



## CITY OF MERRILL

### Water & Sewage Utility

2401 River Street • Merrill, Wisconsin • 54452  
Phone: 715.536.6561 • Fax: 715.539.2668

**Smart** Move

### NOTICE

RE: Water and Sewage Committee Meeting to be held **Wednesday, November 19, 2014** at **5:00 p.m.** in the basement conference room of City Hall.

Voting members: Alderperson Rob Norton, Alderperson Kandy Peterson, and Alderperson John Burgener

The following items will be on the agenda:

1. Review & approval of vouchers.
2. Consider increase adjustment to Water & Sewage Service Fees for 2015.
3. East Street Water Tower – AT&T upgrades to generator and related items – additional \$300 per month rent & lease amendment
4. Operations Report.
5. Public Comment.
6. Next meeting.
7. Adjournment.

Reviewed by,

Rob Norton  
Committee Chairperson

The Merrill City Hall is accessible to the physically disadvantaged. If special accommodations are needed, please contact the Merrill City Hall at 536-6561.

ACCOUNT: 05737 OCT 2014 WATER

VENDOR SET: 01

BANK : 4 UTILITY A/P

VL	CR	NAME / I.D.	DESC	CHECK TYPE	CHECK DATE	DISCOUNT	AMOUNT	CHECK NO#	CHECK AMOUNT
003108		AIRGAS USA, LLC I-093014	AIRGAS USA, LLC	R	10/21/2014		41.61CR	143545	41.61
000081		BAJA'S I-16420	BAJA'S	R	10/21/2014		26.00CR	143546	26.00
001521		BAY TOWEL, INC. I-093014	BAY TOWEL, INC.	R	10/21/2014		393.20CR	143547	393.20
002411		BECHER-HOPPE ASSOC INC I-18219	BECHER-HOPPE ASSOC INC	R	10/21/2014		618.00CR	143548	618.00
000381		CITY OF MERRILL I-REPLACEMENT	CITY OF MERRILL	R	10/21/2014		15,000.00CR	143549	15,000.00
003038		ERIC DAYTON I-RENEWAL - CDL	ERIC DAYTON	R	10/21/2014		74.00CR	143550	74.00
000212		FASTENAL COMPANY I-093014	FASTENAL COMPANY	R	10/21/2014		888.39CR	143551	888.39
000632		FERGUSON ENTERPRISES #331 I-093014	FERGUSON ENTERPRISES #331	R	10/21/2014		1,720.53CR	143552	1,720.53
002661		FRONTIER I-093014	FRONTIER	R	10/21/2014		274.74CR	143553	274.74
001556		HD SUPPLY WATERWORKS, LTD I-C971546	HD SUPPLY WATERWORKS, LTD	R	10/21/2014		4,370.00CR	143554	4,370.00
000224		HYDRITE CHEMICAL CO I-093014	HYDRITE CHEMICAL CO	R	10/21/2014		2,336.80CR	143555	2,336.80
002849		HYDRODESIGNS I-0033420-IN	HYDRODESIGNS	R	10/21/2014		1,340.00CR	143556	1,340.00
000140		KRUEGER PLUMBING L. L. C. I-22966	KRUEGER PLUMBING L. L. C.	R	10/21/2014		106.45CR	143557	106.45
000313		LINCOLN CO TREASURER'S OFFICE I-9484	LINCOLN CO TREASURER'S OFFICE	R	10/21/2014		228.74CR	143558	228.74

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VE	OR	NAME / I.D.	DESC	CHECK TYPE	CHECK DATE	DISCOUNT	AMOUNT	CHECK NO#	CHECK AMOUNT
000157		LONDERVILLE STEEL I-237641	LONDERVILLE STEEL	R	10/21/2014		141.11CR	143559	141.11
000317		MARTELLE WATER TREATMENT I-12605	MARTELLE WATER TREATMENT	R	10/21/2014		5,080.60CR	143560	5,080.60
000041		MERRILL ACE HARDWARE I-093014	MERRILL ACE HARDWARE	R	10/21/2014		122.42CR	143561	122.42
000325		MERRILL GRAVEL & I-956	MERRILL GRAVEL &	R	10/21/2014		40.50CR	143562	40.50
000328		MERRILL WATER UTILITY I-093014	MERRILL WATER UTILITY	R	10/21/2014		354.42CR	143563	354.42
000540		NAPA AUTO PARTS I-093014	NAPA AUTO PARTS	R	10/21/2014		70.63CR	143564	70.63
002452		NELSON'S POWERHOUSE I-11431	NELSON'S POWERHOUSE	R	10/21/2014		155.21CR	143565	155.21
000336		NIENOW ELECTRIC, INC I-093014	NIENOW ELECTRIC, INC	R	10/21/2014		19,248.81CR	143566	19,248.81
000337		NORTH CENTRAL LABORATORIES I-093014	NORTH CENTRAL LABORATORIES	R	10/21/2014		2,701.57CR	143567	2,701.57
001891		NORTHERN LAKE SERVICE INC I-263430	NORTHERN LAKE SERVICE INC	R	10/21/2014		64.00CR	143568	64.00
000351		OFFICE OF STATE TREASURER I-REVENUE	OFFICE OF STATE TREASURER	R	10/21/2014		8,750.00CR	143569	8,750.00
001392		PACE ANALYTICAL SERVICES INC I-093014	PACE ANALYTICAL SERVICES INC	R	10/21/2014		397.00CR	143570	397.00
000566		PITNEY BOWES I-2344283-SP14	PITNEY BOWES	R	10/21/2014		232.53CR	143571	232.53
000363		PUBLIC SERVICE COMMISSION I-RA15-I-03610	PUBLIC SERVICE COMMISSION	R	10/21/2014		1,371.81CR	143572	1,371.81

PACKET: 05737 OCT 2014 WATER

VENDOR SET: 01

BANK : 4 UTILITY A/P

V. JR	NAME / I.D.	DESC	CHECK TYPE	CHECK DATE	DISCOUNT	AMOUNT	CHECK NO#	CHECK AMOUNT
003647	QUALITY INN & SUITES I-22696897	QUALITY INN & SUITES	R	10/21/2014		267.30CR	143573	267.30
002178	RESERVE ACCOUNT I-UTL MACH POSTAGE	RESERVE ACCOUNT	R	10/21/2014		700.00CR	143574	700.00
000897	SANDERS & ASSOCIATES LLC I-5967	SANDERS & ASSOCIATES LLC	R	10/21/2014		825.00CR	143575	825.00
002184	JASON SCHILL I-RENEWAL - CDL	JASON SCHILL	R	10/21/2014		74.00CR	143576	74.00
000554	SUPERIOR CHEMICAL CORP I-71468	SUPERIOR CHEMICAL CORP	R	10/21/2014		84.97CR	143577	84.97
000266	TRANTOW DO IT CENTER I-093014	TRANTOW DO IT CENTER	R	10/21/2014		285.91CR	143578	285.91
000278	TRIDENT SUPPLY I-F9668	TRIDENT SUPPLY	R	10/21/2014		47.90CR	143579	47.90
000578	USA BLUE BOOK I-093014	USA BLUE BOOK	R	10/21/2014		1,237.58CR	143580	1,237.58
000678	VAN ERT ELECTRIC CO INC I-80737	VAN ERT ELECTRIC CO INC	R	10/21/2014		29,750.00CR	143581	29,750.00
000284	VIP ALL-VALUE I-093014	VIP ALL-VALUE	R	10/21/2014		42.74CR	143582	42.74
000299	WAL-MART COMMUNITY/GEMB I-093014	WAL-MART COMMUNITY/GEMB	R	10/21/2014		95.34CR	143583	95.34
000587	WI STATE LAB OF HYGIENE I-091014	WI STATE LAB OF HYGIENE	R	10/21/2014		40.00CR	143584	40.00
000656	WISCONSIN PUBLIC SERVICE I-093014	WISCONSIN PUBLIC SERVICE	R	10/21/2014		10,716.06CR	143585	10,716.06

* * T O T A L S * *	NO#	DISCOUNTS	CHECK AMT	TOTAL APPLIED
REGULAR CHECKS:	41	0.00	110,315.87	110,315.87
HANDWRITTEN CHECKS:	0	0.00	0.00	0.00
PRE-WRITE CHECKS:	0	0.00	0.00	0.00
DRAFTS:	0	0.00	0.00	0.00
VOID CHECKS:	0	0.00	0.00	0.00
NON CHECKS:	0	0.00	0.00	0.00
CORRECTIONS:	0	0.00	0.00	0.00
REGISTER TOTALS:	41	0.00	110,315.87	110,315.87

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R	NAME / I.D.	DESC	CHECK TYPE	CHECK DATE	DISCOUNT	AMOUNT	CHECK NO#	CHECK AMOUNT
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\*\* POSTING PERIOD RECAP \*\*

FUND	PERIOD	AMOUNT
20	10/2014	95.08CR
62	10/2014	32,746.39CR
63	10/2014	77,474.40CR
=====		
ALL		110,315.87CR

<b>City of Merrill - Water and Sewage Charges</b>			
<b>*2015 - Reflects fiscal impact of Federal EPA requirements for lead-free brass.</b>			
	<b>2013</b>	<b>2014</b>	<b>2015</b>
Water Tap 3/4" (Includes Corp.)	\$73.75 3.0%	\$75.95 3.0%	\$103.25 35.9% *
Water Tap 1" (Includes Corp.)	\$85.95 3.0%	\$88.55 3.0%	\$125.85 42.1% *
Water Tap 1 1/2" (Includes Corp.)	\$172.15 3.0%	\$177.35 3.0%	\$386.55 118.0% *
Water Tap 2"	\$283.00 3.0%	\$291.50 3.0%	\$432.25 48.3% *
Flush Private Hydrant	\$257.50 3.0%	\$265.25 3.0%	\$273.25 3.0%
Water Tap - Larger than 2"	At Cost	At Cost	At Cost
Raise "New" Curb Boxes	At Cost	At Cost	At Cost
Sewer Tap 4" (Includes Saddle)	\$108.50 3.1%	\$111.75 3.0%	\$125.75 12.5% *
Sewer Tap 6" (Includes Saddle)	\$120.65 3.0%	\$124.25 3.0%	\$141.30 13.7% *
Public Labor Charge	\$36.30 3.0%	\$37.40 3.0%	\$38.55 3.1%
Backhoe & Operator	\$82.50 3.0%	\$85.00 3.0%	\$87.55 3.0%
Thawing Machine (Including personnel - 2) Outside normal hours - \$15.00/hr. for machine plus labor cost	\$88.65 3.0%	\$91.35 3.0%	\$94.10 3.0%
Valve Turned on at curb stop (PSC)	PSC	PSC	PSC
Reinstallation of meter/valving curb stop (PSC)	PSC	PSC	PSC
Jet Vactor Truck (Including personnel - 2) Outside normal hours - \$52.00/hr. for truck plus labor cost.	\$154.00 3.0%	\$158.65 3.0%	\$163.45 3.0%
Laboratory Cost - Test Observation Wells	\$2,000.00 3.0%	\$2,060.00 3.0%	\$2,122.00 3.0%
B.O.D. Test	\$30.65 3.0%	\$31.55 2.9%	\$32.50 3.0%
Suspended Solids Test	\$14.80 3.1%	\$15.25 3.0%	\$15.70 3.0%
Total Solids Test	\$14.80 3.1%	\$15.25 3.0%	\$15.70 3.0%
PH Test	\$10.45 3.0%	\$10.75 2.9%	\$11.07 3.0%
C.O.D. Test	\$24.00 3.0%	\$24.75 3.1%	\$25.50 3.0%
Phosphorus Test	\$29.50 3.0%	\$30.40 3.1%	\$31.35 3.1%
Holding Tank Disposal	\$8.25 3.1%	\$8.50 3.0%	\$8.75 2.9%
Fixed Charge Per Load - Holding Tank	\$9.55 3.2%	\$9.85 3.1%	\$10.15 3.0%

Reviewed by  
Water Sewage Committee - \_\_\_\_/2014  
Common Council - Adopted \_\_\_\_/2014

Market: IL/WI  
Cell Site Number: WI5424  
Cell Site Name: Merrill NW  
Fixed Asset Number: 10124098

## FIRST AMENDMENT TO AMERICAN CELLULAR CORPORATION SITE AGREEMENT

FIRST AMENDMENT TO AMERICAN CELLULAR CORPORATION SITE AGREEMENT ("First Amendment"), dated as of the latter of the signature dates below, is by and between City of Merrill, A Wisconsin municipal corporation (Owner), whose address is 1004 East First Street, Merrill, WI 54452 ("Owner") and New Cingular Wireless PCS, LLC, a Delaware limited liability company, successor in interest to American Cellular Corporation, having a mailing address of 575 Morosgo Drive NE, Suite 13-F West Tower, Atlanta, GA 30324 (hereinafter referred to as "Lessee").

WHEREAS, Owner and Lessee entered into a American Cellular Corporation Site Agreement dated August 1, 2005, whereby Owner leased to Lessee certain Leased Premises, therein described, that are a portion of the Property located at 501 East Street, Merrill, WI 54452 ("Agreement"); and

WHEREAS, Owner and Lessee desire to amend the Agreement to increase the size of the Premises: and

WHEREAS, Owner and Lessee desire to adjust the rent in conjunction with the modifications to the Agreement contained herein; and

WHEREAS, Owner and Lessee, in their mutual interest, wish to amend the Agreement as set forth below accordingly.

NOW THEREFORE, in consideration of the foregoing and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Owner and Lessee agree as follows:

1. Lease of Premises. Owner agrees to increase the size of the Premises leased to Lessee to accommodate Licensee's needs. Upon the execution of this Amendment, Owner leases to Lessee the Premises as more completely described on attached Exhibit A-1. Lessee's execution of this Amendment will signify Owner's approval of Exhibit A-1. Exhibit A-1 hereby replaces Exhibit A to the Agreement.
2. Rent. Commencing on the first day of the month following the date that Lessee commences construction of the modifications set forth in this Amendment, Rent shall be increased by Three Hundred and No/100 Dollars (\$300.00) per month, subject to further adjustments as provided in the Agreement. Upon Lessee's vacation of additional space, Rent will revert to the original rate, subject to adjustments as provided in the Agreement, upon thirty (30) days' prior written notice to Owner.

Market: IL/WI  
Cell Site Number: WI5424  
Cell Site Name: Merrill NW  
Fixed Asset Number: 10124098

3. Notices. Section 20(f) of the Agreement is hereby deleted in its entirety and replaced with the following:

All notices, requests, demands and communications hereunder will be given by first class certified or registered mail, return receipt requested, or by a nationally recognized overnight courier, postage prepaid, to be effective when properly sent and received, refused or returned undelivered. Notices will be addressed to the parties as follows.

If to Lessee:

New Cingular Wireless PCS, LLC  
Attn: Network Real Estate Administration  
Re: Cell Site # WI5424; Cell Site Name: Merrill NW (WT)  
Fixed Asset #10124098  
575 Morosgo Drive, Suite 13-F West Tower  
Atlanta, GA 30324

With a copy to:

New Cingular Wireless PCS, LLC  
Attn: AT&T Legal Department  
Re: Cell Site # WI5424; Cell Site Name: Merrill NW (WT)  
Fixed Asset #10124098  
208 S. Akard Street  
Dallas, TX 75202-4206

A copy sent to the Legal Department is an administrative step which alone does not constitute legal notice.

If to Owner:

City Clerk  
City Hall  
1004 East First Street  
Merrill, WI 54452

With a copy to:

Water Utility Manager  
Merrill Water Utility  
1004 East First Street  
Merrill, WI 54452

Market: IL/WI  
Cell Site Number: WI5424  
Cell Site Name: Merrill NW  
Fixed Asset Number: 10124098

Either party hereto may change the place for the giving of notice to it by thirty (30) days prior written notice to the other as provided herein.

4. **Emergency 911 Service.** In the future, without the payment of additional rent and at a location mutually acceptable to Owner and Lessee, Owner agrees that Lessee may add, modify and/or replace equipment in order to be in compliance with any current or future federal, state or local mandated application, including but not limited to emergency 911 communication services.

5. **Memorandum of Lease.** Either party will, at any time upon fifteen (15) days prior written notice from the other, execute, acknowledge and deliver to the other a recordable Memorandum of Lease substantially in the form of the Attachment 1. Either party may record this memorandum at any time, in its absolute discretion.

6. **Other Terms and Conditions Remain.** In the event of any inconsistencies between the Agreement and this First Amendment, the terms of this First Amendment shall control. Except as expressly set forth in this First Amendment, the Agreement otherwise is unmodified and remains in full force and effect. Each reference in the Agreement to itself shall be deemed also to refer to this First Amendment.

7. **Capitalized Terms.** All capitalized terms used but not defined herein shall have the same meanings as defined in the Agreement.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

Market: IL/WI  
Cell Site Number: WI5424  
Cell Site Name: Merrill NW  
Fixed Asset Number: 10124098

IN WITNESS WHEREOF, the parties have caused their properly authorized representatives to execute and seal this First Amendment on the dates set forth below.

**“OWNER”**

City of Merrill, Wisconsin

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**“LESSEE”**

New Cingular Wireless PCS, LLC,  
a Delaware limited liability company

By: AT&T Mobility Corporation

Its: Manager

By: \_\_\_\_\_  
Name: Constance A. Lamberes  
Title: Sr. Real Estate & Project Manager  
Date: \_\_\_\_\_



Market: IL/WI  
Cell Site Number: WI5424  
Cell Site Name: Merrill NW  
Fixed Asset Number: 10124098

## **Exhibit A-1**

**Notes:**

1. THIS EXHIBIT MAY BE REPLACED BY A LAND SURVEY AND/OR CONSTRUCTION DRAWINGS OF THE PREMISES ONCE RECEIVED BY OWNER.
2. ANY SETBACK OF THE PREMISES FROM THE PROPERTY'S BOUNDARIES SHALL BE THE DISTANCE REQUIRED BY THE APPLICABLE GOVERNMENTAL AUTHORITIES.
3. WIDTH OF ACCESS ROAD SHALL BE THE WIDTH REQUIRED BY THE APPLICABLE GOVERNMENTAL AUTHORITIES, INCLUDING POLICE AND FIRE DEPARTMENTS.

Market: IL/WI  
Cell Site Number: WI5424  
Cell Site Name: Merrill NW  
Fixed Asset Number: 10124098

## ATTACHMENT 1

### MEMORANDUM OF LEASE

**Prepared by:**

James Hebert  
General Dynamics Wireless Services  
1325 Wiley Road, Suite 136  
Schaumburg, IL 60173  
(847) 598-4609 direct

**Return to:**

James Hebert  
General Dynamics Wireless Services  
1325 Wiley Road, Suite 136  
Schaumburg, IL 60173  
(847) 598-4609 direct

Re: Re: Cell Site # WI5424; Cell Site Name: Merrill NW (WT)  
Fixed Asset #10124098  
State: Wisconsin  
County: \_\_\_\_\_

### MEMORANDUM OF LEASE

This Memorandum of Lease is entered into on this \_\_\_\_ day of \_\_\_\_\_, 2014, by and between City of Merrill, A Wisconsin municipal corporation (Owner), whose address is 1004 East First Street, Merrill, WI 54452 (“Owner”) and New Cingular Wireless PCS, LLC, a Delaware limited liability company, successor in interest to American Cellular Corporation, having a mailing address of 575 Morosgo Drive NE, Suite 13-F West Tower, Atlanta, GA 30324 (hereinafter referred to as “Lessee”).

1. Owner and Lessee entered into a certain American Cellular Corporation Site Agreement (“**Agreement**”) on the 1st day of August, 2005, for the purpose of installing, operating and maintaining a communications facility and other improvements. All of the foregoing is set forth in the Agreement.
2. The portion of the land being amended and leased to Lessee and associated easements are described in **Exhibit A-1** annexed hereto.
3. This Memorandum of Lease is not intended to amend or modify, and shall not be deemed or construed as amending or modifying, any of the terms, conditions or provisions of the Agreement, all of which are hereby ratified and affirmed. In the event of a conflict between the provisions of this Memorandum of Lease and the provisions of the Agreement, the provisions of the Agreement shall control. The Agreement shall be binding upon and inure to

Market: IL/WI  
Cell Site Number: WI5424  
Cell Site Name: Merrill NW  
Fixed Asset Number: 10124098

the benefit of the parties and their respective heirs, successors, and assigns, subject to the provisions of the Agreement.

**IN WITNESS WHEREOF**, the parties have executed this Memorandum of Lease as of the day and year first above written.

**"OWNER"**

City of Merrill, Wisconsin

By: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Its: \_\_\_\_\_  
Date: \_\_\_\_\_, 2014

**"LESSEE"**

New Cingular Wireless PCS, LLC,  
a Delaware limited liability company

By: AT&T Mobility Corporation  
Its: Manager

By: \_\_\_\_\_  
Print Name: Constance A. Lamberes  
Its: Sr. Real Estate & Project Manager  
Date: \_\_\_\_\_, 2014

Market: IL/WI  
Cell Site Number: WI5424  
Cell Site Name: Merrill NW  
Fixed Asset Number: 10124098

**LESSEE ACKNOWLEDGMENT**

STATE OF ILLINOIS) ) ss:  
COUNTY OF COOK)

On the \_\_\_\_ day of \_\_\_\_\_, 2014, before me personally appeared Constance A. Lambers, and acknowledged under oath that he is the Sr. Real Estate & Construction Manager of AT&T Mobility Corporation, the Manager of New Cingular Wireless PCS, LLC, the Lessee named in the attached instrument, and as such was authorized to execute this instrument on behalf of the Lessee.

\_\_\_\_\_  
Notary Public  
Print Name: \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_

**OWNER ACKNOWLEDGMENT**

STATE OF \_\_\_\_\_ )  
COUNTY OF \_\_\_\_\_ ) ss:

I CERTIFY that on \_\_\_\_\_, 2014, \_\_\_\_\_ [name of representative] personally came before me and acknowledged under oath that he or she:

- (a) is the \_\_\_\_\_ [title] of \_\_\_\_\_ [name of corporation], the corporation named in the attached instrument,
- (b) was authorized to execute this instrument on behalf of the corporation and
- (c) executed the instrument as the act of the corporation.

\_\_\_\_\_  
Notary Public  
Print Name: \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_

Market: IL/WI  
Cell Site Number: WI5424  
Cell Site Name: Merrill NW  
Fixed Asset Number: 10124098

**EXHIBIT A-1**

**DESCRIPTION OF PREMISES**

Page \_\_\_\_\_ of \_\_\_\_\_

to the Memorandum of Lease dated \_\_\_\_\_, 2014, by and between City of Merrill, Wisconsin, as Owner, and New Cingular Wireless PCS, LLC, a Delaware limited liability company, as Lessee.

The Property is legally described as follows:

**PROPOSED 8' X 14' GENERATOR LEASE AREA DESCRIPTION:**

A PARCEL OF LAND LOCATED IN THE NORTH 6 FEET OF LOT 6, BLOCK 10 AND THE SOUTH 6 FEET OF LOT 1, BLOCK 11 AND VACATED 4TH STREET ADJACENT TO THE SOUTH LINE OF SAID LOT 1 AND THE NORTH LINE OF SAID LOT 6 ALL BEING PART OF J. M. SMITH'S ADDITION TO WEST MERRILL, LOCATED IN THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER (NE 1/4-SW 1/4) OF SECTION ELEVEN (11), TOWNSHIP THIRTY-ONE (31) NORTH, RANGE SIX (6) EAST, CITY OF MERRILL, LINCOLN COUNTY, WISCONSIN, AND BEING FURTHER DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND 1-3/8" IRON PIN MARKING THE NORTHWEST CORNER OF SAID LOT 6 OF BLOCK 10; THENCE S68° 40' 15"E, 4.35 FEET, MORE OR LESS, TO THE SOUTHWEST CORNER OF THE EXISTING FENCED-IN COMPOUND AND THE POINT OF BEGINNING; THENCE S88° 33' 44"E, 14.00 FEET ALONG THE SOUTH LINE OF THE SAID EXISTING FENCED-IN COMPOUND; THENCE N00° 29' 44"E, 8.00 FEET; N88° 33' 44"W, 14.00 FEET, MORE OR LESS, TO THE WEST LINE OF THE SAID EXISTING FENCED-IN COMPOUND; THENCE S00° 29' 44"W, 8.00 FEET ALONG THE WEST LINE OF THE SAID EXISTING FENCED-IN COMPOUND TO THE POINT OF BEGINNING. SAID LEASE AREA CONTAINS 112 SQUARE FEET AND IS SUBJECT TO ANY AND ALL EASEMENTS OR AGREEMENTS, RECORDED OR UNRECORDED.

## MEMORANDUM OF LEASE

**Prepared by:**

James Hebert  
General Dynamics Wireless Services  
1325 Wiley Road, Suite 136  
Schaumburg, IL 60173  
(847) 598-4609 direct

**Return to:**

James Hebert  
General Dynamics Wireless Services  
1325 Wiley Road, Suite 136  
Schaumburg, IL 60173  
(847) 598-4609 direct

Re: Cell Site #: WI5424; Cell Site Name: Merrill NW (WT)  
Fixed Asset #10124098  
State: Wisconsin  
County: \_\_\_\_\_

### MEMORANDUM OF LEASE

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1. Owner and Lessee entered into a certain American Cellular Corporation Site Agreement ("Agreement") on the 1st day of August, 2005, for the purpose of installing, operating and maintaining a communications facility and other improvements. All of the foregoing is set forth in the Agreement.
2. The portion of the land being amended and leased to Lessee and associated easements are described in Exhibit A-1 annexed hereto.
3. This Memorandum of Lease is not intended to amend or modify, and shall not be deemed or construed as amending or modifying, any of the terms, conditions or provisions of the Agreement, all of which are hereby ratified and affirmed. In the event of a conflict between the provisions of this Memorandum of Lease and the provisions of the Agreement, the provisions of the Agreement shall control. The Agreement shall be binding upon and inure to the benefit of the parties and their respective heirs, successors, and assigns, subject to the provisions of the Agreement.

IN WITNESS WHEREOF, the parties have executed this Memorandum of Lease as of the day and year first above written.

"OWNER"

City of Merrill, Wisconsin

By: \_\_\_\_\_  
Print Name: \_\_\_\_\_  
Its: \_\_\_\_\_  
Date: \_\_\_\_\_, 2014

"LESSEE"

New Cingular Wireless PCS, LLC,  
a Delaware limited liability company

By: AT&T Mobility Corporation  
Its: Manager

By: \_\_\_\_\_  
Print Name: Constance A. Lamberes  
Its: Sr. Real Estate & Project Manager  
Date: \_\_\_\_\_, 2014

**LESSEE ACKNOWLEDGMENT**

STATE OF ILLINOIS)

) ss:

COUNTY OF COOK)

On the \_\_\_\_ day of \_\_\_\_\_, 2014, before me personally appeared Constance A. Lamberes, and acknowledged under oath that he is the Sr. Real Estate & Construction Manager of AT&T Mobility Corporation, the Manager of New Cingular Wireless PCS, LLC, the Lessee named in the attached instrument, and as such was authorized to execute this instrument on behalf of the Lessee.

Notary Public  
Print Name:

My Commission Expires:

**OWNER ACKNOWLEDGMENT**

STATE OF

)

) ss:

COUNTY OF

)

I CERTIFY that on \_\_\_\_\_, 2014, \_\_\_\_\_ [name of representative] personally came before me and acknowledged under oath that he or she:

- (a) is the \_\_\_\_\_ [title] of \_\_\_\_\_ [name of corporation], the corporation named in the attached instrument,
- (b) was authorized to execute this instrument on behalf of the corporation and
- (c) executed the instrument as the act of the corporation.

Notary Public  
Print Name:

My Commission Expires:

**EXHIBIT A-1**

**DESCRIPTION OF PREMISES**

Page \_\_\_\_ of \_\_\_\_

to the Memorandum of Lease dated \_\_\_\_\_, 2014, by and between City of Merrill, Wisconsin, as Owner, and New Cingular Wireless PCS, LLC, a Delaware limited liability company, as Lessee.

The Property is legally described as follows:

**PROPOSED 8' X 14' GENERATOR LEASE AREA DESCRIPTION:**

A PARCEL OF LAND LOCATED IN THE NORTH 6 FEET OF LOT 6, BLOCK 10 AND THE SOUTH 6 FEET OF LOT 1, BLOCK 11 AND VACATED 4TH STREET ADJACENT TO THE SOUTH LINE OF SAID LOT 1 AND THE NORTH LINE OF SAID LOT 6 ALL BEING PART OF J. M. SMITH'S ADDITION TO WEST MERRILL, LOCATED IN THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER (NE 1/4-SW 1/4) OF SECTION ELEVEN (11), TOWNSHIP THIRTY-ONE (31) NORTH, RANGE SIX (6) EAST, CITY OF MERRILL, LINCOLN COUNTY, WISCONSIN, AND BEING FURTHER DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND 1-3/8" IRON PIN MARKING THE NORTHWEST CORNER OF SAID LOT 6 OF BLOCK 10; THENCE S68° 40' 15"E, 4.35 FEET, MORE OR LESS, TO THE SOUTHWEST CORNER OF THE EXISTING FENCED-IN COMPOUND AND THE POINT OF BEGINNING; THENCE S88° 33' 44"E, 14.00 FEET ALONG THE SOUTH LINE OF THE SAID EXISTING FENCED-IN COMPOUND; THENCE N00° 29' 44"E, 8.00 FEET; N88° 33' 44"W, 14.00 FEET, MORE OR LESS, TO THE WEST LINE OF THE SAID EXISTING FENCED-IN COMPOUND; THENCE S00° 29' 44"W, 8.00 FEET ALONG THE WEST LINE OF THE SAID EXISTING FENCED-IN COMPOUND TO THE POINT OF BEGINNING. SAID LEASE AREA CONTAINS 112 SQUARE FEET AND IS SUBJECT TO ANY AND ALL EASEMENTS OR AGREEMENTS, RECORDED OR UNRECORDED.

# GENERAC GENERATOR INSTALL



SITE NAME: MERRILL NW  
 SITE NUMBER: W15424  
 FA LOCATION CODE: 10124098  
 CONSTRUCTION DRAWINGS



1120 Dallas Street, Sauk City, WI 53583  
 Phone: 608-643-4100 Fax: 608-643-7999  
 www.Ramaker.com



## VICINITY MAP



## SCOPE OF WORK

THIS PROPOSAL IS FOR THE ADDITION OF A NEW GENERATOR ON A CONCRETE PAD TO AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY CONSISTING OF AN EQUIPMENT SHELTER (OR CABINET) AND TOWER.

## APPLICABLE BUILDING CODE & STANDARDS

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITION OF THE FOLLOWING CODES AS ADOPTED BY THE GOVERNING LOCAL AUTHORITIES. NOTHING IN THESE PLANS ARE TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

- INTERNATIONAL BUILDING CODE 2009
- NATIONAL ELECTRIC CODE (NEEC)
- AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION
- TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL TOWER AND ANTENNA SUPPORTING STRUCTURES
- TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS



TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN  
**DIGGERS HOTLINE 811 OR  
 1-800-242-8511**  
 WISCONSIN STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

## GENERAL DYNAMICS

Information Technology, Inc.  
 GENERAL DYNAMICS  
 12906 SHELBYVILLE ROAD, SUITE 230  
 LOUISVILLE, KY 40243

*Certification & Seal:*  
 I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Wisconsin.



## GENERAL LOCATION



## SHEET INDEX

- GENERAL:**  
 T-1 TITLE SHEET
- NOTES:**  
 N-1 GENERAL NOTES
- SITE:**  
 A-1 SITE PLAN & EQUIPMENT LAYOUT  
 S-1 FOUNDATION DETAILS
- ELECTRICAL & GROUNDING:**  
 E-1 WIRING DETAILS  
 E-2 PANEL AND PENETRATION DETAILS  
 E-3 ATS, CONDUIT & GROUND ROD DETAILS  
 E-4 GENERAC GENERATOR SPECIFICATIONS  
 E-5 GENERAC ATS SPECIFICATIONS

## APPROVALS

AT&T CONSTRUCTION MGR.	DATE
GENERAL DYNAMICS CONSTRUCTION MGR.	DATE
PROPERTY OWNER	DATE
SITE ACQUISITION	DATE
CONTRACTOR	DATE
CONTRACTOR	DATE
CONTRACTOR	DATE

## PROJECT INFORMATION

**CONSTRUCTION MANAGER:**  
 MARC MOORE  
 CONSTRUCTION MANAGER, WISCONSIN/ILLINOIS  
 GENERAL DYNAMICS WIRELESS SERVICES  
 1325 WILEY ROAD, SUITE 136  
 SCHAUMBURG, IL 60173  
 PH.: (647) 598-4604  
 FAX: (647) 252-2477  
 EMAIL: Marc.Moore@gdt.com

**ENGINEER:**  
 RAMAKER & ASSOCIATES, INC.  
 1120 DALLAS STREET  
 SAUK CITY, WI 53583  
 PH.: (608) 643-4100  
 FAX: (608) 643-7999  
 CONTACT: JAMES KAISER  
 EMAIL: jkaiser@ramaker.com

**SITE DATA:**  
 TOWER OWNER: CITY OF MERRILL - WISCONSIN MUNICIPAL CORP  
 ADDRESS:  
 501 EAST STREET  
 MERRILL, WI 54452  
 COUNTY: LINCOLN  
 LAT.: 45.18332° N  
 LONG.: -89.70398° W  
 GROUND ELEVATION: 1375 FT AMSL

DO NOT SCALE DRAWINGS:  
 CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

*Michael L. Pinske* 9/10/2014  
 Signature: Date:

MARK	DATE	DESCRIPTION
ISSUE	DATE	ISSUED
PHASE	CONSTRUCTION DWGS	04/09/2014

PROJECT TITLE:  
**MERRILL NW  
 W15424  
 FA ID#10124098**

PROJECT INFORMATION:  
 501 EAST STREET  
 MERRILL, WI 54452

SHEET TITLE:  
**TITLE SHEET**

SCALE: NONE

PROJECT NUMBER: 28676  
 SHEET NUMBER: T-1

**NOTES TO SUBCONTRACTOR:**

1. THE GENERAL SUBCONTRACTOR MUST VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE WORK. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES.
2. IT IS THE INTENTION OF THESE DRAWINGS TO SHOW THE COMPLETED INSTALLATION. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING, TIES, FORM WORK, ETC. IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL ORDINANCES, TO SAFELY EXECUTE ALL WORK AND SHALL BE RESPONSIBLE FOR SAME. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.
3. THE SUBCONTRACTOR SHALL USE ADEQUATE NUMBER OF SKILLED WORKMAN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND METHOD NEEDED FOR PROPER PERFORMANCE OF THE WORK.
4. CONSTRUCTION SUBCONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION SUBCONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND CONSTRUCTION SUBCONTRACTOR FURTHER AGREES TO INDEMNIFY AND HOLD DESIGN ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.
5. SITE GROUNDING SHALL COMPLY WITH AT&T WIRELESS SERVICES TECHNICAL SPECIFICATIONS FOR FACILITY GROUNDING FOR CELL SITE STANDARDS, LATEST EDITION, AND COMPLY WITH AT&T TOWERS GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN. GROUNDING SHALL BE COMPLETED BEFORE ERECTION OF TOWER.
6. ALL WORK SHALL COMPLY WITH OSHA AND STATE SAFETY REQUIREMENTS. PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION, IF TEMPORARY LIGHTING AND MARKING IS REQUIRED BY THE FEDERAL AVIATION ADMINISTRATION (FAA), IT IS THE SUBCONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE NECESSARY LIGHTS AND NOTIFY THE PROPER AUTHORITIES IN THE EVENT OF A PROBLEM.
7. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL CODES OR ORDINANCES. THE MOST STRINGENT CODE WILL APPLY IN THE CASE OF DISCREPANCIES OR DIFFERENCES IN THE CODE REQUIREMENTS.
8. ANY DAMAGE TO THE ADJACENT PROPERTIES WILL BE CORRECTED AT THE SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE LANDOWNER AND THE ENGINEER.
9. THE COMPLETE BID PACKAGE INCLUDES THESE CONSTRUCTION DRAWINGS ALONG WITH THE SPECIFICATIONS. SUBCONTRACTOR IS RESPONSIBLE FOR REVIEW OF TOTAL BID PACKAGE PRIOR TO BID SUBMITTAL.
10. SUBCONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.
11. THE SUBCONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE SITE AT ALL TIMES. SILT AND EROSION CONTROL SHALL BE MAINTAINED ON THE DOWNSTREAM SIDE OF THE SITE AT ALL TIMES. ANY DAMAGE TO ADJACENT PROPERTIES WILL BE CORRECTED AT THE SUBCONTRACTOR'S EXPENSE.
12. CLEARING OF TREES AND VEGETATION ON THE SITE SHOULD BE HELD TO A MINIMUM. ONLY THE TREES NECESSARY FOR CONSTRUCTION OF THE FACILITIES SHALL BE REMOVED. ANY DAMAGE TO THE PROPERTY OUTSIDE THE LEASED PROPERTY SHALL BE REPAIRED BY THE SUBCONTRACTOR.
13. ALL SUITABLE BORROW MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID. EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATIONS APPROVED BY GOVERNING AGENCIES PRIOR TO DISPOSAL.
14. SEEDING AND MULCHING OF THE SITE WILL BE ACCOMPLISHED AS SOON AS POSSIBLE AFTER COMPLETION OF THE SITE DEVELOPMENT. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAIN AN ADEQUATE COVER OF VEGETATION OVER THE SITE FOR A ONE YEAR PERIOD.
15. PERMITS: THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.
16. RECORD DRAWINGS: MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS BETWEEN WORK AS SPECIFIED AND INSTALLED. RECORD CHANGES ON A CLEAN SET OF CONTRACT DRAWINGS WHICH SHALL BE TURNED OVER TO THE CONSTRUCTION MANAGER UPON COMPLETION OF THE PROJECT.
17. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES AND/OR EXISTING UTILITIES BELIEVED TO BE IN THE WORKING AREA. IT IS THE RESPONSIBILITY OF THE SUBCONTRACTOR TO VERIFY ALL UTILITIES, PIPELINES AND OTHER STRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS. THE SUBCONTRACTOR SHALL CONTACT THE LOCAL JURISDICTION'S DIGGER'S HOTLINE BEFORE DIGGING OR DRILLING. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AND ENGINEER AT THE SUBCONTRACTOR'S EXPENSE.

**GENERAL NOTES:**

1. THIS PROPOSAL IS FOR THE ADDITION OF A NEW GENERATOR ON A CONCRETE PAD TO AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY CONSISTING OF AN EQUIPMENT SHELTER AND TOWER.
2. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE.
3. THE PROPOSED FACILITY IS UNMANNED AND IS NOT FOR HUMAN HABITAT. (NO HANDICAP

**ACCESS IS REQUIRED)**

4. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH BY AT&T TECHNICIANS.
5. NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS PROPOSAL.
6. OUTDOOR STORAGE AND SOLID WASTE CONTAINERS ARE NOT PROPOSED.
7. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
8. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATION.
9. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTION REQUIRED FOR CONSTRUCTION.
10. SUBCONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.

**ELECTRICAL NOTES:**

**A. GENERAL**

1. COORDINATE LOCATION AND POWER REQUIREMENTS OF ALL EQUIPMENT WITH AT&T AND EQUIPMENT SUPPLIER PRIOR TO INSTALLATION.
2. COORDINATE LOCATION AND REQUIREMENTS FOR ELECTRICAL AND TELEPHONE SERVICES WITH THE PROPERTY REPRESENTATIVE, AT&T AND UTILITY COMPANIES. ROUTING OF CONDUITS MAY BE MODIFIED TO MEET SITE REQUIREMENTS. EXACT CONDUIT ROUTING TO BE DETERMINED IN THE FIELD.
3. ALL WIRING AND EQUIPMENT SHOWN ON ELECTRICAL SHEETS SHALL BE FURNISHED AND INSTALLED UNDER ELECTRICAL PORTION OF CONTRACT UNLESS OTHERWISE NOTED
4. UNINTERRUPTED ELECTRICAL SERVICE FOR EXISTING EQUIPMENT SHALL BE MAINTAINED DURING THE INSTALLATION OF THE WORK DESCRIBED UNDER THESE DOCUMENTS. TEMPORARY EQUIPMENT, CABLES AND WHATEVER ELSE IS NECESSARY SHALL BE PROVIDED AS REQUIRED TO MAINTAIN ELECTRICAL SERVICE. TEMPORARY SERVICE FACILITIES, IF REQUIRED AT ANY TIME, SHALL NOT BE DISCONNECTED OR REMOVED UNTIL NEW SERVICE EQUIPMENT IS IN PROPER OPERATION. IF ANY SERVICE OR SYSTEM MUST BE INTERRUPTED, THE CONTRACTOR SHALL REQUEST PERMISSION IN WRITING STATING THE DATE, TIME, ETC. THE SERVICE WILL BE INTERRUPTED AND THE AREAS AFFECTED. THIS REQUEST SHALL BE MADE IN SUFFICIENT TIME FOR PROPER ARRANGEMENTS TO BE MADE. WRITTEN PERMISSION SHALL BE OBTAINED FROM THE OWNER BEFORE INTERRUPTING ELECTRICAL SERVICE.
5. COORDINATE NEW WORK WITH OTHER TRADES AND VERIFY EXISTING CONDITIONS TO AVOID INTERFERENCE. IN CASE OF INTERFERENCE, AT&T'S REPRESENTATIVE WILL DECIDE WHICH WORK IS TO BE RELOCATED, REGARDLESS OF WHICH WAS FIRST INSTALLED.
6. THE INSTALLATION MUST COMPLY WITH NEC AND ALL FEDERAL, STATE AND LOCAL RULES AND REGULATIONS.
7. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND EQUIPMENT UNLESS OTHERWISE DEFINED BY DIMENSIONS OR DETAILS. EXACT EQUIPMENT LOCATIONS AND RACEWAY ROUTING SHALL BE GOVERNED BY ACTUAL FIELD CONDITIONS AND/OR DIRECTIONS FROM AT&T'S REPRESENTATIVE.
8. CONTRACTOR SHALL PAY ALL PERMITS AND FEES REQUIRED.
9. ALL MATERIALS SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE STANDARDS REFERENCED BELOW:
  - a. ANSI (AMERICAN NATIONAL STANDARDS INSTITUTE)
  - b. ASTM (AMERICAN SOCIETY FOR TESTING MATERIALS)
  - c. ETL (ELECTRICAL TESTING LABORATORY)
  - d. ICEA (INSULATED CABLE ENGINEERS ASSOCIATION)
  - e. IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS)
  - f. MBFU (NATIONAL BOARD OF FIRE UNDERWRITERS)
  - g. NESC (NATIONAL ELECTRICAL SAFETY CODE)
  - h. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
  - i. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
  - j. UL (UNDERWRITERS LABORATORY)
10. CONTRACTOR SHALL REVIEW PLANS, DETAILS AND SPECIFICATIONS IN DETAIL AND ADJUST WORK TO CONFORM WITH ACTUAL SITE CONDITIONS SO THAT ELECTRICAL DEVICES AND EQUIPMENT WILL BE LOCATED AND READILY ACCESSIBLE. QUANTITIES LISTED IN MATERIAL LISTS ON THE DRAWINGS ARE FOR INFORMATION ONLY. THE CONTRACTOR SHALL PROVIDE HIS OWN TAKEOFF FOR MATERIAL QUANTITY AND TYPES BASED ON ACTUAL SITE CONDITIONS. IN ADDITION, CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS TO INSTALL EQUIPMENT FURNISHED BY AT&T OR ITS SUPPLIERS. ALL ITEMS NOT SPECIFICALLY MENTIONED HEREIN OR SHOWN ON THE DRAWINGS, BUT WHICH ARE OBVIOUSLY NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION, SHALL BE INCLUDED.

**B. WIRING/CONDUIT**

1. PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR AS REQUIRED BY CODE SUCH THAT NO MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (360 DEGREES TOTAL) EXIST IN A CONDUIT RUN.

2. ALL POWER AND CONTROL/INDICATION WIRING SHALL BE TYPE THHN/THWN 800V RATED 75 DEGREES CELSIUS, UNLESS NOTED OTHERWISE.
3. CONDUIT BENDS SHALL BE MADE IN ACCORDANCE WITH NEC TABLE 346-10. NO RIGHT ANGLE DEVICE OTHER THAN STANDARD CONDUIT ELBOWS WITH 1/2" MINIMUM INSIDE SWEEPS FOR ALL CONDUITS 2" OR LARGER.
4. POWER WIRING SIZE SHALL NOT BE SMALLER THAN #12 AWG.
5. ALL WIRING SHALL BE COPPER. ALUMINUM WILL NOT BE ACCEPTABLE ALL POWER CIRCUITS SHALL CONTAIN A GROUND WIRE.
6. PHASE MARKINGS TO BE USED AT POWER CONDUCTOR TERMINATIONS.
7. CONTRACTOR SHALL ENSURE INTEGRITY IS MAINTAINED WHEN INSTALLING CONDUIT AND WIRING.
8. INSTALL PULL STRING IN ALL CONDUIT.
9. FOR ROOFTOP INSTALLS AND BUILD-OUTS, CONDUITS INSIDE BUILDING AND ON ROOF SHALL BE RGS, UNLESS OTHERWISE NOTED. FOR RAW LAND SITES AND CO-LOCATES, PVC SCHEDULE 80 SHALL BE UTILIZED UNLESS NOTED OTHERWISE.
10. MAINTAIN MINIMUM 1'-0" VERTICAL AND 1'-0" HORIZONTAL SEPARATIONS FROM ANY MECHANICAL GAS PIPING.
11. ALL WIRING Routed IN PLENUM TO BE RATED OR IN METALLIC FLEX (LIQUIDITE) CONDUIT.

**C. EQUIPMENT**

1. EQUIPMENT/PARTS CONNECTED TO EXISTING PANELS, DUCTS, ETC. SHALL MATCH THE CHARACTERISTICS (AC, V, A) OF THAT EQUIPMENT.
2. ALL ELECTRICAL EQUIPMENT OUTSIDE SHALL BE NEMA OR 3R RATED.

**D. GROUNDING**

1. ALL GROUND CONNECTIONS TO BUILDING SHALL BE MADE USING TWO-HOLE CONNECTORS. PROVIDE STAINLESS STEEL BOLTS AND LOCK WASHERS ON ALL MECHANICAL GROUND CONNECTIONS.
2. ALL EQUIPMENT SURFACES TO BE BONDED TO GROUNDING SYSTEM SHALL BE STRIPPED OF ALL PAINT AND DIRT. CONNECTIONS TO VARIOUS METALS SHALL BE OF A TYPE AS TO CAUSE A GALVANIC OR CORROSIVE REACTION. AREA SHALL BE REPAINTED FOLLOWING BONDING.
3. ANY METALLIC ITEM WITHIN 6' OF GROUND CONDUCTORS MUST BE CONNECTED TO THE GROUNDING SYSTEM.
4. EXTERIOR, ABOVE GRADE GROUND CONNECTIONS SHALL BE FURNISHED WITH A LIBERAL PROTECTIVE COATING OF ANTI-OXIDE COMPOUND.
5. ALL MATERIALS AND LABOR REQUIRED FOR THE GROUNDING SYSTEM AS INDICATED ON THE PLANS AND DETAILS, AND AS DESCRIBED HEREIN SHALL BE FURNISHED BY THIS CONTRACTOR UNLESS OTHERWISE NOTED.
6. EXACT LOCATION OF GROUND CONNECTION POINTS SHALL BE DETERMINED IN FIELD. ADJUST LOCATIONS INDICATED ON PLANS ACCORDING TO ACTUAL EQUIPMENT LOCATIONS TO KEEP THE GROUND CONNECTION CABLES AS SHORT AS PRACTICAL.
7. PROVIDE ALL ELECTRICAL SYSTEM AND EQUIPMENT GROUNDS AS REQUIRED BY THE CURRENT EDITION OF THE NATIONAL ELECTRIC CODE (1999) AND THE CURRENT EDITION OF THE NATIONAL ELECTRICAL SAFETY CODE. BONDING JUMPERS WITH APPROVED GROUND FITTINGS SHALL BE INSTALLED AT ALL RACEWAYS, EQUIPMENT ENCLOSURES, PULL BOXES, ETC. TO MAINTAIN GROUND CONTINUITY WHERE REQUIRED BY CODE.
8. ALL EQUIPMENT GROUND CONDUCTORS SHALL BE TIN COATED, #2 AWG COPPER UNLESS NOTED OTHERWISE ON THE DRAWINGS.

**E. INSPECTION/DOCUMENTATION**

1. THE CONTRACTOR, UPON COMPLETION OF HIS WORK, SHALL PROVIDE AS-BUILT DRAWINGS. INFORMATION SHOULD BE GIVEN TO THE GENERAL CONTRACTOR FOR INCLUSION IN FINAL AS-BUILT SURVEY DOCUMENTS TO BE GIVEN TO THE OWNER.
2. CONTRACTOR SHALL SUPPLY DOCUMENTATION ATTESTING TO THE COMPLETE GROUND SYSTEMS RECEPITIVITY (MAX. 5 OHMS).
3. AN ELECTRICAL INSPECTION SHALL BE MADE BY AND INSPECTING AGENCY APPROVED BY AT&T'S REPRESENTATIVE. CONTRACTOR SHALL COORDINATE ALL INSPECTIONS AND OBTAIN POWER COMPANY APPROVAL.
4. CONTRACTOR SHALL HAVE ATS AND GENERATOR RELAY INSTALLATION AND CONNECTIONS INSPECTED BY OTHERS TO ENSURE THAT UL LISTING FOR THAT EQUIPMENT IS NOT VOIDED.



1120 Dallas Street, Sauk City, WI 53583  
 Phone: 608-643-4100 Fax: 608-643-7999  
 www.Ramaker.com



**GENERAL DYNAMICS**  
 Information Technology, Inc.  
 GENERAL DYNAMICS  
 12906 SHELBYVILLE ROAD, SUITE 230  
 LOUISVILLE, KY 40243

Certification & Seal:  
 I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Wisconsin.



Signature: *Michael L. Pinske* Date: 9/10/2014

MARK	DATE	DESCRIPTION

ISSUE	DATE	ISSUED
CONSTRUCTION DWGS	04/09/2014	

PROJECT TITLE:  
**MERRILL NW  
 W15424  
 FA ID#10124098**

PROJECT INFORMATION:  
 501 EAST STREET  
 MERRILL, WI 54452

SHEET TITLE:  
**GENERAL NOTES**

SCALE: NONE

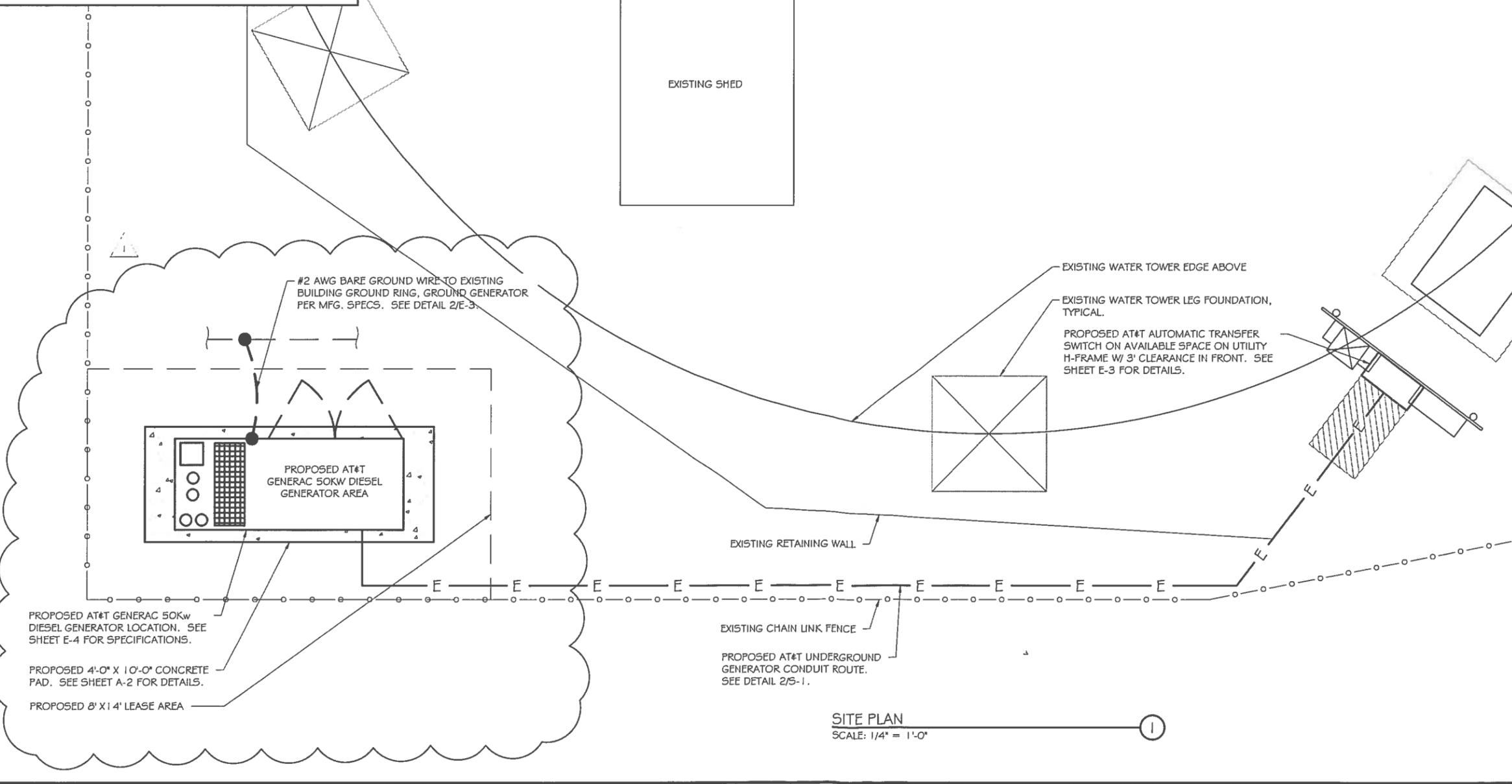
PROJECT NUMBER	28676
SHEET NUMBER	N-1

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 DRAWN BY: XXX CHECKED BY: JAK

I:\2660026676\CAD\26676 - W15424\_MERRILL\_NW - CD.dwg Pnted by: mreave on Sep 10, 2014 - 1:20pm

**SCOPE OF WORK DETAILS**

- GENERAL:**
- NEW GENERAC DIESEL GENERATOR PROVIDED BY GENERAL DYNAMICS & INSTALLED BY GENERAL CONTRACTOR, SEE E-4.
  - NEW 4'-0" X 10'-0" CONCRETE PAD PROVIDED & INSTALLED BY GENERAL CONTRACTOR (AS REQUIRED) SEE S-1
  - NEW GENERAC AUTOMATIC TRANSFER SWITCH PROVIDED BY GENERAL DYNAMICS & INSTALLED BY CONTRACTOR (AS REQUIRED) SEE E-3 & E-5.
  - CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION
  - CONTRACTOR SHALL RESTORE & REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION
- CONDUITS:**
- INSTALL PULL STRING IN EACH CONDUIT
  - (1) NEW 2" AND (1) NEW 1" ELECTRICAL CONDUITS WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO NEW ATS. CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.
  - (2) NEW 1" ELECTRICAL CONDUIT WITH CONDUCTORS TO RUN FROM NEW GENERATOR TO AC PANEL. CONDUIT PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.
  - (1) NEW 1" ALARM CONDUIT & CABLING PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE E-1, E-2 & E-3.
- GROUNDING:**
- NEW EXOTHERMIC CONNECTION FROM EXISTING GROUND RING TO NEW MECHANICAL CONNECTION AT GENERATOR CHASSIS. GENERAL CONTRACTOR TO VERIFY LOCATION IN FIELD. LOCATE GROUND RODS NO MORE THAN 8'-0" APART.



**SITE PLAN**  
 SCALE: 1/4" = 1'-0"



**RAMAKER & ASSOCIATES, INC.**  
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 Information Technology, Inc.  
 GENERAL DYNAMICS  
 12906 SHELBYVILLE ROAD, SUITE 230  
 LOUISVILLE, KY 40243

**Certification & Seal:**  
 I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Wisconsin.



Signature: *Michael L. Pinsky* Date: 9/10/2014

MARK	DATE	DESCRIPTION
1	08/06	GENERATOR LOCATION REVISION

ISSUE PHASE: CONSTRUCTION DWGS DATE ISSUED: 04/09/2014

PROJECT TITLE:  
**MERRILL NW  
 W15424  
 FA ID# 10124098**

PROJECT INFORMATION:  
 501 EAST STREET  
 MERRILL, WI 54452

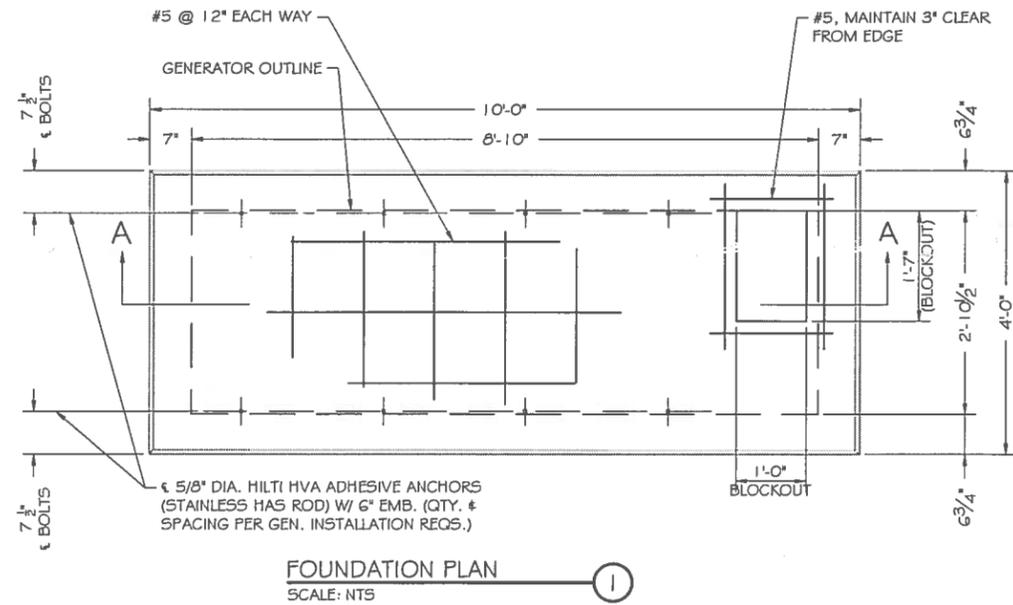
SHEET TITLE:  
**SITE PLAN & EQUIPMENT LAYOUT**

0 2' 4' 8'

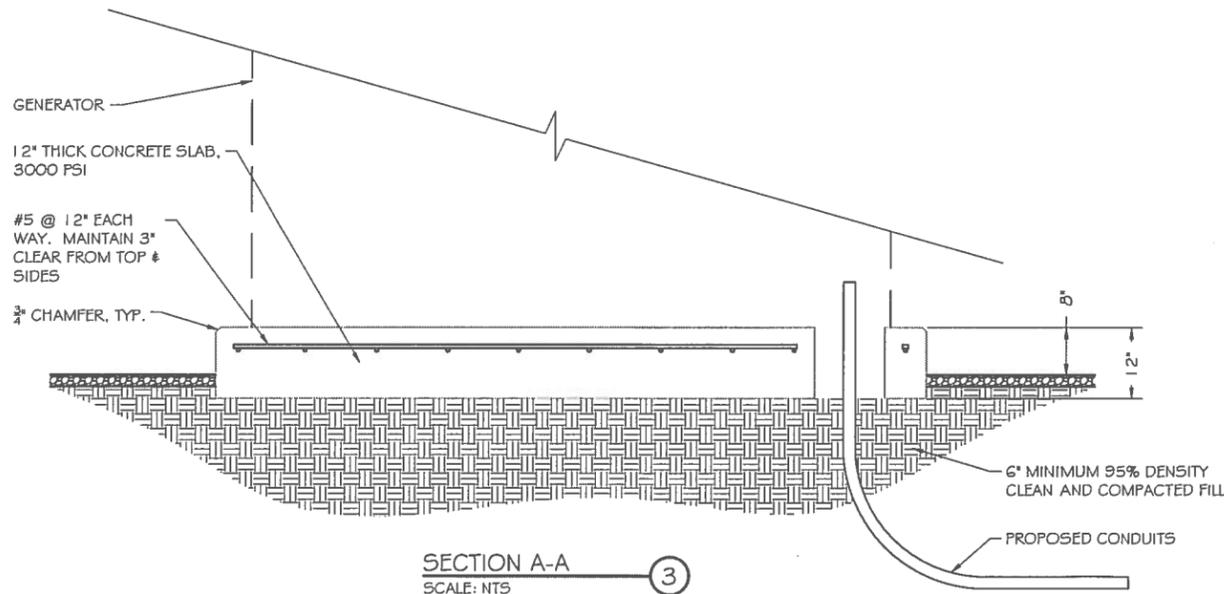
11" x 17" - 1/4" = 1'  
 22" x 34" - 1/2" = 1'

PROJECT NUMBER: **28676**  
 SHEET NUMBER: **A-1**

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FOUNDATION PLAN  
 SCALE: NTS



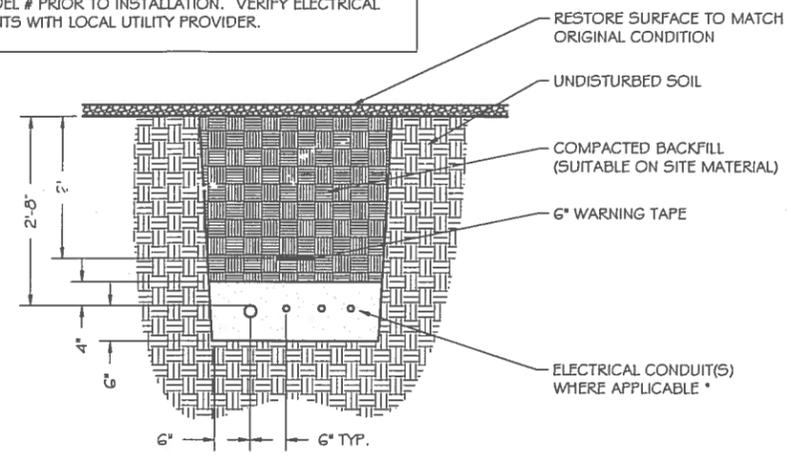
SECTION A-A  
 SCALE: NTS

**DOUBLE WALL FUEL TANK BASE SPECIFICATION**

REF: ATT 50KW GENERATOR PACKAGE  
 UL REGISTRATION NUMBER: MH18459  
 U.L. 142 DOUBLE WALL FUEL TANK BASE SPECIFICATION

- FUEL TANK BASE CONSTRUCTION:
- BE CONSTRUCTED IN ACCORDANCE WITH UNDERWRITERS LABORATORIES STANDARD UL-142. BE CONSTRUCTED IN ACCORDANCE WITH FLAMMABLE & COMBUSTIBLE LIQUIDS CODE, NFPA 30; THE STANDARD FOR INSTALLATION & USE OF STATIONARY COMBUSTIBLE ENGINE & GAS TURBINES, NFPA 37; AND THE STANDARD FOR EMERGENCY & STANDBY POWER SYSTEMS, NFPA 110.
  - ANCHORS MINIMUM (4) @ 5/8" FOR GEN-SET MOUNTING
- SUB BASE TANK TESTING: PRIMARY TANK & SECONDARY CONTAINMENT BASIN SECTIONS SHALL BE PRESSURIZED AT 3-5 PSI AND LEAK-CHECKED TO ENSURE INTEGRITY OF SUB BASE WELD SEAMS PER UL-142 STANDARDS
- FUEL FILL: 5 GALLON SPILL CONTAINMENT WITH ALARM
- 40% REMAINING FOR ALARM
  - 20% REMAINING FOR SHUT-DOWN
- FACTORY PRE-SET AT 95% FULL FOR ALARM
- FUEL CONTAINMENT BASIN: SUB BASE TANK SHALL INCLUDE A WELDED STEEL CONTAINMENT BASIN, SIZED AT A MINIMUM OF 110% OF THE TANK CAPACITY TO PREVENT ESCAPE OF FUEL INTO THE ENVIRONMENT IN THE EVENT OF A TANK RUPTURE. A FUEL CONTAINMENT BASIN LEAK DETECTOR SWITCH SHALL BE PROVIDED.

NOTE:  
 VERIFY WIRE AND CONDUIT QUANTITY & SIZES WITH GENERATOR MAKE & MODEL # PRIOR TO INSTALLATION. VERIFY ELECTRICAL REQUIREMENTS WITH LOCAL UTILITY PROVIDER.



UTILITY CONDUIT TRENCH  
 SCALE: NTS

- NOTES:
- PROVIDE PVC CONDUIT BELOW GRADE EXCEPT AS NOTED BELOW.
  - PROVIDE RGS CONDUIT AND ELBOWS AT STUB UP LOCATIONS (I.E. SERVICE POLE, BTS EQUIPMENT, ETC.)
  - INSTALL UTILITY PULLBOXES PER NEC.

**STRUCTURAL GENERAL NOTES**

- 1.0 GENERAL CONDITIONS
- DESIGN & CONSTRUCTION OF ALL WORK SHALL CONFORM TO LOCAL BUILDING CODES, ACI 318-11. IN CASE OF CONFLICT BETWEEN THE CODES, STANDARDS, REGULATIONS, SPECIFICATIONS, GENERAL NOTES AND/OR MANUFACTURER'S REQUIREMENTS, USE THE MOST STRINGENT PROVISIONS.
  - IT IS THE EXPRESS INTENT OF PARTIES INVOLVED IN THIS PROJECT THAT THE CONTRACTOR OR SUBCONTRACTOR OR INDEPENDENT CONTRACTOR OR THE RESPECTIVE EMPLOYEES SHALL EXCULPATE THE ARCHITECT, THE ENGINEER, TECH. CONSTRUCTION MANAGER, THE OWNER, & THEIR AGENTS FROM ANY LIABILITY WHATSOEVER & HOLD THEM HARMLESS AGAINST LOSS, DAMAGES, LIABILITY OR ANY EXPENSE ARISING IN ANY MATTER FROM THE WRONGFUL OR NEGLIGENT ACT, OR FAILURE TO CARRY METHODS, TECHNIQUES OR PROCEDURES OR FAILURE TO CONFORM TO THE STATE SCAFFOLDING ACT IN CONNECTIONS WITH THE WORK.
  - DO NOT SCALE DRAWINGS
  - VERIFY ALL EQUIPMENT MOUNTING DIMENSIONS PER MANUFACTURER DRAWINGS
  - DESIGN LOADS ARE (GENERAL):
 

LIVE LOAD	: 100 PSF
EQUIPMENT SIZE	: 889.1" H, 106" W, 38" D
WEIGHT WITH WOODEN SHIPPING SKID	
ENCLOSED GENERATOR WITH EMPTY FUEL TANK	: 3974 LBS
TANK SIZE	: 190 GAL
- 2.0 FOR DESIGN & ANALYSIS OF THE FOUNDATION, THE MINIMUM NET SOIL BEARING CAPACITY SHALL BE ASSUMED TO BE 2000 PSF.
- 3.0 CONCRETE
- MEET OR EXCEED THE FOLLOWING CODES & STANDARDS:
 

DESIGN	: ACI 318-11
CONSTRUCTION	: ACI 301
DETAILING	: CRSI MANUAL OF STANDARD PRACTICE
REINF. STEEL	: ASTM A 615 GRADE 60, DEFORMED
MIXING	: ASTM C 94. READY MIX CONCRETE
AIR ENTRAINMENT	: ACI 318 AND ASTM C-260
AGGREGATE	: ASTM C 33 AND C 330 (FOR LIGHT WEIGHT)
  - CONCRETE STRENGTH AT 28 DAYS SHALL BE 4000 PSI MINIMUM
  - DO NOT FIELD BEND OR WELD TO GRADE 60 REINFORCED STEEL
  - PROVIDE AIR ENTRAINMENT CONCRETE WITH AIR CONTENT OF 5 TO 7% FOR ALL CONCRETE EXPOSED TO EARTH OR WEATHER.
  - MAXIMUM AGGREGATE SIZE: 3/4"
  - DO NOT USE IN ADMIXTURE, WATER OR OTHER CONSTITUENTS OF CONCRETE WHICH HAS CALCIUM CHLORIDE.
  - MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS SHOWN ON PLAN.
- 4.0 FOUNDATION & EXCAVATION NOTES
- SLAB SHALL BE CONSTRUCTED UPON UNDISTURBED, NATURAL SUBGRADE OR COMPACTED GRANULAR FILL WITH AN ASSUMED MINIMUM NET ALLOWABLE BEARING CAPACITY OF 2000 PSF.
  - ALL ORGANIC AND/OR OTHER UNSUITABLE MATERIAL SHALL BE REMOVED FROM FOUNDATION & SLAB SUBGRADE & BACKFILL AREAS, & THEN BACKFILLED WITH ACCEPTABLE GRANULAR FILL COMPACTED TO 95% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT (ASTM D1557).
  - THE CONTRACTOR SHALL PROVIDE ALL NECESSARY MEASURES TO PREVENT ANY WATER, FROST, OR ICE FROM PENETRATING ANY FOOTING OR STRUCTURAL SUBGRADE BEFORE & AFTER PLACING OF CONCRETE, AND UNTIL SUCH CONCRETE HAS FULLY CURED.



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 LOUISVILLE, KY 40243

Certification & Seal:  
 I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Wisconsin.



Signature: *Michael L. Pinske* Date: 9/10/2014

MARK	DATE	DESCRIPTION

ISSUE PHASE: CONSTRUCTION DWGS DATE ISSUED: 04/09/2014

PROJECT TITLE:  
 MERRILL NW  
 W15424  
 FA ID# 10124098

PROJECT INFORMATION:  
 501 EAST STREET  
 MERRILL, WI 54452

SHEET TITLE:  
 FOUNDATION DETAILS

SCALE: NONE

PROJECT NUMBER: 28676  
 SHEET NUMBER: S-1

DIAGRAM CIRCUIT SCHEDULE

NO.	FROM	TO	WIRES	GROUND	CONDUIT SIZE	FUNCTION
1	NORMAL POWER SOURCE	AUTOMATIC TRANSFER SWITCH	(3) 3/0	(1) #4	2"	NORMAL POWER FEEDER TO ATS (CUT BACK EXISTING)
2	AUTOMATIC TRANSFER SWITCH	LOAD CENTER	(3) 3/0	(1) #4	2"	POWER FEEDER FROM ATS TO PANEL
3	GENERATOR	AUTOMATIC TRANSFER SWITCH	(3) 3/0	(1) #4	2"	EMERGENCY POWER FEEDER TO ATS
4	AUTOMATIC TRANSFER SWITCH	GENERATOR	(2) #10	(1) #10	1"	START CIRCUIT
5	LOAD CENTER (DISTRIBUTION CENTER)	GENERATOR	(2) #12 (2) #12	(1) #12 (1) #12	1"	CIRCUIT FOR GENERATOR BLOCK HEATER & BATTERY HEATER CIRCUIT FOR BATTERY CHARGER
6	ALARM BLOCK	GENERATOR	12-PAIR 24 AWG	N/A	1"	ALARM CABLES (1) 12 PAIR 24 AWG (RUN THRU INTERIOR OF SHELTER & INTO ALARM BOX. PROVIDE 24" OF SLACK CABLE. FINAL PUNCH DOWN IS BY AT&T TECH. LABEL ALL WIRES

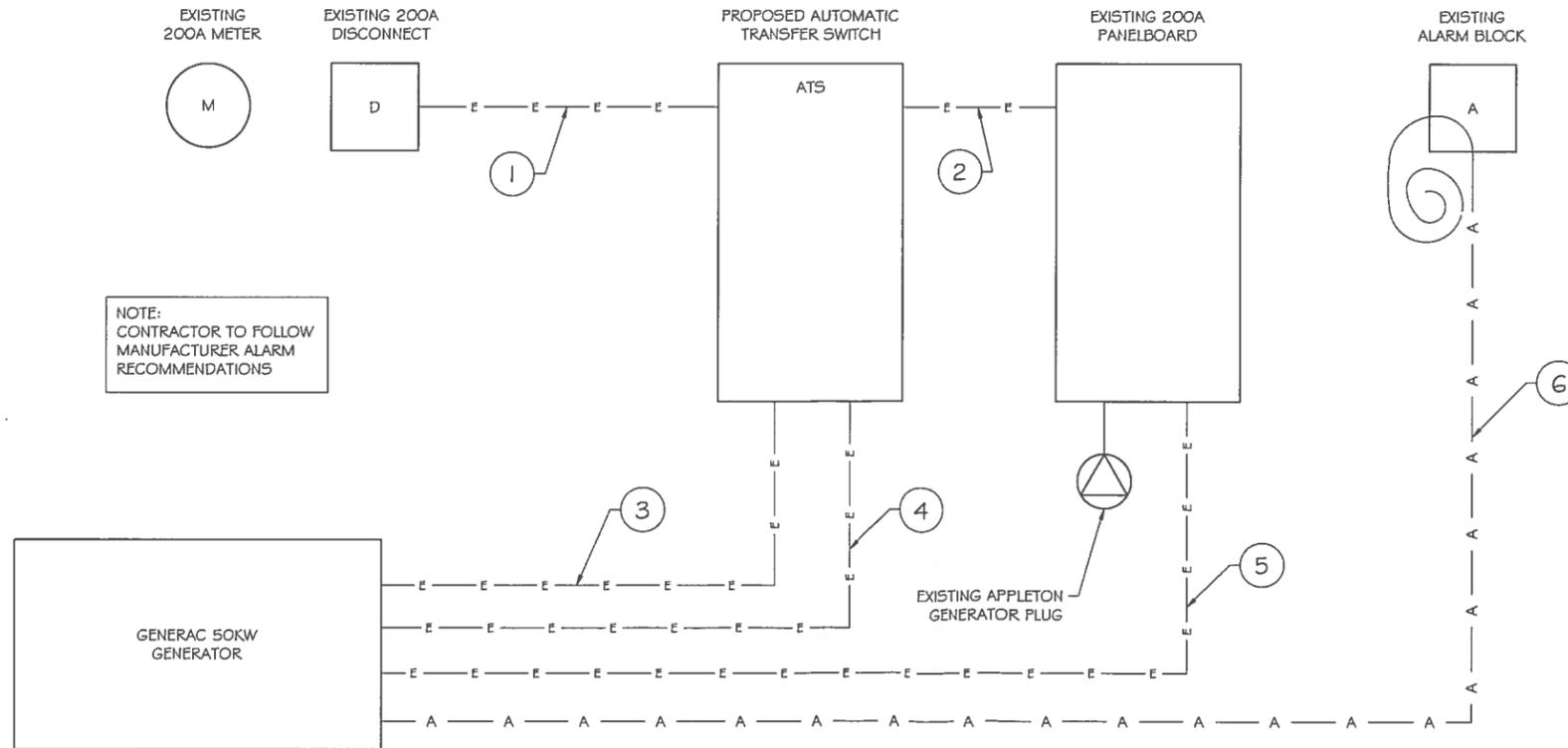
CIRCUIT DETAIL  
 SCALE: NTS

ALARM WIRE IDENTIFICATION CHART

NAME	DESCRIPTION
CF	CRITICAL FAILURE
FL	FUEL LEAK/OVERFILL
GR	GENERATOR RUNNING
LF	LOW FUEL
MAF	MAJOR FAULT
MIF	MINOR FAULT (PRE-ALARMS)

NOTE:  
 CONTRACTOR TO LABEL WIRE WITH P-TOUCH OR SIMILAR LABELS ONLY.  
 ABSOLUTELY NO HANDWRITTEN LABELS.

ALARM WIRING IDENTIFICATION CHART  
 SCALE: NTS



PROPOSED WIRING DIAGRAM  
 SCALE: NTS



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ISSUE	DATE	DATE
PHASE	CONSTRUCTION DWGS	ISSUED 04/09/2014

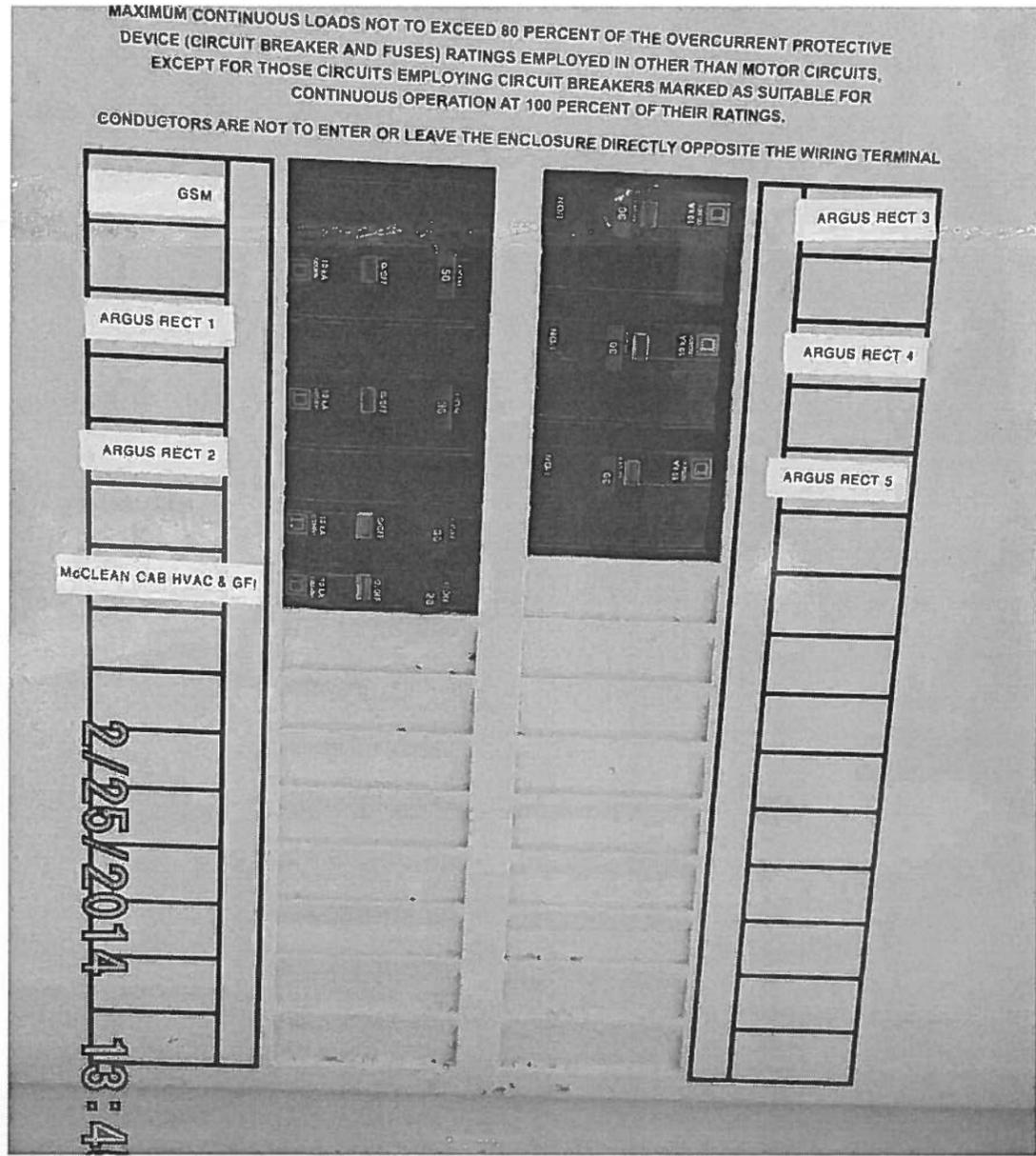
PROJECT TITLE:  
 MERRILL NW  
 W15424  
 FA ID# 10124098

PROJECT INFORMATION:  
 501 EAST STREET  
 MERRILL, WI 54452

SHEET TITLE:  
 WIRING DETAILS

SCALE: NONE

PROJECT NUMBER: 28676  
 SHEET NUMBER: E-1



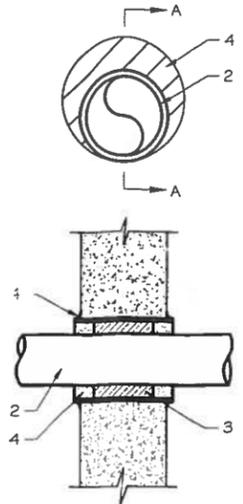
EXISTING PANEL PHOTO  
 SCALE: NTS

NOTE:  
 CONTRACTOR TO LABEL WIRES WITH P-TOUCH OR SIMILAR LABELS ONLY. ABSOLUTELY NO HANDWRITTEN LABELS.

\*CONTRACTOR TO UTILIZE NEXT AVAILABLE IN SEQUENCE SINGLE BREAKER POSITION FOR GENERATOR, BATTERY CHARGER, BATTERY HEATER AND BLOCK HEATER

MAXIMUM CONTINUOUS LOADS NOT TO EXCEED 80 PERCENT OF THE OVERCURRENT PROTECTIVE DEVICE (CIRCUIT BREAKER AND FUSES) RATINGS EMPLOYED IN OTHER THAN MOTOR CIRCUITS, EXCEPT FOR THOSE CIRCUITS EMPLOYING CIRCUIT BREAKERS MARKED AS SUITABLE FOR CONTINUOUS OPERATION AT 100 PERCENT OF THEIR RATINGS.

CONDUCTORS ARE NOT TO ENTER OR LEAVE THE ENCLOSURE DIRECTLY OPPOSITE THE WIRING TERMINAL



NOTE:  
 1. IF EXISTING CONSTRUCTION VARIES FROM THIS DETAIL, AN EQUAL 3-HR U.L. PENETRATION APPROPRIATE FOR THE EXISTING WALL TYPE SHALL BE CONSTRUCTED  
 2. GC SHALL USE NON-SHRINKING CAULK TO WEATHERSEAL ALL PENETRATIONS INTO OR THRU SHELTER WALL.

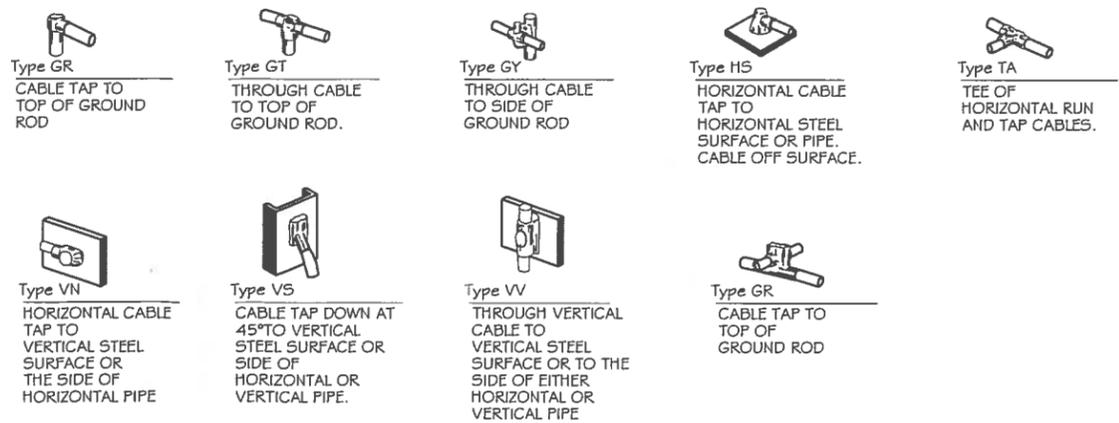
U.L. SYSTEM NO. C-AJ-1150  
 CONDUIT THROUGH BEARING WALL SIMILAR TO U.L. DESIGN NO. U902  
 F RATING = 3 HR  
 T RATING = 0 HR

- FLOOR OR WALL ASSEMBLY: MINIMUM 4-1/2" THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS\*. MAX DIAMETER OF OPENING IS 4". SEE CONCRETE BLOCKS 9CAT2) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
- THROUGH PENETRATIONS: ONE METALLIC PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE ANNULAR SPACE SHALL BE MINIMUM 0". (POINT CONTACT) TO MAXIMUM 1-3/8". THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED:
  - A. STEEL PIPE: NOMINAL 6" DIAMETER (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE.
  - B. IRON PIPE-NOMINAL 6" DIAMETER (OR SMALLER) CAST OR DUCTILE IRON PIPE.
  - C. CONDUIT - NOMINAL 4" DIAMETER (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR NOMINAL 3-1/2" DIAMETER (OR SMALLER) STEEL CONDUIT.
- PACKING MATERIAL: MINIMUM 6" THICKNESS OF MIN 4.0 PCF MINERAL WOOL BATTING INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
- FILL, VOID, OR CAVITY MATERIAL\*: SEALANT: MINIMUM 1/4" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR AND WITH BOTH SURFACES OF WALL. AT THE POINT CONTACT LOCATION BETWEEN PIPE AND CONCRETE, A MINIMUM 1/2" DIAMETER BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/PIPE INTERFACE ON THE TOP SURFACE OF FLOOR AND ON BOTH SURFACES OF WALL. W RATING APPLIES ONLY WHEN CP6015 OR CP604 SEALANT IS USED.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC.: CP6015, CP604, CP606, OR FS-ONE SEALANT.

\* BEARING THE UL CLASSIFICATION MARK.

OUTER WALL PENETRATION DETAIL (IF APPLICABLE) ②  
 SCALE: NTS



CADWELD DETAILS ③  
 SCALE: NTS



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ISSUE PHASE	CONSTRUCTION DWGS	DATE ISSUED 04/09/2014

PROJECT TITLE:  
 MERRILL NW  
 W15424  
 FA ID# 10124098

PROJECT INFORMATION:  
 501 EAST STREET  
 MERRILL, WI 54452

SHEET TITLE:  
 PANEL AND PENETRATION  
 DETAILS

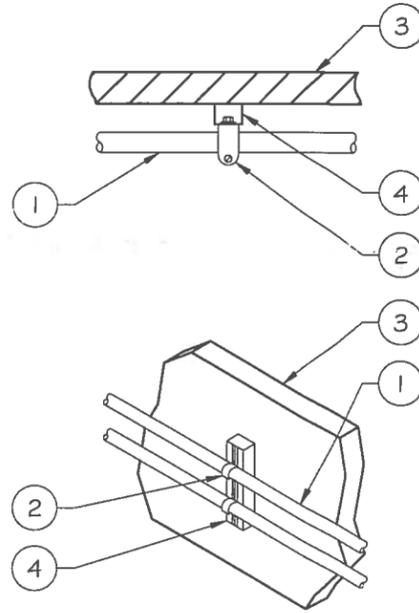
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PROJECT NUMBER: 28676  
 SHEET NUMBER: E-2

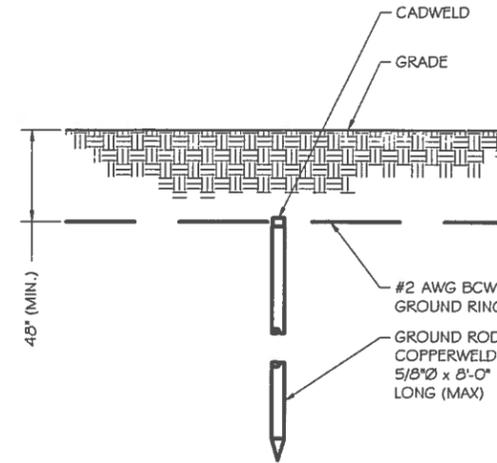
- 1 CONDUIT (TYP)
- 2 BUTTERFLY CLAMP AS REQUIRED
- 3 EXISTING WALL/CEILING
- 4 VERTICAL "UNISTRUT" P1000 T SERIES LENGTH BASED ON NUMBER OF CONDUIT TO BE MOUNTED

WALL CONSTRUCTION TYPE	USE
HOLLOW	3/8" DIA. TOGGLE BOLT
HOLLOW, AT STUD	3/8" DIA. LAG SCREW
CONCRETE BLOCK (HOLLOW)	3/8" DIA. HILTI HY-20 WITH SCREEN, MINIMUM EMBEDMENT 2-1/2"
CONCRETE (SOLID)	3/8" DIA. HILTI HY-150 WITH SCREEN, MINIMUM EMBEDMENT 2-1/2"

NOTE: USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT & CONNECTIONS OF CHANNELS SPACE UNITS @ 5'-0" O.C. LENGTH OF RUN



CONDUIT WALL MOUNT  
 SCALE: NTS

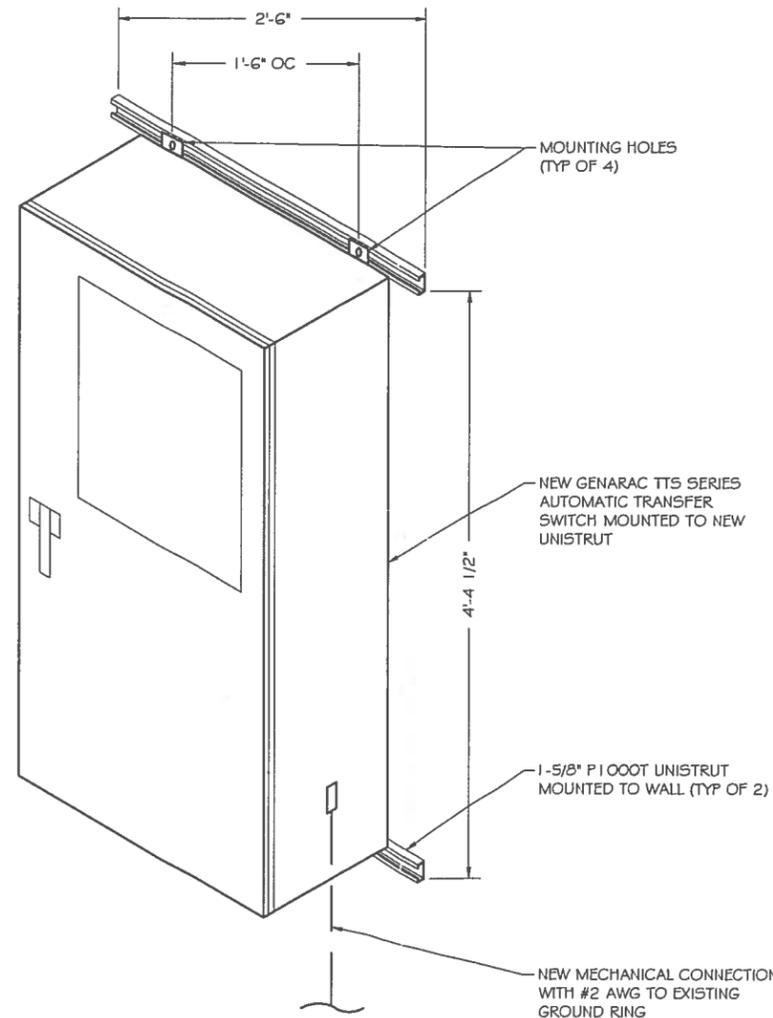


GROUND ROD DETAIL  
 SCALE: NTS

- NOTE:
- GROUND RODS MAY BE:
    - COPPER CLAD STEEL
    - SOLID COPPER
  - GROUND RODS SHALL HAVE A MAXIMUM SPACING TWICE THE LENGTH OF ROD
  - SEE RESISTIVITY REPORT FOR VERIFICATION AS AVAILABLE
  - A LARGER CONDUCTOR SHALL BE REQUIRED IN AREAS HIGHLY PRONE TO LIGHTNING AND/OR AREAS WITH HIGHLY ACIDIC SOIL
  - GROUND RODS INSTALLED WITHIN CLOSE PROXIMITY TO TOWER OR WHEN SOIL IS AT OR BELOW 2,000 OHM-CM, SHALL BE GALVANIZED TO PREVENT GALVANIC CORROSION OF TOWER, (SEE ANSITIA-EIA-222-G)

WALL CONSTRUCTION TYPE	USE
HOLLOW	3/8" DIA. TOGGLE BOLT
HOLLOW, AT STUD	3/8" DIA. LAG SCREW
CONCRETE BLOCK (HOLLOW)	7/16" DIA. HILTI HY-20 WITH SCREEN MINIMUM EMBEDMENT 2-1/2"
CONCRETE (SOLID)	7/16" DIA. HILTI HY-150 WITH SCREEN MINIMUM EMBEDMENT 2-1/2"

- NOTE:
- USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT AND CONNECTION OF CHANNELS
  - GC SHALL USE NON-SHRINKING CAULK TO WEATHER SEAL ALL PENETRATIONS INTO OR THROUGH SHELTER WALL



INTERSECT ATS MOUNTING DETAIL  
 SCALE: NTS



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ISSUE PHASE: CONSTRUCTION DWGS DATE ISSUED: 04/09/2014

PROJECT TITLE:  
 MERRILL NW  
 W15424  
 FA ID#10124098

PROJECT INFORMATION:  
 501 EAST STREET  
 MERRILL, WI 54452

SHEET TITLE:  
 ATS, CONDUIT & GROUND ROD  
 DETAILS

SCALE: NONE

PROJECT NUMBER: 28676  
 SHEET NUMBER: E-3



**SD050**

**3.4L**

**GENERAC INDUSTRIAL POWER**

**Industrial Diesel Generator Set**  
EPA Certified Stationary Emergency

**SD050 50 kW**  
**SD050 50 kW**

1 of 6 2 of 6

**Standby Power Rating**  
50 kW 63 kVA 60 Hz

**Prime Power Rating\***  
45 kW 56 kVA 60 Hz



\*EPA Certified Prime ratings are not available in the U.S. or its Territories

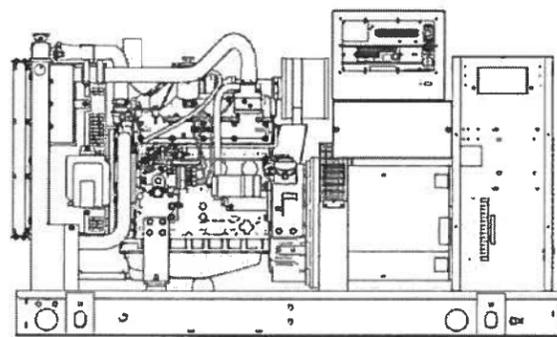


Image used for illustration purposes only

**Codes and Standards**

Generac products are designed to the following standards:

- UL2200, UL508, UL142, UL498
- NFPA70, 99, 110, 37
- NEC700, 701, 702, 708
- ISO9001, 8528, 3046, 7637, Pluses #2b, 4
- NEMA ICS10, MG1, 250, ICS6, AB1
- ANSI C82.41  
American National Standards Institute

**Powering Ahead**

For over 50 years, Generac has led the industry with innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac's gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial application under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

**GENERAC INDUSTRIAL POWER**

**SD050**

**Standard Features**

**ENGINE SYSTEM**

- General
- Oil Drain Extension
- Air Cleaner
- Fan Guard
- Stainless Steel flexible exhaust connection
- Critical Exhaust Silencer (enclosed only)
- Factory Filled Oil
- Radiator Duct Adapter (open set only)

**Fuel System**

- Fuel lockoff solenoid
- Primary fuel filter

**Cooling System**

- Closed Coolant Recovery System
- UV/Ozone resistant hoses
- Factory-Installed Radiator
- Radiator Drain Extension
- 50/50 Ethylene glycol antifreeze
- 120 VAC Coolant Heater

**Engine Electrical System**

- Battery charging alternator
- Battery cables
- Battery tray
- Solenoid activated starter motor
- Rubber-booted engine electrical connections

**ALTERNATOR SYSTEM**

- UL2200 GENprotect™
- 12 leads (3-phase, non 600 V)
- Class H insulation material
- Varied rotor
- 2/3 pitch
- Skewed stator
- Auxiliary voltage regulator power winding
- Amortisseur winding
- Brushless Excitation
- Sealed Bearings
- Automated manufacturing (winding, insertion, lacing, varnishing)
- Rotor dynamically spin in balanced (per tolerance)
- Full load capacity alternator
- Protective thermal switch

**GENERATOR SET**

- Internal Genset Vibration Isolation
- Separation of circuits - high/low voltage
- Separation of circuits - multiple breakers
- Silencer Heat Shield
- Wrapped Exhaust Piping
- Silencer housed in discharge hood (enclosed only)
- Standard Factory Testing
- 2 Year Limited Warranty (Standby rated Units)
- 1 Year Limited Warranty (Prime rated units)
- Silencer mounted in the discharge hood (enclosed only)

**ENCLOSURE (if selected)**

- Rust-proof fasteners with nylon washers to protect finish
- High performance sound-absorbing material
- Basketed doors
- Stamped air-intake louvers
- Air discharge hoods for radiator-upward pointing
- Stainless steel lift off door hinges
- Stainless steel lockable handles
- Rhino Coat™ - Textured polyester powder coat

**TANKS (if selected)**

- UL 142
- Double wall
- Vents
- Sloped top
- Sloped bottom
- Factory pressure tested (2 psi)
- Rupture basin alarm
- Fuel level
- Check valve in supply and return lines
- Rhino Coat™ - Textured polyester powder coat
- Stainless hardware

**CONTROL SYSTEM**



**Control Panel**

- Digital H Control Panel - Dual 4x20 Display
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232/485
- All-Phase Sensing DVR
- Full System Status
- Utility Monitoring
- Low Fuel Pressure Indication
- 2-Wire Start Compatible
- Power Output (kW)
- Power Factor
- kW Hours, Total & Last Run

- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus protocol
- Predictive Maintenance algorithm
- Sealed Boards
- Password parameter adjustment protection
- Single point ground

- 15 channel data logging
- 0.2 msec high speed data logging
- Alarm information automatically comes up on the display

**Alarms**

- Oil Pressure (Pre-programmable Low Pressure Shutdown)
- Coolant Temperature (Pre-programmed High Temp Shutdown)
- Coolant Level (Pre-programmed Low Level Shutdown)
- Low Fuel Pressure Alarm
- Engine Speed (Pre-programmed Over speed Shutdown)
- Battery Voltage Warning
- Alarms & warnings time and date stamped
- Alarms & warnings for transient and steady state conditions
- Snap shots of key operation parameters during alarms & warnings
- Alarms and warnings spelled out (no alarm codes)



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PROJECT TITLE:  
**MERRILL NW**  
**W15424**  
**FA ID# 10124098**

PROJECT INFORMATION:  
501 EAST STREET  
MERRILL, WI 54452

SHEET TITLE:  
**GENERAC 50KW GENERATOR SPECIFICATIONS**

SCALE: NONE

PROJECT NUMBER: 28676  
SHEET NUMBER: E-4

**TTS Series  
Switches**  
**200 Amps**  
**600 VAC**

**GENERAC** | **INDUSTRIAL  
POWER**

**TAS200**  
**200A Automatic Transfer Switch**

**TAS200**  
**TAS200**  
1 of 3 2 of 3

**The Generac TAS200 Automatic Transfer Switch**

Flexibility for multiple application installations

Multiple generator support with 3 source panel

Designed with a 6 inch touch screen controller for improved user interface

Camlock functionality for mobile generator sources

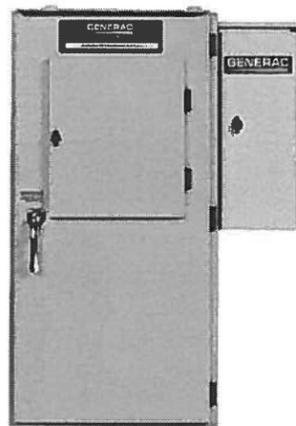


Image used for illustration purposes only.

**Features**

- **STEEL CONSTRUCTION**
- **NEMA 3R ENCLOSURE WITH HINGED "PADLOCKING" DOORS**
- **STAINLESS STEEL HARDWARE**
- **CAMLOCK "QUICK CONNECT" CAPABILITY**
- **OPERATIONAL STATUS VIEW VIA 6 INCH TOUCH SCREEN**
- **TEST FUNCTION - FAST TEST & NORMAL TEST**
- **UL1008 LISTED - FOR EMERGENCY SYSTEMS**

**Optional Features**

- **EXTENDED WARRANTY**
- **THREE-PHASE VOLTAGE CONFIGURATIONS**

**Codes and Standards**

Generac products are designed to the following standards:



UL1008,  
UL508,  
UL50,  
CSA C22.2 No. 178



NEC 700, 701 and 702



NEMA 250

**Application and Engineering Data**

Cabinet Specifications	
Dimensions	24"W x 12"D x 48"H
Weight	210 lbs.
Construction	Single Chamber with Main Door
	Steel
	UL Type / NEMA 3R Rated
	Powder Coat Finish for Corrosion Resistance
	C-UL-US Listed - Automatic Transfer Switch
Mounting Options	Stainless Steel Hardware
	3-Point Latching System with Pad-Lockable Handles
	Wall
Installed	H-frame
	Pre-wired alarm terminal strip

Electrical Specifications	
Voltage/Phase/Amps	120/240 Single-Phase, 200A 120/208 3-Phase, 200A 120/240 3-Phase, 200A
Breaker	Eaton 200 amp Utility Breaker Eaton 200 amp Generator Breaker
Maximum RMS Symmetrical Fault Current - Amps	25k AIC Rated
Protective Device Continuous Rating (Max) Amp	200
Input to Generator	350MCM - #8 AWG
Output to Site	350MCM - #8 AWG
Generator Annunciator Connector	Deutsch DTMO4-12PA-L012
Alarm Terminal Board	Generator Run Alarm
	Generator Fail - Shutdown Alarm
	Generator Fail - Non Shutdown Alarm
	Low Fuel Alarm
	Generator Theft Alarm
	AC Utility Fail Alarm

Camlock Component	
Camlock Component	Shipped loose for multiple installation options
Dimensions	9" W x 9.4" D x 24.25" H
200A Camlock Generator Connection	Single-Phase: Black L1, Red L2, White-Neutral, Green-Ground
	3-Phase: Black L1, Red L2, Blue L3, White-Neutral, Green-Ground
	Uses 4 CH E1016 Male Connectors
	Mating Connector - CH E1016 Female



1120 Dallas Street, Sauk City, WI 53583  
Phone: 608-643-4100 Fax: 608-643-7999  
www.Ramaker.com



**GENERAL DYNAMICS**  
Information Technology, Inc.  
GENERAL DYNAMICS  
12906 SHELBYVILLE ROAD, SUITE 230  
LOUISVILLE, KY 40243

Certification & Seal:  
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Wisconsin.



Signature: *Michael L. Pinske* Date: 9/10/2014

MARK	DATE	DESCRIPTION
ISSUE	CONSTRUCTION DWG5	DATE ISSUED 04/09/2014

PROJECT TITLE:  
**MERRILL NW**  
**W15424**  
**FA ID#10124098**

PROJECT INFORMATION:  
501 EAST STREET  
MERRILL, WI 54452

SHEET TITLE:  
**GENERAC ATS SPECIFICATIONS**

SCALE: NONE

PROJECT NUMBER: 28676  
SHEET NUMBER: E-5

November 13, 2014

TO: Water & Sewage Committee

FROM: Kim Kriewald, Utility Superintendent

RE: Operations Report

Water & Sewer Operations & Water Recycling Operations aka Wastewater Operations

New operator is now part of "on call" list to handle after hour calls.

Spreading of biosolids has ended for the year because of snow cover. The storage shed is ¼ full at this time which will make for a long winter.

East Street tower project has been completed and is now back in operation.

Generator installation at Riverside Avenue has been completed.

Cross connections are continuing with HydroDesigns.

Cleaned catch basins for the street department.

New cover for Oregon & Jackson lift station.

Winterized utility buildings and ready equipment for winter.

Hydrant maintenance & flushing complete.

Taxroll has been completed.

First test run on ACH payments for utility payments has been completed.

Preliminary work for the auditors has also begun.

Respectfully submitted,

  
Kim Kriewald  
Utilities Superintendent

ah