESPONSIBLE FOR A NEW UTILITY ELECTRICAL CONNECTION COSTS.

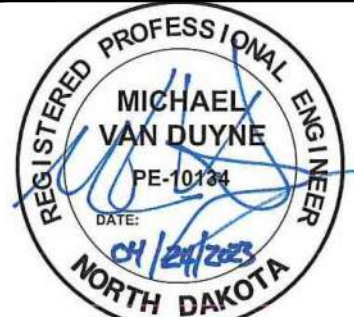
FEEDER SCHEDULE:

- ① EX UNDERGROUND DIRECT BURY BRANCH FEEDER TO REMAIN AND BE ABANDONED IN PLACE.

KEY PLAN:



**ELECTRICAL DEMOLITION SITE PLAN**  
**SOUTH WASHEGUM CAMPGROUND**  
**LAKE METIGOSHE STATE PARK**  
NORTH DAKOTA PARKS & RECREATION DEPARTMENT  
ELECTRICAL UPGRADES  
BISMARCK, NORTH DAKOTA



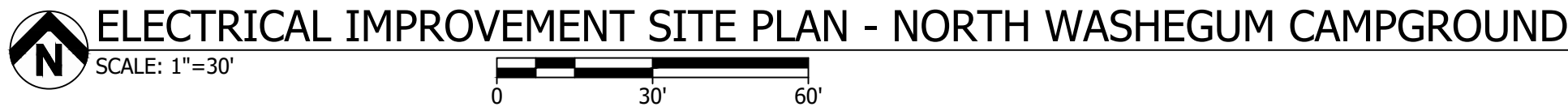
DESIGNED BY:	ARH
DRAWN BY:	SDM
APPROVED BY:	MSV
DESIGN PROJ:	21219.000
CONST PROJ:	
SCALE:	AS NOTED
DATE:	04-24-2023
DRAWING NO:	<b>LM-E-102</b>
SHEET NO:	6 of 13

**Bartlett & West**

3456 E CENTURY AVENUE - BISMARCK, ND 58503  
PHONE 701-258-1110 - FAX 701-258-1111  
WWW.BARTLETTWEST.COM

ALL RIGHTS RESERVED. ALL BARTLETT & WEST PLANS, SPECIFICATIONS AND DRAWINGS ARE PROTECTED UNDER COPYRIGHT LAW, AND NO PART MAY BE COPIED, REPRODUCED, DISPLAYED PUBLICLY, USED TO CREATE DERIVATIVES, DISTRIBUTED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM BY ANY MEANS WITHOUT PRIOR WRITTEN PERMISSION OF BARTLETT & WEST.





- ① EX UNDERGROUND DIRECT BURY MAIN FEEDER. REFER TO ELECTRICAL IMPROVEMENT RISER DIAGRAM 2/LM-E-602 FOR FEEDER SCHEDULE.
- ② NEW UNDERGROUND DIRECT BURY BRANCH FEEDER TRENCH. REFER TO ELECTRICAL WIRING DETAILS 5/LM-E-502 FOR CIRCUITING AND FEEDER SCHEDULE.
- ③ NEW UTILITY FEEDER. REFER TO ELECTRICAL IMPROVEMENT RISER DIAGRAM 2/LM-E-602 FOR FEEDER SCHEDULE.
- ④ NEW UNDERGROUND DIRECT BURY BRANCH FEEDER TRENCH. REFER TO ELECTRICAL WIRING DETAILS 2/LM-E-503 FOR CIRCUITING AND FEEDER SCHEDULE.
- ⑤ NEW UNDERGROUND DIRECT BURY BRANCH FEEDER TRENCH. REFER TO ELECTRICAL WIRING DETAILS 1/LM-E-503 FOR CIRCUITING AND FEEDER SCHEDULE.

- 1/ E/C TO PROVIDE NEW UTILITY TRANSFORMER CONCRETE EQUIPMENT PAD. E/C TO FIELD VERIFY EXACT LOCATION AND COORDINATE ALL REQUIREMENTS WITH ELECTRIC UTILITY.
- 2/ NEW UTILITY TRANSFORMER AND UTILITY METER, PROVIDED BY ELECTRIC UTILITY. E/C TO COORDINATE EXACT CONNECTION REQUIREMENTS WITH ELECTRIC UTILITY.
- 3/ REFER TO ELECTRICAL IMPROVEMENT RISER DIAGRAM DETAIL 4/LM-E-602.
- 4/ NEW 1000 AMP, 120/240 VOLT, 1 PHASE, 3 WIRE PANELBOARD. REFER TO PANELBOARD SCHEDULE ON SHEET LM-E-601.
- 5/ E/C HAS THE OPTION TO BORE UNDER THE STAND (RV GRAVEL PAD) OR TRENCH THROUGH THE STAND. E/C TO RECLAIM TO EX CONDITIONS. E/C TO REPLACE ALL THE DISTURBED STAND AND GRASS AREAS WITH MATCHING MATERIALS, BACKFILLING, AND SEEDING REQUIREMENTS THAT MEET NORTH DAKOTA PARKS AND RECREATION DEPARTMENT'S STANDARDS. MIXED GRAVELS/SAND/DIRT REPLACEMENT FILL MATERIAL WILL NOT BE ACCEPTED. E/C WILL BE REQUIRED TO SORT EX MATERIAL. IF REUSED. E/C TO FIELD COORDINATE ALL REQUIREMENTS.
- 6/ E/C TO CONNECT NEW FEEDER WIRE AND CONDUIT TO EX LIFT STATION. FIELD VERIFY EXACT REQUIREMENTS.
- 7/ REFER TO PUMP HOUSE VFD CONTROL DETAIL 1/LM-E-601 AND PUMP HOUSE PHOTO DETAIL 2/LM-E601.
- 8/ E/C TO REFER TO 2/LM-E-501 FOR NEW PULL-THROUGH PEDESTAL LOCATION.
- 9/ E/C HAS THE OPTION TO BORE UNDER THE ROAD OR TRENCH THROUGH THE ROAD. E/C TO RECLAIM TO EX CONDITIONS. E/C TO REPLACE ALL THE DISTURBED ASPHALT ROADWAY, GRAVEL, AND GRASS AREAS WITH MATCHING MATERIALS, BACKFILLING, AND SEEDING REQUIREMENTS THAT MEET NORTH DAKOTA PARKS AND RECREATION DEPARTMENT'S STANDARDS. MIXED GRAVELS/SAND/DIRT REPLACEMENT FILL MATERIAL WILL NOT BE ACCEPTED. E/C WILL BE REQUIRED TO SORT EX MATERIAL. IF REUSED. E/C TO FIELD COORDINATE ALL REQUIREMENTS.

1. E/C TO PROVIDE ALL NEW PEDESTAL UNDERGROUND DIRECT BURY BRANCH FEEDERS WITHIN THE SAME TRENCH. FIELD COORDINATE EXACT LOCATION.
2. E/C SHALL NOT REMOVE OR DISTURB ANY TREES OR SHRUBS WITHOUT OWNER APPROVAL. FIELD COORDINATE WITH OWNER.
3. THE EX CONDITIONS HAVE BEEN SHOWN BASED ON CASUAL ON-SITE INVESTIGATION WITH NO GUARANTEE TO THEIR ACCURACY, CONTRACTOR TO BE RESPONSIBLE TO FIELD VERIFY EX CONDITIONS.
4. E/C TO FIELD COORDINATE ALL WORK WITH OTHER TRADES.
5. E/C TO FIELD COORDINATE WITH NORTH CENTRAL ELECTRIC CO-OP (NCE) FOR ALL UTILITY COORDINATION  
NCE CONTACT: TYLER LEE  
PHONE: 701-774-7120  
EMAIL: t.lee@nceci.com
6. E/C TO BE RESPONSIBLE FOR A NEW UTILITY ELECTRICAL CONNECTION COSTS.
7. E/C TO REPLACE ALL THE DISTURBED STAND AND GRASS AREAS WITH MATCHING VEGETATION, MATERIALS, BACKFILLING, AND SEEDING REQUIREMENTS THAT MEET NORTH DAKOTA PARKS AND RECREATION DEPARTMENT'S STANDARDS. MIXED GRAVELS/SAND/DIRT REPLACEMENT FILL MATERIAL WILL NOT BE ACCEPTED. E/C WILL BE REQUIRED TO SORT EX MATERIAL IF REUSED. E/C WILL BE REQUIRED TO COORDINATE ALL REQUIREMENTS WITH NORTH DAKOTA PARKS AND RECREATION DEPARTMENT.
8. E/C TO REFER TO 1/LM-E-501 FOR NEW BACK-IN SITE PEDESTAL LOCATION, UNLESS NOTED OTHERWISE.

- WASHEGUM LOOP  
AREA OF WORK

**Bartlett & West**  
3456 E CENTURY AVENUE BIRMINGHAM, AL 35203  
PHONE 701-255-1110 • FAX 701-255-1111  
[www.bartlettwest.com](http://www.bartlettwest.com)

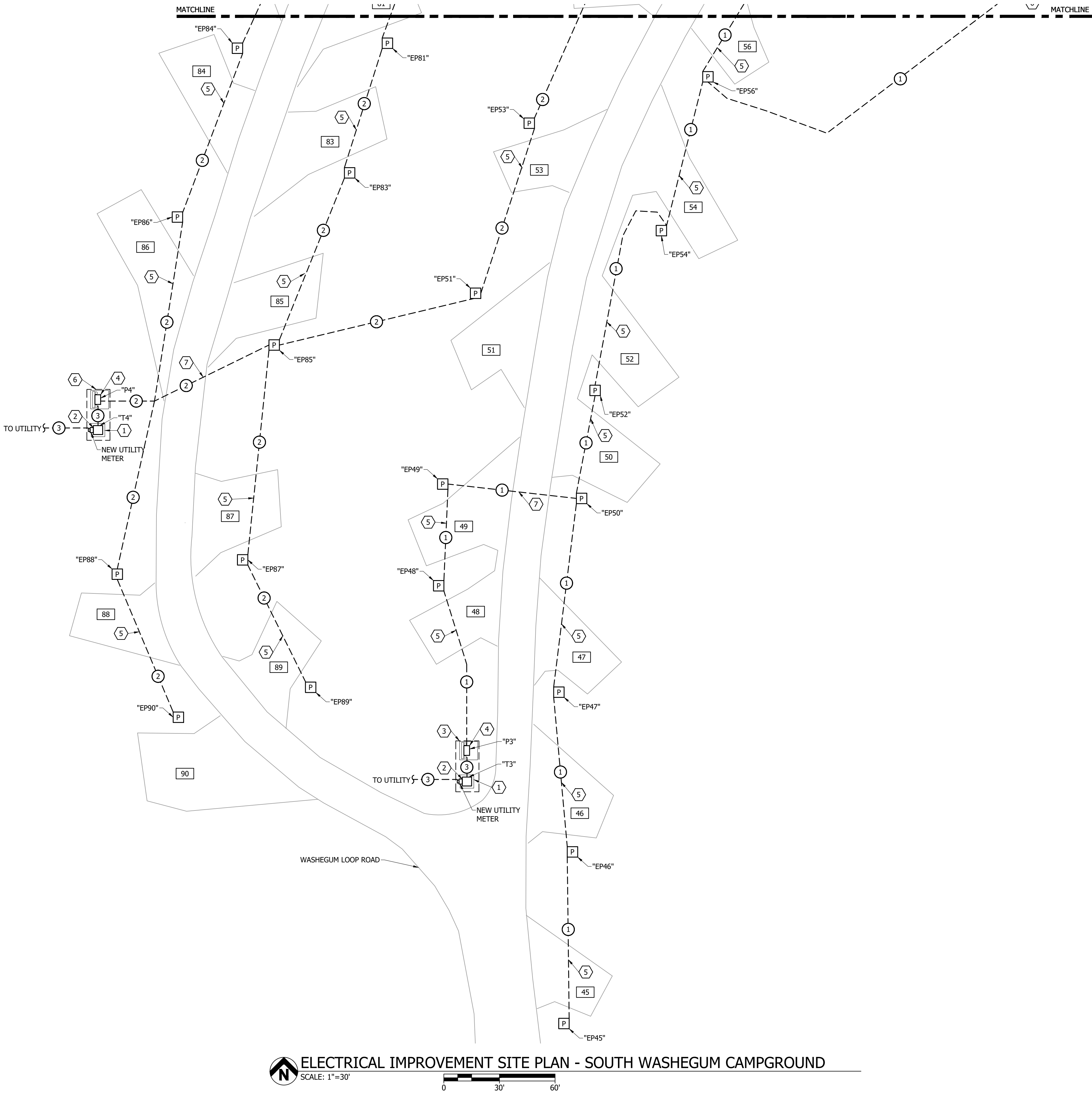
**ELECTRICAL IMPROVEMENT SITE PLAN**  
**NORTH WASHEGUM CAMPGROUND**  
**LAKE METIGOSHE STATE PARK**  
NORTH DAKOTA PARKS & RECREATION DEPARTMENT  
ELECTRICAL UPGRADES  
BISMARCK, NORTH DAKOTA



DESIGNED BY:	ARH
DRAWN BY:	SDM
APPROVED BY:	MSV
DESIGN PROJ:	21219.000
CONST PROJ:	
SCALE:	AS NOTED
DATE:	04-24-2023
DRAWING NO:	<b>LM-E-103</b>
SHEET NO:	



Last edit on: 4/21/2023 12:02 PM by: NPB01926 Drawing Name: F:\proj\21000\21219\01219\000\AutoCad\Plan Set\Lake Metigoshe\21219.000E - Electrical Improvement Site Plans - LMSF.dwg Layout Name: IMPROVEMENT SITE PLAN SOUTH Plotted on: 4/24/2023 2:18:31 PM



REFERENCE NOTES:

- 1 E/C TO PROVIDE NEW UTILITY TRANSFORMER CONCRETE EQUIPMENT PAD. E/C TO FIELD VERIFY EXACT LOCATION AND COORDINATE ALL REQUIREMENTS WITH ELECTRIC UTILITY.
- 2 NEW UTILITY TRANSFORMER AND UTILITY METER, PROVIDED BY ELECTRIC UTILITY. E/C TO COORDINATE EXACT CONNECTION REQUIREMENTS WITH ELECTRIC UTILITY.
- 3 REFER TO ELECTRICAL IMPROVEMENT RISER DIAGRAM DETAIL 3/LM-E-602.
- 4 NEW 800 AMP, 120/240 VOLT, 1 PHASE, 3 WIRE PANELBOARD. REFER TO PANELBOARD SCHEDULE ON SHEET LM-E-601.
- 5 E/C HAS THE OPTION TO BORE UNDER THE STAND (RV GRAVEL PAD) OR TRENCH THROUGH THE STAND. E/C TO RECLAIM TO EX CONDITIONS. E/C TO REPLACE ALL THE DISTURBED STAND AND GRASS AREAS WITH MATCHING MATERIALS, BACKFILLING, AND SEEDING REQUIREMENTS THAT MEET NORTH DAKOTA PARKS AND RECREATION DEPARTMENT'S STANDARDS. MIXED GRAVEL/SAND/DIRT REPLACEMENT FILL MATERIAL WILL NOT BE ACCEPTED. E/C WILL BE REQUIRED TO SORT EX MATERIAL IF REUSED. E/C TO FIELD COORDINATE ALL REQUIREMENTS.
- 6 REFER TO ELECTRICAL IMPROVEMENT RISER DIAGRAM DETAIL 2/LM-E-602.
- 7 E/C HAS THE OPTION TO BORE UNDER THE ROAD OR TRENCH THROUGH THE ROAD. E/C TO RECLAIM TO EX CONDITIONS. E/C TO REPLACE ALL THE DISTURBED ASPHALT ROADWAY, GRAVEL, AND GRASS AREAS WITH MATCHING MATERIALS, BACKFILLING, AND SEEDING REQUIREMENTS THAT MEET NORTH DAKOTA PARKS AND RECREATION DEPARTMENT'S STANDARDS. MIXED GRAVEL/SAND/DIRT REPLACEMENT FILL MATERIAL WILL NOT BE ACCEPTED. E/C WILL BE REQUIRED TO SORT EX MATERIAL IF REUSED. E/C TO FIELD COORDINATE ALL REQUIREMENTS.

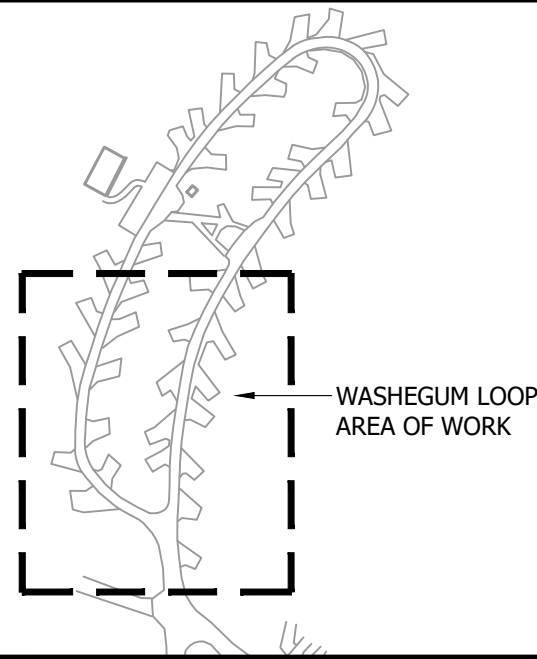
GENERAL NOTES:

1. E/C TO PROVIDE ALL NEW PEDESTAL UNDERGROUND DIRECT BURY BRANCH FEEDERS WITHIN THE SAME TRENCH. FIELD COORDINATE EXACT LOCATION.
2. E/C SHALL NOT REMOVE OR DISTURB ANY TREES OR SHRUBS WITHOUT OWNER APPROVAL. FIELD COORDINATE WITH OWNER.
3. THE EX CONDITIONS HAVE BEEN SHOWN BASED ON CASUAL ON-SITE INVESTIGATION WITH NO GUARANTEE TO THEIR ACCURACY, CONTRACTOR TO BE RESPONSIBLE TO FIELD VERIFY EX CONDITIONS.
4. E/C TO FIELD COORDINATE ALL WORK WITH OTHER TRADES.
5. E/C TO FIELD COORDINATE WITH NORTH CENTRAL ELECTRIC CO-OP (NCE) FOR ALL UTILITY COORDINATION.  
NCE CONTACT: TYLER LEE  
PHONE: 701-774-7120  
EMAIL: t.lee@nceci.com
6. E/C TO BE RESPONSIBLE FOR A NEW UTILITY ELECTRICAL CONNECTION COSTS.
7. E/C TO REPLACE ALL THE DISTURBED STAND AND GRASS AREAS WITH MATCHING VEGETATION, MATERIALS, BACKFILLING, AND SEEDING REQUIREMENTS THAT MEET NORTH DAKOTA PARKS AND RECREATION DEPARTMENT'S STANDARDS. MIXED GRAVEL/SAND/DIRT REPLACEMENT FILL MATERIAL WILL NOT BE ACCEPTED. E/C WILL BE REQUIRED TO SORT EX MATERIAL IF REUSED. E/C TO COORDINATE ALL REQUIREMENTS WITH NORTH DAKOTA PARKS AND RECREATION DEPARTMENT.
8. E/C TO REFER TO 1/LM-E-501 FOR NEW BACK-IN SITE PEDESTAL LOCATION, UNLESS NOTED OTHERWISE.

FEEDER SCHEDULE:

- 1 NEW UNDERGROUND DIRECT BURY BRANCH FEEDER TRENCH. REFER TO ELECTRICAL WIRING DETAILS 1/LM-E-503 FOR CIRCUITING AND FEEDER SCHEDULE.
- 2 NEW UNDERGROUND DIRECT BURY BRANCH FEEDER TRENCH. REFER TO ELECTRICAL WIRING DETAILS 2/LM-E-503 FOR CIRCUITING AND FEEDER SCHEDULE.
- 3 NEW UTILITY FEEDERS. REFER TO ELECTRICAL IMPROVEMENT RISER DIAGRAM 2/LM-E-602 FOR FEEDER SCHEDULE.

KEY PLAN:

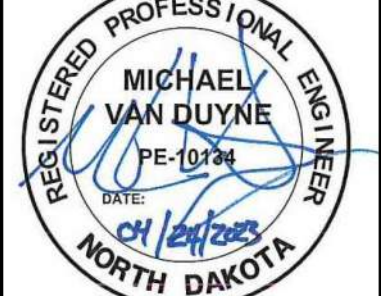


BY	
DESCRIPTION	
DATE	
#	

**Bartlett & West**

3456 E CENTURY AVENUE - BISMARCK, ND 58503  
PHONE 701-258-1110 - FAX 701-258-1111  
WWW.BARTLETTWEST.COM

ELECTRICAL IMPROVEMENT SITE PLAN  
SOUTH WASHEGUM CAMPGROUND  
LAKE METIGOSHE STATE PARK  
NORTH DAKOTA PARKS & RECREATION DEPARTMENT  
ELECTRICAL UPGRADES  
BISMARCK, NORTH DAKOTA

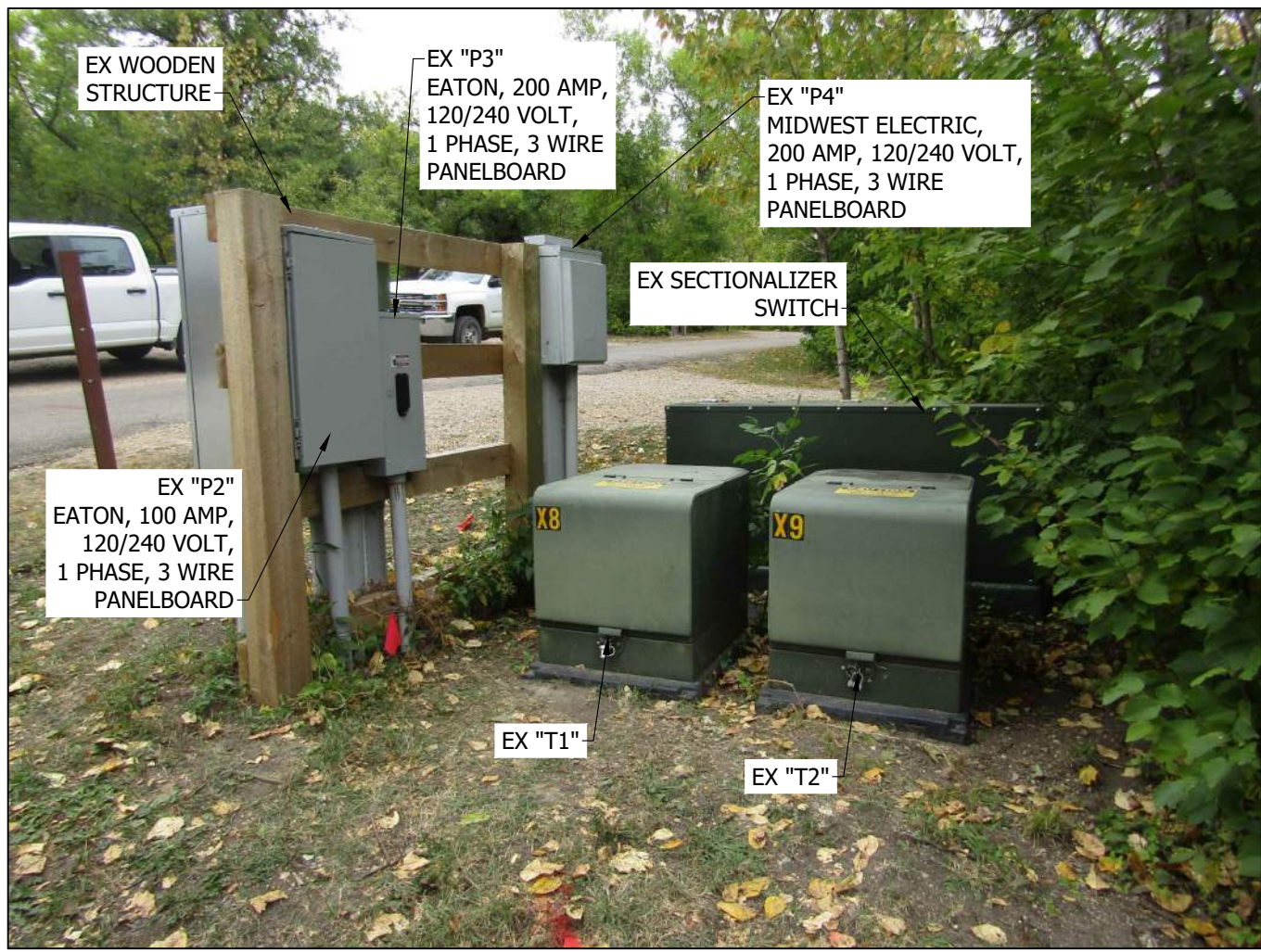


DESIGNED BY:	ARH
DRAWN BY:	SDM
APPROVED BY:	MSV
DESIGN PROJ:	21219.000
CONST PROJ:	
SCALE:	AS NOTED
DATE:	04-24-2023
DRAWING NO:	LM-E-104
SHEET NO:	8 of 13

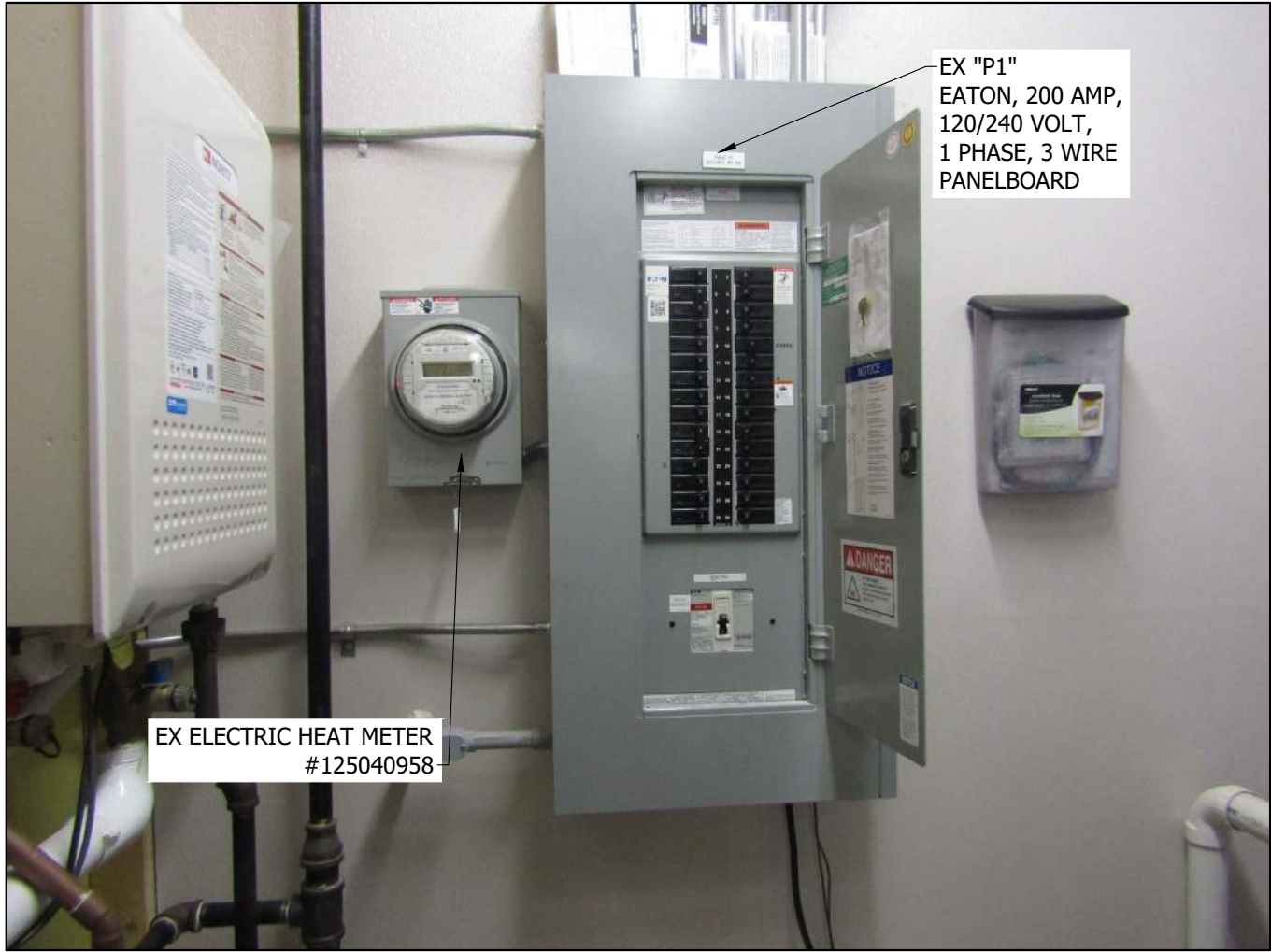
ALL RIGHTS RESERVED. ALL BARTLETT & WEST PLANS, SPECIFICATIONS AND DRAWINGS ARE PROTECTED UNDER COPYRIGHT LAW, AND NO PART MAY BE COPIED, REPRODUCED, DISPLAYED PUBLICLY, USED TO CREATE DERIVATIVES, DISTRIBUTED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM BY ANY MEANS WITHOUT PRIOR WRITTEN PERMISSION OF BARTLETT & WEST.



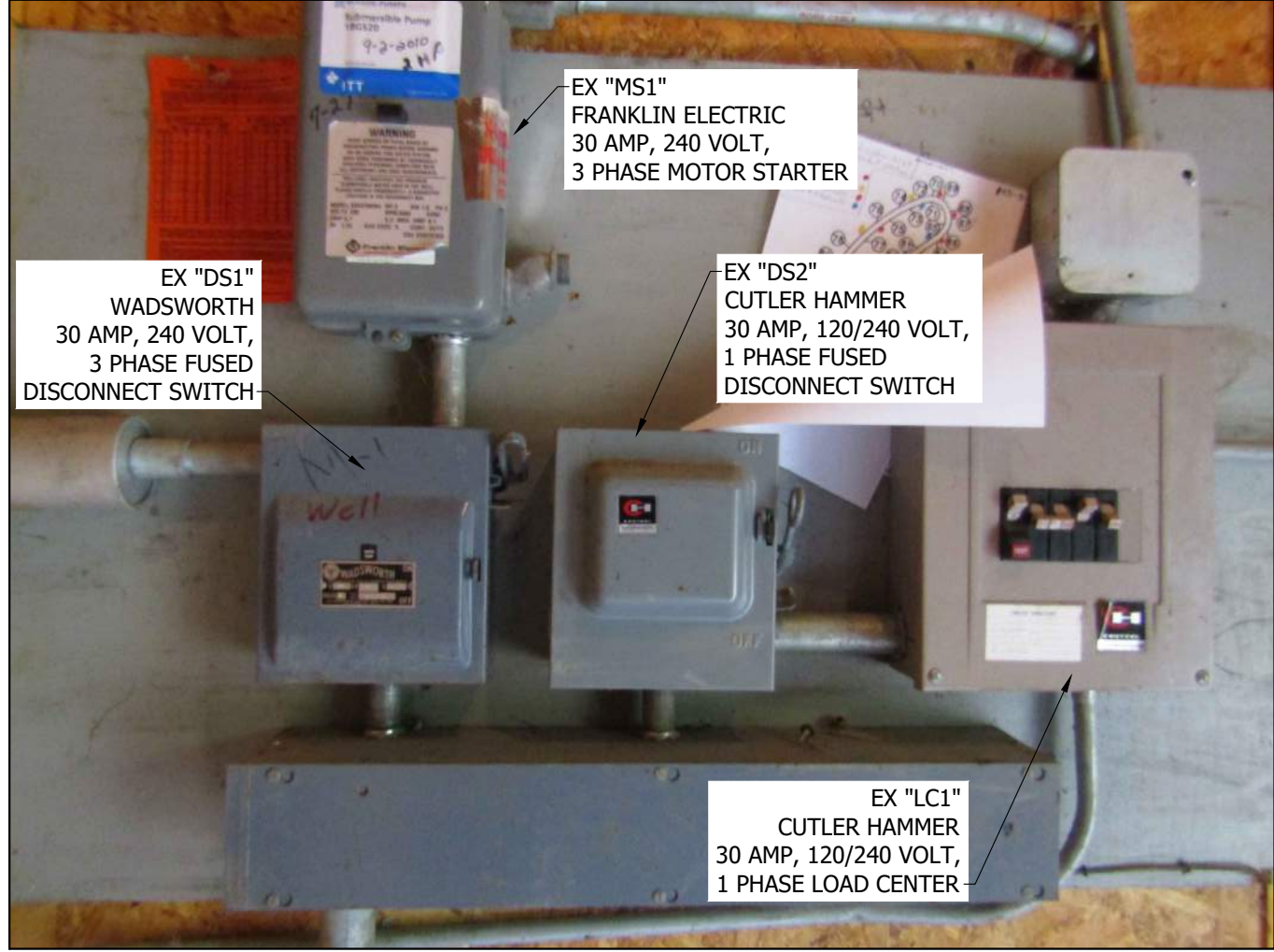
Last edit on: 4/21/2023 11:39 AM by: NP801926 Drawing Name: F:\Proj\21000\21219\01219.000\AutoCad\Plan Set\Lake Metigoshe\21219.000E - Electrical Site Details - LNSP.dwg Layout Name: SITE DETAILS - LNSP Plotted on: 4/24/2023 2:18:33 PM



UTILITY METER, CT CABINET, UTILITY TRANSFORMERS  
UTILITY SECTIONALIZER, EX "P1", EX "P3", AND EX "P4" (SITE 77)  
3 NOT TO SCALE



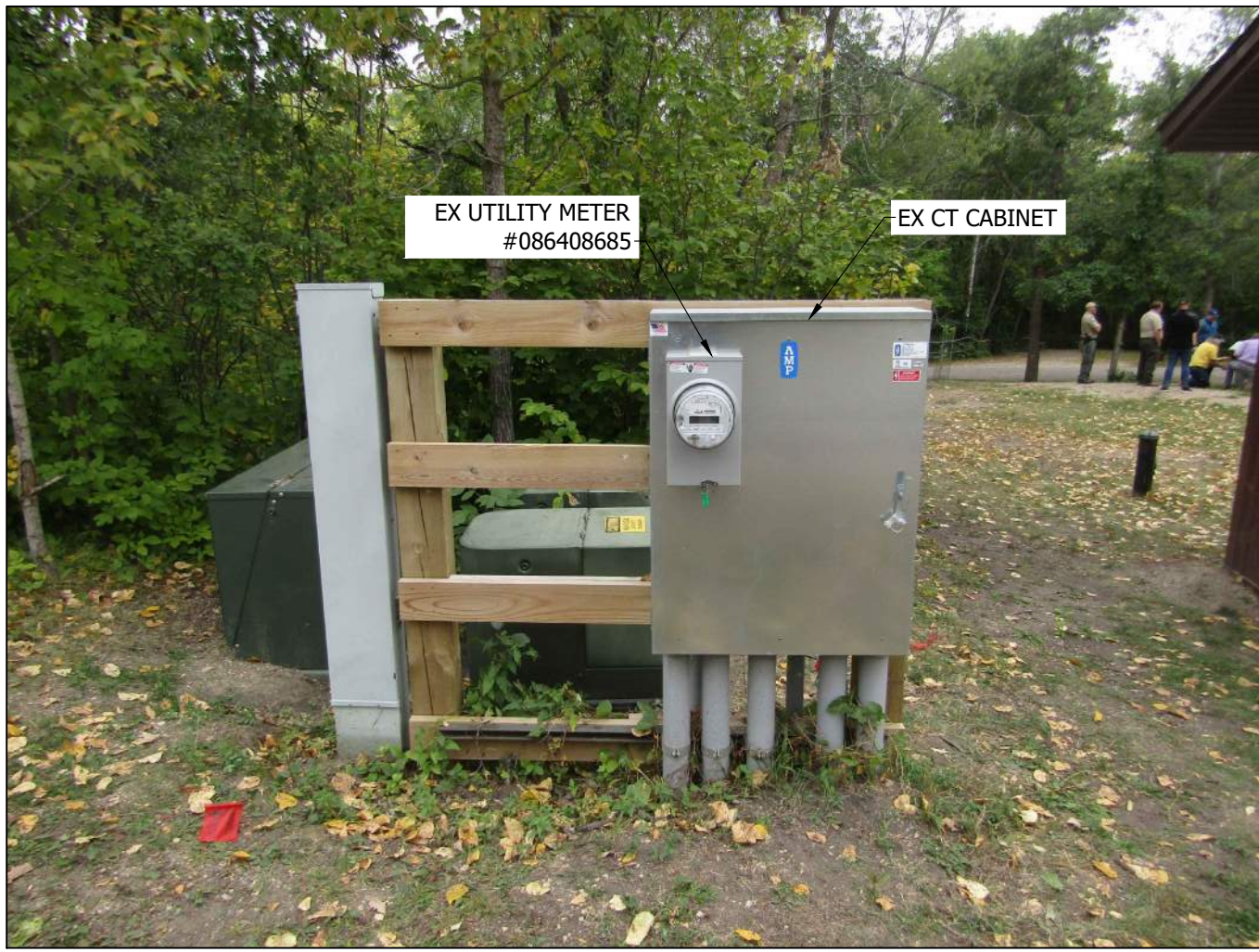
6 COMFORT STATION EX "P1"  
NOT TO SCALE



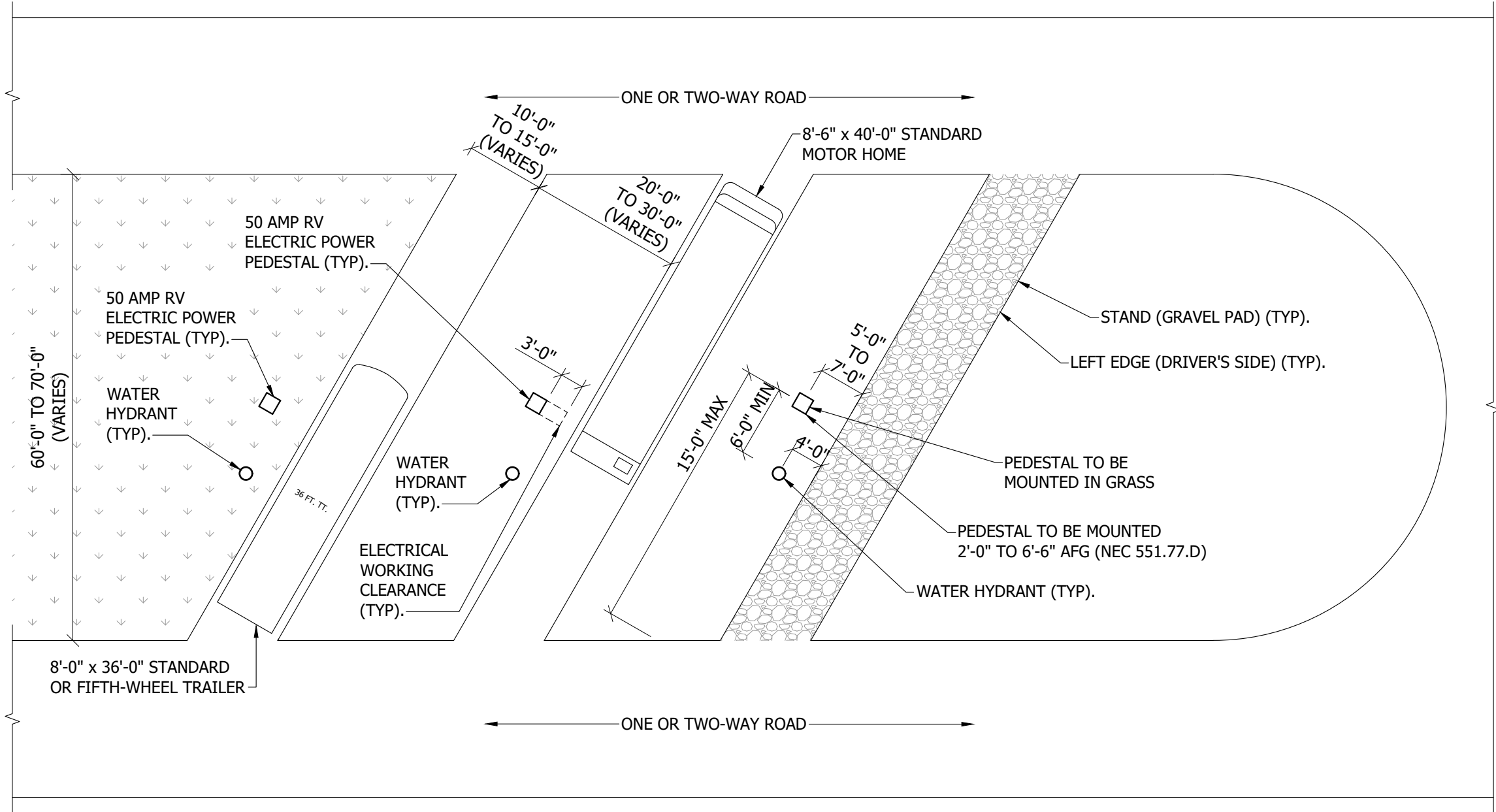
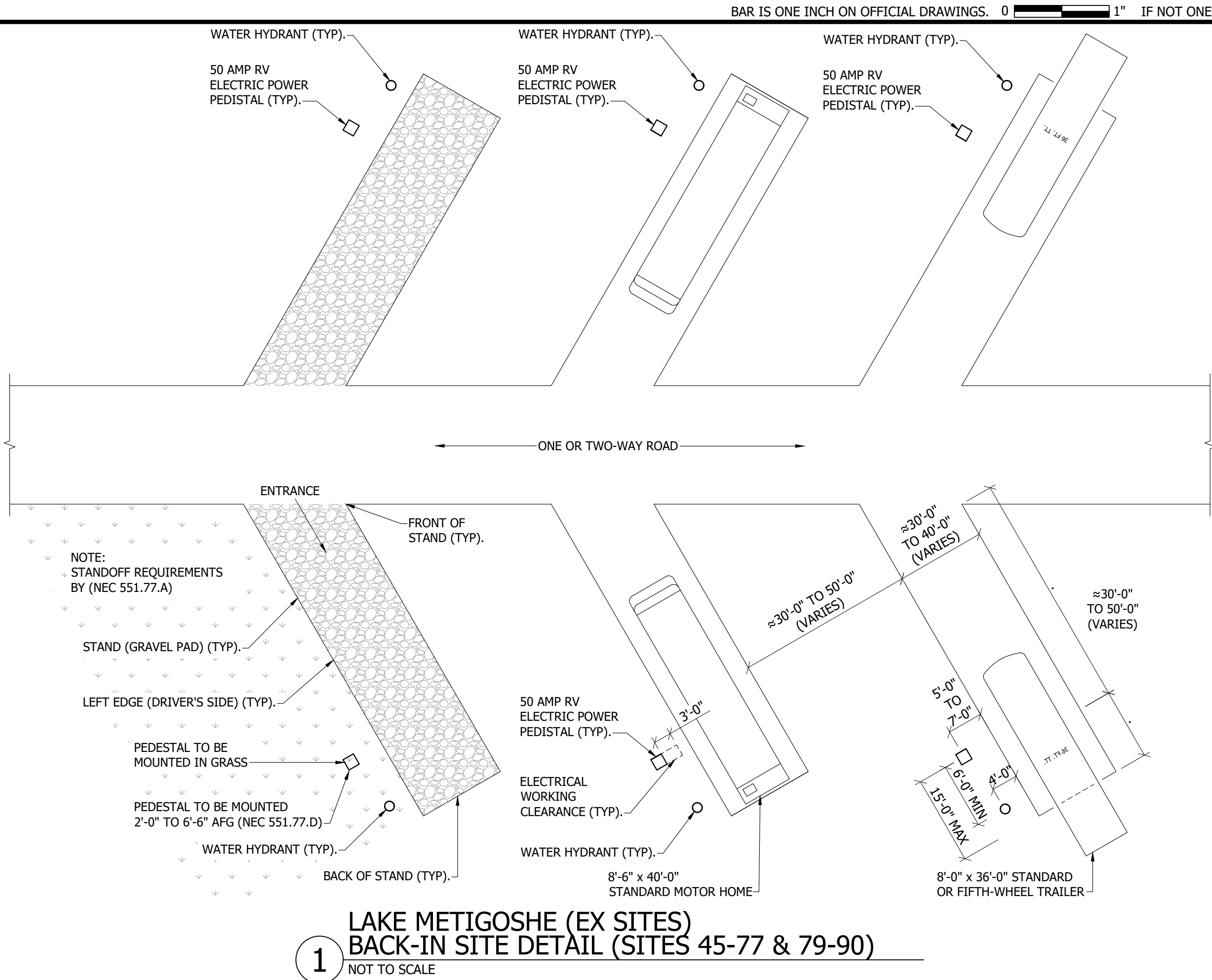
4 PUMP HOUSE EX "MS1", EX "LC1", EX "DS1"  
NOT TO SCALE



7 EX "P5" (SITE 57)  
NOT TO SCALE



5 EX LIFT STATION  
NOT TO SCALE

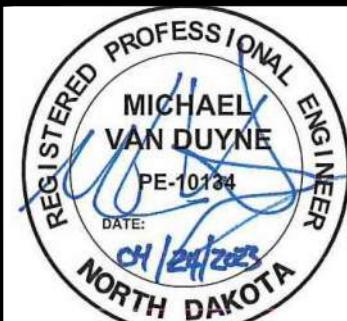


**Bartlett & West**

3496 E CENTURY AVENUE - BISMARCK, ND 58503  
PHONE 701-258-1110 - FAX 701-258-1111  
WWW.BARTLETTANDWEST.COM

**ELECTRICAL SITE DETAILS  
LAKE METIGOSHE STATE PARK**

**NORTH DAKOTA PARKS & RECREATION DEPARTMENT  
ELECTRICAL UPGRADES  
BISMARCK, NORTH DAKOTA**

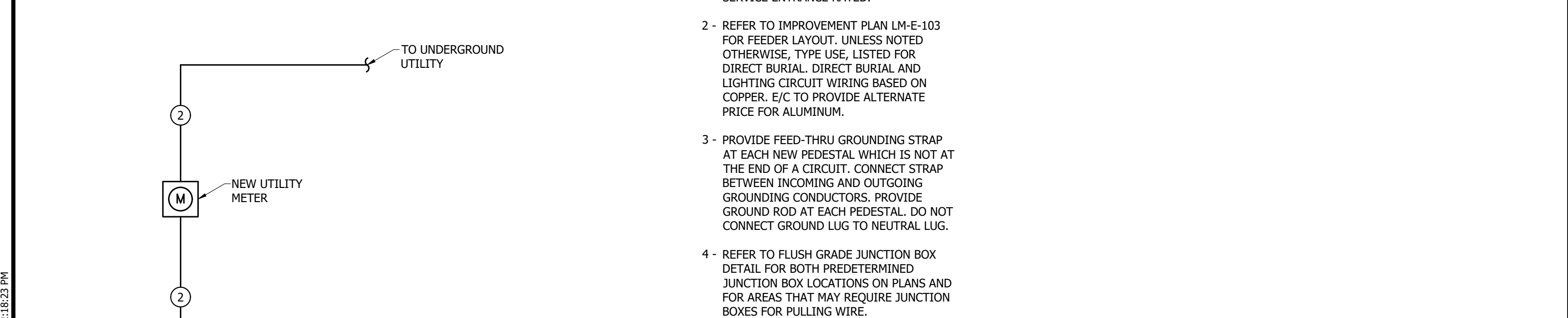


DESIGNED BY:	ARH
DRAWN BY:	SDM
APPROVED BY:	MSV
DESIGN PROJ:	21219.000
CONST PROJ:	
SCALE:	AS NOTED
DATE:	04-24-2023
DRAWING NO:	<b>LM-E-501</b>
SHEET NO:	9 of 13

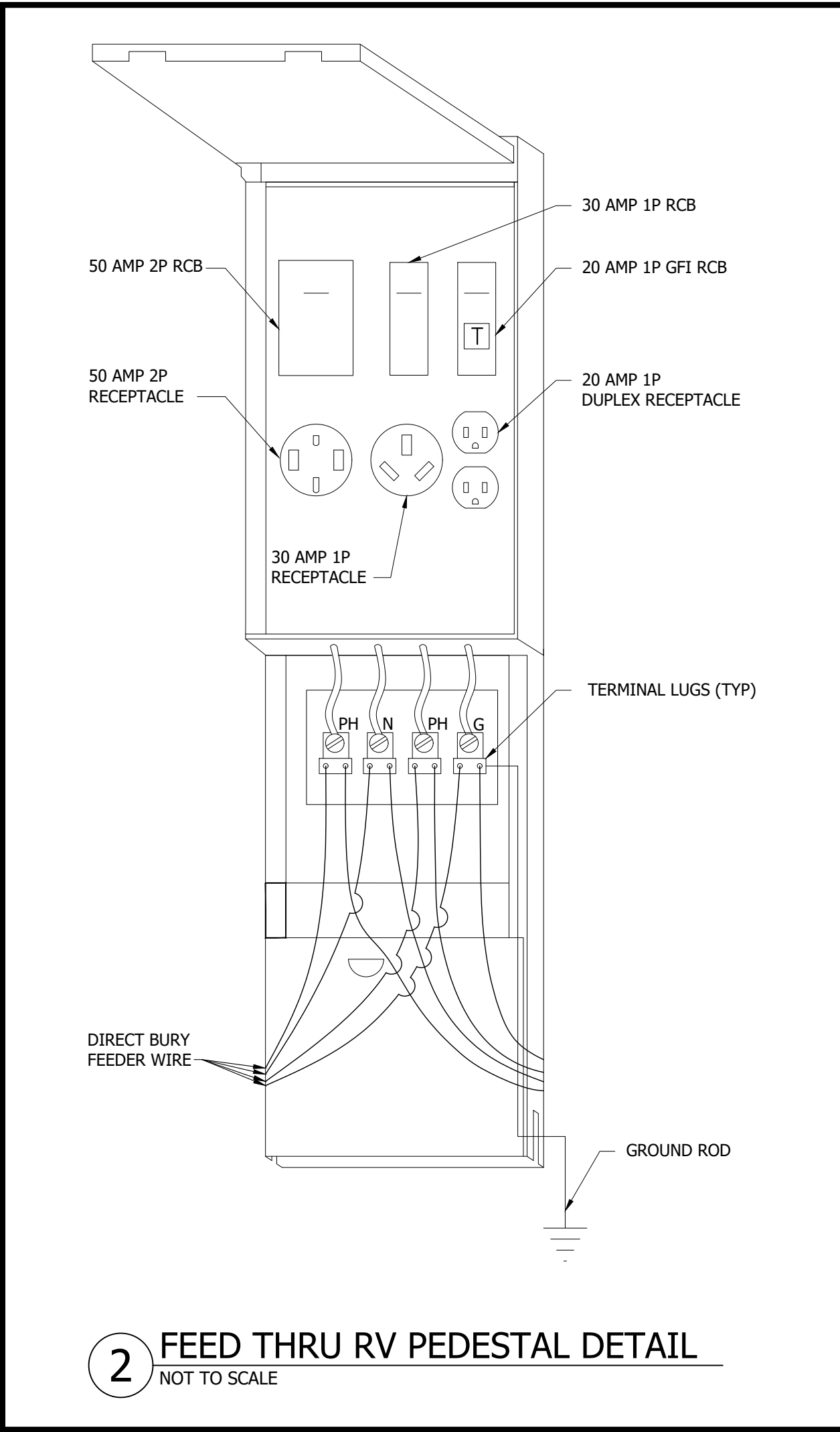


	<b>FEEDER SCHEDULE:</b>	
	①	3-4/0 DIRECT BURY CABLE WITH 4/0G.(BASED ON COPPER)
	②	REFER TO ELECTRICAL IMPROVEMENT RISER DIAGRAM.
	③	3-2/0 DIRECT BURY CABLE WITH 3/0G.(BASED ON COPPER)
	④	3-1/0 DIRECT BURY CABLE WITH 1/0G. (BASED ON COPPER)
	⑤	3-1 DIRECT BURY CABLE WITH 1G. (BASED ON COPPER)

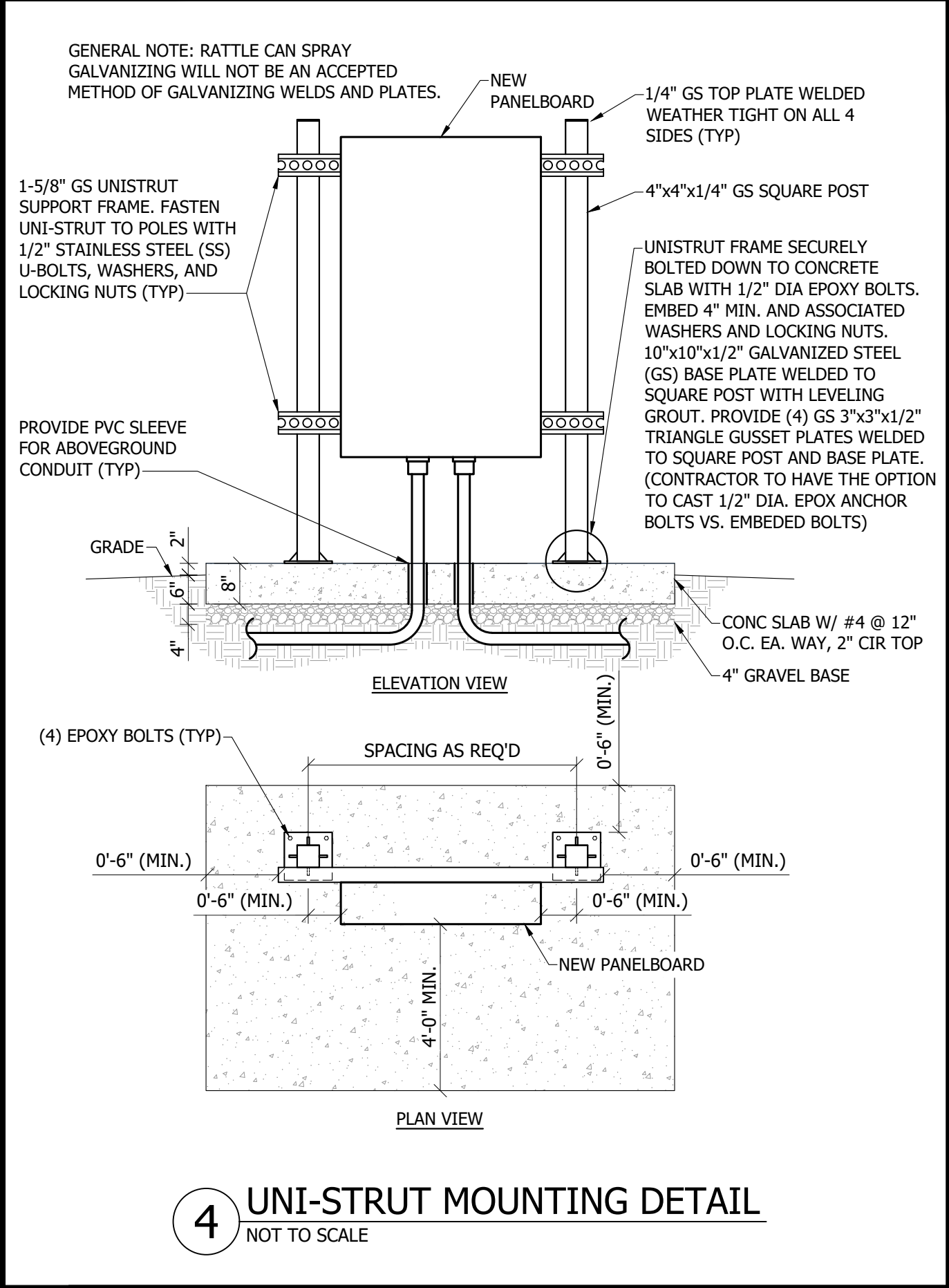
- ALL POWER OUTLET PEDESTALS ARE BASED ON MIDWEST U075 GP6 POWER OUTLET PANELS W/ 100 AMP MAINS, 1-50 AMP, 2P BKR & 50AMP 240 VOLT RECEPTACLE, 1-30 AMP 1P BKR & 30 AMP 120 VOLT RECEPTACLE, AND 1-20 AMP 1P GFI BKR & 120 VOLT DUPLEX RECEPTACLE.
- 1 - PROVIDE PANELS WHICH ARE NEMA 3R & SERVICE ENTRANCE RATED.



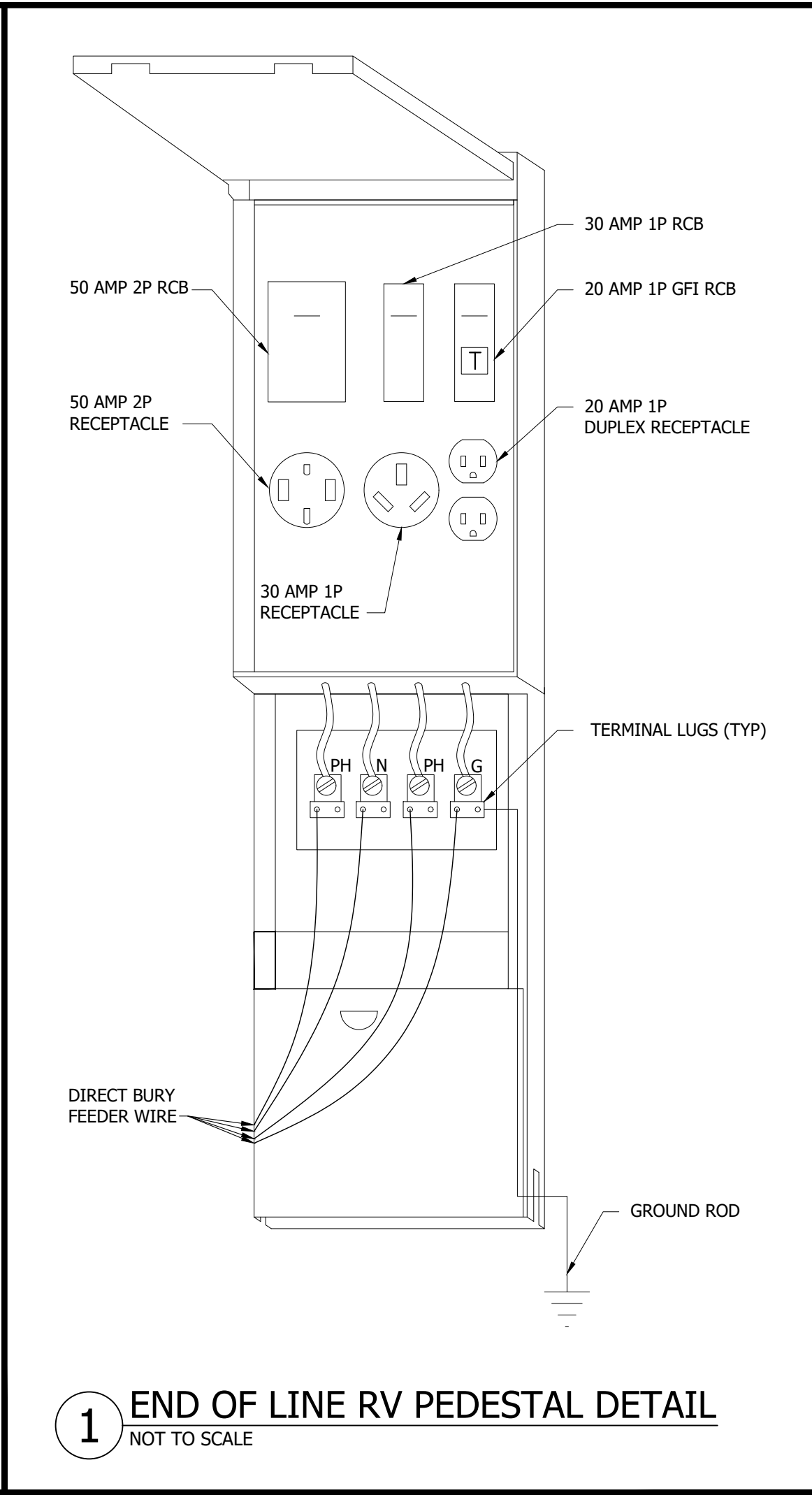
5 "P2" ELECTRICAL WIRING DIAGRAM  
NOT TO SCALE



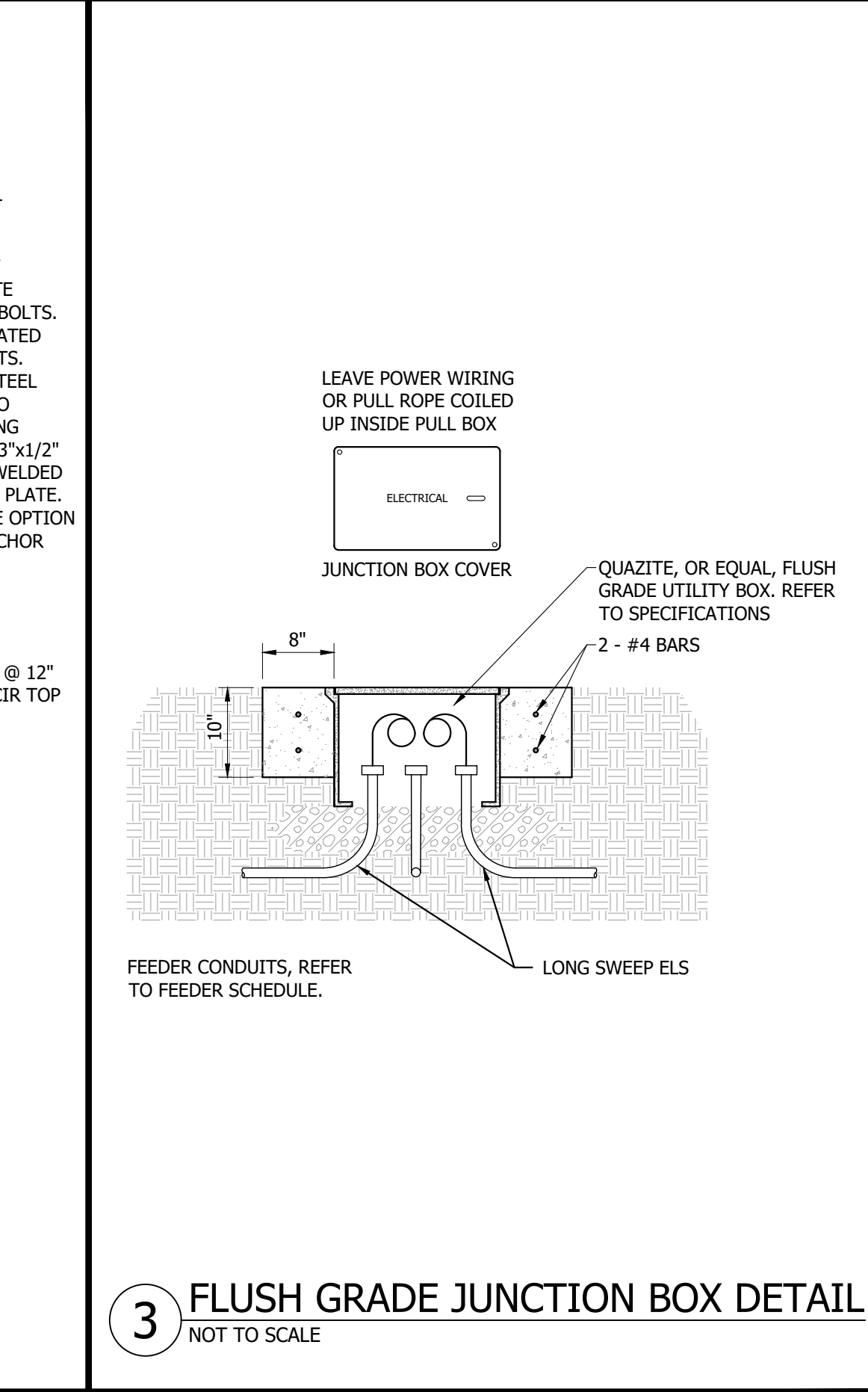
GENERAL NOTE: RATTLE CAN SPRAY



#### 4 UNI-STRUT MOUNTING DETAIL



--	--



### 3 FLUSH GRADE JUNCTION BOX DETAIL

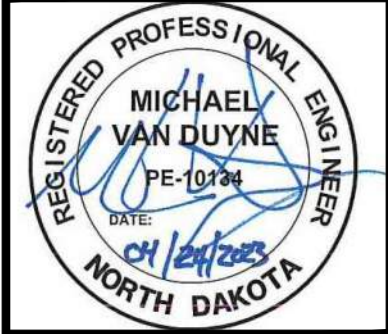
[illegible]

**Bartlett & West**

--

**ELECTRICAL DETAILS**  
**LAKE METIGOSHE STATE PARK**

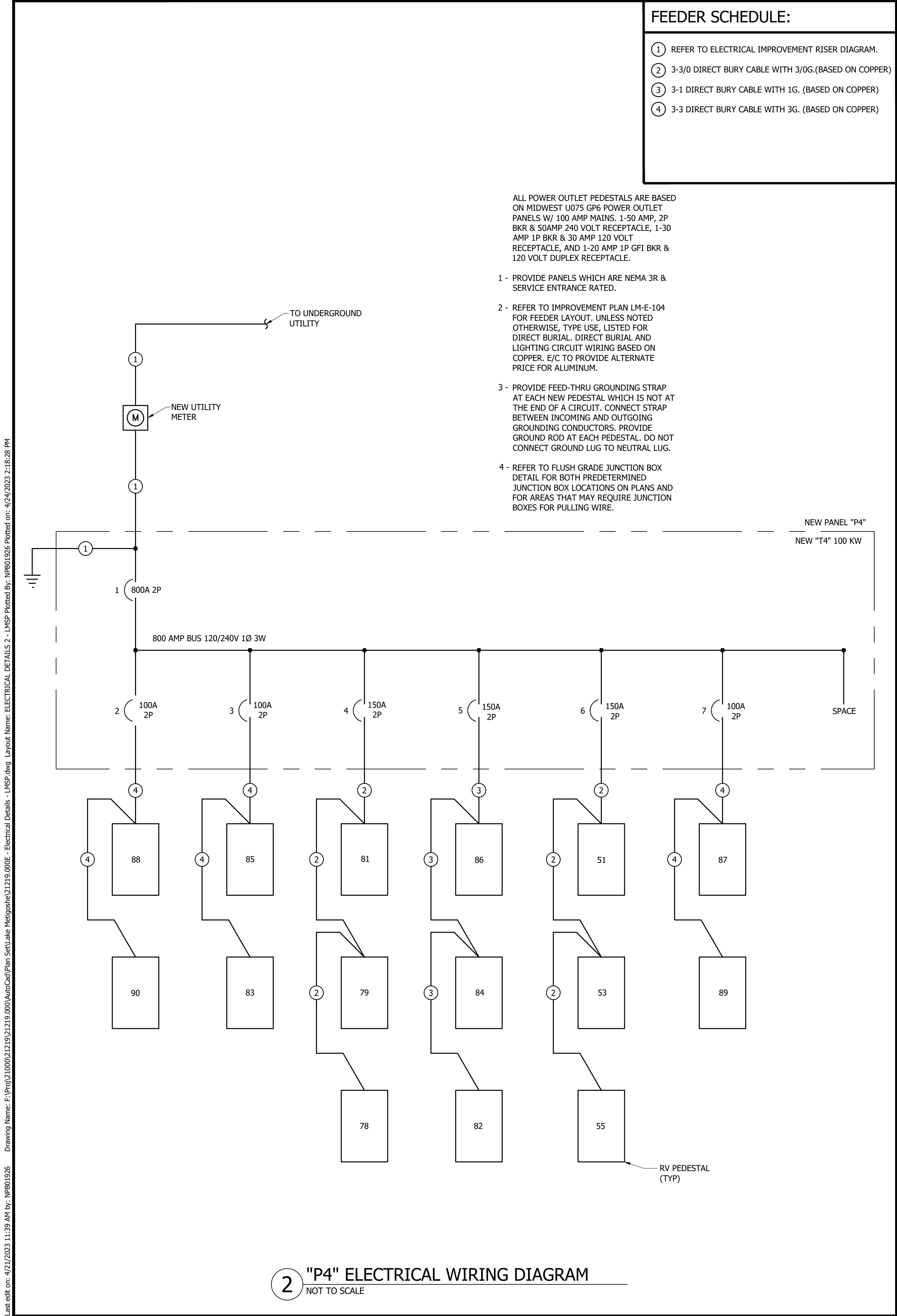
**NORTH DAKOTA PARKS & RECREATION DEPARTMENT**  
**ELECTRICAL UPGRADES**  
**BISMARCK, NORTH DAKOTA**



DESIGNED BY:	ARH
DRAWN BY:	SDM
APPROVED BY:	MSV
DESIGN PROJ:	21219.000
CONST PROJ:	
SCALE:	AS NOTED
DATE:	04-24-2023
DRAWING NO:	<b>LM-E-502</b>
SHEET NO:	10 of 13



Last edit on: 4/21/2023 11:39 AM by: NPB01926 Drawing Name: F:\proj\21000\21219\01219\000\AutoCad\Plan Set\Lake Metigoshe\21219.000E - Electrical Details - LNSP.dwg Layout Name: ELECTRICAL DETAILS 2 - LNSP Plotted By: NPB01926 Plotted on: 4/24/2023 2:18:28 PM



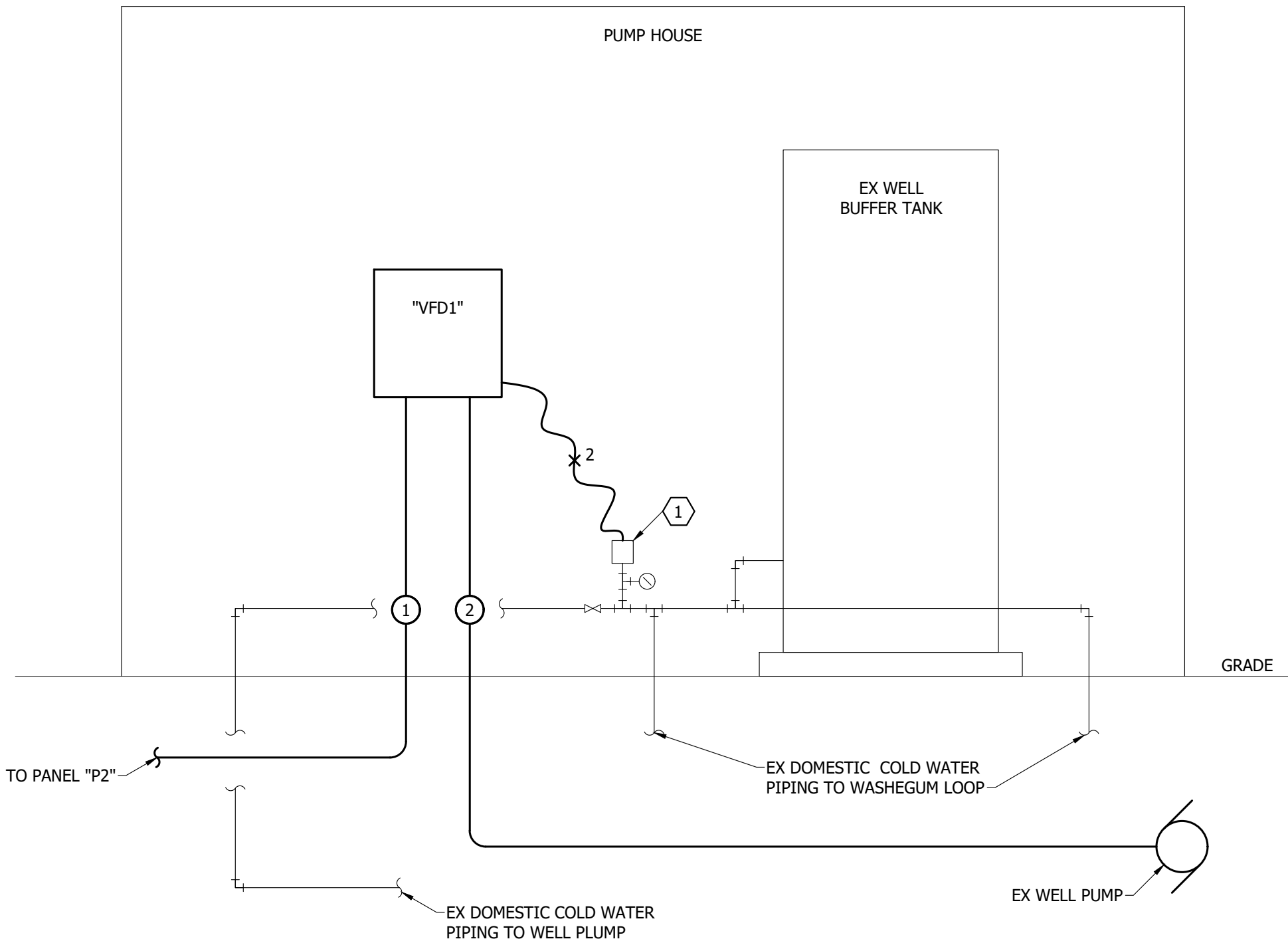


FEEDER SCHEDULE:

- ① VFD MAIN FEEDER. REFER TO ELECTRICAL IMPROVEMENT RISER DIAGRAM.
- ② EX WELL PUMP FEEDER. REFER TO ELECTRICAL IMPROVEMENT RISER DIAGRAM.

REFERENCE NOTES:

- ① E/C TO REMOVE AND DISCONNECT EX PUMP PRESSURE SENSOR AND ALL ASSOCIATED CONTROL WIRE. E/C TO PROVIDE NEW VFD PRESSURE SENSOR AND ALL NEW CONTROL WIRE AND CONDUIT BACK TO VFD CONTACTS. E/C TO FIELD COORDINATE EXACT REQUIREMENTS WITH VFD AND PRESSURE SENSOR MANUFACTURER.



① PUMP HOUSE VFD CONTROL DETAIL  
NOT TO SCALE



② PUMP HOUSE PHOTO DETAILS  
NOT TO SCALE

CIRCUIT BREAKER DISTRIBUTION PANEL SCHEDULE

MARK: "P2"		NEMA 3R		MAIN BUSS: 1000 AMP	
VOLTAGE: 120/240		PHASE: 1	WIRE: 3	GROUND BUS: 500 AMP	
				CIRCUIT BREAKER	
UNIT NO.	EQUIPMENT SERVED			AMP	POLE
1	MCB			1000	2
2	RV SITE 71,73,77			150	2
3	RV SITE 72,74,76			150	2
4	RV SITE 61,65,75			150	2
5	RV SITE 68,69,70			150	2
6	RV SITE 64,66,67			150	2
7	PUMP HOUSE "VFD1"			100	2
8	PUMP HOUSE "LC1"			30	2
9	EX "P1"			200	2
10	SPACE				
11					
12					
ACCESSORIES:					
35K AIC RATING (MINIMUM)					

CIRCUIT BREAKER DISTRIBUTION PANEL SCHEDULE

MARK: "P3"		NEMA 3R		MAIN BUSS: 800 AMP	
VOLTAGE: 120/240		PHASE: 1	WIRE: 3	GROUND BUS: 400 AMP	
				CIRCUIT BREAKER	
UNIT NO.	EQUIPMENT SERVED			AMP	POLE
1	MCB			800	2
2	RV SITE 45,46,47			150	2
3	RV SITE 48,49,50			150	2
4	RV SITE 52,54,56			150	2
5	RV SITE 57,58,59			150	2
6	RV SITE 60,62,63			150	2
7	LIFT STATION			60	2
8	SPACE				
9					
10					
11					
12					
ACCESSORIES:					
35K AIC RATING (MINIMUM)					

CIRCUIT BREAKER DISTRIBUTION PANEL SCHEDULE

MARK: "P4"		NEMA 3R		MAIN BUSS: 800 AMP	
VOLTAGE: 120/240		PHASE: 1	WIRE: 3	GROUND BUS: 400 AMP	
				CIRCUIT BREAKER	
UNIT NO.	EQUIPMENT SERVED			AMP	POLE
1	MCB			800	2
2	RV SITE 88,90			100	2
3	RV SITE 83,85			100	2
4	RV SITE 78,79,81			150	2
5	RV SITE 82,84,86			150	2
6	RV SITE 51,53,55			150	2
7	RV SITE 87,89			100	2
8	SPACE				
9					
10					
11					
12					
ACCESSORIES: 35K AIC RATING (MINIMUM)					

RV PEDESTAL SCHEDULE

MARK	MFR	MODEL	AMPERAGE	VOLTAGE	POLES	"P2" CIRCUIT #	"P3" CIRCUIT #	"P4" CIRCUIT #	RECEPTACLES	ENCLOSURE TYPE	NOTES
"EP45"	MIDWEST	U075GP6	100	240	2		2		50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP46"	MIDWEST	U075GP6	100	240	2		2		50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP47"	MIDWEST	U075GP6	100	240	2		2		50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP48"	MIDWEST	U075GP6	100	240	2		3		50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP49"	MIDWEST	U075GP6	100	240	2		3		50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP50"	MIDWEST	U075GP6	100	240	2		3		50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP51"	MIDWEST	U075GP6	100	240	2			6	50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP52"	MIDWEST	U075GP6	100	240	2		4		50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP53"	MIDWEST	U075GP6	100	240	2			6	50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP54"	MIDWEST	U075GP6	100	240	2		4		50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP55"	MIDWEST	U075GP6	100	240	2			6	50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP56"	MIDWEST	U075GP6	100	240	2		4		50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP57"	MIDWEST	U075GP6	100	240	2		5		50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP58"	MIDWEST	U075GP6	100	240	2		5		50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP59"	MIDWEST	U075GP6	100	240	2		5		50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP60"	MIDWEST	U075GP6	100	240	2		6		50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP61"	MIDWEST	U075GP6	100	240	2	4			50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP62"	MIDWEST	U075GP6	100	240	2		6		50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP63"	MIDWEST	U075GP6	100	240	2		6		50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP64"	MIDWEST	U075GP6	100	240	2	6			50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP65"	MIDWEST	U075GP6	100	240	2	4			50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP66"	MIDWEST	U075GP6	100	240	2	6			50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP67"	MIDWEST	U075GP6	100	240	2	6			50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP68"	MIDWEST	U075GP6	100	240	2	5			50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP69"	MIDWEST	U075GP6	100	240	2	5			50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP70"	MIDWEST	U075GP6	100	240	2	5			50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP71"	MIDWEST	U075GP6	100	240	2	2			50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP72"	MIDWEST	U075GP6	100	240	2	3			50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP73"	MIDWEST	U075GP6	100	240	2	2			50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP74"	MIDWEST	U075GP6	100	240	2	3			50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP75"	MIDWEST	U075GP6	100	240	2	4			50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP76"	MIDWEST	U075GP6	100	240	2	3			50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP77"	MIDWEST	U075GP6	100	240	2	2			50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP78"	MIDWEST	U075GP6	100	240	2			4	50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP79"	MIDWEST	U075GP6	100	240	2			4	50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP81"	MIDWEST	U075GP6	100	240	2			4	50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP82"	MIDWEST	U075GP6	100	240	2			5	50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP83"	MIDWEST	U075GP6	100	240	2			3	50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP84"	MIDWEST	U075GP6	100	240	2			5	50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP85"	MIDWEST	U075GP6	100	240	2			3	50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP86"	MIDWEST	U075GP6	100	240	2			5	50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP87"	MIDWEST	U075GP6	100	240	2			7	50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP88"	MIDWEST	U075GP6	100	240	2			2	50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP89"	MIDWEST	U075GP6	100	240	2			7	50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2
"EP90"	MIDWEST	U075GP6	100	240	2			2	50A/2P, 30A/1P, 20A/1P	NEMA 3R	1,2

- NOTES:
1. LOCATE NEW BACK IN PEDESTALS 5'-7" FROM LEFT EDGE (DRIVER'S SIDE) OF STAND AND A MAXIMUM OF 15'-0" FROM BACK OF STAND TO COMPLY WITH 551.77(A) OF N.E.C.
  2. PROVIDE FEED THRU LUGS.

CIRCUIT BREAKER PANELBOARD SCHEDULE

MARK: "LC1"		NEMA 1		MOUNTING: SURFACE		18K AIC RATING (MINIMUM)	
VOLTAGE: 120/240		PHASE: 1	WIRE: 3	POLES: 6	MAIN BUSS: 40 AMP	MAIN C/B: 40 AMP	
CIRC. NO.	LOAD DESCRIPTION	CIRC. (VA)	LOAD (VA)	PHASE LOAD IN VA		LOAD (VA)	CIRC. NO.
				A B			
1	EX LIGHTS & RECEPTACLE	20A1P	500	3000		2500	20A2P
3	EX WP RECEPTACLE	20A1P	180			2500	-
5	SPARE	20A1P	100	100			
TOTALS:				3100		2680	
MAX. PHASE VA:		3100	MAX. PHASE AMPS:	26	MAX. PHASE DIVERSIFIED VA:	3100	MAX. PHASE DIVERSIFIED AMPS:
							26

VARIABLE FREQUENCY DRIVE SCHEDULE

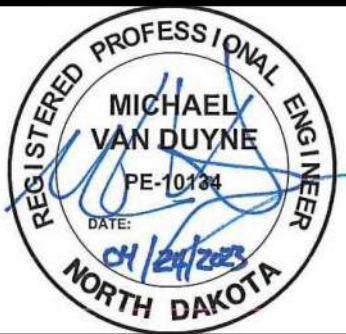
MARK	EQUIPMENT SERVED	LOAD		DRIVE		MOUNTING TYPE			NOTES
		HP	VOLT	PHASE	FLA*	TYPE	FLOOR	WALL	
"VFD1"	SUBMERSIBLE PUMP	5	240	3	24	PWM		X	1,2,3
NOTES:									
1. NEMA 1 ENCLOSURE									
2. DELUXE KEYPAD (NO CODE NUMBERING)									
3. PROVIDE FRANKLIN ELECTRIC SUBDRIVE 50 CONTROL BOX MODEL #5870205503C WITH 240 VOLT, 1 PHASE INPUT AND 240 VOLT, 3 PHASE OUTPUT.									
*VERIFY FLA WITH PUMP MANUFACTURER (MOTORS MAY BE SUBMERSIBLE OR HAVE VARYING FLA)									

DISCONNECT SWITCH SCHEDULE

MARK	EQUIPMENT SERVED	SWITCH		FUSE		ENCLOSURE	NOTES
		VOLTAGE	AMP	POLE	AMP		
"DS1"	"VFD1"	240	60	2	50	FRNRK	1
NOTES: 1. PROVIDE SERVICE ENTRANCE RATED DISCONNECT SWITCH.							

ELECTRICAL SCHEDULES & DETAILS

LAKE METIGOSHE STATE PARK  
NORTH DAKOTA PARKS & RECREATION DEPARTMENT  
ELECTRICAL UPGRADES  
BISMARCK, NORTH DAKOTA



DESIGNED BY: ARH  
DRAWN BY:  
APPROVED BY: MSV  
DESIGN PROJ: 21219.000  
CONST PROJ:  
SCALE: AS NOTED  
DATE: 04-24-2023  
DRAWING NO: LM-E-601  
SHEET NO:





- 3456 E CENTURY AVENUE - BISMARCK, ND 58503  
PHONE 701-258-1110 - FAX 701-258-1111  
[www.bartlettwest.com](http://www.bartlettwest.com)