

JOINT ARCHITECTURAL BOARD/PLAN COMMISSION AGENDA
MONDAY, JULY 17, 2017
7:00 PM
BOARD ROOM
MUNICIPAL BUILDING, 210 COTTONWOOD AVE.

Roll Call

1. Consideration of a motion to approve the Jt. Architectural Board/Plan Commission Minutes of June 19, 2017.
2. Items related to a request for site and building plans and request for Conditional Use for a proposed wireless installation on the existing Village water tower at Coventry Lane from Verizon Wireless Personal Communications.
 - a. **PUBLIC HEARING** for the consideration of a Conditional Use Permit request to construct
 - b. Consideration of site and building plans
 - c. Consideration of a Motion to recommend approval of a Conditional Use Permit
3. Architectural Board consideration of plans for a sign for Zion Lutheran, 1023 E. Capitol Drive.
4. Plan Commission and Architectural Board review and consideration of site and building plans and an amendment to a PUD to allow construction of a storage building for Hartland Meadows, 357 Cottonwood Ave.
5. Plan Commission and Architectural Board review and consideration of site and building plans for construction of an addition and an application for a sign for HM Solutions, 581 S. Industrial Drive.
6. Architectural Board and Plan Commission review and consideration of site and building plans and request for Conditional Use for construction of an additional silo located at 701 W Capitol Drive, Illinois Cement Company, Applicant, TDI Associates, Inc., Engineer/Architect.
 - a. Preliminary consideration of plans for the proposed Conditional Use
 - b. Motion to set a Public Hearing to be held during the regular Plan Commission meeting on August 21, 2017
7. Adjourn

David E. Cox, Village Administrator

A complete packet of meeting materials is normally available by 5:00pm on the Friday before the meeting on the Village website: www.villageofhartland.com (Government/Agendas and Minutes).

Notice: Please note that upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information or to request this service, contact Darlene Igl, WCPC/CMC, Village Clerk, at 262/367-2714. The Municipal Building is handicap accessible.

MEMORANDUM

TO: Architectural Board and Plan Commission
FROM: David E. Cox, Village Administrator 
DATE: July 14, 2017
SUBJECT: Agenda Information – July 17, 2017

The following information relates to the upcoming Architectural Board and Plan Commission meeting agenda and includes additional or summary information and staff recommendations as necessary. The numbering will follow the numbering of the agenda.

Item 2 Related to additional cellular antennas on the Coventry Water Tower.

Background: At its last meeting, the Plan Commission reviewed a request from Verizon Wireless to add new, additional antennas to the water tower near Coventry Lane in the Hartridge subdivision. As a reminder, staff has been working with them to develop an acceptable plan and the related agreements to facilitate a long term installation. Similar installations already exist on this water tower as well as the Hill Street tower, which site also houses a monopole structure for cellular antennas. In accordance with the Village Code, utility related infrastructure is considered a Conditional Use on properties like the Coventry water tower site, which is zoned I-1, Institutional and because this installation is considered an improvement on Village property, the Plan Commission must review it. Under the proposal, Verizon Wireless would like to replace the existing hand rail (about 14 feet in diameter) and painter's rail (about 16 feet) on the tower with new rails at 20 and 22 feet in diameter respectively. This will facilitate the addition of six (6) new antennas and related equipment to the six (6) antennas already on the tower. The new antennas would be serviced by ground-level equipment housed in a small building adjacent to the existing building on the site. Staff and a consulting engineer will continue to review the material not only for Plan Commission comment but for the final permission to construct after approval. An Agreement related to the use of the site has been developed and will be considered by the Village Board as part of this process. Continuing the Conditional Use process, the Plan Commission is asked to give final consideration at this meeting and to make a recommendation to the Village Board as to the terms of the Conditional Use Permit.

Recommendation: Recommend approval with conditions as appropriate.

Item 4 Related to a storage building at Hartland Meadows.

Background: The owner of the Hartland Meadows senior apartments has applied for permission to construct a storage building on the property to serve the equipment and materials storage needs of the site. The construction of Hartland Meadows was accomplished through Planned Unit Development (PUD) overlay zoning over RM-1 Multiple-Family Residential District. The PUD was used to authorize the "elderly" housing at densities greater than the

underlying district. As the Commission is aware, when PUD is used, nearly all zoning matters become part of the PUD agreement and are agreed upon specifically including setbacks, numbers of buildings, location of building and virtually all other aspects of the construction and use. Therefore, this proposed storage building will require an amendment to the PUD agreement to authorize its location and construction. Notwithstanding the PUD, the location and use of the storage building would likely comply with the Zoning regulations. As the Plan Commission reviews the project, please note that staff recommends that the driveway access to the building be reconsidered in light of the location of the fire hydrant. The hydrant could be moved, subject to staff approval of the location and operation, or the driveway diverted to a location at least 5 feet away from the hydrant. Additionally, it would be appropriate to require landscaping of the new structure. That plan could be reviewed by staff, the Village Board or the Plan Commission as the bodies may decide. The Plan Commission is asked to review the proposed building and make a recommendation to the Village Board. The Village Board will consider the matter in July and hold a public hearing in August to finalize any approval that may be given.

Recommendation: Recommend approval of the proposed storage building and amendment to the PUD.

Item 5 Related to an addition and signage for HM Solutions.

Background: HM Product Solutions is proposing a 25,860 square foot addition to their 37,514 square foot existing facility at 581 South Industrial Drive. The purpose of the addition is to provide additional warehouse and storage for their expanding business. The proposed addition is similar to the addition conceived as part of the original plan for expansion at the property when the original building was constructed. The only change is at the south end of the addition where, instead of a parking lot expansion, the warehouse addition will extend to the south building limit. Staff has reviewed the parking need, which exceeds both the requirements under the Zoning Code and the needs of the actual operation, and feels an expansion of parking is not necessary. The proposed addition is, likely, the largest addition that can be accommodated on the site while still providing appropriate storm water treatment facilities. Staff has no concerns regarding the signage plan.

Recommendation: Recommend approval of the site and building plans and the sign plan.

Item 6 Related to a Conditional Use Permit for Illinois Cement.

Background: Illinois Cement has been operating at this site since the early 1980's performing various activities related to the aggregate and cement industry. Its current iteration is

a regional distribution point for the cement component of concrete. Material is both trucked in and trucked out. Illinois Cement is seeking approval to install a second product silo on the property that will service a second type of cement product. All uses in the Q-1 Quarrying/Extractive Zoning District are Conditional Uses. There are no permitted uses. As such, the request to add a second silo would normally be considered as an amendment to the Conditional Use Permit (CUP) for the site. However, due to the age of the site, no written CUP has been identified. Therefore, a new CUP is being requested for the site to ensure that its operation is proper and acceptable to the Village. Staff is not aware of any operational issues with the current property. Staff does suggest that the following items be addressed and agreed upon for inclusion in the CUP document, which is recorded against the property.

- Products and number of silos
- Hours of operation
- Noise levels associated with the operation
- Number of trucks entering and leaving the site daily
- Route for truck traffic (suggested route: W Capitol Drive to Highway 83 in all cases)

Additionally, the Commission may wish to address maintenance of the vegetated buffer area east of the site on the Illinois Cement property including a requirement to keep and maintain this site and that Illinois Cement comply with the Village's regulations related to removal of trees on their site. Also, the Board may wish to consider requiring the combination of the two parcels since the operation appears to overlap the parcel lines.

Recommendation: Give initial consideration and set the Public Hearing date as recommended.

DC:PC Agenda Info 7-17

cc: Ryan Amtmann, Village Engineer
Mike Einweck, Public Works Director
Scott Hussinger, Building and Zoning Official

**VILLAGE OF HARTLAND
JOINT ARCHITECTURAL BOARD/PLAN COMMISSION MINUTES
MONDAY, JUNE 19, 2017
7:00 PM
BOARD ROOM
MUNICIPAL BUILDING, 210 COTTONWOOD AVE.**

Present: David deCourcy-Bower, Tim Fenner, Tim Hallquist, Jeff Pfannerstill, James Schneeberger, Randy Swenson and Jack Wenstrom.

Others Present: Administrator Cox, Building Inspector/Zoning Administrator Hussinger and Deputy Clerk Meyer.

Roll Call

1. Motion (Hallquist/Schneeberger) to approve the Jt. Architectural Board/Plan Commission Minutes of May 15, 2017. Carried (7-0).
2. Architectural Board consideration of an application for an addition on the Moede residence, 416 River Grove Lane.

This proposed project was approved in March 2016. In accordance with Village Code, that approval expired in March 2017 and permits had not been requested. The homeowner now desires to move forward with construction. The Architectural Board is asked to review the proposed plans again.

Motion (Swenson/Hallquist) to approve an application for an addition on the Moede residence, 416 River Grove Lane. Carried (7-0).

3. Architectural Board consideration of plans for a sign for Theia Vision Care, 213 E. Capitol Drive.

At this point, the building exterior is not proposed for renovations. The sign is proposed to utilize the existing sign standards and to replace the face. The Business Improvement District (BID) reviewed the original sign and indicated its approval conditioned on the language and icons related to the doctor's website and social media be removed. The version being presented to the Architectural Board has been revised to reflect those changes.

Motion (Fenner/Hallquist) to approve plans for a sign for Theia Vision Care, 213 E. Capitol Drive, based on the recommendation of the Business Improvement District. Carried (7-0).

4. Architectural Board consideration of plans a new entry canopy for Capital Equipment and Handling, Inc., 1100 Cottonwood Avenue.

The project representative was present. He stated that there is a wind issue and, consequently, they have been through four sets of entry doors. The wind break entryway will be constructed of aluminum panels the same as the windows on the building. A photo of the prototype entryway added to the doorway was handed out to the board.

Motion (Hallquist/Schneeberger) to approve the plans for a new entry canopy for Capital Equipment and Handling, Inc., 1100 Cottonwood Avenue. Carried (7-0).

Jeff Anson was not present for item number 5, the next item on the agenda. The board moved to number 6 and 7 before number 5 was reviewed.

5. Plan Commission and Architectural Board review and consideration of site, landscape and operational plans for Hoggers Pub, 375 Cottonwood Ave.

Mr. Anson had submitted some photos with hand-drawn explanations of his site and landscape plans. He expressed the desire to cut down a silver maple tree on the property that obstructs drainage. Regrading will be needed in order to prevent water in the basement. He would like to keep the existing black walnut tree.

Mr. Anson described his plans of adding flower beds, small flowering trees, bushes, two horseshoe pits and perhaps a gazebo in the future. Bushes at the front of the building will be taken out and pavers or bricks will make a seating area. There will be a seating area in the rear, which currently exists.

The parking lot was discussed and the Commission suggested a different configuration than what Mr. Anson had described. The number of parking spaces required for this lot is six.

Mr. Anson plans to have a party for his wife's 50th birthday next Wednesday. He does not have an operable kitchen, but is bringing in a caterer with a large grill/smoker. The Commission told Mr. Anson to check with Waukesha County on any requirements they may have for that type of catering.

The Plan Commission gave Mr. Anson a great deal of feedback for his site and landscape plan. However, they need a more detailed plan that shows dimensions to scale, specifics and a timetable for the numerous improvements planned. A plan of operation will also be required.

Lighting at the present time consists of a total of three fixtures -- 2 on the garage and 1 on the building.

There will need to be screening for the refuse area in the back of the property.

Motion (Fenner/Swenson) to table site, landscape and operational plans for Hoggers Pub, 375 Cottonwood Ave. until further detailed dimensions and a plan of operation is submitted. Carried (7-0).

6. Plan Commission and Architectural Board actions related to a Conditional Use Permit for a proposed wireless installation on the existing Village water tower at Coventry Lane from Verizon Wireless Personal Communication
 - a. Review and consideration of site and building plans to add a second wireless installation with shelter, back-up generator and antennas on existing water tower site.

Verizon wireless has requested to add new, additional antennas to the water tower near Coventry Lane in the Hartridge subdivision. With the Village Board's permission, staff has been working with them to develop an acceptable plan and the related agreements to facilitate a long term installation. Similar installations already exist on this water tower, as well as the Hill Street tower, which also houses a monopole structure for cellular antennas. In accordance with the

Village Code, utility related infrastructure is considered a Conditional Use on properties like the Coventry water tower site, which is zoned I-1, Institutional and because this installation is considered an improvement on Village property, the Plan Commission must review it.

Verizon Wireless would like to replace the existing hand rail (about 14 feet in diameter) and painter's rail (about 16 feet) on the tower with new rails at 20 and 22 feet in diameter respectively. This will facilitate the addition of six new antennas and related equipment to the six antennas already on the tower.

An Agreement related to the use of the site has been developed and will be considered by the Village Board as part of this process.

Nathan Ward, a representative of the project, was present. Verizon's shelter will match the architectural design of the existing shelter, but Verizon's will be slightly larger than the T-Mobile because they will have a back-up generator, as well as the radio transmitter and receiving equipment. They will be routing the coax cable underground underneath the driveway through the doghouse at the base of the tank, up to the top and attached to the antennas mounted on the handrail. There will not be much visual difference other than the second shelter on site. Engineering has been completed. When this installation is complete, the area will be at capacity.

Mr. Ward will research the decibel level of the generator. He asked if the Village has an ordinance with a decibel threshold. If so, he will meet that – there are multiple options for the generator. Mr. Hussinger will get back to Mr. Ward tomorrow with that information. The generator is a 35 kilowatt unit. It will cycle once a week during the daytime hours to keep things lubricated. Otherwise, it will run only during a catastrophic power failure after two to three days -- the backup battery will work for the first two or three days. Mr. Hussinger would like some documentation on the decibel level for the unit because there are residential properties close by. They will be installing a landscaping buffer, per the Village's request. The generator will most likely be a diesel generator, which has triple containment. The lease has been drafted.

They would like to start construction immediately. It will take about 45-60 days to complete.

- b. Motion (Swenson/Wenstrom) to set a Public Hearing regarding the issuance of a Conditional Use Permit for the next regular Plan Commission meeting on Monday, July 17 beginning at 7:00pm. Carried (7-0).

Tim Fenner will be excused for the July 17 meeting, but he would recommend that if a Conditional Use Permit is issued, it would be upon completion of the lease.

7. Plan Commission and Architectural Board review and consideration of a request to amend the site plan for a warehouse addition for Blue Ribbon Flooring, 475 Cardinal Lane.

In November 2016, the Plan Commission and Village Board approved the site plan and addition for Blue Ribbon Flooring conditioned on paving of the gravel areas on the lot. Any area of gravel not needed would be removed and restored to vegetation. The construction of the addition is underway and the owner is requesting consideration to be allowed to maintain the existing gravel. He has two concerns: the first is a maintenance concern due to the sharp turning performed on this

area due to site limitations and the second relates to perceived infiltration of storm water through the gravel. Based on the Village Code and implementation policies of the Plan Commission, all vehicle areas (parking, drives, loading) have been paved in the industrial/commercial area, gravel areas that may have existed in the past have become paved areas. As a result, only one gravel parking/loading area was observed in a recent survey of this park. When the Plan Commission considered the matter in 2016, its recommendation for approval was conditioned on the paving of the gravel area. This condition was reiterated by the Village Board in its approval. One factor the owner points out is the tendency of asphalt to “push” or tear under the significant lateral pressure of hard turning of the trucks. A common practice to addressing this issue is the use of concrete in strategic locations.

David Smith, owner of Blue Ribbon Flooring, stated that the cost of concrete is prohibitive for him. He specifically designed the area with the gravel for big rig turn-arounds, which has worked well over the years.

There was discussion regarding the definition of “hard surface”. Village zoning code does require that off street parking be paved. However, it is not retroactive. When there is an expansion, we typically apply that standard. It was questioned if gravel is considered hard surface. When the code talks about paving, it only talks about asphalt and concrete, not gravel. John Kutz, with MSI, stated that when he has to do storm water hard surface calculations, he has to consider the gravel. This area is never used for parking, only for truck turning around. The reason for the turnaround is so that the trucks don’t have to back into the property. Entering forward and then turning around is for the safety of the Cardinal Lane traffic. The current asphalt area is three inches thick. There will be paving in front of the new addition. Over the years Mr. Smith let the grass grow on the south side of the property and it continues to grow up to that turn around area. It a unique shaped lot on the curve of the road.

It’s very clear in M-1 zoning that parking areas have to be paved with asphalt or concrete. In the B-4 or B-5 zoning, not only do parking areas have to be paved, but loading and other traffic areas have to be paved. The two zoning codes address that in slightly different ways. But there been the policy of paving all surfaces in the M-1.

David Smith maintains the gravel on a regular basis with a bobcat and a rake.

Most recently the Village worked with Advanced Disposal on their site to have them pave some gravel areas. That situation was different, because it was for a storm water runoff issue where installing pavement made sense.

There was some concern about aesthetics and whether the gravel would make it onto Cardinal Lane. However, there is 50 feet of pavement between the gravel area and the road and the gravel has not tracked out into the road in the past. The Department of Public Works uses this property for accessing a sanitary sewer easement.

Motion (Swenson /Wenstrom) to recommend to the Village Board approval of the gravel turnaround loading area at Blue Ribbon Flooring, 475 Cardinal Lane, based on the owner consistently maintaining that gravel area. Carried (7-0).

Joint Architectural Board/Plan Commission Minutes
June 19, 2017 Meeting

Jeff Anson, the applicant for Item 5, was not present. The discussion for this item was in need of his input. The Board took a five minute recess and Mr. Anson was called to see if he was able to come to the meeting within short time. He did appear within five minutes and Item 5 was then discussed. (See No. 5 above)

Note: Jack Wenstrom and Tim Fenner will be excused for the next Joint Architectural Board/Plan Commission Meeting on July 17.

8. Adjourn

Motion (Swenson/Wenstrom) to adjourn. Carried (7-0). Meeting adjourned at 8:27 PM.

Respectfully submitted by
Recording Secretary,

Lynn Meyer
Deputy Clerk



VILLAGE OF HARTLAND
PETITION FOR:



CONDITIONAL USE

With Approval for Location and Plan of Operation

(REQUIRES 2 PLAN COMMISSION MEETINGS, A PUBLIC HEARING AT THE SECOND PLAN COMMISSION MEETING AND 1 VILLAGE BOARD MEETING)

FEE: \$150.00 + \$300 Professional Fee Deposit

Date: <u>5-23-17</u>	Fee Paid: <u>\$450</u>
Date Filed: <u>5-23-17</u>	Receipt No. <u>185543</u>

1. Name: Owner: Verizon Wireless Personal Communications LP
Agent: Nathan Ward

Address of Owner/Agent: Owner: 1515 Woodfield Rd.
Schaumburg, IL 60173
Agent: 1200 Riva Ridge
Racine, WI 53402

Phone Number of Owner/Agent: Owner: 847-619-3046 Agent: 414-788-1327

FAX No. _____ E-mail nward@buellconsulting.com

2. Give complete legal description of property to be considered. (Attach a separate sheet with description and label sheet "Exhibit A").

See attached Exhibit A

3. State present use of property and intended use. The site is a municipal water tank with one existing wireless communications provider with equipment shelter and antennas on tank. We propose to add a second wireless installation with shelter, back-up generator and antennas on tank.

Nathan Ward 5/18/17
Signature of Petitioner

1200 Riva Ridge, Racine, WI 53402
Address

414-788-1327
Phone

Exhibit A

The following described real estate situated in the County of Waukesha and State of Wisconsin, to-wit:

All that part of the Southeast 1/4 of Section 2, Town 7 North, Range 18 East, Village of Hartland, Waukesha County, Wisconsin, bounded and described as follows: Beginning at the most Easterly corner of Lot 9, Block 9, Hartridge Addition No. 1; thence North 49° 15' West along the Northeasterly line of Lots 8 and 9 of Block 9, 150.00 feet; thence North 40° 45' East, 250.00 feet; thence South 49° 15' East, 150.00 feet; thence South 40° 45' West, 250.00 feet to the place of beginning. ALSO including the following described strip of land for access easement: Beginning at the most Southerly corner of Lot 9, Block 9, Hartridge Addition No. 1; thence North 43° 45' East along the Southeasterly line of said Lot 9, 119.56 feet; thence North 40° 45' East, 80.44 feet; thence South 49° 15' East, 30.00 feet; thence South 40° 45' West, 81.23 feet; thence South 43° 45' West, 120.35 feet; thence North 46° 15' West, 30.00 feet to the place of beginning. AND BEING the same property conveyed to Village of Hartland, a municipal corporation from Universal Shelter

Corporation by Warranty Deed dated October 26, 1973 and recorded November 01, 1973 in Deed Book 059, Page 447.

CONSULTANT TEAM

PROJECT CONSULTANT: TERRA CONSULTING GROUP, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
(847) 698-6400

SURVEYOR: THOMSON SURVEYING LTD.
9575 W. HIGGINS ROAD
SUITE 850
ROSEMONT, IL 60018
(847) 318-9790

STRUCTURAL: HUTTER FRANKINA ENGINEERING
32 W 273 ARMY TRAIL RD, SUITE #100
WAYNE, IL 60184
(630) 513-6711

APPROVALS

REAL ESTATE: _____

RF: _____

CONSTRUCTION: _____

EQUIPMENT ENGINEERING: _____

OPERATIONS: _____

PROJECT TYPE

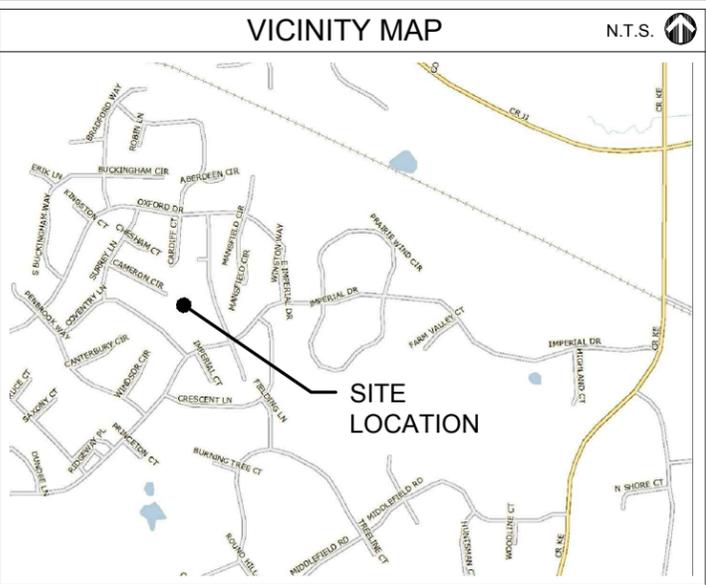
PROPOSED LESSEE ANTENNAS TO BE MOUNTED ON EXISTING WATER TOWER WITH PROPOSED 9'-4" x 16'-0" EQUIPMENT PLATFORM AT BASE.

SITE COORDINATES:

LATITUDE: 43° 05' 35.63" N (1A CERTIFICATION)
LONGITUDE: 88° 19' 56.11" W (1A CERTIFICATION)
ELEVATION: ±1127.5' (1A)

DRIVING DIRECTIONS:

FROM LESSEE OFFICE:
TURN LEFT ONTO E FRONTAGE RD. TAKE RAMP LEFT AND FOLLOW IL-53 N. KEEP STRAIGHT ONTO IL-53 N EXT. TAKE RAMP RIGHT & FOLLOW SIGNS FOR E LAKE COOK RD. TAKE RAMP LEFT FOR I-94 W TOWARD WI. AT EXIT 316/317, TAKE RAMP RIGHT TOWARD MADISON. KEEP STRAIGHT ONTO I-43 S / I-894 W. KEEP RIGHT ONTO I-894 W. AT EXIT 1B, TAKE RAMP LEFT FOR I-94 W TOWARD MADISON. AT EXIT 293C, TAKE RAMP RIGHT FOR WI-16 W TOWARD PEWAUKEE. AT EXIT 184, TAKE RAMP RIGHT FOR CR-JK / CR-KE TOWARD N SHORE DR. TURN LEFT ONTO CR-JK / CR-KE. TURN RIGHT ONTO IMPERIAL DR. TURN RIGHT ONTO COVENTRY LN. DESTINATION IS ON THE RIGHT.



VERIZON WIRELESS

PERSONAL COMMUNICATIONS LP

d/b/a Verizon Wireless

1515 WOODFIELD ROAD, SUITE 1400
SCHAUMBURG, ILLINOIS 60173

LOCATION NUMBER: 278150

SITE NAME: HARTLAND EAST

**COVENTRY LANE
HARTLAND, WI 53029**

FIBER COORDINATION IS NOT COMPLETE (PENDING FIBER CONTACT). PRIOR TO CONSTRUCTION, CONTACT DESIGNER FOR UPDATE.

PROJECT INFORMATION

P.I.N. #: HAV 072897001 (LEASE AREA) & HAV 0727208 (ACCESS DRIVE)

ADDRESS: COVENTRY LANE
HARTLAND, WI 53029

POWER: T.B.D. FIBER: T.B.D.

UTILITIES: _____

JURISDICTION: VILLAGE OF HARTLAND

OCCUPANCY: UNINHABITED

ZONING: MUNICIPALE

CONSTRUCTION TYPE: WATER TOWER CO LO

GENERATOR TYPE: DIESEL

PROPERTY OWNER: VILLAGE OF HARTLAND
210 COTTONWOOD AVE.
HARTLAND, WI 53029

APPLICANT: VERIZON WIRELESS PERSONAL COMMUNICATIONS LP
d/b/a VERIZON WIRELESS
1515 WOODFIELD ROAD, SUITE 1400
SCHAUMBURG, IL 60173
(920) 841-1263

CONSTRUCTION MANAGER: JON BARTELL (920) 585-9845

REAL ESTATE MANAGER: DANIEL PEREZ (847) 706-1747

SHEET	DRAWING INDEX	REVISION
T-1	TITLE SHEET	-
LP	LOCATION PLAN	-
C-1	ENGINEERING SITE PLAN	-
C-2	SITE GRADING PLAN	-
C-3	EQUIPMENT ENCLOSURE FOUNDATION PLAN	-
ANT-1	SITE ELEVATION & ANTENNA LAYOUT	-
ANT-2	ANTENNA INFORMATION	-
ANT-2A	ANTENNA INFORMATION	-
ANT-3	DOGHOUSE & CONCRETE SLAB DETAILS	-
ANT-4	SITE DETAILS	-
S-1	STRUCTURAL DRAWINGS	-
S-2	STRUCTURAL DRAWINGS	-
S-3	STRUCTURAL DRAWINGS	-
S-3	STRUCTURAL DRAWINGS	-
S-4	STRUCTURAL DRAWINGS	-
S-5	STRUCTURAL DRAWINGS	-
B-1	EQUIPMENT ENCLOSURE PLAN & SECTION	-
B-2	EQUIPMENT ENCLOSURE ELEVATIONS	-
B-3	ROOF PLAN	-
B-4	SHELTER SECTIONS	-
E-1	UTILITY ROUTING PLAN	-
E-2	SITE GROUNDING PLAN	-
E-3	GROUNDING DETAILS	-
E-4	GROUNDING DETAILS	-
E-4A	GROUNDING DETAILS	-
E-5	ELECTRICAL DETAILS	-
SP-1	SPECIFICATIONS	-
SP-2	SPECIFICATIONS	-
P-1	EXISTING SITE PHOTOS	-
1 OF 3	SITE SURVEY	-
2 OF 3	SITE SURVEY	-
3 OF 3	SITE SURVEY	-
ATTACHMENTS		

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA CONSULTING GROUP, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

REVISIONS

NO.	DESCRIPTION	DATE	BY	TJS
1	ISSUED FOR REVIEW	06/08/17		

LOC. # 278150

HARTLAND EAST

COVENTRY LANE
HARTLAND, WI 53029

DRAWN BY: BTE

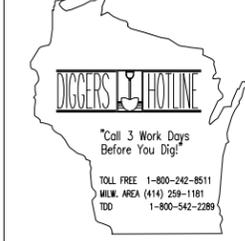
CHECKED BY: TAZ

DATE: 12/02/15

PROJECT #: 33-1912

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1



OTHER UTILITIES NOT INCLUDED IN DIGGERS HOTLINE AND LOCAL UTILITY DISTRICTS AND COMPANIES SHALL ALSO BE NOTIFIED

LEGEND

- = 1" IRON PIPE FOUND
 - = 6" NAIL SET
 - ⊕ = COUNTY MONUMENT FOUND
 - ⊠ = ELECTRIC METER
 - ⊡ = TELEPHONE PEDESTAL
 - ⊙ = FIRE HYDRANT
 - ⊗ = GROUNDING PORT
 - ⊠ = ELECTRIC TRANSFORMER
 - ⊗ = WATER VALVE
 - ∩ = DOOR
 - T/E- = BURIED ELEC. & TELE.
 - TV- = BURIED CABLE
 - B.O.C. = BACK OF CURB
 - ⊙ = EXISTING CEDAR TREE
-
- PROPERTY LINE
 - FENCE
 - OVERHEAD POWER LINE
 - UNDERGROUND TELCO
 - UNDERGROUND POWER
 - BURIED WATER LINE
 - BURIED GAS LINE
 - EDGE OF BUSH/TREES

MERIDIAN SURVEYING, LLC

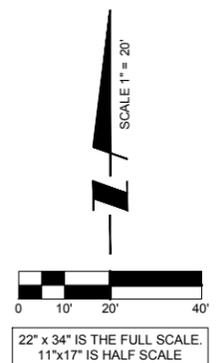
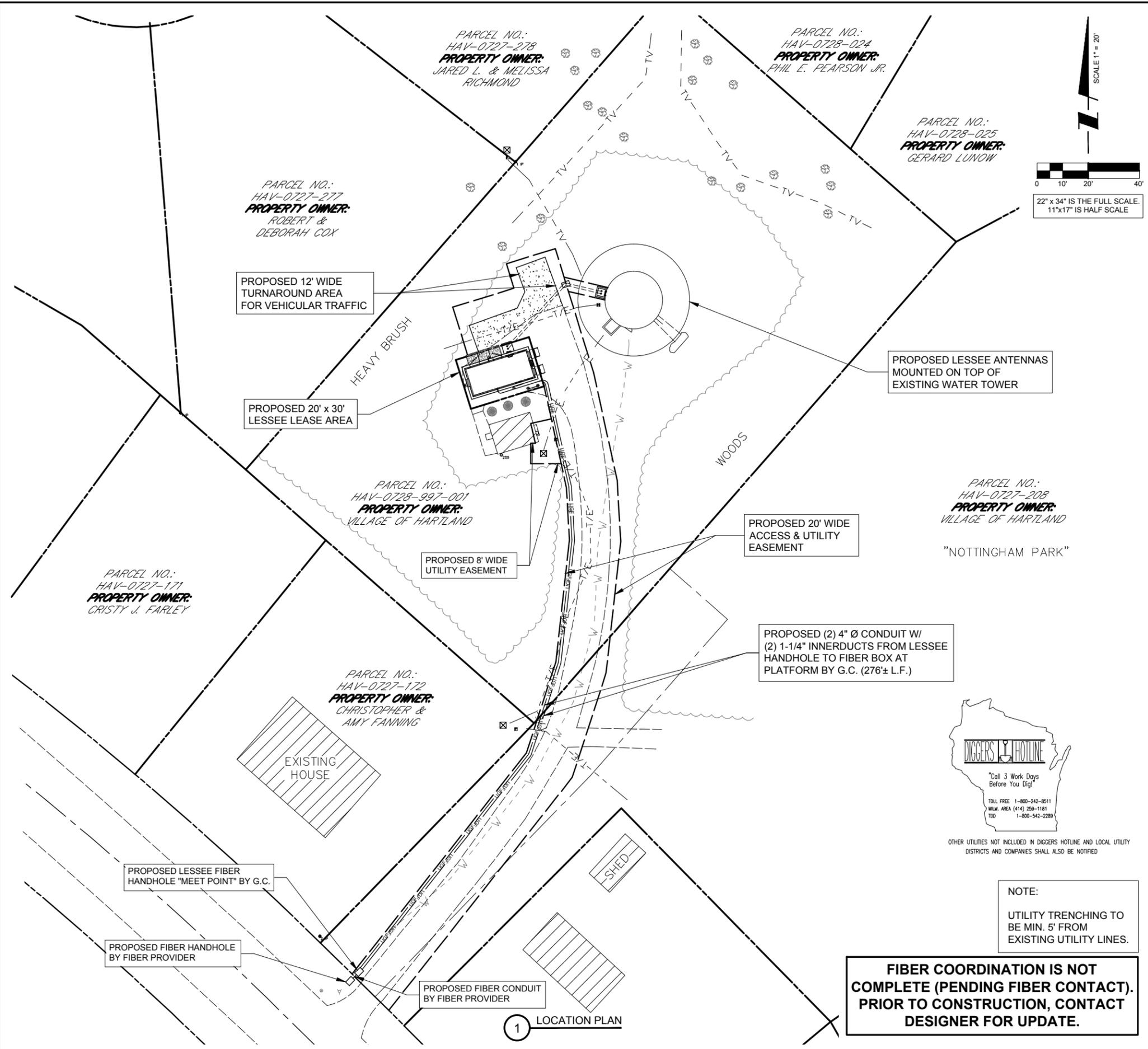
N8774 Firelane 1 Office: 920-993-0881
 Menasha, WI 54952 Fax: 920-273-6037

BENCHMARK INFORMATION

SITE BENCHMARK: (BM A)
 TOP OF WATER TOWER ANCHOR
 BOLT NE OF OVERFLOW PIPE

GENERAL SITE NOTES

1. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING PAVEMENT. CONTRACTOR SHALL PHOTOGRAPH AND VIDEOTAPE EXISTING PAVEMENT PRIOR TO CONSTRUCTION. ANY DAMAGE CAUSED DURING CONSTRUCTION SHALL BE REPLACED TO EXISTING OR BETTER CONDITION AT NO ADDITIONAL COST.
2. THE CONTRACTOR WILL, UPON BECOMING AWARE OF SUBSURFACE OR LATENT PHYSICAL CONDITIONS DIFFERING FROM THOSE DISCLOSED BY THE ORIGINAL SOIL INVESTIGATION WORK, PROMPTLY NOTIFY THE OWNER VERBALLY AND IN WRITING, AS TO THE NATURE OF THE DIFFERING CONDITIONS. NO CLAIM BY THE CONTRACTOR FOR ANY CONDITIONS DIFFERING FROM THOSE ANTICIPATED IN THE PLANS AND SPECIFICATIONS AND DISCLOSED BY THE SOIL STUDIES WILL BE ALLOWED UNLESS THE CONTRACTOR HAS SO NOTIFIED THE OWNER, VERBALLY AND IN WRITING, AS REQUIRED ABOVE, OF SUCH DIFFERING SUBSURFACE CONDITIONS.
3. CONTRACTOR TO PROVIDE APPROXIMATE 50'X50' STAGING AREA AND TEMPORARY ROAD. CONTRACTOR SHALL COORDINATE WITH ANTENNA CONTRACTOR, A STAGING AREA AND TEMPORARY ROAD THAT IS ACCEPTABLE TO THE OWNER. STAGING AREA AND TEMPORARY ROAD SHALL BE RESTORED TO EXISTING CONDITIONS AS NECESSARY UPON COMPLETION OF THE PROJECT.
4. BEFORE AND DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE ADEQUATE EROSION CONTROL AS NECESSARY IN THE FORM OF SILT FENCES FOR THE SITE AND BALES AROUND ANY EXISTING MANHOLES, INLETS, OR CATCH BASINS SUSCEPTIBLE TO EROSION. EROSION CONTROL MEASURES SHALL BE PERIODICALLY INSPECTED TO ENSURE PROPER FUNCTION. EROSION CONTROL SHALL BE REMOVED UPON COMPLETION OF WORK.



OTHER UTILITIES NOT INCLUDED IN DIGGERS HOTLINE AND LOCAL UTILITY DISTRICTS AND COMPANIES SHALL ALSO BE NOTIFIED

NOTE:
 UTILITY TRENCHING TO BE MIN. 5' FROM EXISTING UTILITY LINES.

FIBER COORDINATION IS NOT COMPLETE (PENDING FIBER CONTACT). PRIOR TO CONSTRUCTION, CONTACT DESIGNER FOR UPDATE.

1 LOCATION PLAN

CHICAGO SMSA
 limited partnership
 d/b/a VERIZON WIRELESS



NO.	DESCRIPTION	DATE	BY
	ISSUED FOR REVIEW	06/08/17	TJS

LOC. # 278150

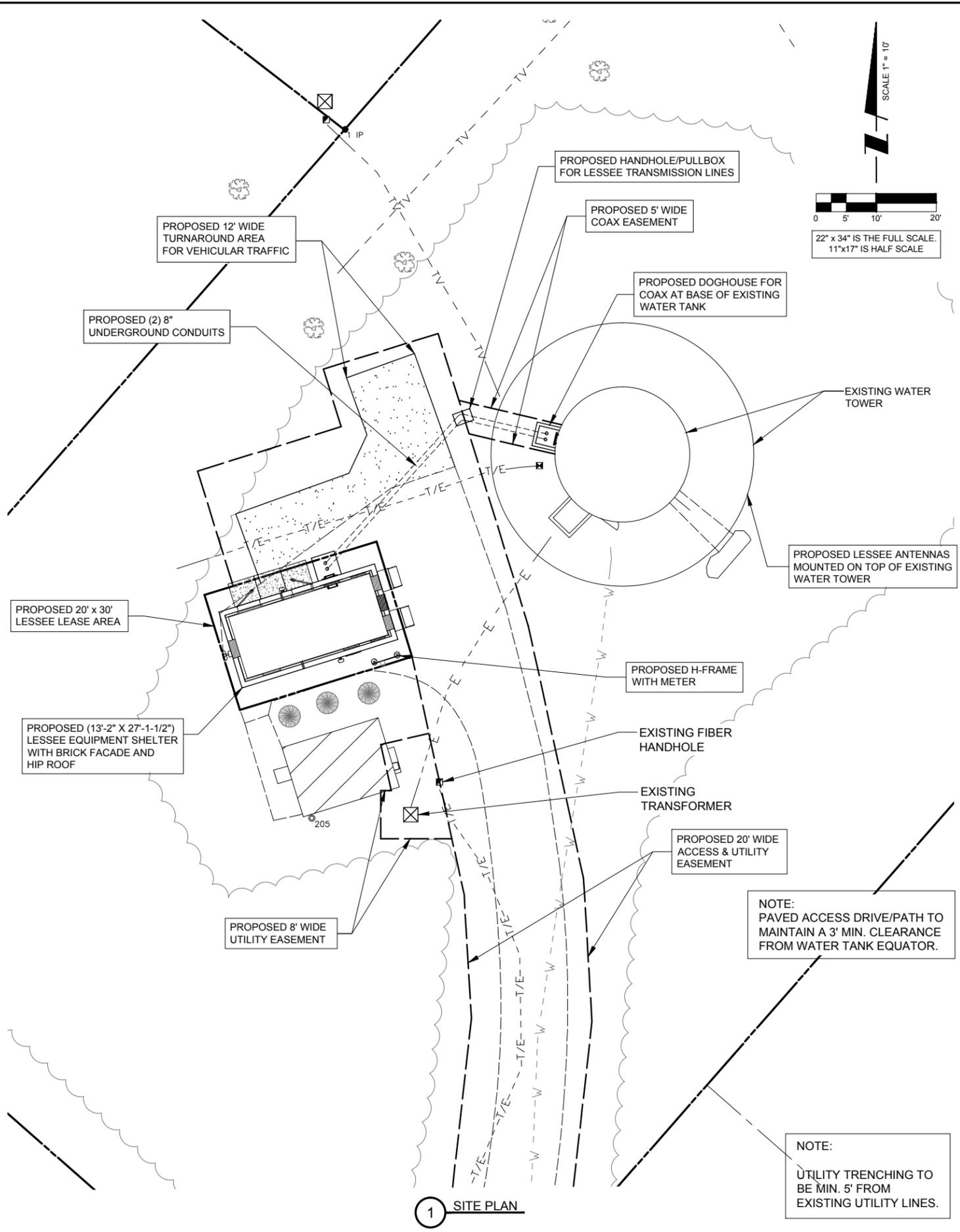
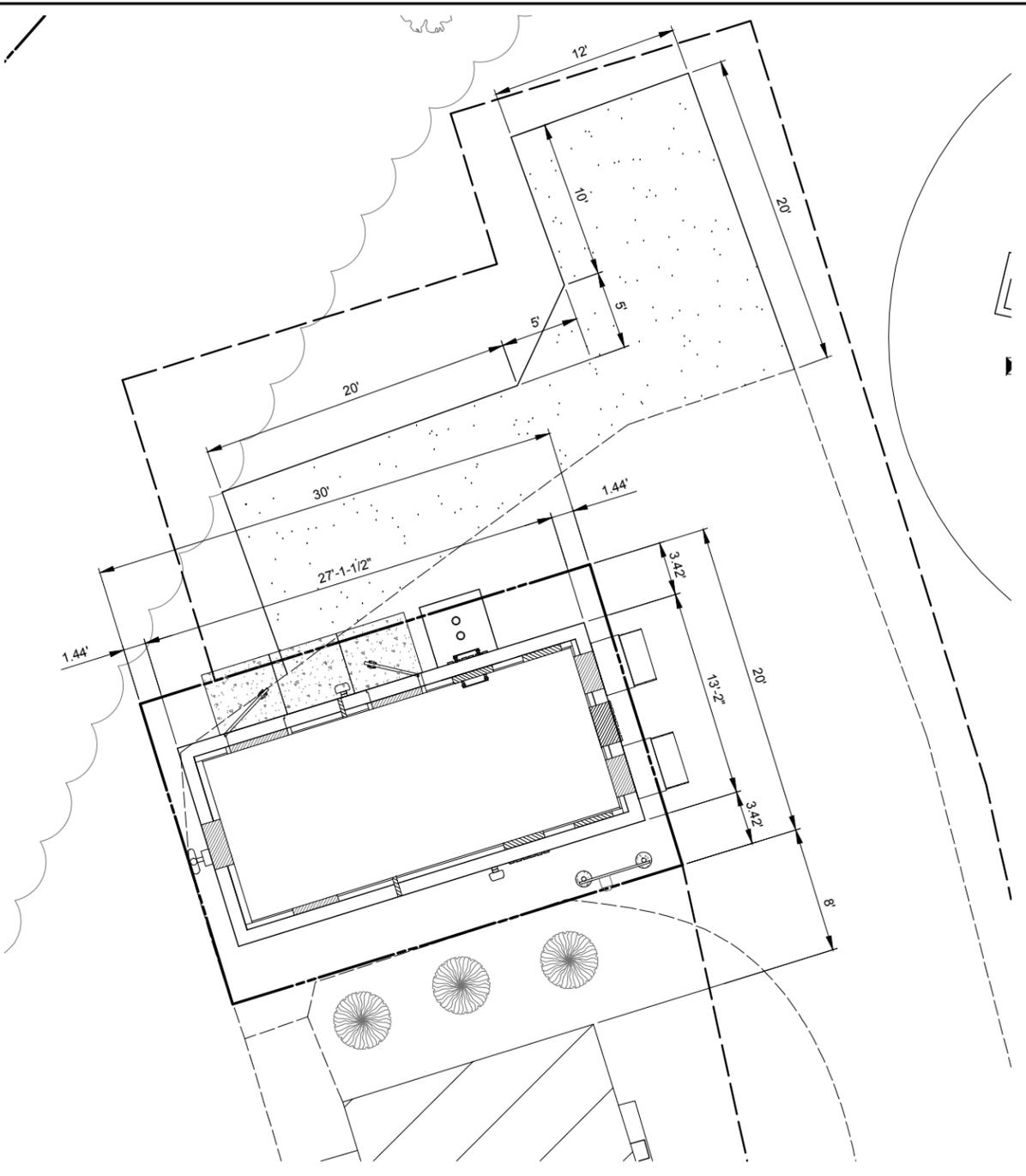
HARTLAND EAST

COVENTRY LANE
 HARTLAND, WI 53029

DRAWN BY:	BTE
CHECKED BY:	TAZ
DATE:	12/02/15
PROJECT #:	33-1912

SHEET TITLE
 LOCATION PLAN

SHEET NUMBER
LP



PAVEMENT MATERIALS AND QUANTITIES

ACCESS ROAD	52 S.Y.
	1 1/2" HMA SURFACE COURSE
	3" HMA BINDER COURSE
	BITUMINOUS PRIME COAT
	6" OF 3/4" CRUSHED AGGREGATE WITH FINES, CA-6
	6" OF SUB-GRADE AGGREGATE
	2000 GRADE SUB-GRADE GEOTEXTILE FABRIC, WOVEN

THE CONTRACTOR ALSO SHALL INCLUDE A SEPARATE UNIT PRICE PER CUBIC YARD TO REMOVE UNSTABLE OR UNSUITABLE MATERIAL AND HAIL-IN GRANULAR BACKFILL UNDER THE ACCESS DRIVE AND/OR APRON.

MERIDIAN SURVEYING, LLC

N8774 Firelane 1 Office: 920-993-0881
Menasha, WI 54952 Fax: 920-273-6037

BENCHMARK INFORMATION

SITE BENCHMARK: (BM A)
TOP OF WATER TOWER ANCHOR
BOLT NE OF OVERFLOW PIPE
ELEVATION: 1019.48'

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA CONSULTING GROUP, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

REVISIONS

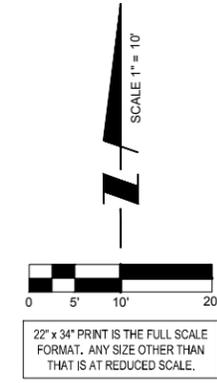
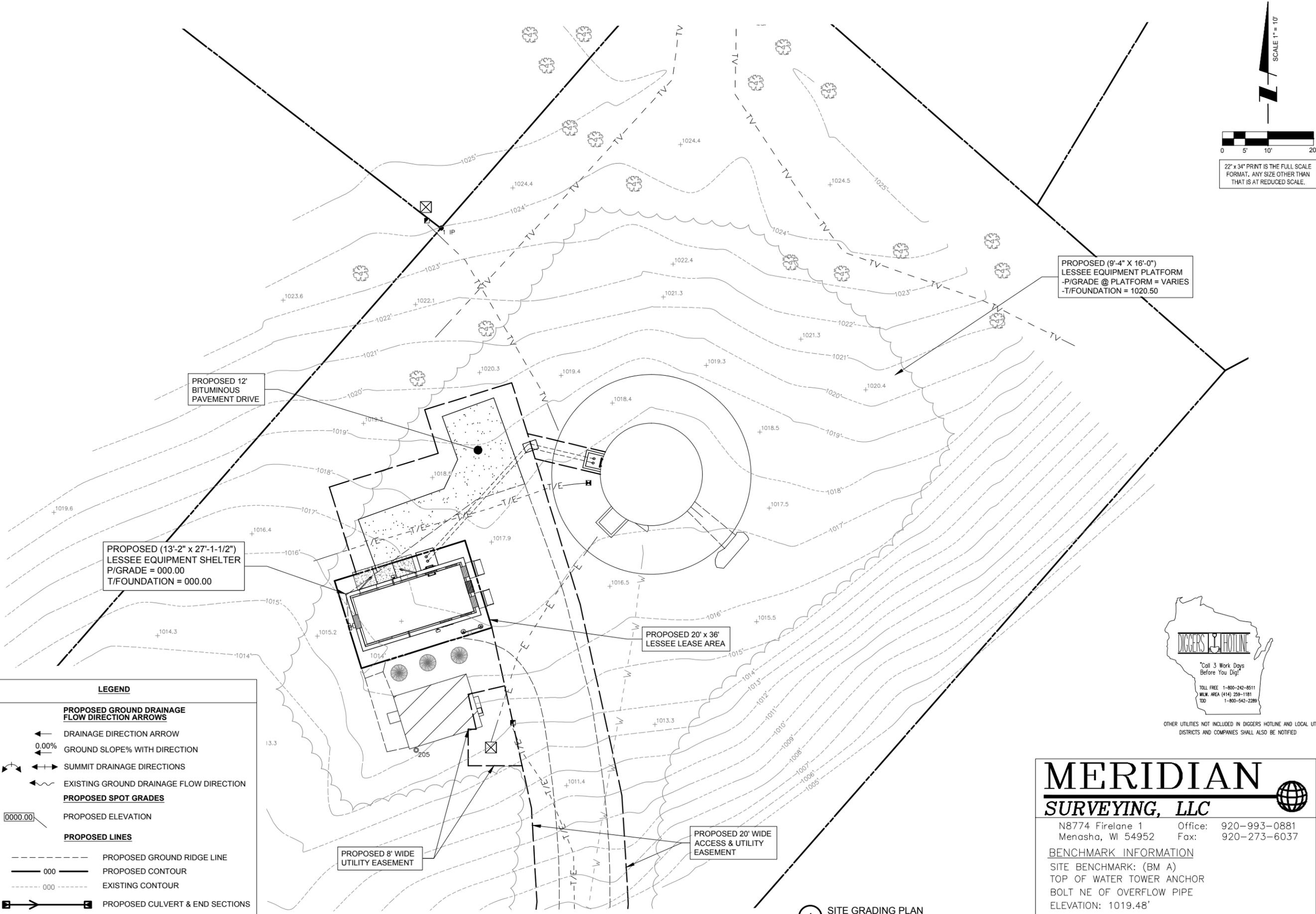
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LOC. # 278150
HARTLAND EAST
COVENTRY LANE
HARTLAND, WI 53029

DRAWN BY:	BTE
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DATE:	12/02/15
PROJECT #:	33-1912

SHEET TITLE
ENLARGED SITE PLAN

SHEET NUMBER
C-1



PROPOSED (9'-4" X 16'-0")
LESSEE EQUIPMENT PLATFORM
-P/GRADE @ PLATFORM = VARIES
-T/FOUNDATION = 1020.50

PROPOSED 12'
BITUMINOUS
PAVEMENT DRIVE

PROPOSED (13'-2" x 27'-1-1/2")
LESSEE EQUIPMENT SHELTER
P/GRADE = 000.00
T/FOUNDATION = 000.00

PROPOSED 20' x 36'
LESSEE LEASE AREA

PROPOSED 8' WIDE
UTILITY EASEMENT

PROPOSED 20' WIDE
ACCESS & UTILITY
EASEMENT



OTHER UTILITIES NOT INCLUDED IN DIGGERS HOTLINE AND LOCAL UTILITY DISTRICTS AND COMPANIES SHALL ALSO BE NOTIFIED

LEGEND	
PROPOSED GROUND DRAINAGE FLOW DIRECTION ARROWS	
	DRAINAGE DIRECTION ARROW
	0.00% GROUND SLOPE% WITH DIRECTION
	SUMMIT DRAINAGE DIRECTIONS
	EXISTING GROUND DRAINAGE FLOW DIRECTION
PROPOSED SPOT GRADES	
	PROPOSED ELEVATION
PROPOSED LINES	
	PROPOSED GROUND RIDGE LINE
	PROPOSED CONTOUR
	EXISTING CONTOUR
	PROPOSED CULVERT & END SECTIONS

1 SITE GRADING PLAN
SCALE: 1" = 10'

MERIDIAN
SURVEYING, LLC

N8774 Firelane 1 Office: 920-993-0881
Menasha, WI 54952 Fax: 920-273-6037

BENCHMARK INFORMATION
SITE BENCHMARK: (BM A)
TOP OF WATER TOWER ANCHOR
BOLT NE OF OVERFLOW PIPE
ELEVATION: 1019.48'

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS



REVISIONS			
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LOC. # 278150

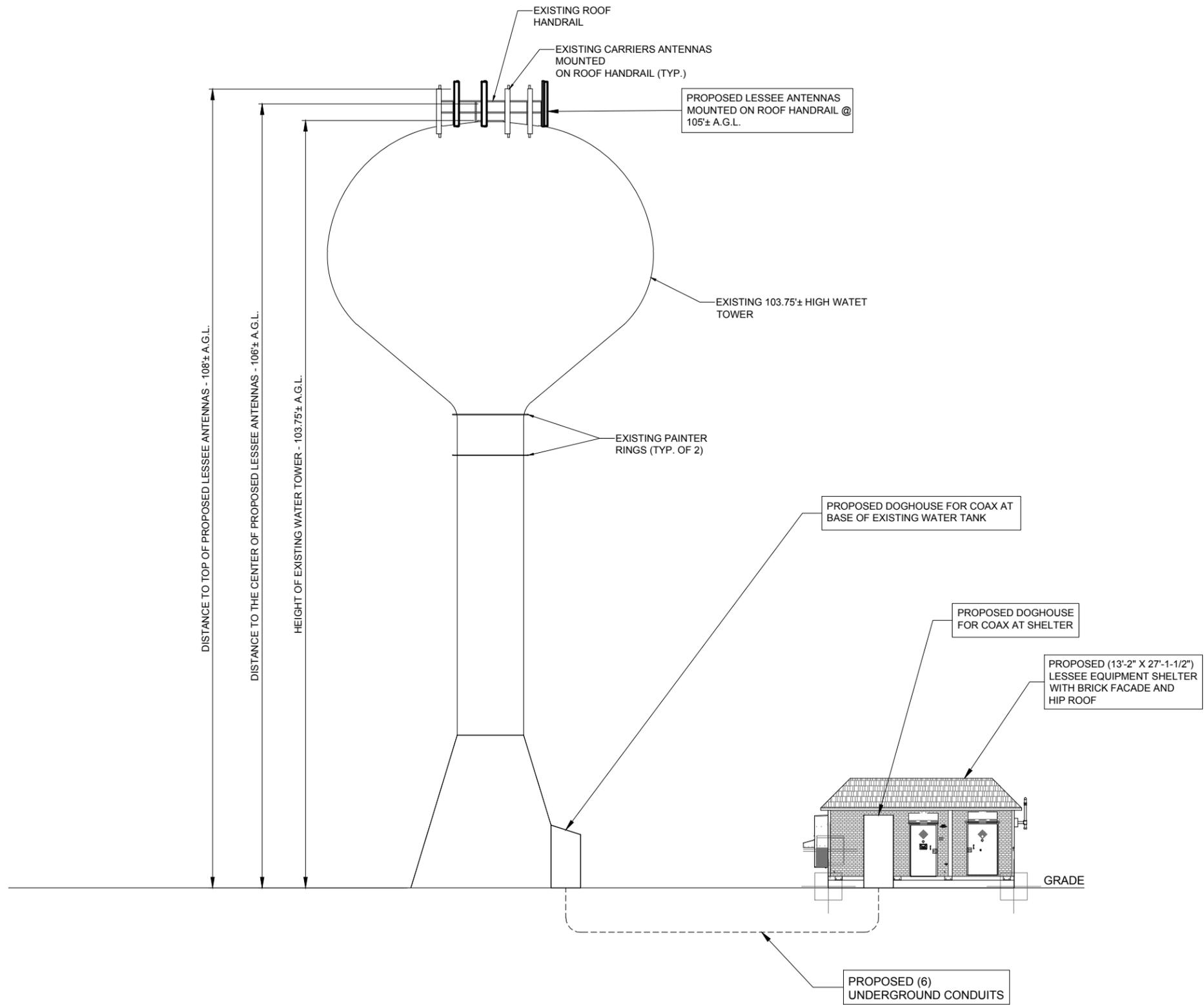
HARTLAND EAST

COVENTRY LANE
HARTLAND, WI 53029

DRAWN BY:	BTE
CHECKED BY:	TAZ
DATE:	12/02/15
PROJECT #:	33-1912

SHEET TITLE
SITE GRADING PLAN

SHEET NUMBER
C-2



1 SOUTH WEST ELEVATION
SCALE: 1/8" = 1'-0"

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA
CONSULTING GROUP, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

REVISIONS		DATE	BY
NO.	DESCRIPTION	06/05/17	TJS
	ISSUED FOR REVIEW		

LOC. # 278150
HARTLAND EAST

COVENTRY LANE
HARTLAND, WI 53029

DRAWN BY:	BTE
CHECKED BY:	TAZ
DATE:	12/02/15
PROJECT #:	33-1912

SHEET TITLE
SITE ELEVATION

SHEET NUMBER
ANT-1

RF EMISSIONS REPORT REQUIRED

YES NO

DATE OF REPORT: _____

EQUIPMENT CHANGE REQUEST FORM - ECR

Cell Name	Hartland East	Cell ID	779
Location Number	278150	RF Engineer	Tim Baker
Date of Request	1/18/2017	Market	Milwaukee
		Address	Coventry Lane
		City/State/Zip	Hartland, WI

PROPOSED CONFIGURATION

Sector	Pos	Antenna		Antenna Manufacturer	Antenna Model	Centerline	Azimuth	Variable Tilt	Mechanical Tilt	Action	
		Port	RF Path								
Alpha	A1	H1	AWS - Rxtx0	Amphenol	HEX658CW0000G	106	30	2	0	Add- Install	
		H2	AWS - Rxtx1					4			
		L1	LTE C - Rxtx0					2			
		L2	LTE C - Rxtx1								
	A2	H1	LTE PCS - Rxtx0								
		H2	LTE PCS - Rxtx1								
		H1	Unused at this time								
		H2	Unused at this time								
	A3	L1	Unused at this time								
		L2	Unused at this time								
		H1	Unused at this time								
		H2	Unused at this time								
A4	H1	Unused at this time									
	H2	Unused at this time									
	H1	AWS - Rx-2	Amphenol	HEX658CW0000G	106	30	2	0	Add- Install		
	H2	AWS - Rx-3					4				
L1	LTE C - Rx-2	2									
L2	LTE C - Rx-3										
Beta	B1	H1	AWS - Rxtx0	Amphenol	HEX658CW0000G	106	150	2	0	Add- Install	
		H2	AWS - Rxtx1					4			
		L1	LTE C - Rxtx0					2			
		L2	LTE C - Rxtx1								
	B2	H1	LTE PCS - Rxtx0								
		H2	LTE PCS - Rxtx1								
		H1	Unused at this time								
		H2	Unused at this time								
	B3	L1	Unused at this time								
		L2	Unused at this time								
		H1	Unused at this time								
		H2	Unused at this time								
B4	H1	AWS - Rx-2	Amphenol	HEX658CW0000G	106	150	2		Add- Install		
	H2	AWS - Rx-3					4				
	L1	LTE C - Rx-2					2				
	L2	LTE C - Rx-3									
Gamma	G1	H1	AWS - Rxtx0	Amphenol	HEX658CW0000G	106	270	4		Add- Install	
		H2	AWS - Rxtx1					6			
		L1	LTE C - Rxtx0					4			
		L2	LTE C - Rxtx1								
	G2	H1	LTE PCS - Rxtx0								
		H2	LTE PCS - Rxtx1								
		H1	Unused at this time								
		H2	Unused at this time								
	G3	L1	Unused at this time								
		L2	Unused at this time								
		H1	Unused at this time								
		H2	Unused at this time								
G4	H1	Unused at this time									
	H2	Unused at this time									
	H1	AWS - Rx-2	Amphenol	HEX658CW0000G	106	270	4		Add- Install		
	H2	AWS - Rx-3					6				
L1	LTE C - Rx-2	4									
L2	LTE C - Rx-3										
		H1	LTE PCS - Rx-2								
		H2	LTE PCS - Rx-3								

Comments

1 PROPOSED ANTENNA CONFIGURATION
N.T.S.

HYBRID LENGTH

SECTOR	AT GROUND		AT STRUCTURE		TOTAL (±)
	HOR (±)	VER (±)	HOR (±)	RAYCAP CL (±)	
MAIN	-	-	8	-	-

Proposed

Passive Components	Location	Manufacturer	Component Model	Count	Action
	Passive Components	Top (Platform)	Ericsson	RRUS B13	3
Top (Platform)		Ericsson	RRUSA2 B13	3	Install
Top (Platform)		Ericsson	RRUS32 B4	3	Install
Top (Platform)		Ericsson	RRUS32 B2	3	Install
Top (Platform)		Ericsson			Install
Top (Platform)		Ericsson			Install
Top (Platform)		Raycap	RCMDC-3315-PF-48	3	Install
Bottom (Shelter)		Raycap	RCMDC-3315-PF-48	3	Install
Bottom (Shelter)					
Coax	Sector	Coax Manufacturer	Type	Size	Count
	Alpha				
	Beta				
	Gamma				
	Hybrid	Andrew	HFT1206-24S49	1.5	3

Comments

Run AISG RET control cable from 700 RRU to Antenna 1, daisy chain to Antenna 4. All tranceiver equipment is tower mounted. Baseband equipment can be remote hosted.

3 COMBINER CABLE DATA INFORMATION
N.T.S.

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS



NO.	REVISIONS	DESCRIPTION	DATE	BY
			06/08/17	TJS
		ISSUED FOR REVIEW		

LOC. # 278150

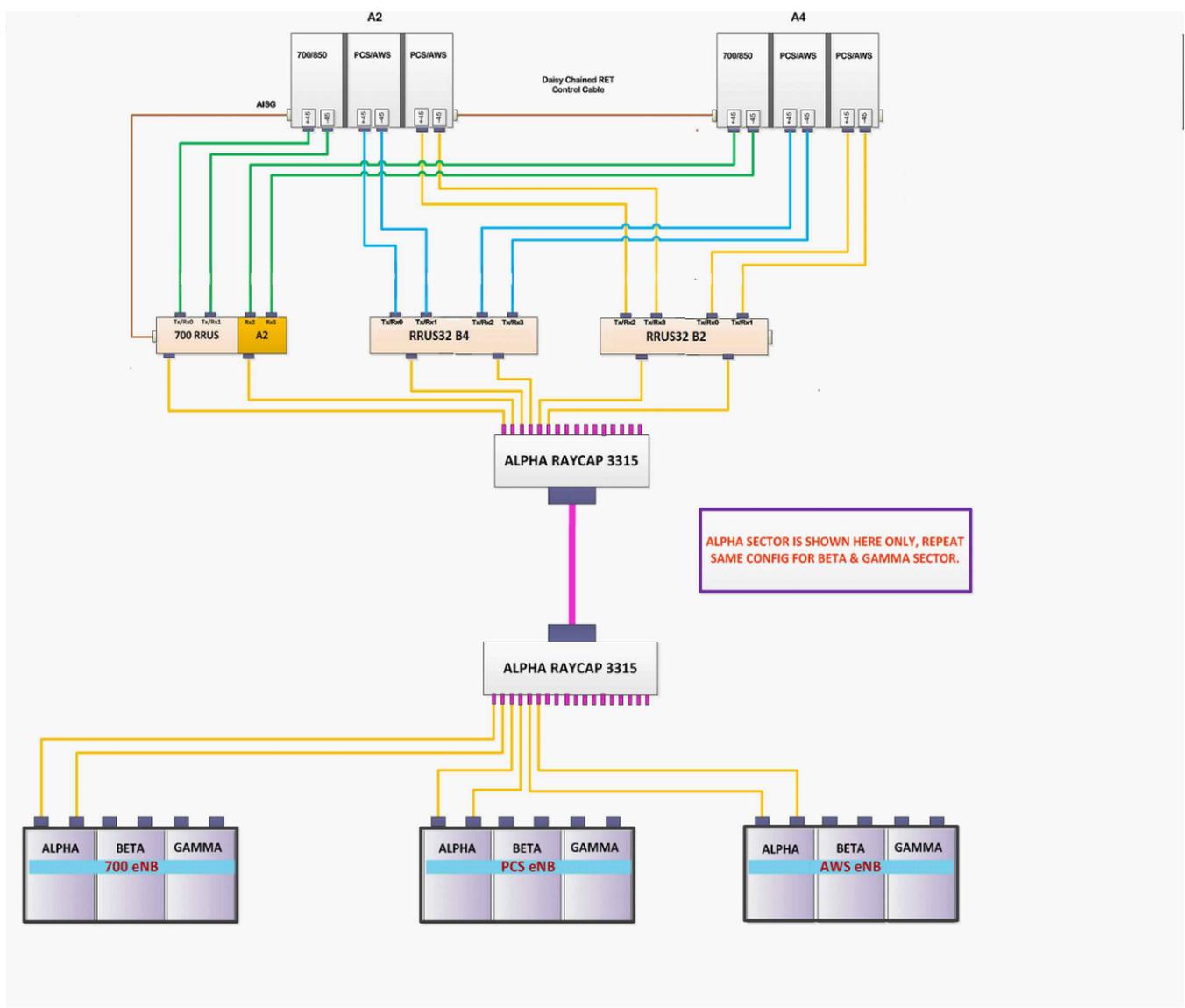
HARTLAND EAST

COVENTRY LANE
HARTLAND, WI 53029

DRAWN BY:	BTE
CHECKED BY:	TAZ
DATE:	12/02/15
PROJECT #:	33-1912

SHEET TITLE
ANTENNA INFORMATION

SHEET NUMBER
ANT-2



1 CABLE DIAGRAM
 N.T.S.

Raycap Layout - Raycap Per Sector					
POWER					
3	700 RRU	6	700 RRU2/A2		
2	PCSLT RRU	5	PCSLT RRU2/A2		
1	AWS RRU	4	AWS RRU2/A2		
FIBER					
1	2	3	4	5	6
AWS RRU	AWS RRU2/A2	PCSLTE RRU	PCSLTE RRU/A2	700 RRU	700 RRU/A2
7	8	9	10	11	12

2 RAYCAP TABLE
 N.T.S.

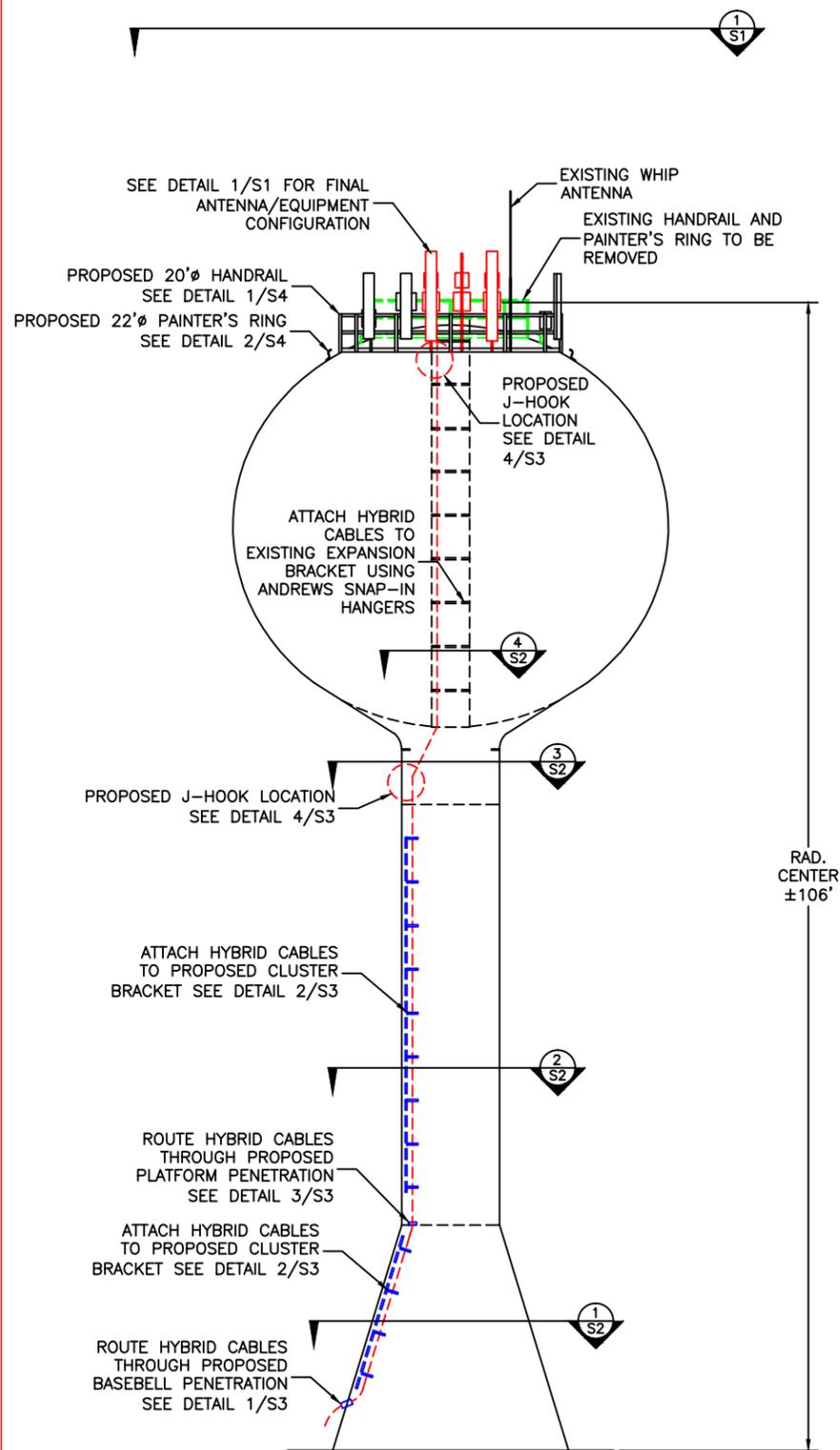
NO.	DESCRIPTION ISSUED FOR REVIEW	DATE	BY	TJS
		06/08/17		

LOC. # 278150
 HARTLAND EAST
 COVENTRY LANE
 HARTLAND, WI 53029

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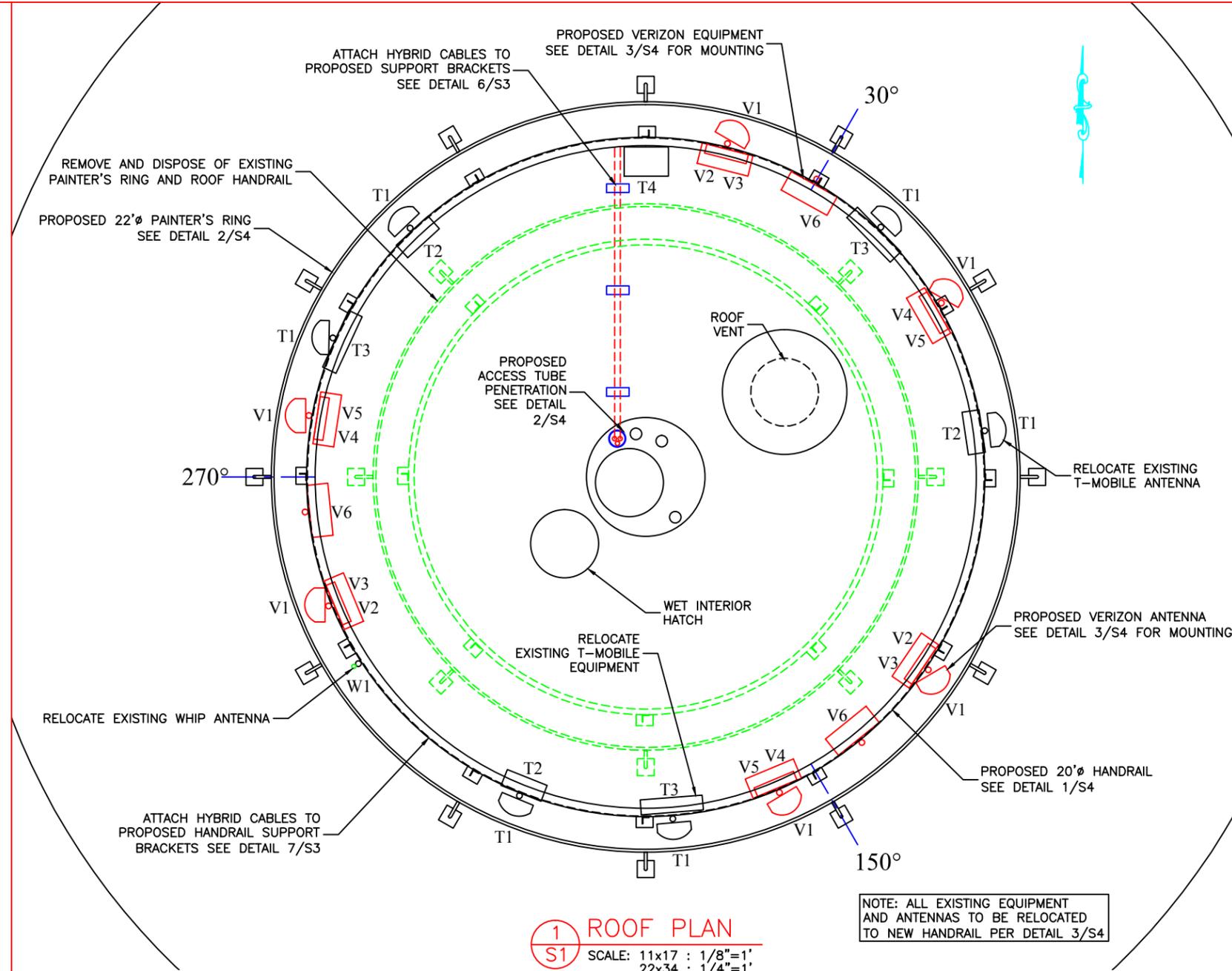
SHEET TITLE
 ANTENNA INFORMATION

SHEET NUMBER
ANT-2A



WEST ELEVATION

SCALE: 11x17 : 1/16"=1'
22x34 : 1/8"=1'



1 ROOF PLAN
SCALE: 11x17 : 1/8"=1'
22x34 : 1/4"=1'

NOTE: ALL EXISTING EQUIPMENT AND ANTENNAS TO BE RELOCATED TO NEW HANDRAIL PER DETAIL 3/S4

Mount	Quantity	Status	Carrier	Manufacture	Model
(key to plan)		(New or Existing)			
V1	6	Proposed	Verizon	Amphenol	HEX658CW0000G
V2	3	Proposed	Verizon	Ericsson	RRU B13
V3	3	Proposed	Verizon	Ericsson	RRUSA2
V4	3	Proposed	Verizon	Ericsson	RRUS32 B4
V5	3	Proposed	Verizon	Ericsson	RRUS32 B2
V6	3	Proposed	Verizon	Raycap	RCMDC3315-PF-4
T1	6	Existing	T-Mobile	Andrews	TMBXX-6517-A2M
T2	3	Existing	T-Mobile	Nortel	FRIG
T3	3	Existing	T-Mobile	Nortel	FXFB
T4	1	Existing	T-Mobile	Raycap	3315
W1	1	Existing	City	-	-

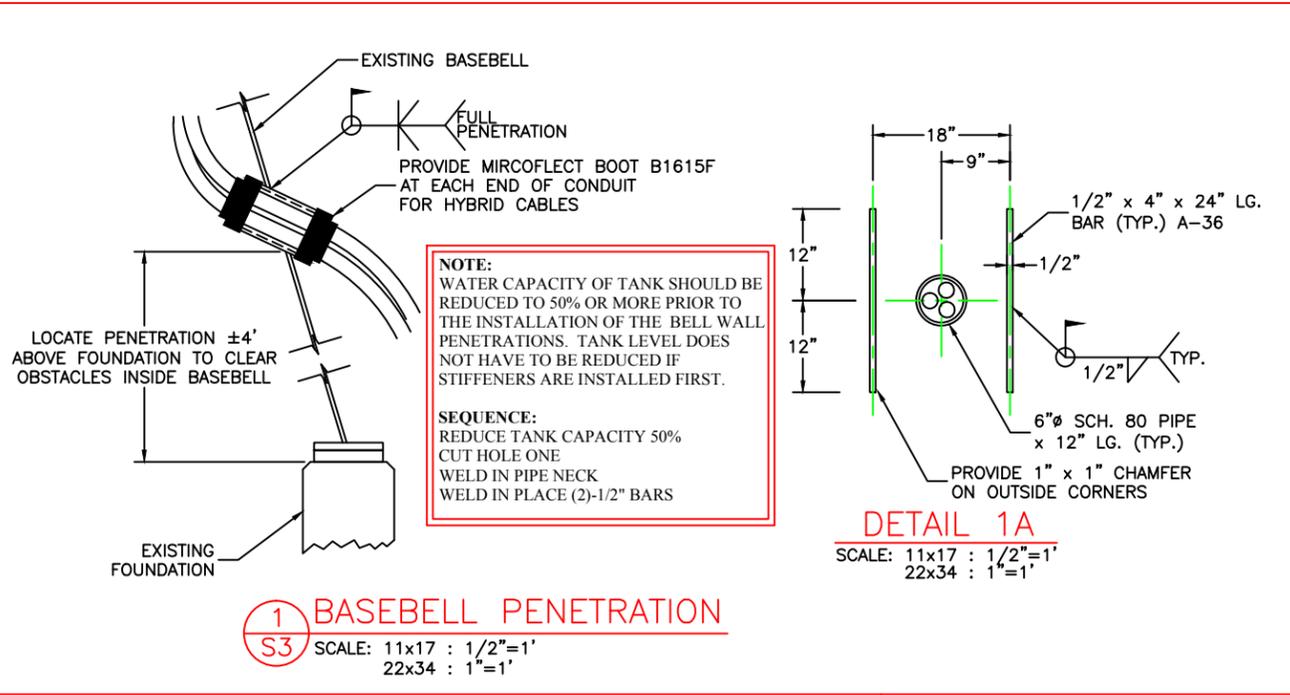


HARTLAND EAST
COVENTRY LANE
HARTLAND, WI

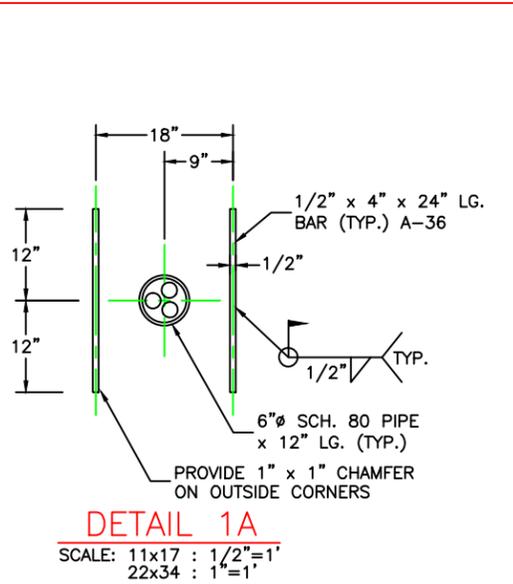
NO.	REVISION/DESCRIPTION	DATE
#1.	SUBMITTED FOR REVIEW/BIDDING	02/01/17

CARRIER SITE NO.	278150
DIXON PROJECT NO.	49-20-02-17
DRAWN BY	CMK
CHECKED BY	IMG
SHEET TITLE	STRUCTURAL DRAWINGS

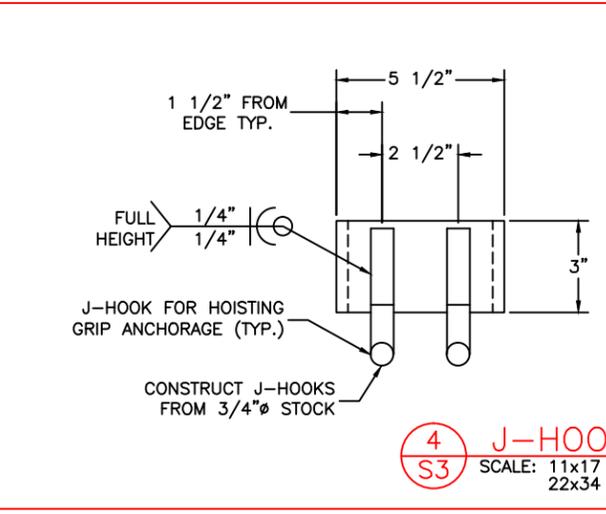
S1



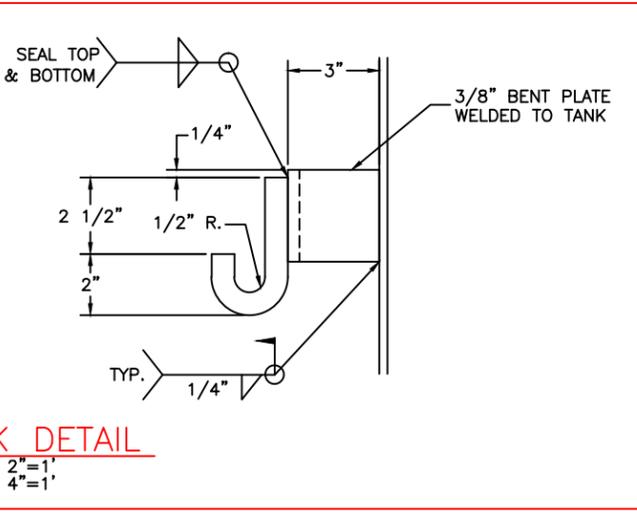
1 BASEBELL PENETRATION
 S3 SCALE: 11x17 : 1/2"=1'
 22x34 : 1"=1'



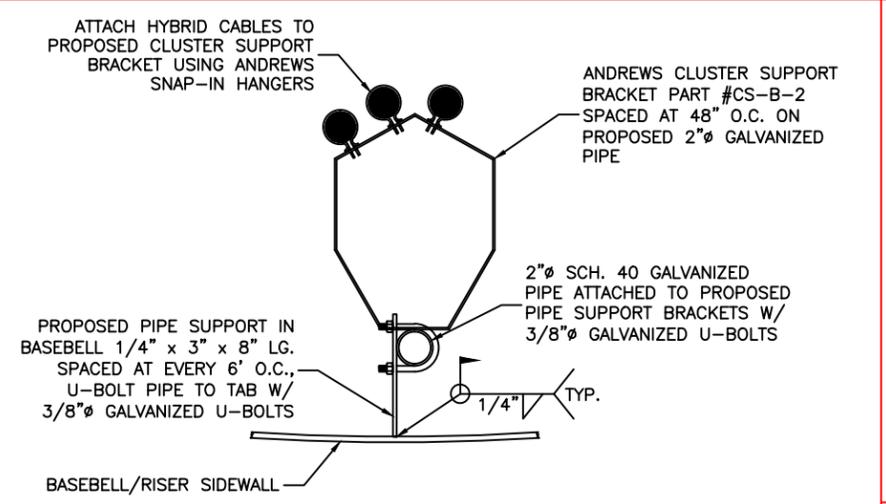
DETAIL 1A
 SCALE: 11x17 : 1/2"=1'
 22x34 : 1"=1'



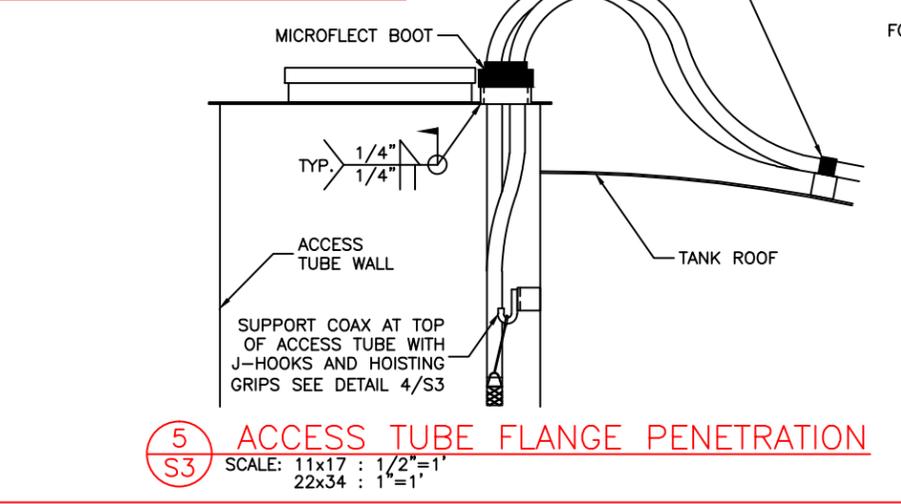
4 J-HOOK DETAIL
 S3 SCALE: 11x17 : 2"=1'
 22x34 : 4"=1'



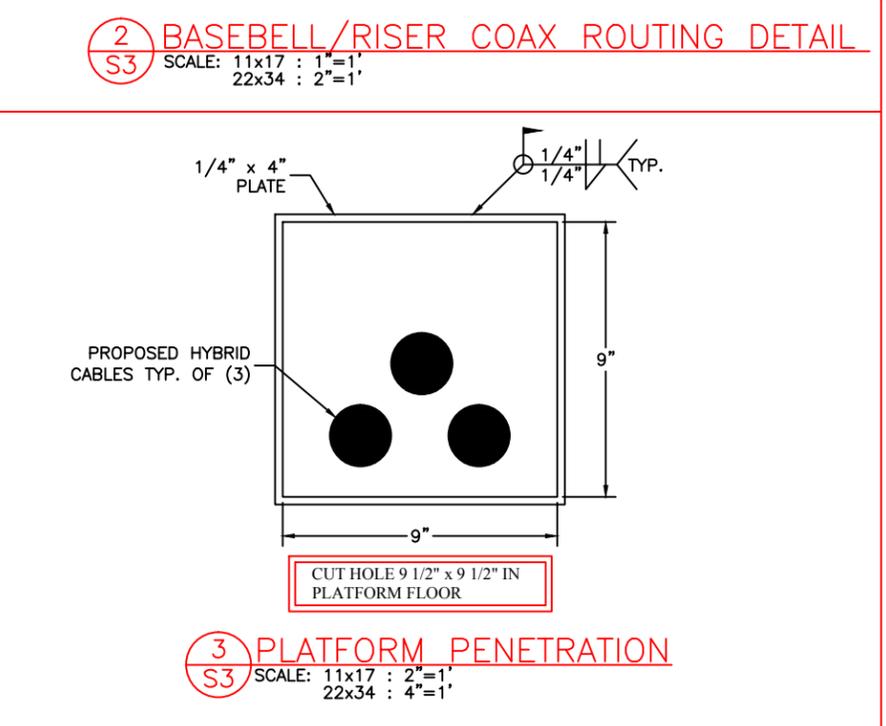
5A ACCESS TUBE FLANGE SECTION
 S3 SCALE: 11x17 : 1"=1'
 22x34 : 2"=1'



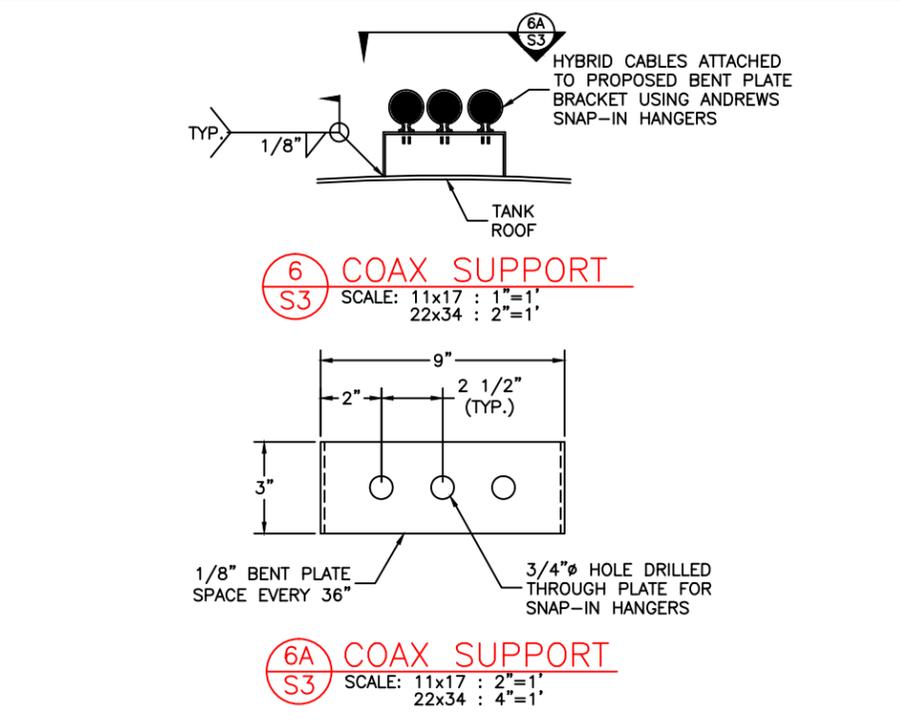
2 BASEBELL/RISER COAX ROUTING DETAIL
 S3 SCALE: 11x17 : 1"=1'
 22x34 : 2"=1'



5 ACCESS TUBE FLANGE PENETRATION
 S3 SCALE: 11x17 : 1/2"=1'
 22x34 : 1"=1'

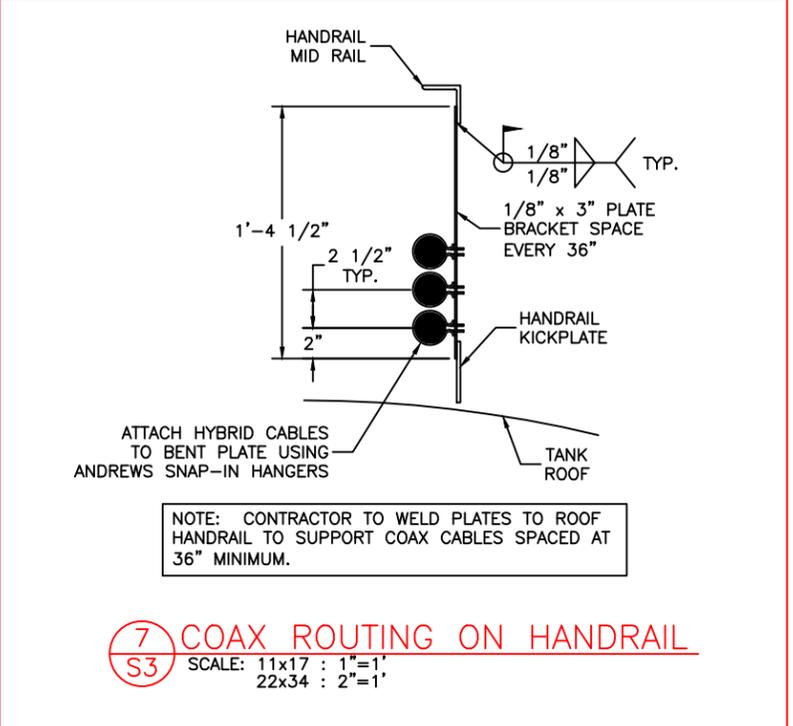


3 PLATFORM PENETRATION
 S3 SCALE: 11x17 : 2"=1'
 22x34 : 4"=1'

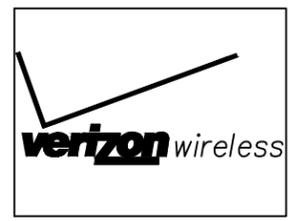


6 COAX SUPPORT
 S3 SCALE: 11x17 : 1"=1'
 22x34 : 2"=1'

6A COAX SUPPORT
 S3 SCALE: 11x17 : 2"=1'
 22x34 : 4"=1'



7 COAX ROUTING ON HANDRAIL
 S3 SCALE: 11x17 : 1"=1'
 22x34 : 2"=1'



HARTLAND EAST
 COVENTRY LANE
 HARTLAND, WI

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CARRIER SITE NO.
278150

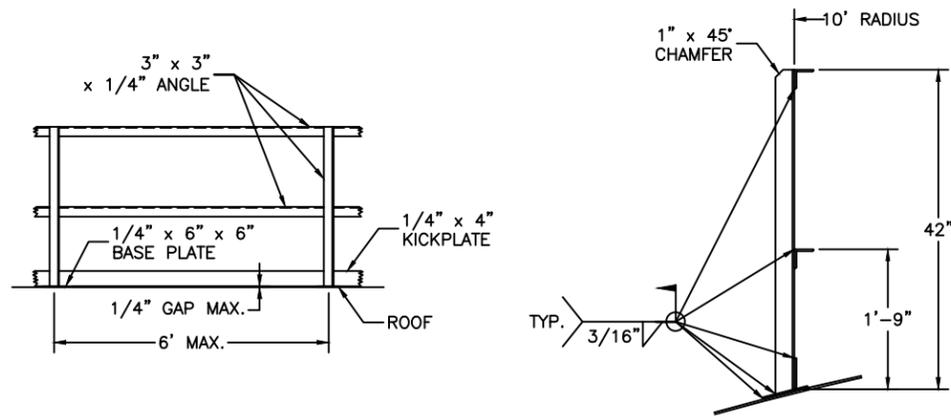
DIXON PROJECT NO.
49-20-02-17

DRAWN BY
CMK

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IMG

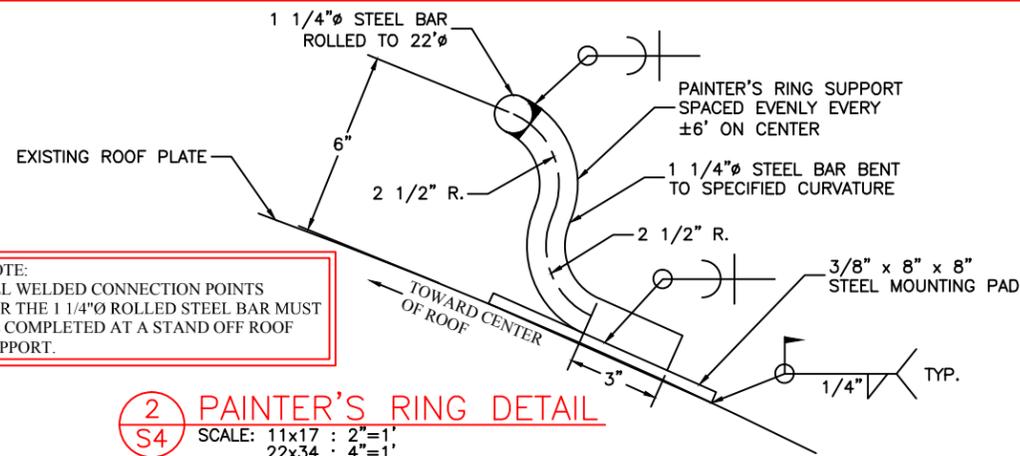
SHEET TITLE
STRUCTURAL DRAWINGS

S3

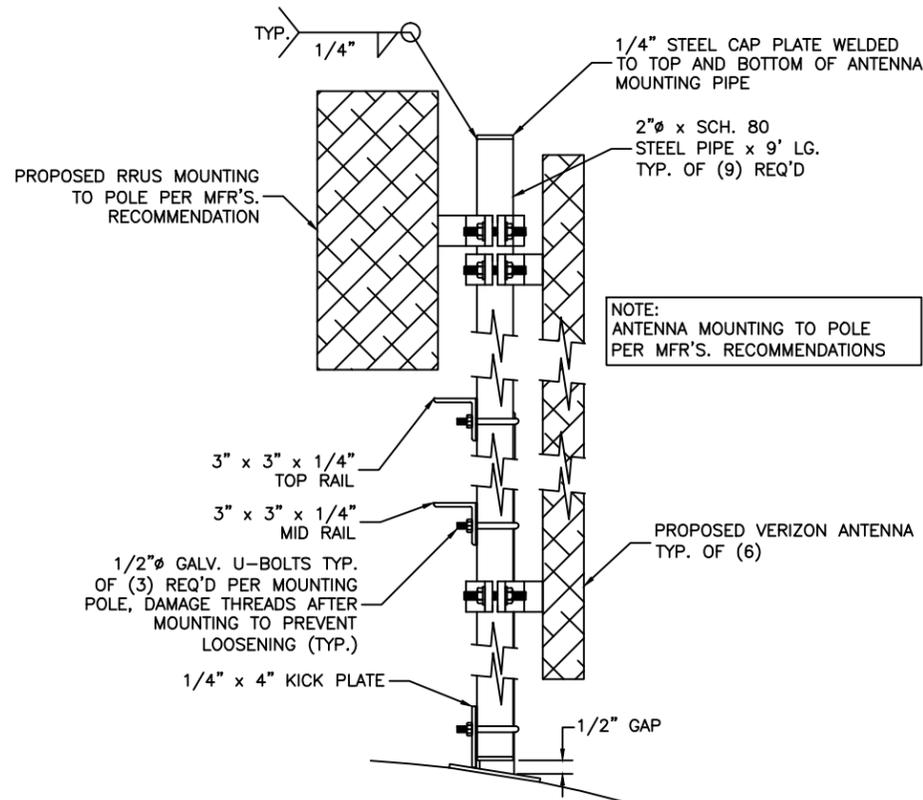


1 HANDRAIL DETAIL
 S4 SCALE: 11x17 : 1/4"=1'
 22x34 : 1/2"=1'

DETAIL
 SCALE: 11x17 : 1/2"=1'
 22x34 : 1"=1'



2 PAINTER'S RING DETAIL
 S4 SCALE: 11x17 : 2"=1'
 22x34 : 4"=1'



3 ANTENNA MOUNT
 S4 SCALE: 11x17 : 1"=1'
 22x34 : 2"=1'

GENERAL WELDING:

- ALL WELDING SHALL BE PERFORMED BY A CERTIFIED WELDER.
- COMPLY WITH THE AWS D1.1 STRUCTURAL WELDING CODE, ANSI/AWWA D100-96 (LATEST EDITION THEREOF), "AWWA STANDARD FOR WELDED STEEL TANKS FOR WATER STORAGE" AND FEDERAL, STATE, AND LOCAL CODES, DURING CONSTRUCTION DESIGN AND FABRICATION.
- MAKE ALL WELDS TO THE TANK WALL WITH E7018 LOW HYDROGEN ROD. WELD SMOOTH AND AVOID UNDERCUTS AND BURRS. GRIND SMOOTH ALL WELDS SO THAT NO SHARP PROTRUSIONS REMAIN. SMOOTH IS DEFINED AS: "NO CUTS OR ABRASIONS OCCUR WHEN RUBBING YOUR HAND OVER THE WELD."
- BEFORE WELDING, REMOVE ALL COATINGS WITHIN 6" OF THE AREA TO BE WELDED.
- USE ASTM A-36 CARBON STEEL FOR ALL STRUCTURAL STEEL; USE A-307 BOLTS UNLESS OTHERWISE SPECIFIED.
- FIELD FIT UP PROBLEMS OR CHANGES TO THE PLAN SHEETS ARE TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

GENERAL PAINTING INSTRUCTIONS:

- SHOP PAINTING:
 ABRASIVE BLAST CLEAN ALL NEW STEEL TO COMMERCIAL GRADE (SSPC-SP6) CONDITION AND APPLY A THREE COAT EPOXY/URETHANE SYSTEM AS FOLLOWS:

COAT	TNEMEC SERIES	MINIMUM DFT	MAXIMUM DFT
PRIMER	27	2.0	3.0
INTERMEDIATE	27	2.0	3.0
TOP COAT*	1074	2.0	3.0
- EDGES TO BE WELDED IN THE FIELD SHALL NOT BE COATED (LEAVE A MINIMUM OF TWO INCHES BARE METAL.)
- FIELD PAINTING:

EXTERIOR-SOLVENT CLEAN, SPOT POWER TOOL CLEAN ALL ABRADED AND WELDED AREAS TO A SSPC-SP11 GRAY METAL CONDITION AND SPOT COAT IN ACCORDANCE WITH COATINGS AS SPECIFIED ABOVE. DRY INTERIOR-SPOT POWER TOOL CLEAN ALL AREAS OF BURNED COATING TO A SSPC-SP11 GRAY METAL CONDITION AND APPLY A TWO COAT EPOXY POLYAMIDE SYSTEM AS FOLLOWS:

COAT	TNEMEC SERIES	MINIMUM DFT	MAXIMUM DFT
PRIMER	FC20	3.0	5.0
TOP COAT*	FC20	3.0	5.0
WET INTERIOR-SPOT POWER TOOL CLEAN ALL AREAS OF BURNED COATING TO A SSPC-SP11 GRAY METAL CONDITION AND COAT IN ACCORDANCE WITH COATINGS AS SPECIFIED BELOW:			
COAT	RAVEN SERIES	MINIMUM DFT	MAXIMUM DFT
PRIMER	AQUATAPOXY	3.0	5.0
TOP COAT	AQUATAPOXY	3.0	5.0
TOTAL		6.0	10.0

- PREPARATION OF GALVANIZED MATERIAL:
 APPLY ONE COAT OF CLEAN 'N' ETCH AS PER MANUFACTURER'S RECOMMENDATIONS AND COAT IN ACCORDANCE WITH COATINGS AS SPECIFIED BELOW:

COAT	TNEMEC SERIES	MINIMUM DFT	MAXIMUM DFT
PRIMER	66 HI-BUILD EPOXOLINE	2.0	3.0
TOP COAT*	1074 ENDURA-SHIELD	2.0	3.0
TOTAL		4.0	6.0

- PREPARATION OF ALL MISCELLANEOUS ANTENNA EQUIPMENT: (ANTENNAS, COAX, MOUNTING BRACKETS)

COAT	TNEMEC SERIES	MINIMUM DFT	MAXIMUM DFT
PRIMER	135 CHEMBUILD EPOXY	3.0	4.0
TOP COAT*	1074 ENDURA-SHIELD	2.0	3.0
TOTAL		5.0	7.0

- APPLY ALL COATINGS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
 *TOP COAT COLOR TO MATCH EXISTING COLOR. (SEE TANK OWNER FOR RECORDS)

GENERAL NOTES



HARTLAND EAST
 COVENTRY LANE
 HARTLAND, WI

NO.	#1.	REVISION/DESCRIPTION	DATE
		SUBMITTED FOR REVIEW/BIDDING	02/01/17

CARRIER SITE NO.
 278150

DIXON PROJECT NO.
 49-20-02-17

DRAWN BY
 CMK

CHECKED BY
 IMG

SHEET TITLE
 STRUCTURAL DRAWINGS

S4

DIXON ENGINEERING, INC.
STEEL TANK ANTENNA FIELD INSPECTION REPORT
SPHEROID TANK

TANK DATA

OWNER: _____
CLIENT/CARRIER: _____
TANK NAME: _____
LOCATION: _____ STREET: _____
CITY: _____
STATE: _____
TANK SIZE: _____ CAPACITY: _____ GALLONS
DIAMETER: _____ FEET
LWL: _____ FEET
HWL: _____ FEET
HEAD RANGE: _____ FEET

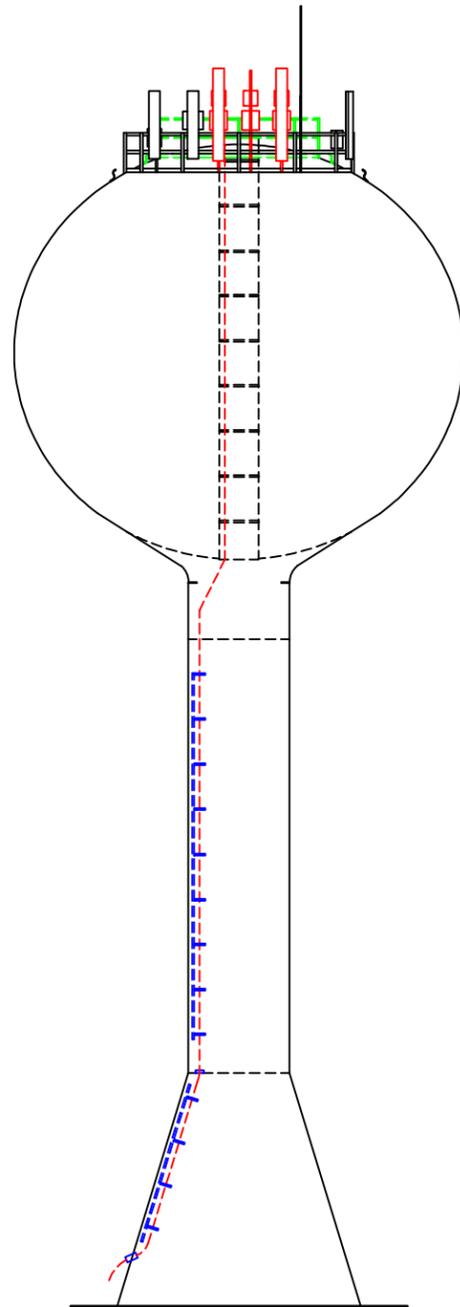
DATE CONSTRUCTED: _____
MANUFACTURER: _____
CONTRACT NUMBER: _____
INSPECTORS: _____

SITE CONDITIONS:

FENCED: _____
CONTROL BUILDING: _____
EXISTING ANTENNA CONTROL SITES: _____
NUMBER: _____

FOUNDATION:
EXPOSED FOUNDATION CONDITION: _____
CONCRETE CHIPPED OR CRACKED: _____
IF YES, WHERE ARE CRACKS LOCATED? AT ANCHOR BOLTS?

ARE CRACKS ACTIVE OR PASSIVE?
INDICATIONS OF FOUNDATION SETTLEMENT: _____
SITE DRAINAGE: _____
INDICATIONS OF UNDERGROUND LEAKAGE: _____
UNDERMINING OF FOUNDATION: _____



TANK ELEVATION

BASEBELL:

INSIDE WIDTH OF BASE FLANGE: _____ inches
OUTSIDE WIDTH OF BASE FLANGE: _____ inches
THICKNESS OF BASE FLANGE: _____ inches
BASEBELL THICKNESS: _____ inches
FLOOR: _____

ANCHOR BOLTS:

NUMBER OF BOLTS: _____
DIAMETER OF BOLTS: _____
BOLT CONDITION: _____

DOOR SIZE: _____
OVERFLOW PIPE: _____

FILL PIPE DIAMETER: _____

EXISTING CARRIERS: COAX # AND SIZE: _____ UNDERGROUND CONDUITS # AND SIZE: _____

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____

BASEBELL PENETRATIONS: NUMBER: _____ SIZE: _____ HEIGHT: _____ SIZE OF STIFFENER: _____ BETWEEN STIFFENER: _____

- A. _____
- B. _____
- C. _____
- D. _____
- E. _____
- F. _____
- G. _____

BASEBELL LADDER:

WIDTH OF RUNGS: _____ THICKNESS OF RUNGS: _____
SHAPE OF RUNGS: _____ CAGE DIAMETER: _____

CONDENSATE PLATFORM:

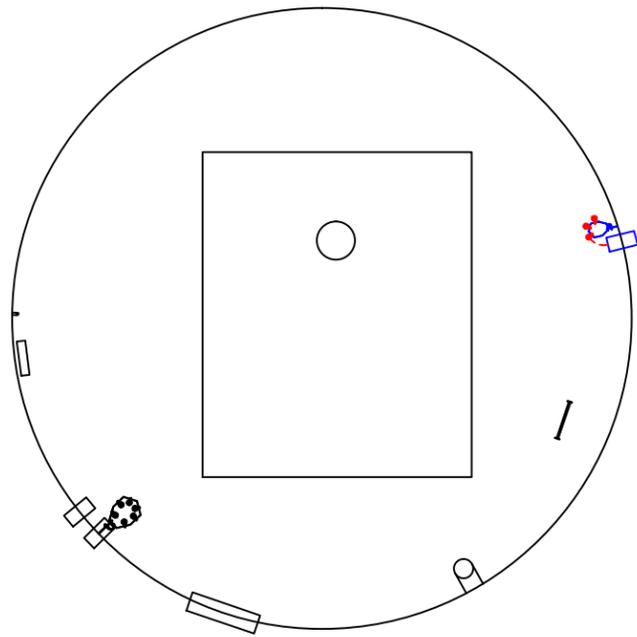
LADDER OPENING SIZE: _____ SIZE OF DRAIN: _____

RISER LADDER:

TOE CLEARANCE: _____ WIDTH OF RUNGS: _____
THICKNESS OF RUNGS: _____ SHAPE OF RUNGS: _____
CAGE DIAMETER: _____

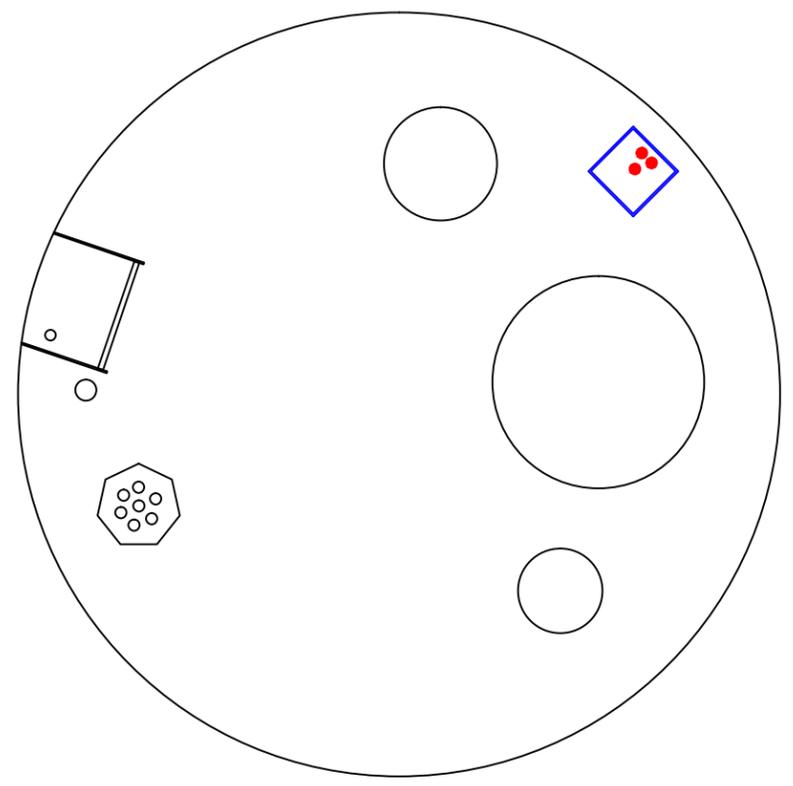
RISER:

RISER STIFFENERS: NUMBER: _____ SIZE: _____
DISTANCE FROM CONDENSATE PLATFORM: _____

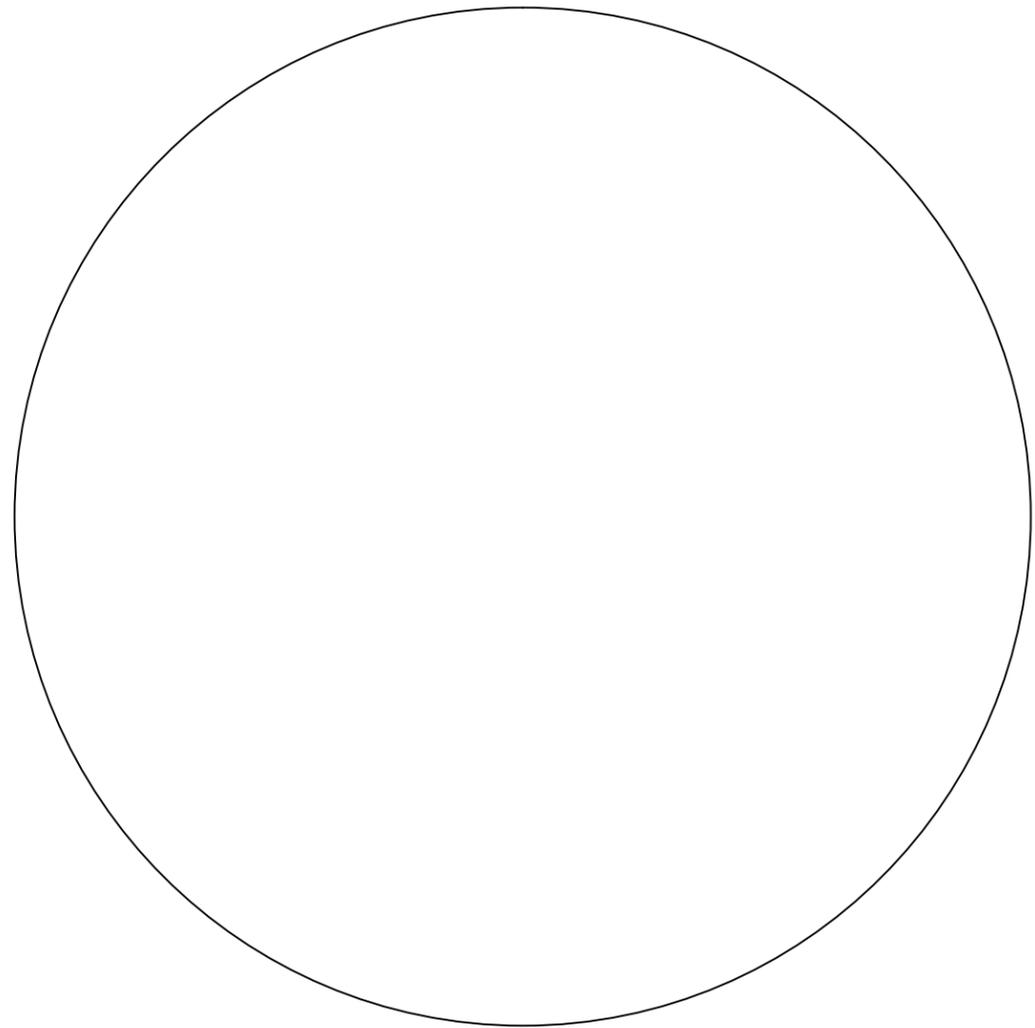


BASEBELL

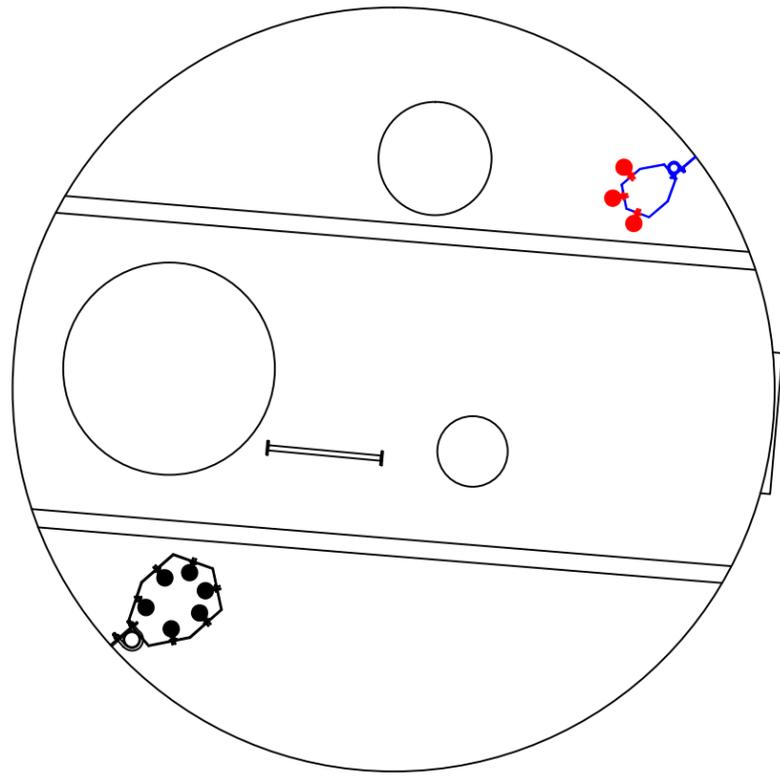
BASEBELL



CONDENSATE PLATFORM



RISER SECTION



TOP PLATFORM

EXISTING STEM ANTENNAS: CARRIER QUANTITY TYPE MODEL SIZE # OF TMA'S # OF RRH'S

TMA'S



DIPLEXER



RRH



ACCESS TUBE LADDER:

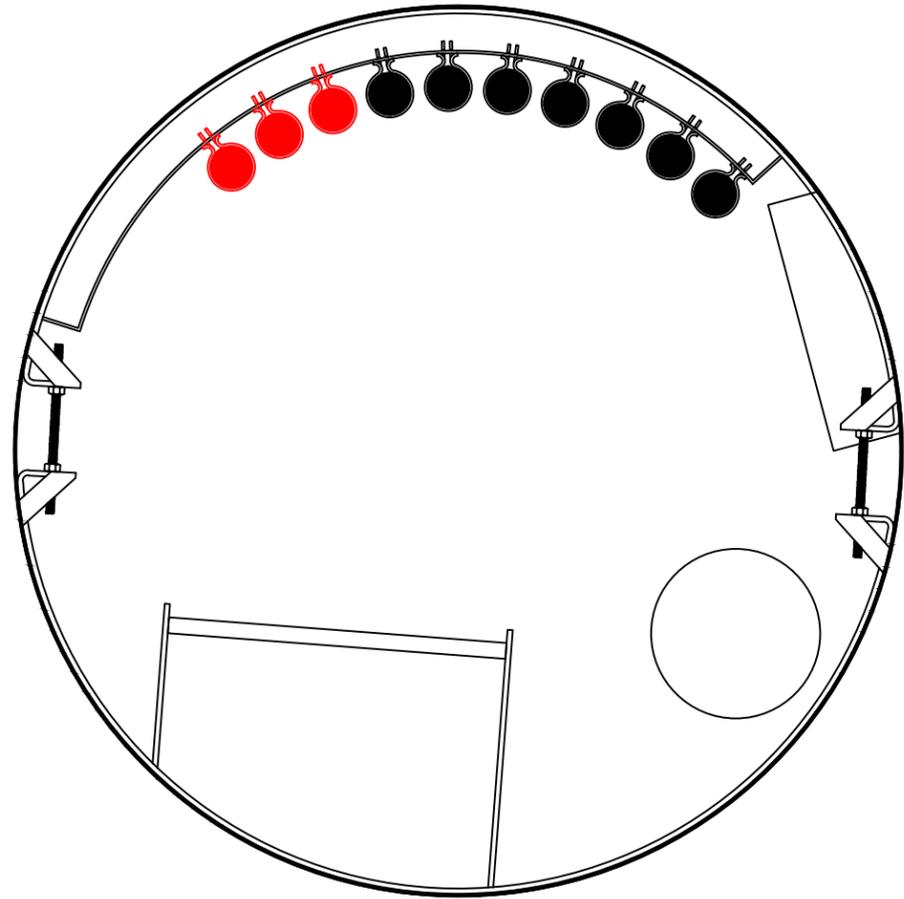
TOE CLEARANCE: RIGHT SIDE: _____ LEFT SIDE: _____
 WIDTH OF RUNGS: _____ THICKNESS OF RUNGS: _____
 SHAPE OF RUNGS: _____

MANWAY TO WET INTERIOR:

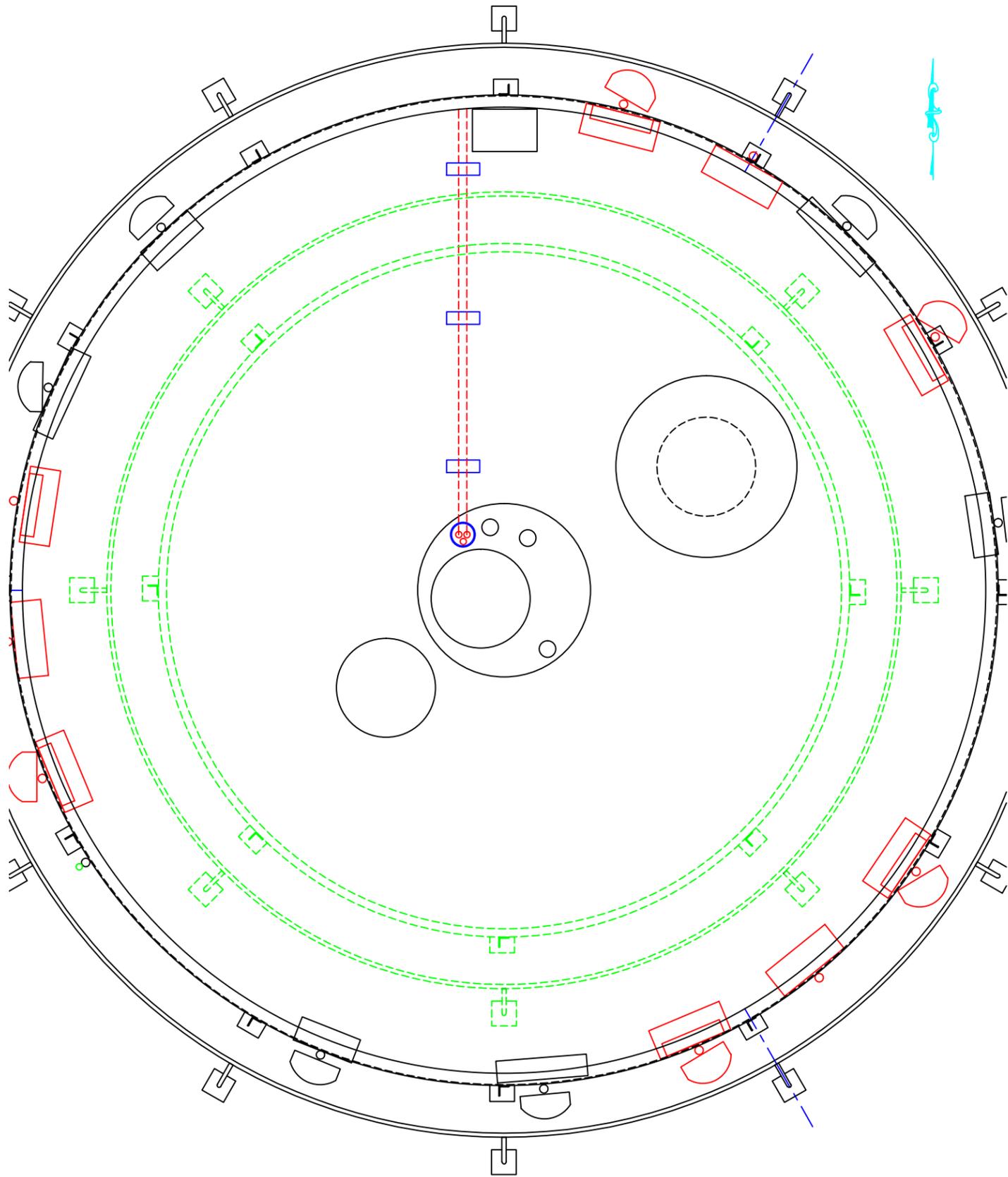
LOCATION: _____ SIZE: _____

ACCESS TUBE ROOF HATCH:

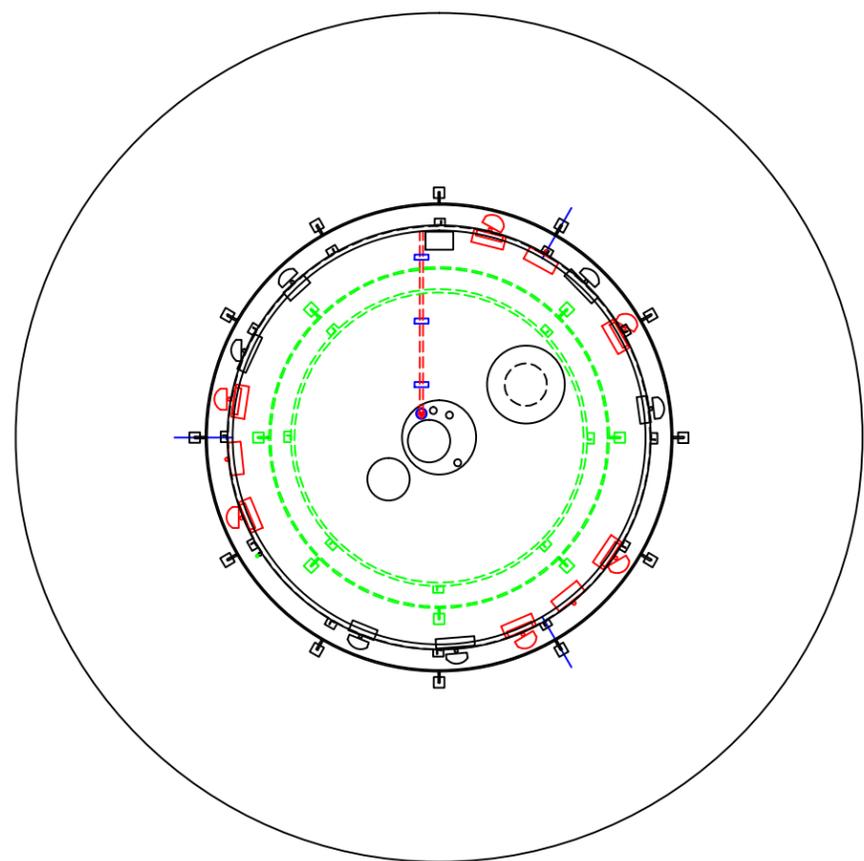
SIZE: _____



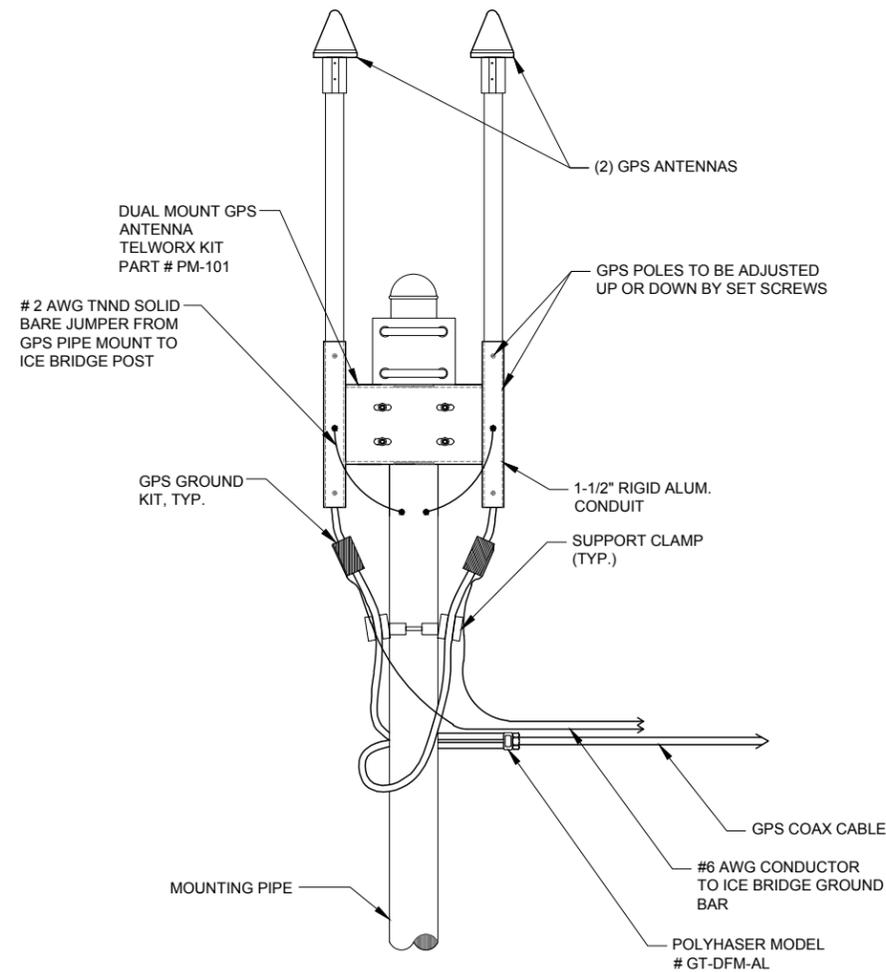
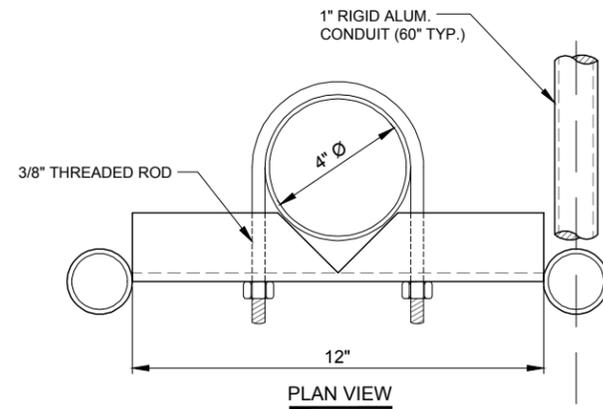
ACCESS TUBE



ACCESS TUBE FLANGE PENETRATIONS

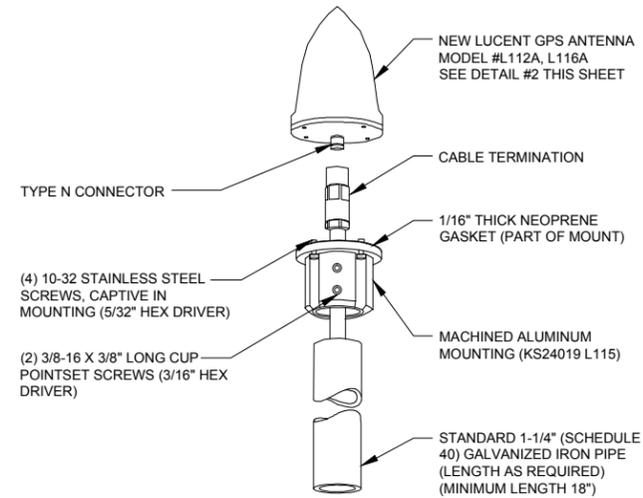


ROOF VIEW



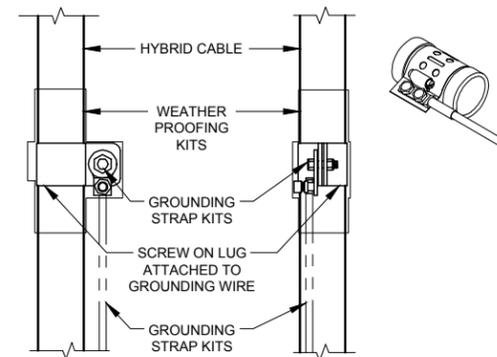
1 GPS MOUNTING DETAIL
N.T.S.

NOTE:
INSTALL EACH GPS ON THE
CLOSEST ICE BRIDGE POSTS TO
SHELTER (TYP. AT 2 LOCATIONS).



2 TYPICAL GPS DETAIL
N.T.S.

- NOTES:
- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
 - THIS DETAIL IS TYPICAL FOR EACH CABLE WHERE IT IS SPECIFIED TO BE GROUNDED
 - CABLE TO BE GROUNDED AT ANTENNA LEVEL AND PRIOR TO ENTERING SHELTER ENTRY PANEL.
 - CABLE ALSO TO BE GROUNDED TO GROUND BAR AT TOWER BASE IF APPLICABLE.
 - USE ONLY TIN PLATED GROUNDING KITS.



3 COAX/ HYBRID GROUND KIT DETAIL
N.T.S.

**CHICAGO
SMSA**
limited partnership
d/b/a VERIZON WIRELESS



NO.	DESCRIPTION	DATE	BY	
			TJS	
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LOC. # 278150

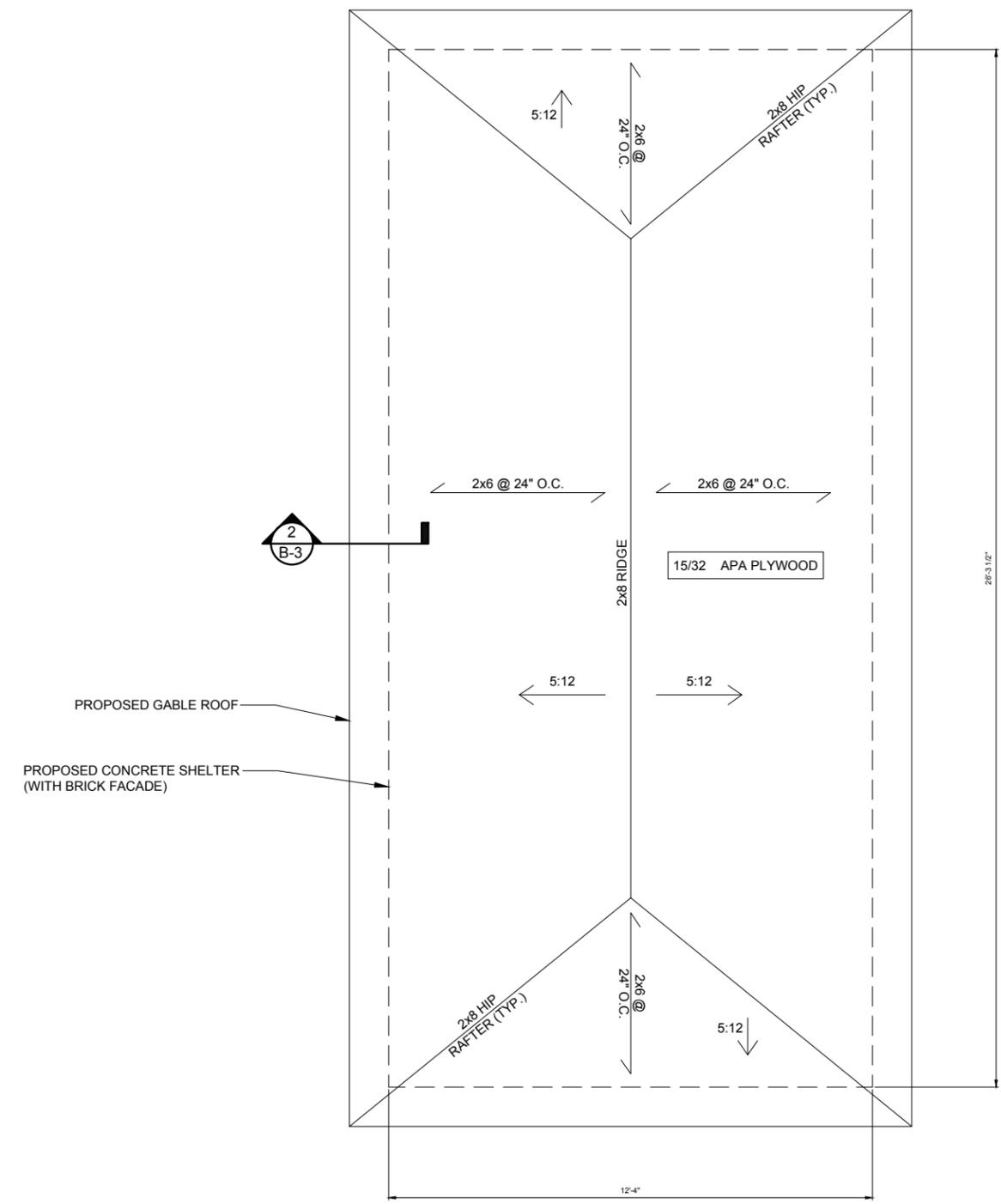
HARTLAND EAST

COVENTRY LANE
HARTLAND, WI 53029

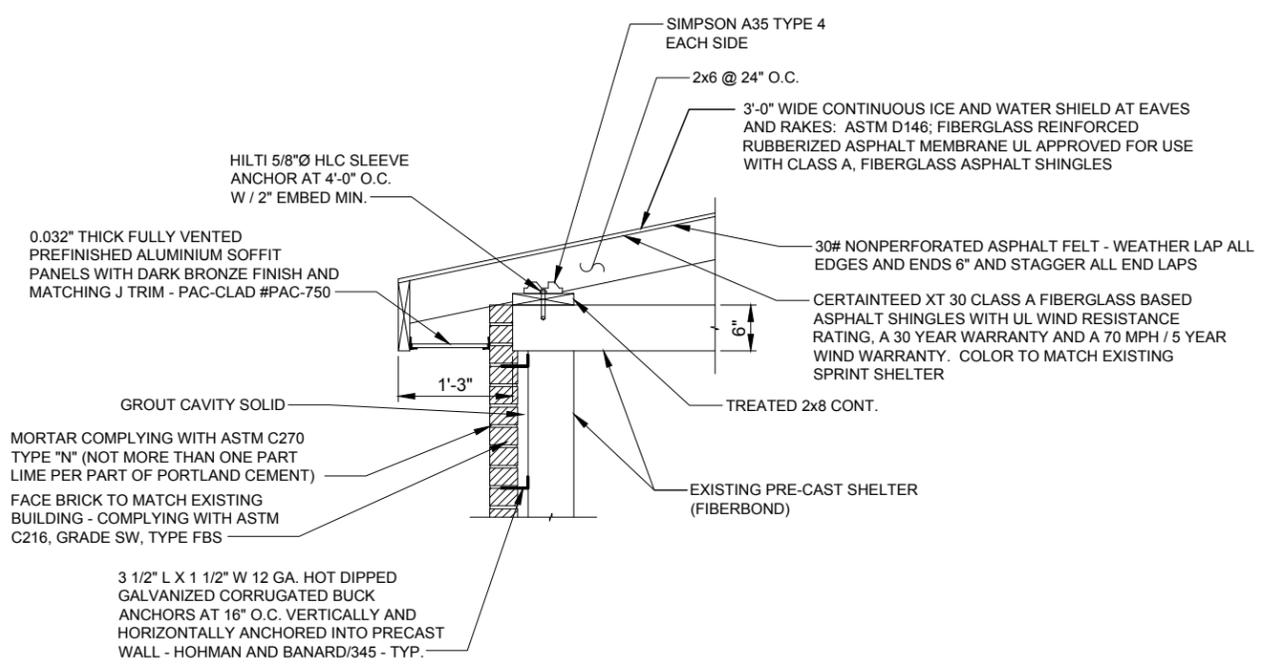
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DATE:	12/02/15
PROJECT #:	33-1912

SHEET TITLE
SITE DETAILS

SHEET NUMBER
ANT-4



1 ROOF PLAN
 SCALE: 1" = 2'
 24" x 36" PRINT IS THE FULL SCALE FORMAT. ANY SIZE OTHER THAN THAT IS AT REDUCED SCALE.



2 ROOF DETAIL
 SCALE: 1" = 1'
 24" x 36" PRINT IS THE FULL SCALE FORMAT. ANY SIZE OTHER THAN THAT IS AT REDUCED SCALE.

- NOTES:**
1. LUMBER TO BE HEM FIR #2 OR BETTER.
 2. PROVIDE NAILING PATTERNS PER IRC & IBC.
 3. FIELD VERIFY EXISTING CONDITIONS.
 4. ALL CONNECTORS TO BE GALVANIZED.

REVISIONS		NO.	DESCRIPTION	DATE	BY
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LOC. # 278150
HARTLAND EAST
 COVENTRY LANE
 HARTLAND, WI 53029

DRAWN BY:	BTE
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SHEET TITLE
ROOF PLAN

SHEET NUMBER
B-3

UTILITY NOTES:

WORK INCLUDES:

THESE NOTES AND ACCOMPANYING DRAWINGS COMPLEMENT THE PROVISIONS AND INSTALLATIONS BY THE ELECTRICAL CONTRACTOR, OF ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO INSTALL THE ELECTRICAL WORK COMPLETE IN CONNECTION WITH THIS VERIZON WIRELESS SITE AND SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:

1. THE PROVISIONS, INSTALLATION, AND CONNECTION OF A GROUNDING ELECTRODE SYSTEM COMPLETE WITH A BUILDING AND SECONDARY GROUNDING, CELLULAR TELEPHONE COMMUNICATIONS TOWER AND CONNECTIONS TO THE INCOMING ELECTRICAL DISTRIBUTION EQUIPMENT.
2. THE PROVISION AND INSTALLATION OF AN OVERHEAD ELECTRICAL SERVICE OR UNDERGROUND ELECTRICAL SERVICE AND ALL ASSOCIATED WIRE AND CONDUIT AS REQUIRED AND/OR INDICATED ON PLANS.
3. THE PROVISION, INSTALLATION OF CONDUIT AND CONNECTIONS FOR LOCAL TELEPHONE SERVICE.
4. THE FURNISHING AND INSTALLATION OF THE ELECTRICAL SERVICE ENTRANCE CONDUCTORS, CONDUITS, METER SOCKET, AND CONNECTIONS TO THE SERVICE EQUIPMENT WITHIN THE ENCLOSURE.
5. TWO INCH (2") AND THREE INCH (3") DIAMETER PVC CONDUITS SCHEDULE 40.
6. ALL PVC CONDUITS SHOULD BE LEFT WITH NYLON PULL CORD FOR FUTURE USE.
7. EXCAVATION, TRENCHING, AND BACKFILLING FOR CONDUIT(S), CABLE(S), AND EXTERNAL GROUNDING SYSTEM.

CODES, PERMITS, AND FEES:

1. ALL REQUIRED PERMITS, LICENSES, INSPECTIONS AND APPROVALS SHALL BE SECURED AND ALL FEES FOR SAME PAID BY CONTRACTOR.
2. THE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE CODES: STATE, LOCAL AND NATIONAL, AND THE DESIGN, PERFORMANCE CHARACTERISTICS AND METHODS OF CONSTRUCTION OF ALL ITEMS AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE LATEST ISSUE OF THE VARIOUS APPLICABLE STANDARD SPECIFICATIONS OF THE FOLLOWING AUTHORITIES:

N.E.C.	NATIONAL ELECTRIC CODE
A.N.S.I.	AMERICAN NATIONAL STANDARDS INSTITUTE
I.E.E.E.	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
A.S.T.M.	AMERICAN SOCIETY FOR TESTING MATERIALS
N.E.M.A.	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
U.L.	UNDERWRITERS LABORATORIES, INC.
N.F.P.A.	NATIONAL FIRE PROTECTION ASSOCIATION

RACEWAYS AND WIRING:

1. WIRING OF EVERY KIND MUST BE INSTALLED IN CONDUIT, UNLESS NOTED OTHERWISE, OR AS APPROVED BY THE ENGINEER.
2. UNLESS OTHERWISE SPECIFIED, ALL WIRING SHALL BE COPPER (CU) TYPE THWN, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.
3. RACEWAYS SHALL BE GALVANIZED STEEL, SIZED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, UNLESS OTHERWISE NOTED. ALL RACEWAYS SHALL BE APPROVED FOR THE INSTALLATION.
4. PULL OR JUNCTION BOXES SHALL BE PROVIDED AS REQUIRED TO FACILITATE INSTALLATION OF RACEWAYS AND WIRING. PROVIDE JUNCTION AND PULLBOXES FOR CONDUIT RUNS WITH MORE THAN (360) DEGREES OF BENDS.
5. PROVIDE A COMPLETE RACEWAY AND WIRING INSTALLATION, PERMANENTLY AND EFFECTIVELY GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE AND LOCAL CODES.
6. ELECTRICAL PANELBOARD SHALL BE FURNISHED AND INSTALLED BY OTHERS. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION.
7. ALL STEEL CONDUIT SHALL BE BONDED AT BOTH ENDS WITH GROUNDING BUSHING.

GENERAL NOTES:

SEE DETAILS AND SCHEDULES ON DRAWINGS AND SPECIFICATIONS FOR MEANING OF ABBREVIATIONS AND ADDITIONAL REQUIREMENTS AND INFORMATION. CHECK ARCHITECTURAL, STRUCTURAL AND OTHER MECHANICAL AND ELECTRICAL DRAWINGS FOR SCALE, SPACE LIMITATIONS, COORDINATION, AND ADDITIONAL INFORMATION, ETC. REPORT ANY DISCREPANCIES, CONFLICTS, ETC. TO ENGINEER BEFORE SUBMITTING BID. ALL EQUIPMENT FURNISHED BY OTHERS (FBO) SHALL BE PROVIDED WITH PROPER MOTOR STARTERS, DISCONNECTS, CONTROLS, ETC. BY THE ELECTRICAL CONTRACTOR UNLESS SPECIFICALLY NOTED OTHERWISE. THE ELECTRICAL CONTRACTOR SHALL INSTALL AND COMPLETELY WIRE ALL ASSOCIATED EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S WIRE DIAGRAMS AND AS REQUIRED FOR A COMPLETE OPERATING INSTALLATION. ELECTRICAL CONTRACTOR SHALL VERIFY AND COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF (FBO) EQUIPMENT PRIOR TO ROUGH-IN OF CONDUIT AND WIRING TO AVOID CONFLICTS.

COORDINATION WITH UTILITY COMPANY:

THE ELECTRICAL CONTRACTOR SHALL COORDINATE COMPLETE ELECTRICAL SERVICE WITH LOCAL UTILITY COMPANY FOR A COMPLETE OPERATIONS SYSTEM, INCLUDING TRANSFORMER CONNECTIONS, CONCRETE TRANSFORMER PADS, IF REQUIRED, METER SOCKETS, PRIMARY CABLE RACEWAY REQUIREMENTS, SECONDARY SERVICE, ETC. PRIOR TO SUBMITTING BID TO INCLUDE ALL LABOR AND MATERIALS. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN THE BID ANY OPTIONAL OR EXCESS FACILITY CHARGES ASSOCIATED WITH PROVIDING ELECTRICAL SERVICE FROM LOCAL UTILITY COMPANY. VERIFY BEFORE BIDDING TO INCLUDE ALL COSTS. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE AVAILABLE FAULT CURRENT WITH THE LOCAL UTILITY COMPANY PRIOR TO SUBMITTING BID. ADJUST A.I.C. RATINGS OF ALL OVER CURRENT PROTECTION DEVICES IN DISTRIBUTION EQUIPMENT AS REQUIRED TO COORDINATE WITH AVAILABLE FAULT CURRENT FROM LOCAL UTILITY COMPANY. ALL GROUNDING RODS PROVIDED BY THE POWER OR TELEPHONE UTILITY COMPANIES MUST BE TIED INTO THE MAIN EXTERNAL GROUND RING.

UTILITY CONTACTS:

POWER: T.B.D.

FIBER: T.B.D.

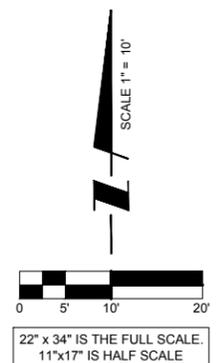
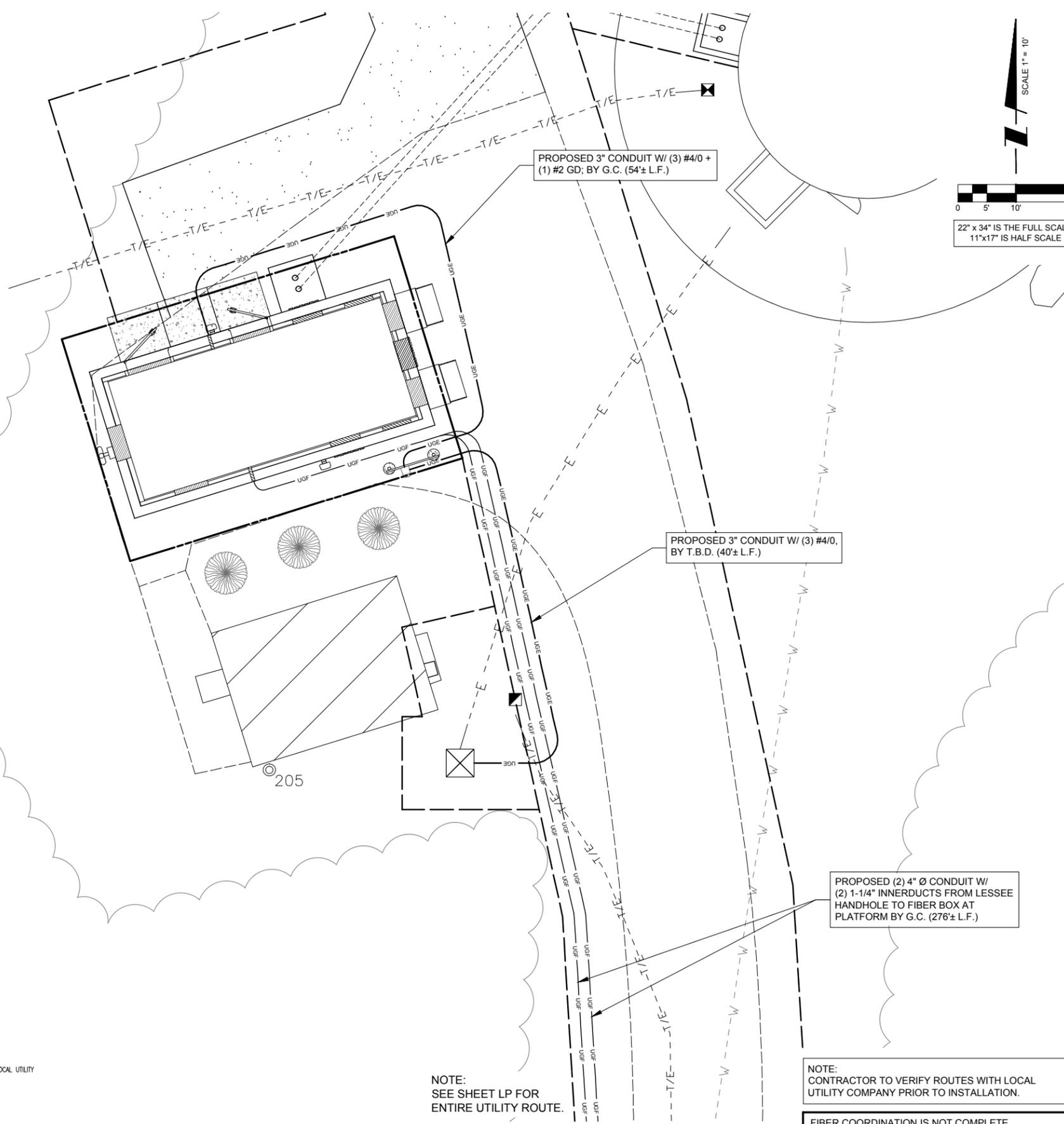


OTHER UTILITIES NOT INCLUDED IN DIGGERS HOTLINE AND LOCAL UTILITY DISTRICTS AND COMPANIES SHALL ALSO BE NOTIFIED

NOTE:
SEE SHEET LP FOR
ENTIRE UTILITY ROUTE.

ELECTRICAL CONTRACTOR SHALL COORDINATE WITH POWER COMPANY FOR ENTRY INTO FENCED AREA BY EITHER MAILING A KEY TO A SLAVE LOCKED CHAIN AT THE FENCE GATE OR CALLING AND LEAVING A COMBINATION.

FOR CONTINUATION AND CONNECTION OF ELECTRIC AND FIBER SERVICE. COORDINATE WITH ELECTRIC AND FIBER COMPANY.



NOTE:
SEE SHEET LP FOR
ENTIRE UTILITY ROUTE.

NOTE:
CONTRACTOR TO VERIFY ROUTES WITH LOCAL
UTILITY COMPANY PRIOR TO INSTALLATION.

FIBER COORDINATION IS NOT COMPLETE
(PENDING FIBER CONTACT). PRIOR TO
CONSTRUCTION, CONTACT DESIGNER FOR UPDATE.

1 SITE UTILITY ROUTING PLAN

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS



NO.	DESCRIPTION	DATE	BY
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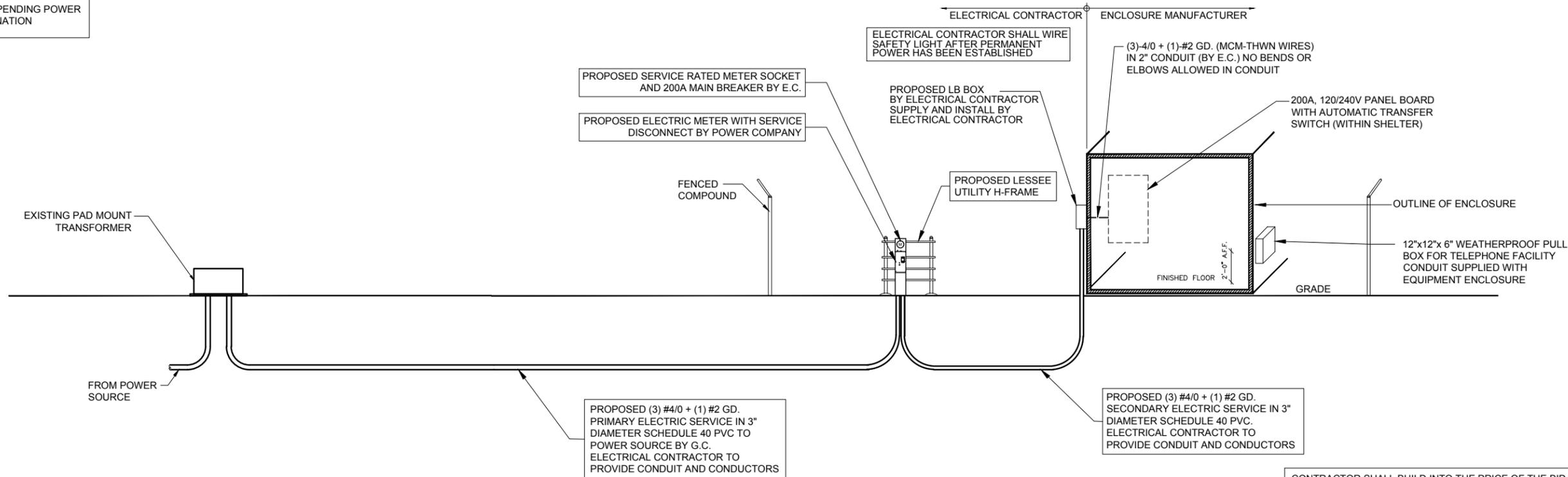
LOC. # 278150
HARTLAND EAST
COVENTRY LANE
HARTLAND, WI 53029

DRAWN BY:	BTE
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DATE:	12/02/15
PROJECT #:	33-1912

SHEET TITLE
UTILITY ROUTING PLAN

SHEET NUMBER
E-1

• DESIGN PENDING POWER COORDINATION

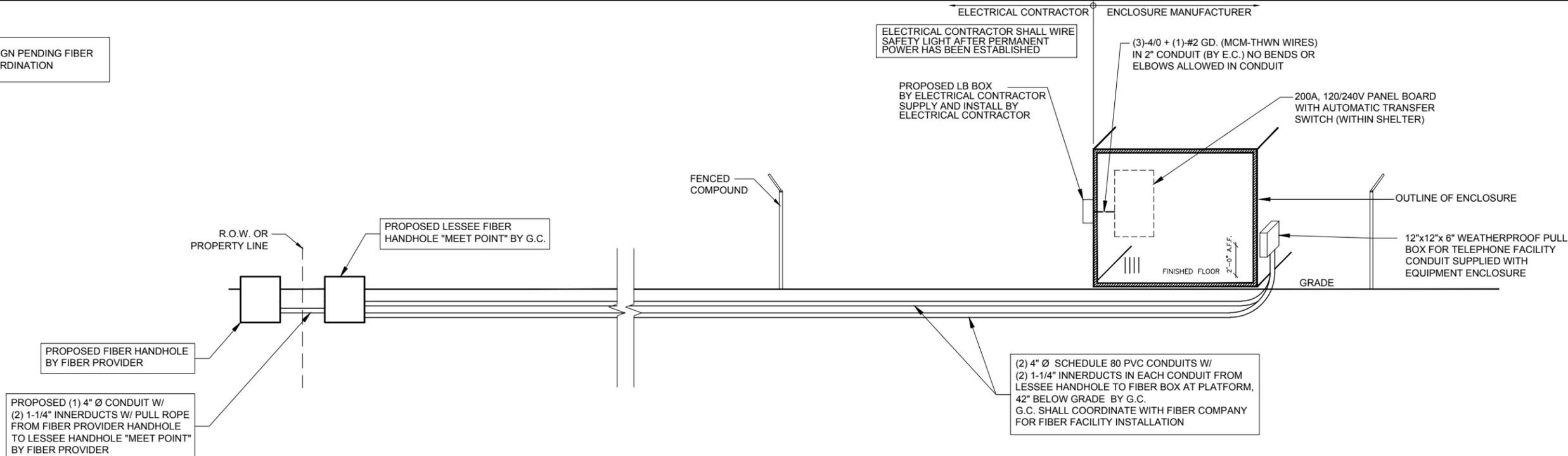


ELECTRICAL SERVICE: 200 AMP 120/240V SINGLE PHASE 3 WIRE

1 POWER RISER DIAGRAM
SCALE: N.T.S.

CONTRACTOR SHALL BUILD INTO THE PRICE OF THE BID THE COST OF TWO (2) MOBILIZATIONS:
1) POWER/FIBER PERMIT PULLED PRIOR TO BUILDING PERMIT AND PRELIMINARY WORK (SMART JACK ON A STICK, ETC) COMPLETED PRIOR TO GENERAL CONSTRUCTION
2) RETURN TO COMPLETE GENERAL ELECTRICAL CONSTRUCTION

• DESIGN PENDING FIBER COORDINATION



NOTE: VERIFY FIBER ROUTING REQUIREMENTS WITH FIBER COMPANY

2 FIBER RISER DIAGRAM
SCALE: N.T.S.

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA
CONSULTING GROUP, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

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LOC. # 278150
HARTLAND EAST
COVENTRY LANE
HARTLAND, WI 53029

DRAWN BY: BTE
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DATE: 12/02/15
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SHEET TITLE
UTILITY RISER DIAGRAMS

SHEET NUMBER
E-1A

GROUNDING ELECTRODE SYSTEM NOTES:

1. ALL GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC PROCESS CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE, SPLICES, ETC. ALL CABLE TO GROUND RODS, GROUND RODS SPLICES AND LIGHTNING PROTECTION SYSTEM AS INDICATED. GROUND FOUNDATION ONLY AS INDICATED BY PM. ALL MATERIALS USED (MOLDS, WELDING, METAL, TOOLS, ETC.) SHALL BE BY EXOTHERMIC PROCESS AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND PROCEDURES. GROUND CONDUCTOR SHALL HAVE A MINIMUM 24" BENDING RADIUS.
2. ALL EXOTHERMIC CONNECTIONS ON GALVANIZED SURFACES SHALL BE CLEANED THOROUGHLY AND COLORED TO MATCH SURFACE WITH (2) TWO COATS OF SHERWIN-WILLIAMS GALVITE (WHITE) PAINT B50W3 (OR EQUAL) OR SHERWIN-WILLIAMS SILVERBRITE (ALUMINUM) B59S11 (OR EQUAL).
3. ALL ELECTRICAL & MECHANICAL GROUND CONNECTIONS SHALL HAVE ANTI-OXIDANT COMPOUND APPLIED TO CONNECTION
4. FENCE/GATE: GROUND FENCE POSTS WITHIN 6 FEET OF PLATFORM AND 25 FEET OF TOWER AS INDICATED ON DRAWINGS. GROUND EACH GATE POST AND CORNER POST. GROUND CONNECTIONS TO FENCE POSTS SHALL BE MADE BY THE EXOTHERMIC PROCESS AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES. ALL OTHER CONNECTIONS FOR THE GROUND GRID SYSTEM SHALL BE MADE BY THE EXOTHERMIC PROCESS, AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES.
6. UTILITY COMPANY COORDINATION: ELECTRICAL CONTRACTOR SHALL CONFIRM THAT ALL WORK IS IN ACCORDANCE WITH THE RULES OF THE LOCAL UTILITY COMPANY BEFORE SUBMITTING THE BID, THE CONTRACTOR SHALL CHECK WITH THE UTILITY COMPANIES SUPPLYING SERVICE TO THIS PROJECT AND SHALL DETERMINE FROM THEM ALL EQUIPMENT AND CHARGES WHICH THEY WILL REQUIRE AND SHALL INCLUDE THE COST IN THE BID.
7. GROUND TEST: GROUND TESTS SHALL BE PERFORMED AS REQUIRED BY LESSEE STANDARD PROCEDURES. GROUND GRID RESISTANCE SHALL NOT EXCEED 5 OHMS.
8. CONTRACTOR SHALL SUBMIT THE GROUND RESISTANCE TEST REPORT AS FOLLOWS:
 1. ONE (1) COPY TO OWNER REPRESENTATIVE
 2. ONE (1) COPY TO ENGINEER
 3. ONE (1) COPY TO KEEP INSIDE EQUIPMENT ENCLOSURE

TYPICAL KEYED GROUNDING NOTES

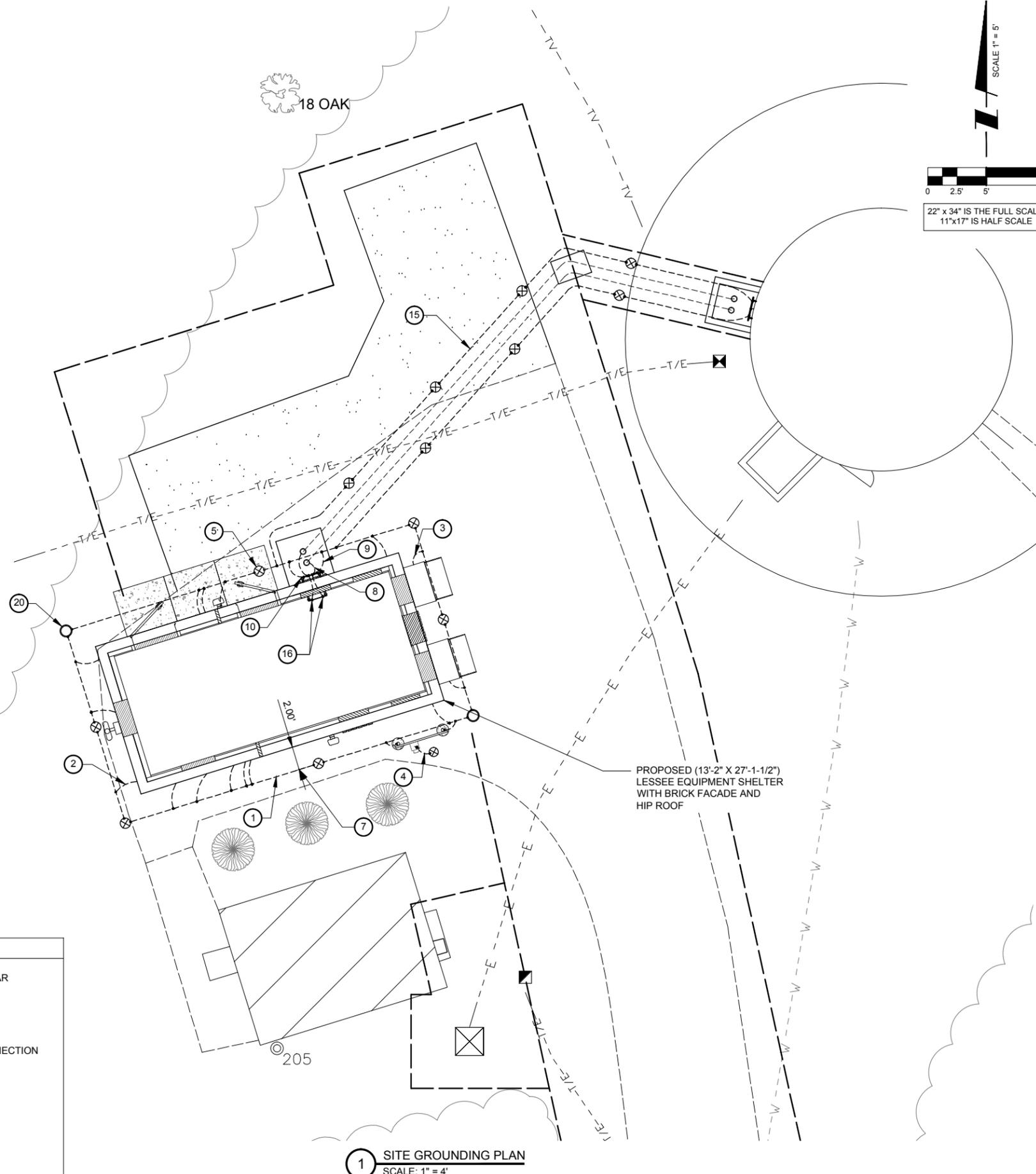
- ① #2 AWG T1NND SOLID BARE COPPER CONDUCTOR 42" BELOW GRADE (TYPICAL) MINIMUM 24" BENDING RADIUS
- ② ENCLOSURE GROUND (TYP.) IN 1/2" DIAMETER SCHEDULE 40 PVC CONDUIT
- ③ GROUND EQUIPMENT ENCLOSURE HVAC WITH MECHANICAL CLAMP (SEE DETAIL, SHEET E-3).
- ④ DISCONNECT AND ELECTRIC SERVICE GROUND TO GROUND ROD
- ⑤ 5/8" x 10' COPPER CLAD GROUND ROD
- ⑥ GROUND CHAIN LINK FENCE (TYPICAL) EXOTHERMIC CONNECTION (TYPE VS) GROUND FENCE POSTS WITHIN 6 FEET OF PLATFORM AND 25 FEET OF TOWER. (SEE DETAIL, SHEET E-5.)
- ⑦ MAINTAIN TWO FOOT DISTANCE OFF OF STRUCTURES.
- ⑧ GROUND COAXIAL ANTENNA CABLES TO GROUND BAR BY ANTENNA CONTRACTOR TERMINATE CABLES 1'-0" FROM PLATFORM AND INSTALL LIGHTNING SURGE ARRESTORS ON EACH CABLE GROUND.
- ⑨ EXOTHERMICALLY WELD COPPER GROUND BAR TAIL TO HALO GROUND RING (EXOTHERMIC CONNECTION TYPE TA) BY ANTENNA CONTRACTOR. FINAL CONNECTION BY ELECTRICAL CONTRACTOR.
- ⑩ 4"x20"x1/4" T1NND INSULATED COPPER GROUND BAR, NON ISOLATED WITH 10.0' LONG #2 AWG T1NND SOLID COPPER WIRE WELDED TAILS (HARGER GBIT 14420VW)
- ⑪ GROUND CABLE WAVEGUIDE BRIDGE (TYP.) BY ELECTRICAL CONTRACTOR.
- ⑫ PROPOSED PERIPHERAL GROUND RING SHOULD BE INSTALLED 1' TO 2' INSIDE THE FENCE LINE. THE TOWER GROUND RING SHOULD BE INSTALLED A MINIMUM 2' OFF OF ANY STRUCTURES.
- ⑬ EXISTING TOWER OR COMPOUND GROUND RING (V.I.F.)
- ⑭ GATE JUMPERS (SEE DETAIL, SHEET E-4)
- ⑮ BOND EXISTING/ PROPOSED TOWER GROUND RING TO PROPOSED PLATFORM GROUND RING WITH #2 AWG T1NND SOLID COPPER CONDUCTOR IN 2 LOCATIONS.
- ⑯ TWO #2 LEADS FROM THE EGR TO THE GROUND BAR AT UTILITY FRAME LOCATED ON PLATFORM STEEL. CADWELD AT EGR AND DOUBLE HOLE LUGS ON PLATFORM.
- ⑰ BOND RAYCAP TO MGB.
- ⑱ EACH TOWER FOUNDATION MESH/CAGE TO BE BONDED TO TOWER GROUND RING WITH #2 T1NND SOLID COPPER CONDUCTOR
- ⑲ EACH TOWER FOUNDATION TO HAVE AT LEAST ONE ANCHOR BOLT BONDED TO TOWER GROUND RING WITH #2 T1NND SOLID COPPER CONDUCTOR
- ⑳ COPPER CLAD GROUND ROD WITH INSPECTION WELL TOP OF GROUND ROD MAX 24" BURY.
- ㉑ EXTEND GROUND CONDUCTORS IN 1/2" RIGID H.W. CONDUIT ADJACENT TO PAD, OFFSET AND ATTACH TO EXTERIOR OF GENERATOR HOUSING AND EXTEND TO GROUND LUGS AS REQUIRED, VERIFY LOCATION WITH GENERAC.
- ㉒ MGB MOUNTED UNDER PERIMETER BEAM



OTHER UTILITIES NOT INCLUDED IN DIGGERS HOTLINE AND LOCAL UTILITY DISTRICTS AND COMPANIES SHALL ALSO BE NOTIFIED

NOTE:
SEE GROUNDING DETAILS ON SHEETS E-3 & E-4

LEGEND:	
	GROUND BAR OR ARRESTOR BAR
	5/8"Ø x 10'-0" GROUND ROD
	GROUND SYSTEM TEST WELL
	CADWELD OR APPROVED CONNECTION
	SPARE GROUND LEAD
	MECHANICAL CONNECTION
	EXISTING GROUNDING
	NEW GROUNDING



1 SITE GROUNDING PLAN
SCALE: 1" = 4'

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA
CONSULTING GROUP, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
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REVISIONS				
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HARTLAND EAST
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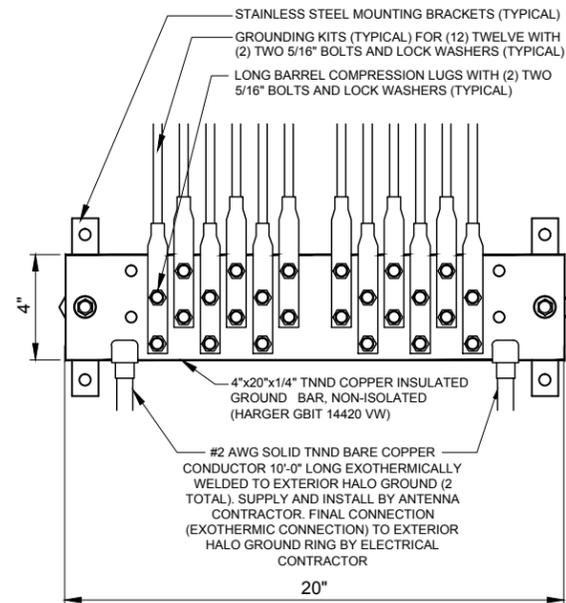
DRAWN BY:	BTE
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SHEET TITLE
SITE GROUNDING PLAN

SHEET NUMBER
E-2

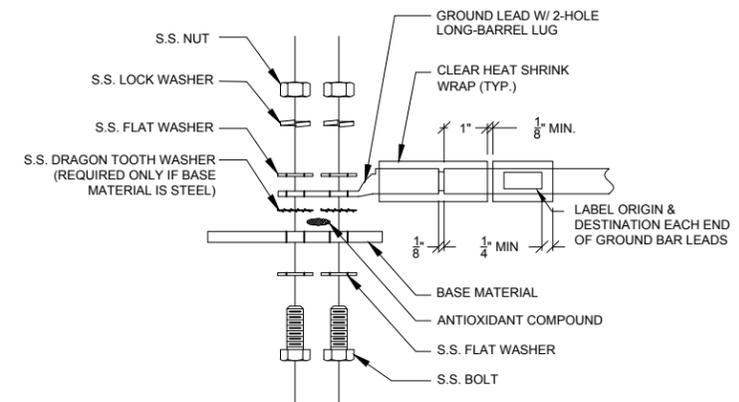
GROUNDING ELECTRODE SYSTEM NOTES:

- ALL GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC PROCESS CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE, SPLICES, ETC. ALL CABLE TO GROUND RODS, GROUND RODS SPLICES AND LIGHTNING PROTECTION SYSTEM AS INDICATED. GROUND FOUNDATION ONLY AS INDICATED BY PM. ALL MATERIALS USED (MOLDS, WELDING, METAL, TOOLS, ETC.) SHALL BE BY EXOTHERMIC PROCESS AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND PROCEDURES. GROUND CONDUCTOR SHALL HAVE A MINIMUM 24" BENDING RADIUS.
- ALL EXOTHERMIC CONNECTIONS ON GALVANIZED SURFACES SHALL BE CLEANED THOROUGHLY AND COLORED TO MATCH SURFACE WITH (2) TWO COATS OF SHERWIN-WILLIAMS GALVITE (WHITE) PAINT B50W3 (OR EQUAL) OR SHERWIN-WILLIAMS SILVERBRITE (ALUMINUM) B59S11 (OR EQUAL).
- ALL ELECTRICAL & MECHANICAL GROUND CONNECTIONS SHALL HAVE ANTI-OXIDANT COMPOUND APPLIED TO CONNECTION
- FENCE/GATE: GROUND FENCE POSTS WITHIN 6 FEET OF ENCLOSURE AND 25 FEET OF TOWER AS INDICATED ON DRAWINGS. GROUND EACH GATE POST AND CORNER POST. GROUND CONNECTIONS TO FENCE POSTS SHALL BE MADE BY THE EXOTHERMIC PROCESS AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES. ALL OTHER CONNECTIONS FOR THE GROUND GRID SYSTEM SHALL BE MADE BY THE EXOTHERMIC PROCESS, AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES.
- AFTER INSTALLATION OF THE CANOPY AT THE DOOR, GC/EC IS TO BOND THE CANOPY TO THE DOOR FRAME WITH A #2 CONDUCTOR. USE DOUBLE-LUG CONNECTION. PREP AND PAINT SURFACE TO MATCH AFTER INSTALLATION.
- UTILITY COMPANY COORDINATION: ELECTRICAL CONTRACTOR SHALL CONFIRM THAT ALL WORK IS IN ACCORDANCE WITH THE RULES OF THE LOCAL UTILITY COMPANY BEFORE SUBMITTING THE BID, THE CONTRACTOR SHALL CHECK WITH THE UTILITY COMPANIES SUPPLYING SERVICE TO THIS PROJECT AND SHALL DETERMINE FROM THEM ALL EQUIPMENT AND CHARGES WHICH THEY WILL REQUIRE AND SHALL INCLUDE THE COST IN THE BID.
- GROUND TEST: GROUND TESTS SHALL BE PERFORMED AS REQUIRED BY LESSEE STANDARD PROCEDURES. GROUND GRID RESISTANCE SHALL NOT EXCEED 5 OHMS.
- CONTRACTOR SHALL SUBMIT THE GROUND RESISTANCE TEST REPORT AS FOLLOWS:
 - ONE (1) COPY TO OWNER REPRESENTATIVE
 - ONE (1) COPY TO ENGINEER
 - ONE (1) COPY TO KEEP INSIDE EQUIPMENT ENCLOSURE

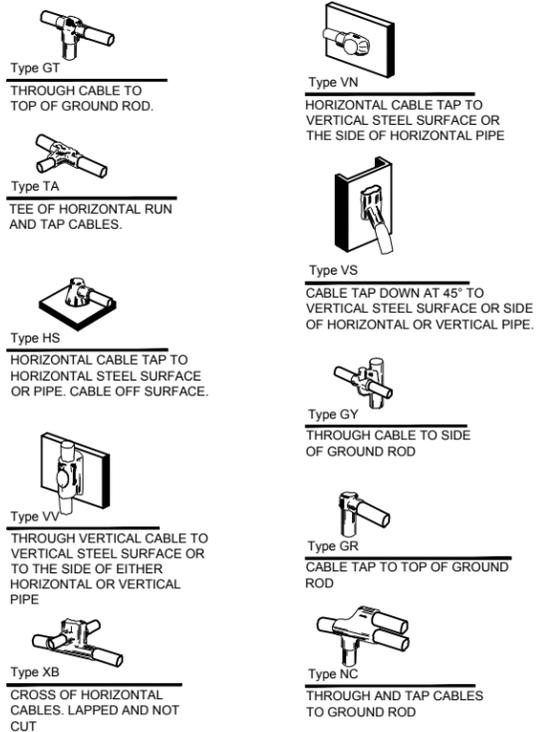


1 EXTERIOR GROUND BAR DETAIL
N.T.S.

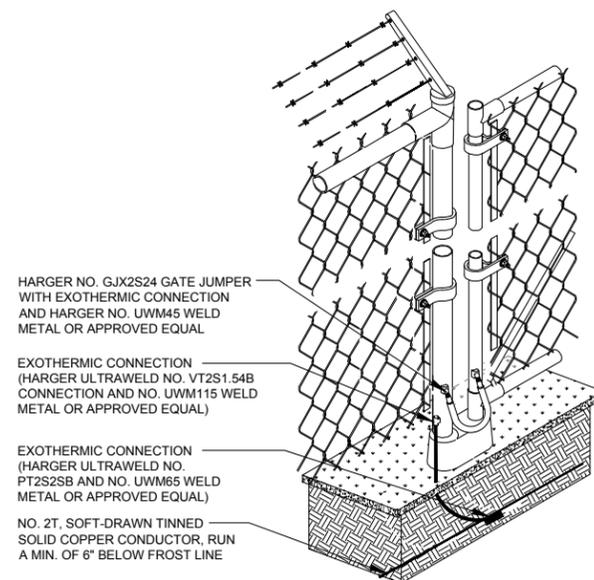
- NOTES:
- ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING BELLEVILLES. COAT ALL SURFACES WITH KOPR-SHIELD BEFORE MATING.
 - FOR GROUND BOND TO STEEL ONLY: INSERT A DRAGON TOOTH WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH KOPR-SHIELD.
 - GROUND BARS, INSTALL BOLT HEAD TOWARD WALL
 - ENCLOSURES, INSTALL BOLT HEAD ON OUTSIDE OF ENCLOSURE



2 GROUND LUG INSTALLATION DETAIL
N.T.S.



3 EXOTHERMIC WELD DETAILS
EXOTHERMIC AND HARGER ULTRAWELD OR APPROVED EQUAL



4 FENCE GROUNDING DETAIL
N.T.S.

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA
CONSULTING AND CONSTRUCTION, LTD.
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REVISIONS		BY	TJS
NO.	DESCRIPTION	DATE	
	ISSUED FOR REVIEW	06/08/17	

LOC. # 278150

HARTLAND EAST

COVENTRY LANE
HARTLAND, WI 53029

DRAWN BY:	BTE
CHECKED BY:	TAZ
DATE:	12/02/15
PROJECT #:	33-1912

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
E-4

GENERAL

THE CONSTRUCTION DOCUMENT DRAWINGS ARE INTERRELATED. WHEN PERFORMING THE WORK, EACH CONTRACTOR MUST REFER TO ALL DRAWINGS. COORDINATION IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

DIVISION 1: GENERAL REQUIREMENTS
SECTION 01700 - PROJECT CLOSEOUT

PART 1 - GENERAL

- A. OBTAIN AND SUBMIT RELEASES ENABLING THE OWNER UNRESTRICTED USE OF THE WORK AND ACCESS TO SERVICES AND UTILITIES; INCLUDE OCCUPANCY PERMITS, OPERATING CERTIFICATES AND SIMILAR RELEASES.
B. SUBMIT RECORD DRAWINGS, DAMAGE OR SETTLEMENT SURVEY, PROPERTY SURVEY, AND SIMILAR FINAL RECORD INFORMATION.
C. COMPLETE FINAL CLEAN UP REQUIREMENTS. TOUCH UP AND OTHERWISE REPAIR AND RESTORE MARRED EXPOSED FINISHES.

PART 2 - FINAL CLEANING

- 1. COMPLETE THE FOLLOWING CLEANING OPERATIONS BEFORE REQUESTING INSPECTION FOR CERTIFICATION OF COMPLETION.
a. CLEAN THE PROJECT SITE, YARD AND GROUNDS, IN AREAS DISTURBED BY CONSTRUCTION ACTIVITIES, INCLUDING LANDSCAPE DEVELOPMENT AREAS, OF RUBBISH, WASTE MATERIALS, LITTER AND FOREIGN SUBSTANCES. SWEEP PAVED AREAS BROOM CLEAN. REMOVE PETRO-CHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS, RAKE GROUNDS THAT ARE NEITHER PLANTED NOR PAVED, TO A SMOOTH EVEN-TEXTURED SURFACE.
b. REMOVE TOOLS, CONSTRUCTION EQUIPMENT, MACHINERY AND SURPLUS MATERIAL FROM THE SITE
c. REMOVE SNOW AND ICE TO PROVIDE SAFE ACCESS TO THE SITE AND EQUIPMENT ENCLOSURE.
d. CLEAN EXPOSED EXTERIOR AND INTERIOR HARD-SURFACED FINISHES TO A DIRT-FREE CONDITION, FREE OF STAINS, FILMS AND SIMILAR FOREIGN SUBSTANCES. AVOID DISTURBING NATURAL WEATHERING OF EXTERIOR SURFACES.
e. REMOVE DEBRIS FROM LIMITED ACCESS SPACES, INCLUDING ROOFS, EQUIPMENT ENCLOSURE, MANHOLES, AND SIMILAR SPACES.
f. TOUCH-UP AND OTHERWISE REPAIR AND RESTORE MARRED EXPOSED FINISHES AND SURFACES. REPLACE FINISHES AND SURFACES THAT CAN NOT BE SATISFACTORILY REPAIRED OR RESTORED, OR THAT SHOW EVIDENCE OF REPAIR OR RESTORATION. DO NOT PAINT OVER "UL" AND SIMILAR LABELS, INCLUDING ELECTRICAL NAME PLATES.
g. LEAVE THE PROJECT CLEAN AND READY FOR OCCUPANCY
2. REMOVAL OF PROTECTION: REMOVE TEMPORARY PROTECTION AND FACILITIES INSTALLED DURING CONSTRUCTION TO PROTECT PREVIOUSLY COMPLETED INSTALLATIONS DURING THE REMAINDER OF THE CONSTRUCTION PERIOD.

DIVISION 2: SITE WORK
SECTION 02200 - EARTHWORK AND DRAINAGE

PART 1 - GENERAL

- 1. WORK INCLUDED: SEE SITE PLAN.
2. SEQUENCING
a. CONSTRUCT TEMPORARY CONSTRUCTION AREA ALONG EAST FENCE LINE.
b. GRADE, SEED, FERTILIZE, AND MULCH ALL AREAS DISTURBED BY CONSTRUCTION (INCLUDING UNDERGROUND UTILITY EASEMENTS) IMMEDIATELY AFTER BRINGING LEASE AREA AND ACCESS DRIVE W/ TURNAROUND TO BASE COURSE ELEVATION, WATER TO ENSURE GROWTH

PART 2 - EXECUTION

- 1. INSPECTIONS: LOCAL BUILDING INSPECTORS SHALL BE NOTIFIED NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS, UNLESS OTHERWISE SPECIFIED BY JURISDICTION.
2. PREPARATION
a. CLEAR TREES, BRUSH AND DEBRIS FROM SITE AS REQUIRED.
b. PRIOR TO OTHER EXCAVATION AND CONSTRUCTION, GRUB ORGANIC MATERIAL TO A MINIMUM OF SIX INCHES (6") BELOW GRADE.
c. UNLESS OTHERWISE INSTRUCTED BY OWNER, TRANSPORT ALL REMOVED TREES, BRUSH AND DEBRIS FROM THE PROPERTY TO AN AUTHORIZED LANDFILL.
d. PRIOR TO PLACEMENT OF FILL OR BASE MATERIALS, ROLL THE SOIL.
e. WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, LINE THE AREAS WITH STABILIZER MAT PRIOR TO PLACEMENT OF FILL OR BASE MATERIAL.
3. INSTALLATION
a. GRADE OR FILL THE SITE AS REQUIRED IN ORDER THAT UPON DISTRIBUTION OF SOILS, RESULTING FROM EXCAVATIONS, THE RESULTING GRADE WILL CORRESPOND WITH SAID SUB-BASE COURSE. ELEVATIONS ARE TO BE CALCULATED FROM BENCHMARK, FINISHED GRADES, OR INDICATED SLOPES.
b. CLEAR EXCESS SPOILS, IF ANY, FROM JOB SITE AND DO NOT SPREAD BEYOND THE LIMITS OF PROJECT AREA UNLESS AUTHORIZED BY PROJECT MANAGER AND AGREED TO BY LANDOWNER.
c. AVOID CREATING DEPRESSIONS WHERE WATER MAY POND.
d. THE CONTRACT SHALL INCLUDE GRADING, BANKING, AND DITCHING, UNLESS OTHERWISE INDICATED.
e. PLACE FILL OR STONE IN SIX INCH (6") MAXIMUM LIFTS, AND COMPACT BEFORE PLACING NEXT LIFT.
f. THE TOP SURFACE COURSE, SHALL EXTEND A MINIMUM OF ONE FOOT (1') BEYOND THE SITE FENCE (UNLESS OTHERWISE NOTED) AND SHALL COVER THE AREA AS INDICATED.
g. APPLY SEED, FERTILIZER, AND STRAW COVER TO ALL OTHER DISTURBED AREAS, DITCHES, AND DRAINAGE SWALES, NOT OTHERWISE RIPRAP.

- h. UNDER NO CIRCUMSTANCES WILL DITCHES, SWALES, OR CULVERTS BE PLACED SO THAT THEY DIRECT WATER TOWARDS, OR PERMIT STANDING WATER IMMEDIATELY ADJACENT TO SHELTER OR EQUIPMENT. IF DESIGNS OR ELEVATIONS ARE IN CONFLICT WITH THIS, ADVISE CONSTRUCTION MANAGER IMMEDIATELY.
i. APPLY SEED, FERTILIZER, AND STRAW COVER TO ALL OTHER DISTURBED AREAS, DITCHES, AND DRAINAGE SWALES, NOT OTHERWISE RIPRAP.
j. UNDER NO CIRCUMSTANCES WILL DITCHES, SWALES, OR CULVERTS BE PLACED SO THAT THEY DIRECT WATER TOWARDS, OR PERMIT STANDING WATER IMMEDIATELY ADJACENT TO SHELTER OR EQUIPMENT. IF DESIGNS OR ELEVATIONS ARE IN CONFLICT WITH THIS, ADVISE CONSTRUCTION MANAGER IMMEDIATELY.
k. IN DITCHES WITH SLOPES GREATER THAN 10% MOUND DIVERSIONARY HEADWALLS IN THE DITCH AT CULVERT ENTRANCES. POSITION THE HEADWALL AT AN ANGLE NO GREATER THAN THAT 60° OFF THE DITCH LINE. RIPRAP THE UPSTREAM SIDE OF THE HEADWALL AS WELL AS THE DITCH FOR SIX FEET (6') ABOVE THE CULVERT ENTRANCE.
l. APPLY SEED AND FERTILIZER TO SURFACE CONDITIONS WHICH WILL ENCOURAGE ROOTING. RAKE AREAS TO BE SEEDED TO EVEN THE SURFACE AND LOOSEN THE SOIL.
m. SOW SEED IN TWO DIRECTIONS IN TWICE THE QUANTITY RECOMMENDED BY THE SEED PRODUCER.
n. ENSURE GROWTH OF SEEDED AND LANDSCAPED AREAS, BY WATERING, UP TO THE POINT OF RELEASE FROM THE CONTRACT. CONTINUE TO REWORK THE BARE AREAS UNTIL COMPLETE COVERAGE IS OBTAINED.
4. FIELD QUALITY CONTROL: COMPACT SOILS TO MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557. AREAS OF SETTLEMENT WILL BE EXCAVATED AND REFILLED AT CONTRACTOR'S EXPENSE. INDICATE PERCENTAGE OF COMPACTION ACHIEVED ON AS-BUILT DRAWINGS.
5. PROTECTION
a. PROTECT SEEDED AREAS FROM EROSION BY SPREADING STRAW TO A UNIFORM LOOSE DEPTH OF 1-2 INCHES, STAKE AND TIE DOWN AS REQUIRED. USE OF EROSION CONTROL MESH OR MULCH NET WILL BE AN ACCEPTABLE ALTERNATIVE.
b. PROTECT ALL EXPOSED AREAS AGAINST WASHOUTS AND SOIL EROSION. PLACE STRAW BALES AT THE INLET APPROACH TO ALL NEW OR EXISTING CULVERTS. WHERE THE SITE OR ROAD AREAS HAVE BEEN ELEVATED IMMEDIATELY ADJACENT TO THE RAIL LINE, STAKE EROSION CONTROL FABRIC FULL LENGTH IN THE SWALE TO PREVENT CONTAMINATION OF THE RAIL BALLAST. ALL EROSION CONTROL METHODS SHALL CONFORM TO APPLICABLE BUILDING CODE REQUIREMENTS.

SECTION 02830 - FENCING AND GATE(S)

PART 1 - GENERAL

- 1. WORK INCLUDED - SEE PLAN FOR SITE AND LOCATION OF FENCE
2. QUALITY ASSURANCE
a. ALL STEEL MATERIALS UTILIZED IN CONJUNCTION WITH THIS SPECIFICATION WILL BE GALVANIZED OR STAINLESS STEEL. WEIGHT OF ZINC COATING ON THE FABRIC SHALL NOT BE LESS THAN 12 OUNCES PER SQUARE FOOT OF MATERIAL COVERED. POSTS SHALL BE HOT-DIPPED IN GRADE "E" ZINC, 18 OUNCES PER SQUARE FOOT.
3. SEQUENCING
a. IF THE SITE AREA HAS BEEN BROUGHT UP TO SURFACE COURSE ELEVATION (PRIOR TO THE FENCE CONSTRUCTION), FENCE POST EXCAVATION SPOILS MUST BE CONTROLLED TO PRECLUDE CONTAMINATION OF SAID SURFACE COURSE.
4. SUBMITTALS
a. MANUFACTURER'S DESCRIPTIVE LITERATURE.
b. CERTIFICATE OR STATEMENT OF COMPLIANCE WITH THE SPECIFICATIONS.

PART 2 - PRODUCTS

- 1. FENCE MATERIAL
a. ALL FABRIC WIRE, RAILS, HARDWARE, AND OTHER STEEL MATERIALS SHALL BE HOT-DIPPED GALVANIZED.
b. FABRIC SHALL BE SEVEN-FOOT (7") HIGH OR TO MATCH EXISTING FENCE TWO-INCH CHAIN LINK MESH OF NO. 9 GAUGE (0.148") WIRE. THE FABRIC SHALL HAVE A KNUCKLED FINISH FOR THE TOP SELVAGES. FABRIC SHALL CONFORM TO THE SPECIFICATIONS OF ASTM A-392 CLASS 1.
c. ALL POSTS SHALL BE SCHEDULE - 40 MECHANICAL SERVICE PIPE AND SHALL BE TYPE 1 ASTM A-128 AND OF THE FOLLOWING DIAMETER
i. LINE 2" SCHEDULE 40 (2 3/8" O.D.)
ii. CORNER 3" SCHEDULE 40 (3 1/2" O.D.)
iii. GATE 3" SCHEDULE 40 (3 1/2" O.D.)
d. ALL TOP AND BRACE RAILS SHALL BE 1 DIAMETER SCHEDULE - 40 MECHANICAL - SERVICE PIPE.
e. GATE FRAMES AND BRACES SHALL BE 1.90 INCH DIAMETER SCHEDULE 40 MECHANICAL - SERVICE PIPE. FRAMES SHALL HAVE WELDED CORNERS.
f. GATE FRAMES SHALL HAVE A FULL-HEIGHT VERTICAL BRACE, AND A FULL-WIDTH HORIZONTAL BRACE, SECURED IN PLACE BY USE OF GATE BRACE CLAMPS.
g. GATE HINGES SHALL BE MERCHANTS METAL MODEL 64386 HINGE ADAPTER WITH MODEL 6409, 188-DEGREE ATTACHMENT.
h. A NO. 7 GAUGE ZINC COATED TENSION WIRE SHALL BE USED AT THE BOTTOM OF THE FABRIC, TERMINATED WITH BAND CLIPS AT CORNER AND GATE POSTS.
i. A SIX-INCH BY 1/2-INCH DIAMETER EYEBOLT TO HOLD TENSION WIRE SHALL BE PLACED AT LINE POSTS.
j. STRETCHER BARS SHALL BE 3/16-INCH BY 3/4-INCH OR HAVE EQUIVALENT CROSS-SECTIONAL AREA.

- k. ALL CORNER GATE AND PANELS SHALL HAVE A 3/8-INCH TRUSS ROD WITH TURNBUCKLES.
l. ALL POST EXCEPT GATE POSTS SHALL HAVE A COMBINATION CAP AND BARBED WIRE SUPPORTING ARM. GATE POSTS SHALL HAVE A DOME CAP.
m. OTHER HARDWARE INCLUDES BUT MAY NOT BE LIMITED TO TIE CLIPS, BAND CLIPS, AND TENSION BAND CLIPS.
n. ALL CAPS SHALL BE MALLEABLE IRON, DOME OR ACORN SHAPED AS REQUIRED BY PIPE SIZE.

PART 3 - EXECUTION

- 1. INSPECTION: TO CONFIRM PROPER DEPTH AND DIAMETER OF POST HOLE EXCAVATIONS. ALL POST HOLES WILL BE EXCAVATED AS PER CONSTRUCTION DOCUMENTS,
2. INSTALLATION
a. FOUNDATIONS SHALL HAVE A MINIMUM SIX INCH (6") CONCRETE COVER UNDER POST.
b. ALL FENCE POSTS SHALL BE VERTICALLY PLUMB; ON QUARTER INCH (1/4")
c. AT CORNER POSTS, GATE POSTS, AND SIDES OF GATE FRAME, FABRIC SHALL BE ATTACHED WITH STRETCHER AND TENSION BAND-CLIPS AT FIFTEEN (15) INCH INTERVALS.
d. AT LINE POSTS, FABRIC SHALL BE ATTACHED WITH BAND-CLIPS AT FIFTEEN (15) INCH INTERVALS.
e. FABRIC SHALL BE ATTACHED TO BRACE RAILS, TENSION WIRE AND TRUSS RODS WITH TIE-CLIPS AT TWO FOOT (2') INTERVALS.
f. A MAXIMUM GAP OF ONE INCH WILL BE PERMITTED BETWEEN TIE CHAIN LINE FABRIC AND THE FINAL GRADE.
g. GATE SHALL BE INSTALLED SO LOCKS ARE ACCESSIBLE FROM BOTH SIDES.
h. GATE HINGE BOLTS SHALL HAVE THEIR THREADS PEENED OR WELDED TO PREVENT UNAUTHORIZED REMOVAL.
i. CONCRETE TO BE A MINIMUM OF 4,000 PSI AT 7 DAYS. CEMENT SHALL EXCEED ASTM C150, TYPE IIIA.
3. PROTECTION: UPON COMPLETION OF ERECTION, INSPECT FENCE MATERIAL AND PAINT FIELD CUTS OR GALVANIZING BREAKS WITH ZINC-BASED PAINT, COLOR TO MATCH THE GALVANIZED METAL. APPLICABLE STANDARDS:
ASTM-A120 SPECIFICATION FOR PIPE, STEEL, BLACK AND HOT-DIPPED ZINC COATED (GALVANIZED) WELDED AND SEAMLESS, FOR ORDINARY USES.
ASTM-A123 ZINC (HOT-DIP GALVANIZED) COATING ON IRON AND STEEL PRODUCTS.
ASTM-A153 STANDARD SPECIFICATION FOR ZINC COATING (HOT-DIP) ON IRON AND STEEL HARDWARE.
ASTM-A392 SPECIFICATION FOR ZINC-COATED STEEL CHAIN LINK FENCE FABRIC.
ASTM-A491 SPECIFICATION FOR ALUMINUM-COATED STEEL CHAIN LINK FENCE FABRIC
ASTM-A525 STANDARD SPECIFICATION FOR STEEL SHEET ZINC COATED (GALVANIZED) BY THE HOT-DIPPED PROCESS.
ASTM-A570 SPECIFICATION FOR HOT-ROLLED CARBON STEEL SHEET AND STRIP. STRUCTURAL QUALITY.
A. FEDERAL SPECIFICATION RR-F-191-FENCING, WIRE AND POST METAL (AND GATES, CHAIN LINK FENCE FABRIC, AND ACCESSORIES)

DIVISION 3: CONCRETE
SECTION 03000 - BASIC CONCRETE MATERIALS AND METHODS

PART 1 - GENERAL

- 1. WORK INCLUDED: FORMWORK, REINFORCEMENT, ACCESSORIES, CAST-IN-PLACE CONCRETE, FINISHING, AND CURING.
2. INSPECTIONS
a. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING BUILDING DEPARTMENT INSPECTIONS REQUIRED FOR HIS SCOPE OF WORK.
b. ALL REINFORCING STEEL SHALL BE INSPECTED AND APPROVED BY THE LESSEE'S CONSTRUCTION MANAGER PRIOR TO PLACEMENT OF CONCRETE.
c. THE LESSEE'S CONSTRUCTION MANAGER SHALL BE NOTIFIED NO LESS THAN 48 HOURS IN ADVANCE OF CONCRETE POURS.
3. QUALITY ASSURANCE
a. CONSTRUCT AND ERECT CONCRETE FORMWORK IN ACCORDANCE WITH ACI 301 AND ASTM 318.
b. PERFORM CONCRETE REINFORCING WORK IN ACCORDANCE WITH ACI 301, ACI 318, AND ASTM A184.
c. PERFORM CAST-IN-PLACE CONCRETE WORK IN ACCORDANCE WITH ACI 301, ACI 318, AND ACI 117-90.
d. OPEN FOUNDATION TRENCHES SHALL BE INSPECTED BY MES PRIOR TO CONCRETE INSTALLATION.
4. SUBMITTALS: SUBMIT CONCRETE MIX AND REINFORCING STEEL SHOP DRAWINGS FOR APPROVAL BY LESSEE CONSTRUCTION MANAGER/ENGINEER. THE SHOP DRAWING SHALL BE SUBMITTED IN THE FORM OF TWO (2) CONCRETE MIX DESIGN INFORMATION SHEETS AND TWO (2) BLUELINE DRAWINGS FOR REINFORCING STEEL.

PART 2 - PRODUCTS

- 1. REINFORCEMENT MATERIALS
a. REINFORCEMENT STEEL, ASTM A615, 60 ksi YIELD GRADE, DEFORMED BILLET STEEL BARS, PLAIN FINISH.
b. WELDED STEEL WIRE FABRIC ASTM A185 PLAIN TYPE IN FLAT SHEETS, PLAIN FINISH.
c. CHAIRS, BOLSTERS, BAR SUPPORTS, SPACERS. SIZED AND SHAPED FOR SUPPORTS OR REINFORCING.

- d. FABRICATE CONCRETE REINFORCING IN ACCORDANCE WITH ACI 315, ACI 318, ASTM A184.
2. CONCRETE MATERIALS
a. CEMENT: ASTM C150, PORTLAND TYPE
b. FINE AND COURSE AGGREGATES: ASTM C33 - MAXIMUM SIZE OF CONCRETE AGGREGATE SHALL NOT EXCEED; ONE INCH (1") SIZE SUITABLE FOR INSTALLATION METHOD UTILIZED OR ONE-THIRD (1/3) CLEAR DISTANCE BEHIND OR BETWEEN REINFORCING.
c. WATER: CLEAN AND NOT DETRIMENTAL TO CONCRETE
d. AIR ENTRAINING ADMIXTURE: ASTM C260
e. BONDING AGENT: LATEX EMULSION FOR BONDING NEW TO OLD CONCRETE AS MANUFACTURED BY DAYTON SUPERIOR.
f. NON-SHRINK GROUT: PREMIXED COMPOUND CONSISTING OF NONMETALLIC AGGREGATE. CEMENT, WATER REDUCING AND PLASTICISING AGENTS.
3. CONCRETE MIX
a. CONCRETE MATERIALS SHALL CONFORM TO THE APPROPRIATE A.C.I. REQUIREMENTS FOR EXPOSED STRUCTURAL CONCRETE.
b. MIX AND DELIVER CONCRETE IN ACCORDANCE WITH ASTM C94, ALT. 3.
c. PROPORTIONS OF CONCRETE MATERIALS SHALL BE SUITABLE FOR THE INSTALLATION METHOD UTILIZED AND SHALL RESULT IN DURABLE CONCRETE FOR LOCAL ANTICIPATED AGGRESSIVE ACTIONS. THE DURABILITY REQUIREMENTS OF ACI 318 CHAPTER 4 SHALL BE SATISFIED BASED ON THE CONDITIONS EXPECTED AT THE SITE. PROVIDE CONCRETE AS FOLLOWS:
i. COMPRESSIVE STRENGTH: 4000 psi AT 7 DAYS. SEE SHEET 2-1 FOR CAISSON CONCRETE COMPRESSIVE STRENGTH.
ii. SLUMP: 3 INCHES

PART 3 - EXECUTION

- 1. INSERTS, EMBEDDED COMPONENTS AND OPENINGS
a. THE CONSTRUCTOR SHALL COORDINATE AND CROSS-CHECK ARCHITECTURAL, BUILDING & ELECTRICAL DRAWINGS FOR OPENINGS, SLEEVES, ANCHORS, HANGERS, AND OTHER ITEMS RELATED TO CONCRETE WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THE PROPER LOCATION BEFORE PLACING CONCRETE.
b. PROVIDE FORMED OPENINGS WHERE REQUIRED FOR WORK TO BE EMBEDDED IN AND PASSING THROUGH CONCRETE MEMBERS.
c. COORDINATE WORK OF OTHER SECTIONS IN FORMING AND SETTING OPENING, SLOTS, RECESSES, CHASES, SLEEVES, BOLTS, ANCHORS, AND OTHER INSERTS.
d. INSTALL CONCRETE ACCESSORIES STRAIGHT, LEVEL AND PLUMB.
2. REINFORCEMENT PLACEMENT
a. PLACEMENT REINFORCEMENT, SUPPORTED AND SECURED AGAINST DISPLACEMENT.
b. ENSURE REINFORCING IS CLEAN, FREE OF LOOSE SCALE, DIRT, OR OTHER FOREIGN COATINGS.
c. WELDING IS PROHIBITED ON REINFORCING STEEL AND EMBEDMENTS.
d. MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE THREE INCHES (3") UNLESS OTHERWISE NOTED.
e. CONCRETE COVER FROM TOP OF FOUNDATION TO ENDS OF VERTICAL REINFORCEMENT SHALL NOT EXCEED THREE INCHES (3") NOR BE LESS THAN TWO INCHES (2").
3. PLACING CONCRETE
a. VIBRATE ALL CONCRETE.
b. ALL CONCRETE WORK SHALL ADHERE TO THE LATEST A.C.I. STANDARDS FOR WINTER POURING AND CURING PROCEDURE IF SEASONAL CONDITIONS APPLY.
4. CURING
a. AFTER PLACEMENT, PROTECT CONCRETE FROM PREMATURE DRYING.
b. MAINTAIN CONCRETE WITH MINIMAL MOISTURE LOSS AT RELATIVELY CONSTANT TEMPERATURE FOR A PERIOD NECESSARY FOR HYDRATION OF CEMENT AND HARDENING OF CONCRETE.
5. PROVIDE HAND RUBBED SMOOTH FINISH TO ALL EXPOSED VERTICAL FORMED CONCRETE SURFACES.
6. FIELD QUALITY CONTROL
a. SUBMIT THREE (3) CONCRETE TEST CYLINDERS - TAKEN FOR EVERY 15 CUBIC YARD OR LESS. SUBMIT CONCRETE TESTS TO THE PROJECT MANAGER IN ACCORDANCE WITH ASTM, C-31 AND C-39.
b. SUBMIT ONE (1) ADDITIONAL TEST CYLINDER - TAKEN DURING COLD WEATHER POURS, AND CURED ON JOB SITE UNDER SAME CONDITIONS AS CONCRETE IT REPRESENTS.
c. SUBMIT ONE (1) SLUMP TEST - TAKEN FOR EACH SET OF TEST CYLINDERS TAKEN.
7. DEFECTIVE CONCRETE: MODIFY OR REPLACE CONCRETE NOT CONFORMING TO REQUIRED LINES, DETAILS OR ELEVATIONS AT COST OF GC, AS DIRECTED BY ARCHITECT/ENGINEER.



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LOC. # 278150

HARTLAND EAST

COVENTRY LANE HARTLAND, WI 53029

Table with 2 columns: DRAWN BY: BTE, CHECKED BY: TAZ, DATE: 12/02/15, PROJECT #: 33-1912

SHEET TITLE SPECIFICATIONS

SHEET NUMBER SP-1

DIVISION 5: METALS

PART 1 - GENERAL

- 1. SECTION INCLUDES:
STRUCTURAL STEEL FRAMING MEMBERS, BASE PLATES, PLATES, BARS, AND GROUTING UNDER BASE PLATES.
- 2. SUBMITTALS:
SHOP DRAWINGS: INDICATE SIZES, SPACING, AND LOCATIONS OF STRUCTURAL MEMBERS, OPENINGS, CONNECTIONS, CAMBERS, LOADS, AND WELDED SECTIONS.
- 3. QUALITY ASSURANCE
 - A. FABRICATE STRUCTURAL STEEL MEMBERS IN ACCORDANCE WITH AISC SPECIFICATIONS FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
 - B. PERFORM DESIGN UNDER DIRECT SUPERVISION OF A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE.

PART 2 - PRODUCTS

- 1. MATERIALS:
 - A. STRUCTURAL STEEL MEMBERS: ASTM A572, GRADE 50
 - B. STRUCTURAL TUBING: ASTM A500, GRADE B
 - C. PIPE: ASTM A53, TYPE E OR S, GRADE B
 - D. BOLTS, NUTS, AND WASHERS: ASTM A325
 - E. ANCHOR BOLTS: ASTM A307
 - F. WELDING MATERIALS: AWS 01.1, TYPE REQUIRED FOR MATERIALS BEING WELDED
- G. GROUT: NON - SHRINK TYPE, PREMIXED COMPOUND CONSISTING OF NONMETALLIC AGGREGATE, CEMENT, WATER REDUCING AND PLASTICIZING ADDITIVES, CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 7000 PSI AT 28 DAYS.
- H. SHOP AND TOUCH-UP PRIMER: SSPC 15, TYPE 1, RED OXIDE
- I. TOUCH-UP PRIMER FOR GALV. SURFACES ZINC RICH TYPE

- 2. FABRICATION: CONTINUOUSLY SEAL JOINTED MEMBERS BY CONTINUOUS WELDS. GRIND EXPOSED WELDS SMOOTH.
- 3. FINISH:
 - A. PREPARE STRUCTURAL COMPONENT SURFACES IN ACCORDANCE WITH SSPC SP-1 TO SP-10 PROCEDURES.
 - B. STRUCTURAL STEEL MEMBERS SHALL BE HOT DIPPED GALVANIZED.

PART 3 - EXECUTION

- 1. EXAMINATION AND PREPARATION:
VERIFY THAT THE FIELD CONDITIONS ARE ACCEPTABLE.
- 2. ERECTION:
 - A. ALLOW FOR ERECTION LOADS. PROVIDE TEMPORARY BRACING TO MAINTAIN FRAMING IN ALIGNMENT UNTIL COMPLETION OF ERECTION AND INSTALLATION OF PERMANENT BRIDGING AND BRACING.
 - B. FIELD WELD COMPONENTS INDICATED ON SHOP DRAWINGS.
 - C. DO NOT FIELD CUT OR ALTER STRUCTURAL MEMBERS WITHOUT APPROVAL OF THE ARCHITECT/ENGINEER.
 - D. AFTER ERECTION, TOUCH-UP WELDS, ABRASIONS, AND SURFACES NOT SHOP PRMED OR GALVANIZED WITH TOUCH-UP PRMERS AS SPECIFIED UNDER SECTION 05000, OMETALS, PART 2 - PRODUCTS, H & I. SURFACES TO BE IN CONTACT WITH CONCRETE NOT INCLUDED.
- 3. FIELD QUALITY CONTROL:
FIELD INSPECTION OF MEMBERS, CONNECTIONS, WELDS, AND TOURQUING

DIVISION 16: ELECTRICAL

SECTION 16050 - BASIC ELECTRICAL MATERIALS AND METHODS

- 1. CONTRACTOR SHALL REVIEW THE CONTRACT DOCUMENTS PRIOR TO ORDERING THE ELECTRICAL EQUIPMENT AND STARTING THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT LISTING ANY DISCREPANCIES OR CONFLICTING INFORMATION.
- 2. ELECTRICAL PLANS, DETAILS AND DIAGRAMS ARE DIAGRAMMATIC ONLY. VERIFY EXACT LOCATIONS AND MOUNTING HEIGHTS OF ELECTRICAL EQUIPMENT WITH OWNER PRIOR TO INSTALLATION.
- 3. EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, JUNCTION BOX, SWITCH BOX, ETC. THE TYPE OF TAGGING METHODS SHALL BE IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.).
- 4. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN GOOD WORKING CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED "J" WHERE APPLICABLE. MATERIALS SHALL MEET WITH APPROVAL OF ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, NBFU, AND "UL" LISTED.
- 5. ALL CONDUIT SHALL HAVE A PULL CORD.
- 6. PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF TH JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, AND CIRCUITS.
- 7. ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED, AND A MINIMUM OF 10,000 A.I.C.
- 8. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY UBC, NEC AND ALL APPLICABLE CODES.
- 9. PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
- 10. PLASTIC PLATES FOR ALL SWITCHES, RECEPTACLES, TELEPHONE AND BLANKED OUTLETS SHALL HAVE ENGRAVED LETTERING WHERE INDICATED ON THE DRAWINGS. WEATHERPROOF RECEPTACLES SHALL HAVE SIERRA #WPD-8 LIFT COVERPLATES.

SECTION 1640 - SERVICE AND DISTRIBUTION

- 1. WIRE AND CABLE CONDUCTORS SHALL BE COPPER, 600V, TYPE THHN OR THWN, WITH A MIN. SIZE OF #12 AWG, COLOR CODED. ALL RECTIFIER DROPS SHALL BE STRANDED TO ACCEPT CRIMP CONNECTORS.
- 2. ALL CHEMICAL GROUND RODS SHALL BE "UL" APPROVED.
- 3. METER SOCKET AMPERES, VOLTAGE, NUMBER OF PHASES SHALL BE AS NOTED ON THE DRAWINGS. MANUFACTURED BY MILBANK OR APPROVED EQUAL, AND SHALL BE UTILITY COMPANY APPROVED.
- 4. CONDUIT:
 - A. RIGID CONDUIT SHALL BE U.L LABEL GALVANIZED ZINC COATED WITH GALVANIZED ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE ½ LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.
 - B. ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL, FITTING SHALL BE GLAND RING COMPRESSION TYPE.
 - C. FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L LISTED LABEL AND MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE. ALL FLEXIBLE CONDUITS SHALL HAVE FULL LENGTH GROUND WIRE.
 - D. ALL UNDERGROUND CONDUIT SHALL BE AS NOTED ON THE DRAWINGS AT A MINIMUM DEPTH OF 42" BELOW GRADE. IT IS REQUIRED AND WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO NOTIFY J.U.L.I.E. AT 1-800-892-0123 OR OTHER SUCH NOTIFYING AGENCY FORTY-EIGHT (48) HOURS PRIOR TO DIGGING.
- 5. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS ARE TO BE PAID BY THE CONTRACTOR.
- 6. ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS WITH WHITE ON BLUE BACKGROUND LETTERING (MINIMUM LETTER HEIGHT SHALL BE ONE FORTH INCH (1/4')). NAMEPLATES SHALL BE FASTENED WITH STAINLESS STEEL SCREWS, NOT ADHESIVE.
- 7. UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL POTENTIAL GROUNDING TESTS BY AN INDEPENDENT TESTING SERVICE ENGAGED BY THE CONTRACTOR SHALL BE SUBMITTED FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION.
- 8. GROUNDING ELECTRODE SYSTEM
 - A. PREPARATION
 - 1. SURFACE PREPARATION: ALL CONNECTIONS SHALL BE MADE TO BARE METAL. ALL PAINTS SURFACES SHALL BE FIELD INSPECTED AND MODIFIED TO ENSURE PROPER CONTACT. NO WASHERS ARE ALLOWED BETWEEN THE ITEMS BEING GROUND. ALL CONNECTIONS ARE TO HAVE A NO-OXIDIZING GENT APPLIED PRIOR TO INSTALLATION.
 - 2. GROUND BAR PREPARATION ALL COPPER GROUND BARS SHALL BE CLEANED, POLISHED AND A NON-OXIDIZING AGENT APPLIED. NO FINGERPRINTS OR DISCOLORED COPPER WILL BE PERMITTED.
 - 3. SLEEVES: ALL GROUNDING CONDUCTORS SHALL RUN THROUGH PVC SLEEVES WHEREVER CONDUCTORS RUN THROUGH WALLS, FLOORS OR CEILINGS. IF CONDUCTORS MUST RUN THROUGH EMIT, BOTH ENDS OF CONDUIT SHALL BE GROUNDED. SEAL BOTH ENDS OF CONDUIT WITH SILICONE CAULK.
 - B. GROUND BARS
 - 1. ALL GROUND BARS SHALL BE ONE FORTH INCH (1/4") THICK TINNED COPPER PLATE AND OF AND OF SIZE INDICATED ON DRAWINGS.
 - 2. ALL CONNECTIONS TO THE GROUND BAR SHALL OBSERVE THE FOLLOWING SEQUENCE:
 - A. BOLT-HEAD
 - B. 2-HOLE LUG
 - C. TINNED COPPER BUSS BAR
 - D. STAR WASHER
 - E. NUT
 - C. EXTERNAL CONNECTIONS
- D. GROUND RODS
 - 1. ALL BURIED GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS. CONNECTIONS SHALL INCLUDE ALL CABLE TO CABLE, SPLICES, TEE'S, CROSSES, ETC. ALL CABLE TO GROUND RODS, GROUND ROD SPLICES AND LIGHTNING PROTECTION SYSTEMS ARE TO BE AS INDICATED. ALL MATERIALS USED (MOLDS, WELDING METAL, TOOLS, ETC.) SHALL BE BY "CADWELD" AND INSTALLED PER MANUFACTURER'S RECOMMENDED PROCEDURES.
 - 2. ALL ABOVE GRADE GROUNDING AND BONDING CONDUCTORS SHALL BE CONNECTED BY TWO HOLE CRIMP TYPE (COMPRESSION) CONNECTIONS (EXCEPT FOR THE ACEG AND GROUND ROD) MECHANICAL CONNECTIONS, FITTINGS OR CONNECTIONS THAT DEPEND SOLELY ON SOLDIER SHALL NOT BE USED. ALL CABLE TO CABLE CONNECTIONS SHALL BE HIGH PRESSURE DOUBLE CRIMP TYPE CONNECTIONS. CONNECTIONS TO STRUCTURAL STEEL SHALL BE EXOTHERMIC WELDS.
- E. GROUND RODS
 - ALL GROUND RODS SHALL BE STANDARD TINNED SOLID BARE COPPER ANNEALED, AND OF SIZE INDICATED ON DRAWINGS UNLESS NOTED OTHERWISE.
- F. LUGS
 - 1. LUGS SHALL BE 2 - HOLE, LONG BARREL, STRAND COPPER UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS. LUGS SHALL BE THOMAS AND BETTS SERIES #548 _BE OR EQUIVALENT
 - A. 535 MCM DLO 54880BE
 - B. 262 MCM DLO 54872BE
 - C. #1/0 DLO 54862BE
 - D. #4/0 THWN AND BARE 54866BE
 - E. #2/0 THWN 54862BE
 - F. #2 THHN 54207BE
 - G. #6 DLO 54205BE

- 2. WHEN THE DIRECTION OF THE CONDUCTOR MUST CHANGE, IT SHALL BE DONE GRADUALLY. THE CURVATURE OF THE TURN SHALL BE DONE IN ACCORDANCE WITH THE FOLLOWING CHART:

	GROUNDING CONDUCTOR SIZE	MINIMUM BENDING RADIUS TO INSIDE EDGE
NO.	6 AWG TO NO. 4 AWG	6 INCHES
NO.	2 AWG TO NO. 1/0 AWG	8 INCHES
NO.	2/0 AWG TO 4/0 MCM	12 INCHES
	250 MCM TO 750 MCM	24 INCHES

- G. GROUND RING
 - 1. THE EXTERNAL GROUND RING ENCIRCLING THE TOWER (IF APPLICABLE) AND BETWEEN BETWEEN THE EQUIPMENT SHELTER PLATFORM ANCHORS SHALL BE MINIMUM NO. 2 A.W.G SOLID TINNED BARE COPPER CONDUCTOR IN DIRECT CONTACT WITH THE EARTH AT THE DEPTH INDICATED ON THE DRAWINGS. CONDUCTOR BENDS SHALL HAVE A MINIMUM BENDING RADIUS OF EIGHT INCHES (8").

- 2. ALL EXTERNAL GROUND RINGS ARE TO BE JOINED TOGETHER AND ALL CONNECTIONS MUST BE CADWELDED. NO LUNGS OR CLAMPS WILL BE ACCEPTED.
- H. FENCE/GATE
 - GROUND EACH GATE POST, CORNER POST AND GATE AS INDICATED ON DRAWING GROUND CONNECTIONS TO FENCE POST AND ALL OTHER CONNECTIONS FOR THE GROUND GRID SYSTEM SHALL BE MADE BY EXOTHERMIC WELD PROCESS, AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES, AND SPRAYED WITH COLD-GALVANIZED PAINT.

- 3. I.E.E.E. FALL POTENTIAL TESTS

- A. FOR RAW LAND SITE
 - 1. GROUND TESTS SHALL BE PERFORMED AS INDICATED ON DRAWINGS. A BIDDLE GROUND OHMER OR THE METHOD OF USING TWO AUXILIARY GROUND RODS (AS DESCRIBED IN I.E.E.E. STANDARDS NO. 81-1983, PART 1) MAY BE USED. THE I.E.E.E. METHOD REQUIRES THE USE OF AN A.C. TEST CURRENT. THE AUXILIARY TEST RODS MUST BE SUFFICIENTLY FAR AWAY FROM THE ROD UNDER TEST SO THAT THE REGIONS IN WHICH THEIR RESISTANCE IS LOCALIZED DO NOT OVERLAP. THE TEST POINT WILL BE GROUND ROD AND WILL CONSIST OF THE THREE POINT FALL OF POTENTIAL MEGGER TEST METHOD, USING THE BIDDLE NULL-BALANCE EARTH TESTER (MEGGER #250220-2 OR EQUIVALENT)
 - 2. CONTRACTOR TO CONDUCT GROUND RESISTANCE TEST IN THE FORMAT AS FOLLOWS:
 - B. EQUIPMENT PAD
 - 1. FIRST TEST - SHALL BE WITH FOUR GROUND RODS INSTALLED, ONE AT EACH CORNER OF THE PAD BUT NOT CONNECTED TO THE MAIN GROUNDING BUS. FURNISH WIRE TO CONNECT (TEMPORARY CLAMP) ALL FOUR GROUND RODS TOGETHER TO MAKE A SYSTEM TEST AFTER EACH ROD IS INDIVIDUALLY TESTED. IF ANY INDIVIDUAL ROD TESTS 35 OHMS OR MORE, THE ELECTRICAL CONTRACTOR AND OWNER'S REPRESENTATIVE SHOULD BE NOTIFIED SO THAT THE ROD CAN BE DRIVEN DEEPER UNTIL ALL FOUR RODS HAVE A RESISTANCE OF 10 OHMS OR LESS ON A DRY DAY.
 - 2. SECOND TEST- SHALL BE WITH THE GROUND RODS CONNECTED, WITH DRY SOIL AND WHEN NO STANDING WATER HAS BEEN PRESENT FOR THE PAST TEN (10) DAYS. THE MAXIMUM ALLOWABLE READING IS 5 OHMS TO GROUND. IF THE RESISTANCE OF THE ENTIRE SYSTEM EXCEEDS 5 OHMS, NOTIFY THE CONTRACTOR AND OWNER'S REPRESENTATIVE SO THAT ADDITIONAL AND/OR DEEPER RODS CAN BE INSTALLED.
- C. TOWER
 - 1. FIRST TEST - SHALL BE WITH THREE GROUND RODS INSTALLED (MINIMUM), EQUALLY SPACED AROUND THE TOWER FOUNDATION, BUT NOT CONNECTED TO THE SHELTER PAD EXTERNAL GROUND RING. FURNISH WIRE TO CONNECT (TEMPORARY CLAMP) ALL THREE GROUND RODS TOGETHER TO MAKE A SYSTEM TEST AFTER EACH ROD IS INDIVIDUALLY TESTED. IF ANY INDIVIDUAL ROD TESTS 25 OHMS OR MORE, NOTIFY THE CONTRACTOR AND OWNER'S REPRESENTATIVE SO THAT THE ROD CAN BE DRIVEN DEEPER UNTIL ALL THREE (3) RODS HAVE A RESISTANCE OF 10 OHMS OR LESS ON A DRY DAY.
 - 2. SECOND TEST- SHALL BE WITH THE GROUND RODS CONNECTED, WITH DRY SOIL AND WHEN NO STANDING WATER HAS BEEN PRESENT FOR THE PAST (10) DAYS, THE MAXIMUM ALLOWABLE READING IS 5 OHMS THE ELECTRICAL CONTRACTOR AND OWNER'S REPRESENTATIVE SHOULD BE NOTIFIED SO THAT EITHER ADDITIONAL AND/OR DEEPER RODS CAN BE INSTALLED.
 - D. EQUIPMENT PAD AND TOWER
 - 1. AFTER THE EQUIPMENT PAD AND TOWER GROUND RESISTANCE TEST IS COMPLETED, CONTRACTOR SHALL TIE EQUIPMENT PAD EXTERNAL GROUND RING AND TOWER EXTERNAL GROUND RING TOGETHER. AFTER FIRST AND SECOND TEST ALL CONNECTIONS MUST BE MADE USING EXOTHERMIC WELD. NO LUGS OR CLAMPS WILL BE ACCEPTED.
 - 2. AFTER ALL THE EXTERNAL GROUND RINGS ARE TIED TOGETHER, COMPETE A MEGGER CHECKER OF THE GROUND SYSTEM SHOULD BE DONE. THE MAXIMUM ALLOWABLE LEADING IS 5 OHMS TO GROUND.

- 10. GROUNDING RESISTANCE TEST REPORT
 - UPON COMPLETION OF THE TESTING FOR EACH SITE, A TEST REPORT SHOWING RESISTANCE IN OHMS WITH AUXILIARY POTENTIAL ELECTRODES AT 5 FEET AND 10 FEET INTERVALS UNTIL THE AVERAGE RESISTANCE STARTS INCREASING AND ALSO NOTE THAT 10-15 PHOTOS MUST BE TAKEN TO PROOF ENTIRE EXTERNAL GROUND RING SYSTEM BEFORE BACKFILL. TWO (2) SETS OF TEST DOCUMENTS AREA OF THE INDEPENDENT TESTING SERVICE TO BE BOUND AND SUBMITTED WITHIN ONE (1) WEEK OF WORK COMPLETION.

SECTION 16503 - POLES, POSTS, AND STANDARDS (SINGLE MAST AND SELF SUPPORTING TOWERS)

- 1. GENERAL
 - A. LIGHTNING ROD AND EXTENSION PIPE INCLUDING ALL APPURTENANCES, TO BE FURNISHED BY OWNER, IF REQUIRED
 - B. PROVIDE TEMPORARY LIGHTING FOR TOWER AS PER FAA REGULATIONS DURING CONSTRUCTION, IF REQUIRED.
 - C. GROUNDING:
 - GROUND TOWER WITH A MINIMUM OF #2 AWG TINNED SOLID BARE COPPER CONDUCTOR CADWELDED TO TOWER BASE PLATE. TWO (2) GROUNDING LEADS PER TOWER BASE PLATE.

NO EXOTHERMIC WELDS SHALL BE ATTACHED DIRECTLY TO THE MONOPOLE TOWER SHAFT

SECTION 16745- TELECOMMUNICATIONS WIRING COMPONENT (COAXIAL ANTENNA CABLE)

- 1. GENERAL
 - A. ALL MATERIALS, PRODUCTS OR PROCEDURES INCORPORATED INTO WORK SHALL BE NEW AND OF STANDARD COMMERCIAL QUALITY.
 - B. CERTAIN MATERIALS AND PRODUCTS WILL BE SUPPLIED BY THE OWNER (REFER TO GENERAL CONDITIONS FOR THE LIST OF OWNER FURNISHED EQUIPMENT, MATERIALS AND SUPPLIES FOR THESE ITEMS). THE CONTRACTOR IS RESPONSIBLE FOR PICKUP AND DELIVERY OF ALL SUCH MATERIALS
 - C. ALL OTHER MATERIALS AND PRODUCTS SPECIFIED IN THE CONTRACT DOCUMENTS SHALL BE SUPPLIED BY THE CONTRACTOR.
 - 2. MATERIALS
 - a. COAXIAL CABLE:
 - 1. INSTALL COAXIAL CABLE AND TERMINATIONS BETWEEN ANTENNAS AND EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS WITH COAXIAL CABLES SUPPORTED AT NO MORE THAN 3'-0" O.C. WEATHERPROOF ALL CONNECTORS BETWEEN THE ANTENNA AND EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE THREE FEET (3') IN EXCESS OF EQUIPMENT LOCATION UNLESS OTHERWISE STATED.
 - 2. ALL COAX RUN LENGTHS GREATER THAN 175 FEET SHALL BE 1-5/8", ALL COAX. RUN LENGTH BETWEEN 101 FEET AND 174 FEET SHALL BE 1-1/4", AND IN LENGTH LESS THAN OR EQUAL TO 100 FEET SHALL BE 7/8".
 - 3. ANTENNA AND COAXIAL CABLE GROUNDING
 - a. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS OF COAXIAL CABLE (NOT WITHIN BENDS)
 - 4. COAXIAL CABLE IDENTIFICATION
 - a. TO PROVIDE EASY IDENTIFICATION AND UNIFORM MARKING OF ANTENNA CABLING, PLASTIC TAGS SHALL BE USED AT THE FOLLOWING LOCATIONS:
 - 1. FIRST LOCATION IS AT THE END OF THE COAX NEAREST THE ANTENNA (WHERE THE COAXIAL CABLE AND JUMPER ARE CONNECTED).
 - 2. SECOND LOCATION IS INSIDE THE EQUIPMENT SHELTER NEAR THE WAVEGUIDE ENTRY PORT.
 - b. USE ANDREW CABLE TIES (PT. # 7290) TO SECURE IDENTIFICATION TAGS.
5. TESTING
 - LESSEE SHALL PROVIDE AN INDEPENDENT TESTING AGENCY TO PERFORM THE COAXIAL SWEEP TEST & REPORT. THE CONTRACTOR IS TO PROVIDE ONE CLIMBER / QUALIFIED PERSONNEL TO ASSIST IN ANY REPAIRS AND WEATHERPROOFING ONCE THE TEST IS COMPLETE. THE CONTRACTOR IS TO PROVIDE LESSEE WITH A MINIMUM OF 48 HOURS NOTICE PRIOR TO THE TIME OF THE SWEEP TEST.

CHICAGO SMSA
limited partnership
d/b/a VERIZON WIRELESS

TERRA
COMMUNICATIONS CORPORATION, LTD.
600 BUSSE HIGHWAY
PARK RIDGE, IL 60068
PH: 847-698-6400
FAX: 847-698-6401

REVISIONS		DATE	BY
NO.	DESCRIPTION ISSUED FOR REVIEW	06/08/17	TJS

LOC. # 278150

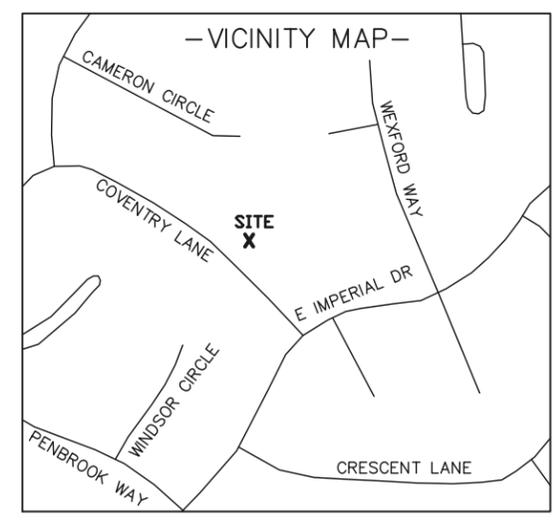
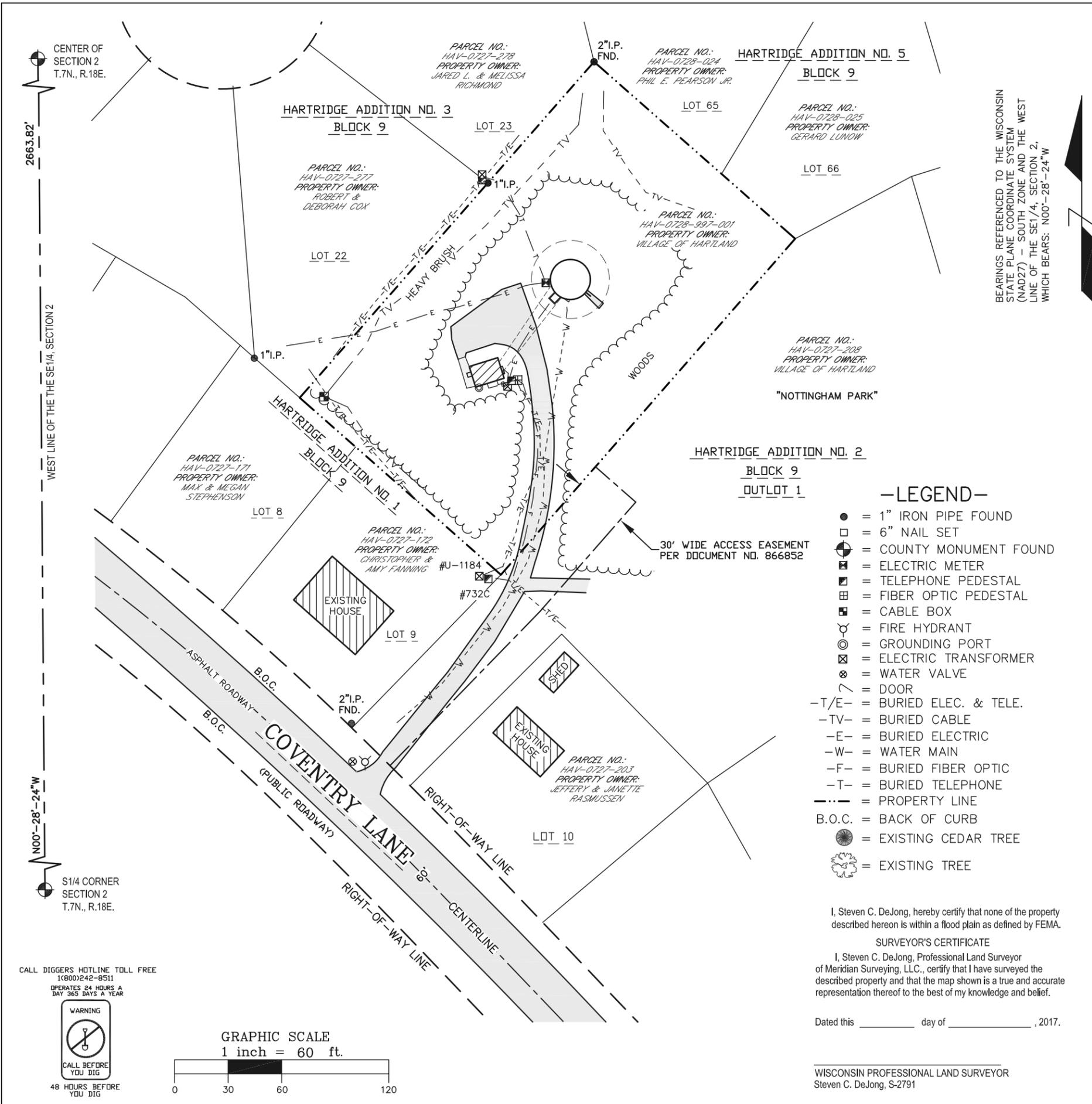
HARTLAND EAST

COVENTRY LANE
HARTLAND, WI 53029

DRAWN BY:	BTE
CHECKED BY:	TAZ
DATE:	12/02/15
PROJECT #:	33-1912

SHEET TITLE
SPECIFICATIONS

SHEET NUMBER
SP-2



BEARINGS REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM (NAD27) - SOUTH ZONE AND THE WEST LINE OF THE SE1/4, SECTION 2, WHICH BEARS: N00°-28'-24"W

EXISTING WATER TOWER BASE
 LATITUDE: 43°-05'-35.63"
 LONGITUDE: 88°-19'-56.11"
 (Per North American Datum of 83/91)
 Top of Antenna Elevation: 1127.5'
 (Highest Point)
 Top of Tower Elevation: 1120.9'
 Ground Elevation: 1018.0'
 (Per North American Vertical Datum of 1988)

- LEGEND-**
- = 1" IRON PIPE FOUND
 - = 6" NAIL SET
 - ⊙ = COUNTY MONUMENT FOUND
 - ⊠ = ELECTRIC METER
 - ⊡ = TELEPHONE PEDESTAL
 - ⊞ = FIBER OPTIC PEDESTAL
 - ⊞ = CABLE BOX
 - ⊕ = FIRE HYDRANT
 - ⊙ = GROUNDING PORT
 - ⊠ = ELECTRIC TRANSFORMER
 - ⊗ = WATER VALVE
 - ⌋ = DOOR
 - T/E- = BURIED ELEC. & TELE.
 - TV- = BURIED CABLE
 - E- = BURIED ELECTRIC
 - W- = WATER MAIN
 - F- = BURIED FIBER OPTIC
 - T- = BURIED TELEPHONE
 - - - = PROPERTY LINE
 - B.O.C. = BACK OF CURB
 - ⊙ = EXISTING CEDAR TREE
 - ⊕ = EXISTING TREE

SURVEY NOTES:

-THE LOCATION OF THE EXISTING UTILITIES, AS SHOWN ON THIS PLAN, ARE APPROXIMATE ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ACTUAL LOCATION AND DEPTH OF ALL EXISTING UTILITIES. THE OWNER AND THE SURVEYOR SHALL NOT BE RESPONSIBLE FOR ANY OMISSION OR VARIATION FROM THE LOCATION SHOWN.

-DIGGERS HOTLINE TICKET NO. 20170404151.

-PRIVATE UTILITIES MARKED ON 2-01-2017.

-THIS IS NOT A BOUNDARY SURVEY OF THE PARENT PARCEL. THIS SURVEY REPRESENTS THE LEASE AREA AND EASEMENTS ONLY.

FEMA NOTE:
 -ACCORDING TO FEDERAL EMERGENCY AGENCY MAPS, THE PROPOSED TELECOMMUNICATIONS SITE IS LOCATED IN ZONE "X", COMMUNITY PANEL NO. 55133C0179H, DATED NOVEMBER 05 2014, AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. ZONE "X" IS DESIGNATED AS: "AREAS DETERMINED TO BE OUTSIDE OF 500-YEAR FLOOD PLAIN".

WETLAND NOTE:
 -THE PRESENCE AND LOCATION OF WETLANDS HAS NOT BEEN DETERMINED ON THIS PROPERTY. WETLANDS SHOULD ONLY BE DETERMINED BY ACTUAL FIELD DELINEATION PERFORMED BY A QUALIFIED WETLAND SPECIALIST.

I, Steven C. DeJong, hereby certify that none of the property described hereon is within a flood plain as defined by FEMA.

SURVEYOR'S CERTIFICATE

I, Steven C. DeJong, Professional Land Surveyor of Meridian Surveying, LLC., certify that I have surveyed the described property and that the map shown is a true and accurate representation thereof to the best of my knowledge and belief.

Dated this _____ day of _____, 2017.

WISCONSIN PROFESSIONAL LAND SURVEYOR
 Steven C. DeJong, S-2791

SURVEYED FOR:

600 Busse Highway
 Park Ridge, IL 60068
 OFFICE: (847) 698-6400
 FAX: (678) 444-4472

SURVEYED FOR:

1515 WOODFIELD ROAD
 SUITE 1400
 SCHAUMBURG, IL 60173

MERIDIAN
 SURVEYING, LLC

N8774 Firelane 1 Office: 920-993-0881
 Menasha, WI 54952 Fax: 920-273-6037

SITE NAME: **HARTLAND EAST**

SITE NUMBER: **278150**

SITE ADDRESS: **COVENTRY LANE
 HARTLAND, WI 53029**

PROPERTY/TOWER OWNER:
 VILLAGE OF HARTLAND
 210 COTTONWOOD AVENUE
 HARTLAND, WI 53029

PARCEL NO.:
 HAV-0728-997-001 (LEASE)
 HAV-0727-208 (EASE.)

ZONED: MUNI

DEED: DOCUMENT NO. 866852

LEASE EXHIBIT
 FOR
 VERIZON WIRELESS PERSONAL
 COMMUNICATIONS LP d/b/a VERIZON WIRELESS

BEING A PART OF THE SW1/4 OF THE
 SE1/4, SECTION 2, T.7N., R.18E.,
 VILLAGE OF HARTLAND,
 WAUKESHA COUNTY, WISCONSIN

NO.	DATE	DESCRIPTION	BY
2	2/2/17	Added Field Locates	J.D.
1	3/19/14	Preliminary Survey	A.E.

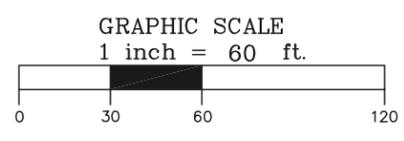
DRAWN BY: *JD* FIELD WORK DATE: *2/01/17*

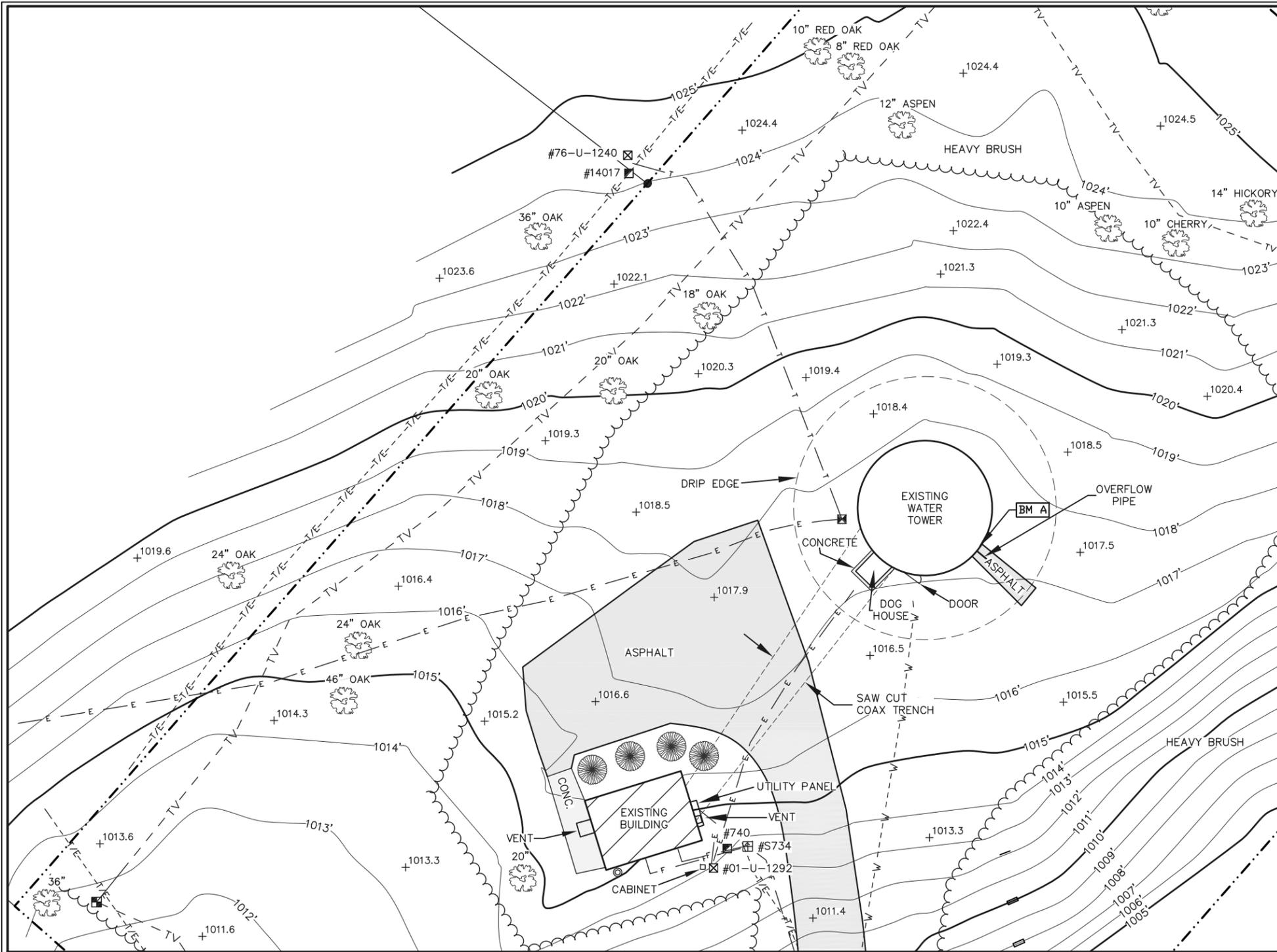
CHECKED BY: *S.C.D.* FIELD BOOK: *M-29 PG 62*

JOB NO.: *9299* SHEET *1* OF *3*

2663.82'
 WEST LINE OF THE SE1/4, SECTION 2
 2663.82'
 S1/4 CORNER SECTION 2 T.7N., R.18E.

CALL DIGGERS HOTLINE TOLL FREE
 1(800)242-8511
 OPERATES 24 HOURS A DAY 365 DAYS A YEAR





- LEGEND-**
- = 1" IRON PIPE FOUND
 - = 6" NAIL SET
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 - ⊙ = EXISTING TREE

SURVEYED FOR:

600 Busse Highway
Park Ridge, IL 60068
OFFICE: (847) 698-6400
FAX: (678) 444-4472

SURVEYED FOR:

1515 WOODFIELD ROAD
SUITE 1400
SCHAUMBURG, IL 60173

MERIDIAN
SURVEYING, LLC

N8774 Firelane 1 Office: 920-993-0881
Menasha, WI 54952 Fax: 920-273-6037

SITE NAME: **HARTLAND EAST**

SITE NUMBER: **278150**

SITE ADDRESS: **COVENTRY LANE
HARTLAND, WI 53029**

PROPERTY/TOWER OWNER:
VILLAGE OF HARTLAND
210 COTTONWOOD AVENUE
HARTLAND, WI 53029

PARCEL NO.:
HAV-0728-997-001 (LEASE)
HAV-0727-208 (EASE.)

ZONED: MUNI

DEED: DOCUMENT NO. 866852

LEASE EXHIBIT
FOR
VERIZON WIRELESS PERSONAL
COMMUNICATIONS LP d/b/a VERIZON WIRELESS

BEING A PART OF THE SW1/4 OF THE
SE1/4, SECTION 2, T.7N., R.18E.,
VILLAGE OF HARTLAND,
WAUKESHA COUNTY, WISCONSIN

NO.	DATE	DESCRIPTION	BY
2	2/2/17	Added Field Locates	J.D.
1	3/19/14	Preliminary Survey	A.E.

DRAWN BY: *JD* FIELD WORK DATE: *2/01/17*

CHECKED BY: *S.C.D.* FIELD BOOK: *M-29 PG 62*

JOB NO.: *9299* SHEET *2* OF *3*

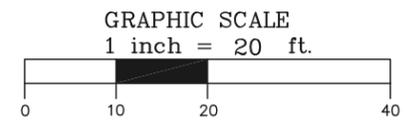
I, Steven C. DeJong, hereby certify that none of the property described hereon is within a flood plain as defined by FEMA.

SURVEYOR'S CERTIFICATE

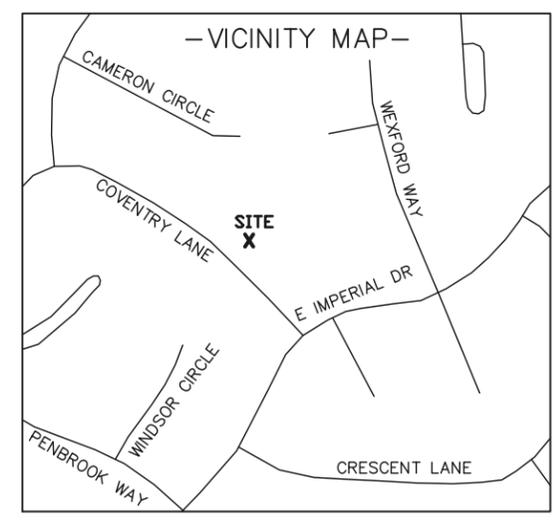
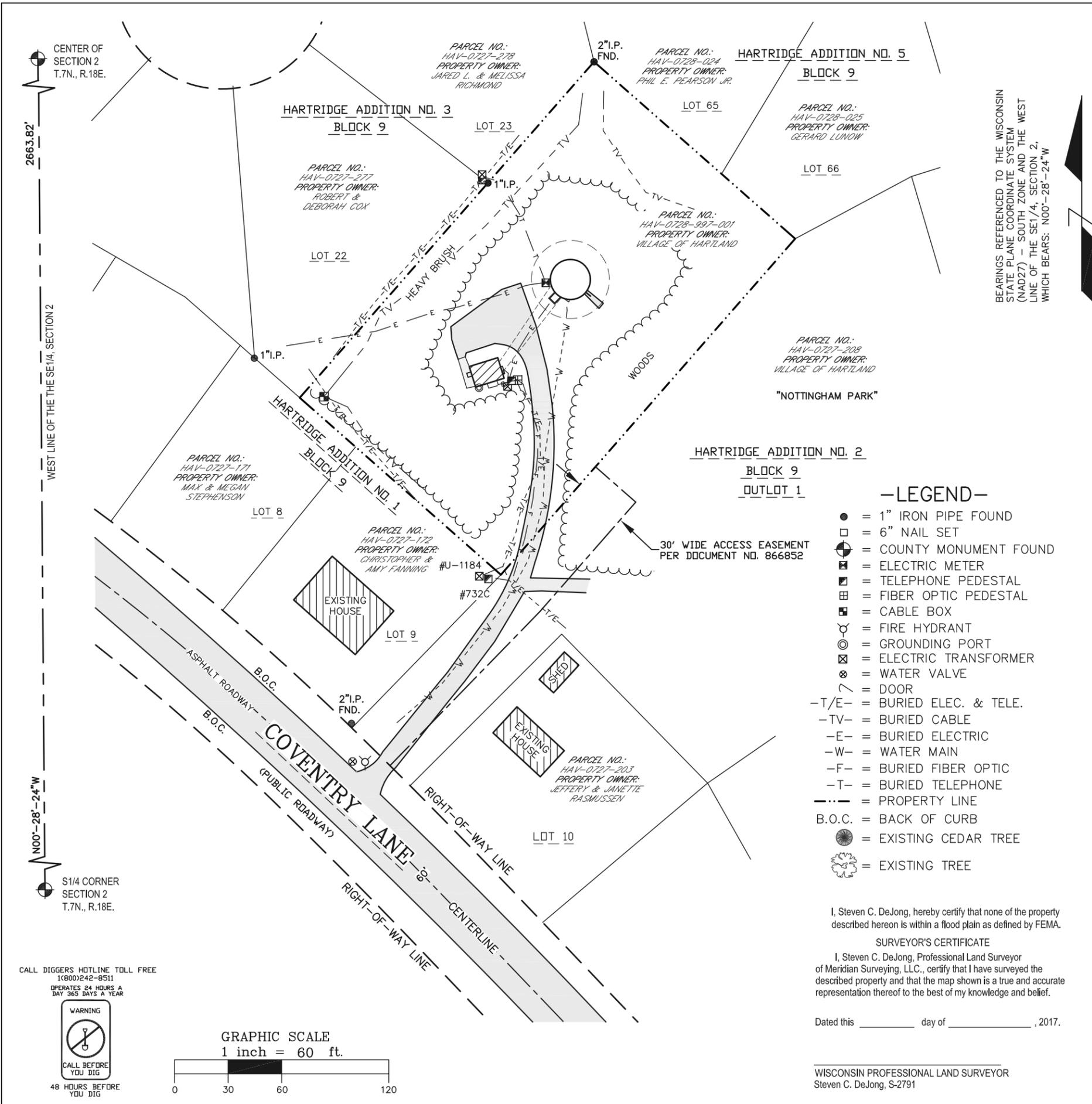
I, Steven C. DeJong, Professional Land Surveyor of Meridian Surveying, LLC., certify that I have surveyed the described property and that the map shown is a true and accurate representation thereof to the best of my knowledge and belief.

Dated this _____ day of _____, 2017.

BENCHMARK INFORMATION
SITE BENCHMARK: (BM A)
TOP OF WATER TOWER ANCHOR
BOLT NE OF OVERFLOW PIPE
ELEVATION: 1019.48'



BEARINGS REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM (NAD27) - SOUTH ZONE AND THE WEST LINE OF THE SE1/4, SECTION 2, WHICH BEARS: N00°-28'-24"W



BEARINGS REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM (NAD27) - SOUTH ZONE AND THE WEST LINE OF THE SE1/4, SECTION 2, WHICH BEARS: N00°-28'-24"W

EXISTING WATER TOWER BASE
 LATITUDE: 43°-05'-35.63"
 LONGITUDE: 88°-19'-56.11"
 (Per North American Datum of 83/91)
 Top of Antenna Elevation: 1127.5'
 (Highest Point)
 Top of Tower Elevation: 1120.9'
 Ground Elevation: 1018.0'
 (Per North American Vertical Datum of 1988)

- LEGEND-**
- = 1" IRON PIPE FOUND
 - = 6" NAIL SET
 - ⊙ = COUNTY MONUMENT FOUND
 - ⊠ = ELECTRIC METER
 - ⊡ = TELEPHONE PEDESTAL
 - ⊞ = FIBER OPTIC PEDESTAL
 - ⊞ = CABLE BOX
 - ⊕ = FIRE HYDRANT
 - ⊙ = GROUNDING PORT
 - ⊠ = ELECTRIC TRANSFORMER
 - ⊗ = WATER VALVE
 - ⌋ = DOOR
 - T/E- = BURIED ELEC. & TELE.
 - TV- = BURIED CABLE
 - E- = BURIED ELECTRIC
 - W- = WATER MAIN
 - F- = BURIED FIBER OPTIC
 - T- = BURIED TELEPHONE
 - - - = PROPERTY LINE
 - B.O.C. = BACK OF CURB
 - ⊙ = EXISTING CEDAR TREE
 - ⊕ = EXISTING TREE

SURVEY NOTES:

-THE LOCATION OF THE EXISTING UTILITIES, AS SHOWN ON THIS PLAN, ARE APPROXIMATE ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ACTUAL LOCATION AND DEPTH OF ALL EXISTING UTILITIES. THE OWNER AND THE SURVEYOR SHALL NOT BE RESPONSIBLE FOR ANY OMISSION OR VARIATION FROM THE LOCATION SHOWN.

-DIGGERS HOTLINE TICKET NO. 20170404151.

-PRIVATE UTILITIES MARKED ON 2-01-2017.

-THIS IS NOT A BOUNDARY SURVEY OF THE PARENT PARCEL. THIS SURVEY REPRESENTS THE LEASE AREA AND EASEMENTS ONLY.

FEMA NOTE:
 -ACCORDING TO FEDERAL EMERGENCY AGENCY MAPS, THE PROPOSED TELECOMMUNICATIONS SITE IS LOCATED IN ZONE "X", COMMUNITY PANEL NO. 55133C0179H, DATED NOVEMBER 05 2014, AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. ZONE "X" IS DESIGNATED AS: "AREAS DETERMINED TO BE OUTSIDE OF 500-YEAR FLOOD PLAIN".

WETLAND NOTE:
 -THE PRESENCE AND LOCATION OF WETLANDS HAS NOT BEEN DETERMINED ON THIS PROPERTY. WETLANDS SHOULD ONLY BE DETERMINED BY ACTUAL FIELD DELINEATION PERFORMED BY A QUALIFIED WETLAND SPECIALIST.

I, Steven C. DeJong, hereby certify that none of the property described hereon is within a flood plain as defined by FEMA.

SURVEYOR'S CERTIFICATE

I, Steven C. DeJong, Professional Land Surveyor of Meridian Surveying, LLC., certify that I have surveyed the described property and that the map shown is a true and accurate representation thereof to the best of my knowledge and belief.

Dated this _____ day of _____, 2017.

WISCONSIN PROFESSIONAL LAND SURVEYOR
 Steven C. DeJong, S-2791

SURVEYED FOR:

600 Busse Highway
 Park Ridge, IL 60068
 OFFICE: (847) 698-6400
 FAX: (678) 444-4472

SURVEYED FOR:

1515 WOODFIELD ROAD
 SUITE 1400
 SCHAUMBURG, IL 60173

MERIDIAN
 SURVEYING, LLC

N8774 Firelane 1 Office: 920-993-0881
 Menasha, WI 54952 Fax: 920-273-6037

SITE NAME: **HARTLAND EAST**

SITE NUMBER: **278150**

SITE ADDRESS: **COVENTRY LANE
 HARTLAND, WI 53029**

PROPERTY/TOWER OWNER:
 VILLAGE OF HARTLAND
 210 COTTONWOOD AVENUE
 HARTLAND, WI 53029

PARCEL NO.:
 HAV-0728-997-001 (LEASE)
 HAV-0727-208 (EASE.)

ZONED: MUNI

DEED: DOCUMENT NO. 866852

LEASE EXHIBIT
 FOR
 VERIZON WIRELESS PERSONAL
 COMMUNICATIONS LP d/b/a VERIZON WIRELESS

BEING A PART OF THE SW1/4 OF THE
 SE1/4, SECTION 2, T.7N., R.18E.,
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 WAUKESHA COUNTY, WISCONSIN

NO.	DATE	DESCRIPTION	BY
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DRAWN BY: *JD* FIELD WORK DATE: *2/01/17*

CHECKED BY: *S.C.D.* FIELD BOOK: *M-29 PG 62*

JOB NO.: *9299* SHEET *1* OF *3*

CENTER OF SECTION 2
 T.7N., R.18E.

2663.82'

WEST LINE OF THE SE1/4, SECTION 2

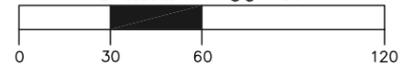
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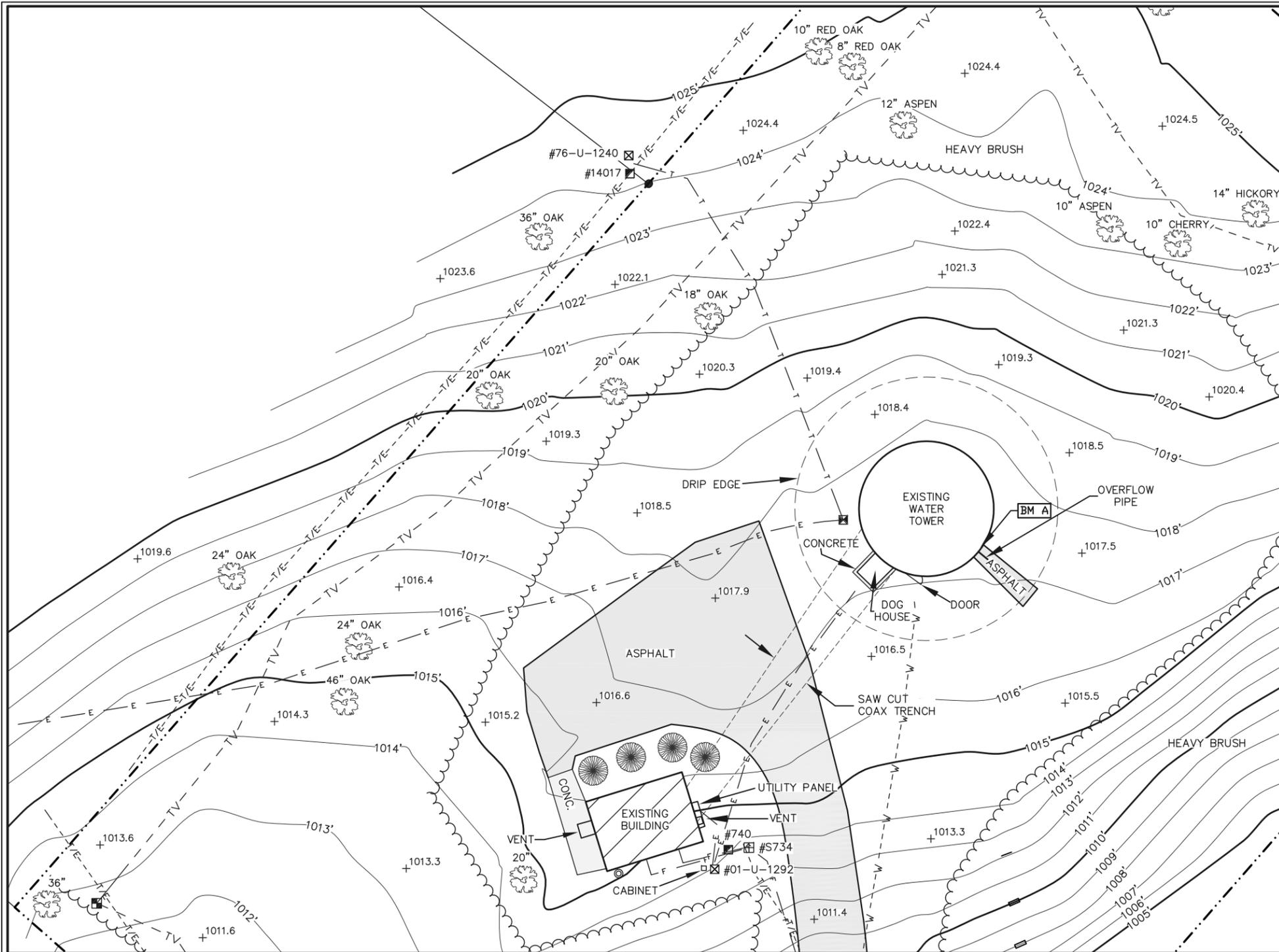
S1/4 CORNER
 SECTION 2
 T.7N., R.18E.

CALL DIGGERS HOTLINE TOLL FREE
 1(800)242-8511
 OPERATES 24 HOURS A
 DAY 365 DAYS A YEAR



GRAPHIC SCALE
 1 inch = 60 ft.





- LEGEND-**
- = 1" IRON PIPE FOUND
 - = 6" NAIL SET
 - ⊙ = COUNTY MONUMENT FOUND
 - ⊠ = ELECTRIC METER
 - ⊡ = TELEPHONE PEDESTAL
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SURVEYED FOR:

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Park Ridge, IL 60068
OFFICE: (847) 698-6400
FAX: (678) 444-4472

SURVEYED FOR:

1515 WOODFIELD ROAD
SUITE 1400
SCHAUMBURG, IL 60173

MERIDIAN
SURVEYING, LLC

N8774 Firelane 1 Office: 920-993-0881
Menasha, WI 54952 Fax: 920-273-6037

SITE NAME: **HARTLAND EAST**

SITE NUMBER: **278150**

SITE ADDRESS: **COVENTRY LANE
HARTLAND, WI 53029**

PROPERTY/TOWER OWNER:
VILLAGE OF HARTLAND
210 COTTONWOOD AVENUE
HARTLAND, WI 53029

PARCEL NO.:
HAV-0728-997-001 (LEASE)
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ZONED: MUNI

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VERIZON WIRELESS PERSONAL
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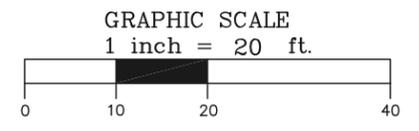
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BOLT NE OF OVERFLOW PIPE
ELEVATION: 1019.48'



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AARON C HOEPPNER
MICHELLE M HOEPPNER
810 E IMPERIAL DR
HARTLAND WI 53029

CARL ISLO
787 WINDSOR CIR
HARTLAND WI 53029-2625

COLETTE DORIS RICK
727 CAMERON CIR
HARTLAND WI 53029-2509

DAVID MARLOW
ALICIA MARLOW
797 WINDSOR CIR
HARTLAND WI 53029

DOUGLAS R CIURRO
N17W27357 LAKEFIELD DR
PEWAUKEE WI 53072

ERIC A RAHMEL
788 E IMPERIAL DR
HARTLAND WI 53029

HARTRIDGE HOMEOWNERS
ASSOCIATION INC
PO BOX 182
HARTLAND WI 53029

IMPERIAL LLC
W325N6872 NORTH LAKE DR
HARTLAND WI 53029-8510

JANET V SCHMITT
812 IMPERIAL CT
HARTLAND WI 53029

JOHN JENSON
LAURIE JENSON
736 MANSFIELD CIR
HARTLAND WI 53029

ALVIN MEISEL
JANICE MEISEL
816 IMPERIAL CT
HARTLAND WI 53029-2657

CHARLES HANSEN
CHRISTINE HANSEN
737 COVENTRY LN
HARTLAND WI 53029

DANE T JENSEN
ALLIE J JENSEN
720 COVENTRY LN
HARTLAND WI 53029-2610

DAVID UNTERWEGER
D UNTERWEGER
W334N5971 ROAD M
NASHOTAH WI 53058

EDWARD WEBSTER
JOANNE WEBSTER
832 E IMPERIAL DR
HARTLAND WI 53029

ERIC S DOESCHER
ELIZABETH H DOESCHER
734 CAMERON CIR
HARTLAND WI 53029

HARTRIDGE HOMEOWNERS
ASSOCIATION INC
PO BOX 182
HARTLAND WI 53029

JAKUB ARENDARCZYK
787 E IMPERIAL DR
HARTLAND WI 53029-2646

JEFFREY J RASMUSSEN
JANET I RASMUSSEN
W284N6574 HAWTHORNE RD
HARTLAND WI 53029

JOHN M MICHALAK
LISA M MICHALAK
721 COVENTRY LN
HARTLAND WI 53029

BARBARA L YDE-NOVY 2011 LIVING
TRUST
749 CAMBRIDGE CT
HARTLAND WI 53029

CHRISTOPHER FARIS
CINDY FARIS
765 WEXFORD WAY
HARTLAND WI 53029

DANIEL L ZASTROW
10228 BUNNY CT
HALES CORNERS WI 53130

DONALD R BISGARD
COLEEN A BISGARD
W151N7677 WOODVIEW DR
MENOMONEE FALLS WI 53051

EMILY L BUSCH
MICHAEL J THORPE
725 COVENTRY LN
HARTLAND WI 53029-2609

GERARD LUNOW
757 CAMBRIDGE CT
HARTLAND WI 53029

IMPERIAL LLC
W325N6872 NORTH LAKE DR
HARTLAND WI 53029-8510

JAMES T LAU
SUSAN M LAU
801 IMPERIAL CT
HARTLAND WI 53029-2657

JEFFREY W AND PATRICIA A HAYES
2016 LIVING TRUST
774 WEXFORD WAY
HARTLAND WI 53029-2536

JOYCEL HEINZELMANN
758 WEXFORD WAY
HARTLAND WI 53029

KARL D BAUMGARTNER
MICHELLE L BAUMGARTNER
781 WEXFORD WAY
HARTLAND WI 53029-2553

MARK A DUFEK
MALLORY K DUFEK
753 CAMBRIDGE CT
HARTLAND WI 53029-2508

MAX T STEPHENSON
MEGAN R STEPHENSON
N25W23255 PAUL RD
PEWAUKEE WI 53072-4074

PETER J AND SUSAN A BALZER
REVOCABLE LIVING TRUST
745 CAMBRIDGE CT
HARTLAND WI 53029-2508

REINALDO A SANTAELLA & NORA E
SANTELLA REV TRUST
731 MANSFIELD CIR
HARTLAND WI 53029

RICHARD SCHNITTKKE
KIMBERLY SCHNITTKKE
724 COVENTRY LN
HARTLAND WI 53029

SALVATORE V CRIVELLO
REBECCA L BRUENER
732 COVENTRY LN
HARTLAND WI 53029-2610

STEVEN JANQUART
STEPHANIE JANQUART
750 WEXFORD WAY
HARTLAND WI 53029

VERNON DEBORD
A DEBORD
773 WEXFORD WAY
HARTLAND WI 53029

VOULA PANAGOPOULOS
922 E IMPERIAL DR
HARTLAND WI 53029

KIMM S ROBINSON
KATHLEEN ROBINSON
740 COVENTRY LN
HARTLAND WI 53029

MARK OLSON
CARLA OLSON
825 WEXFORD CT
HARTLAND WI 53029

PERRY AND DELORES JANSEN TRUST
DATED
DECEMBER 4, 2014
243 SOMERSET GLN

PETER ZIMMERMANN
ROBYNN ZIMMERMANN
817 E IMPERIAL DR
HARTLAND WI 53029

REINHARD SAWALL REVOCABLE TRUST
W289N4756 WILD ROSE CT
HARTLAND WI 53029

ROBERT COX
DEBORAH COX
735 CAMERON CIR
HARTLAND WI 53029

SCOTT R POPELKA
LISA K POPELKA
736 CAMERON CIR
HARTLAND WI 53029-2509

THOMAS LAMP
GAIL LAMP
729 COVENTRY LN
HARTLAND WI 53029

VILLAGE OF HARTLAND
210 COTTONWOOD AVE
HARTLAND WI 53029

MARIE A GALEWSKI
798 WINDSOR CIR
HARTLAND WI 53029

MATTHEW J GEIER
782 WEXFORD WAY
HARTLAND WI 53029

PETER GUSTIN
STACEY GUSTIN
918 E IMPERIAL DR
HARTLAND WI 53029

RAYMOND J & RUTH A ROEGLIN 2005
LIVING TRUST
820 E IMPERIAL DR
HARTLAND WI 53029

RICHARD MISKO
SUE MISKO
733 COVENTRY LN
HARTLAND WI 53029

ROBERT RADULOVICH
NICKIE A RADULOVICH
766 WEXFORD WAY
HARTLAND WI 53029-2536

SEAN T STERNKOPF
JESSICA A STERNKOPF
735 WEXFORD WAY
HARTLAND WI 53029-2535

TIMOTHY S PENKERT
KIM M PENKERT
742 WEXFORD WAY
HARTLAND WI 53029-2536

VILLAGE OF HARTLAND
210 COTTONWOOD AVE
HARTLAND WI 53029-2017

Document Number	<u>CONDITIONAL USE PERMIT</u> [Verizon Wireless Personal Communications LP d/b/a Verizon Wireless - 734 Coventry Lane] Document Title
-----------------	--

THIS CONDITIONAL USE PERMIT is hereby granted this 24th day of July, 2017, by the Village of Hartland (hereinafter Village) to Verizon Wireless Personal Communications LP d/b/a Verizon Wireless (hereinafter “Grantee”) for the operation of a **utility substation for cellular or wireless communications** on the Village-owned property located at 734 Coventry Lane, more commonly referred to as the Coventry Lane Water Tower site.

RECITALS

WHEREAS, Grantee has applied for a conditional use permit (the “CUP”) pursuant to Sections 46-649 (3) and 46-847 of the Village of Hartland Code of Ordinances for the operation of a utility substation for cellular or wireless communications on the Village-owned water tower property located at 734 Coventry Lane, Hartland, Wisconsin, (the “Property”) more specifically described as:

Tax Key No. HAV 0728997001
Legal Description: Part of the southeast ¼ of section 2, Township 7 North, Range 18 East commencing at the east corner of Lot 9, Block 9 of the Hartridge Addition No 1 Subdivision thence north 49° 15' west 150 feet, thence north 40° 45' east 250 feet thence south 49° 15' east 150 feet thence south 40° 45' west 250 Ft to the point of beginning. Recorded in book 59 at page 447.
Owned by Village of Hartland
210 Cottonwood Ave
Hartland, WI 53029

Recording Area
Drafted By and Return Address David Cox Village of Hartland 210 Cottonwood Ave. Hartland, WI 53029
Parcel Identification Number
HAV 0728997001

WHEREAS, the Property is located in the I-1 Institutional Zoning District; and

WHEREAS, Section 46-649 (3) of the Village of Hartland Code of Ordinances provides that a utility substation use in the I-1 District is a conditional use; and

WHEREAS, Applicant has submitted all information as required under Section 46-847 of the Village of Hartland Code of Ordinances and has prepared a proposed agreement with the Village of Hartland related to the proposed use of the Property; and

WHEREAS, the Village Plan Commission reviewed the subject CUP application, site plan and intended operation and held a Public Hearing on July 17, 2017 pursuant to Section 46-848 of the Village of Hartland Code of Ordinances and recommended the following conditions of approval necessary to fulfill the purpose and intent of the Village Code of Ordinances:

1. Operation of the utility substation for cellular or wireless communications use consistent with the applicant's submissions and statements at public meetings,
2. Operation of the utility substation for cellular or wireless communications use in compliance with any and all agreements, licenses, permits or other permissions granted to the Grantee,
3. Entrance into a License Agreement or other appropriate instrument with the Village for the use of the property,
4. Installation and maintenance of the utility substation for cellular or wireless communications use and all needed utilities at no cost to the Village,
5. Installation and proper maintenance of landscape buffers at the discretion of the Village Public Works Director
6. Installations of the Grantee shall not interfere with the Village's access and operation of the Property
7. Prohibition of outside storage of materials or items on the site,
8. OTHER?; and

WHEREAS, the Village Board of Trustees has considered the Plan Commission's recommendations and has determined that the proposed conditional use and structures are in accordance with the purpose and intent of Chapter 46 of the Village Code of Ordinances and is found to be not hazardous, harmful, offensive or otherwise adverse to the environment or the value of the neighborhood or the community.

NOW THEREFORE, the Village Board of Trustees hereby approves the issuance of this conditional use permit to Verizon Wireless Personal Communications LP d/b/a Verizon Wireless for the operation of a utility substation for cellular or wireless communications at the Property, which conditional use permit shall be subject to the following conditions:

1. The conditional use permit granted hereunder is for the sole benefit of Verizon Wireless Personal Communications LP d/b/a Verizon Wireless.
2. The business activities permitted hereunder are limited to the operation of a utility substation for cellular or wireless communications.
3. All business activities conducted on the Property shall conform to this CUP and any approved License Agreement or permit and the Village of Hartland Code of Ordinances and other applicable state or federal regulations.
4. The foregoing recommended conditions of the Plan Commission are hereby included by reference as if set forth herein.

5. Changes subsequent to the initial issuance of this CUP shall require an amendment to this CUP.
6. This CUP shall terminate upon the occurrence of any of the following:
 - a. Upon Grantee failing to conduct business at the Property in substantial conformity with this CUP; or
 - b. Upon the cessation of the operations permitted under this CUP; or
 - c. Upon revocation in accordance with the Village Code; or
 - d. Upon termination of the License Agreement or other agreement between Grantee and the Village as it relates to use of the Property.
7. The operation of the utility substation for cellular or wireless communications may, at the Village's discretion and upon 90-days notice to the Grantee, be reviewed by the Village after the establishment has been in operation for a period of time to ascertain whether all conditions of this Conditional Use Permit are being met.
8. Notwithstanding the forgoing, this CUP is issued to Verizon Wireless Personal Communications LP d/b/a Verizon Wireless and shall expire or terminate as indicated above in paragraph 6.

This conditional use permit is hereby issued this 24th day of July, 2017 subject to the conditions provided herein.

VILLAGE OF HARTLAND

Jeff Pfannerstill, Village President

Darlene Igl, MMC/WCPC, Village Clerk

[VILLAGE SEAL]

**DEPARTMENT OF BUILDING INSPECTION
APPLICATION FOR ARCHITECTURAL BOARD**

Job Address <u>1023 E Capitol Dr.</u>				
Lot	Block	Subdivision	Key No. HAV	
Owner <u>Zion Lutheran</u>	EMAIL <u>gdaniels@zionhartland.org</u>		Phone <u>(262) 367-3617</u>	
Address		City <u>Hartland</u>	State <u>WI</u>	Zip <u>53029</u>
Contractor <u>Bauer Sign Company</u>	Phone ⁽²⁶²⁾ <u>538-1413</u>	FAX	EMAIL <u>p.j.booth1999@gmail.com</u>	
Address <u>2500 South 170th Street</u>		City <u>New Berlin</u>	State <u>WI</u>	Zip <u>53151</u>

The Architectural Board meets on the THIRD MONDAY of the Month at 7:00 p.m. in the Board Room of the Hartland Municipal Building located at 210 Cottonwood Avenue in the Village of Hartland.

The DEADLINE for filing is THREE WEEKS PRIOR TO THE MEETING DATE at 4:30 p.m. All of the following information must be received prior to the deadline in order to be placed on the agenda.

Commercial/Industrial/Multifamily:

- Three bound sets of plans (one of the sets must be reduced to a maximum size of 11" x 17"). Plans must show all sides of building, materials and colors, exterior HVAC locations, appearance, and dumpster location.
- Three site plans. Plans must be dimensioned.
- Three landscape plans.
- Three exterior lighting plans. Include type, location, number and wattage of fixtures.

Signs:

- Three renderings (one of the renderings must be reduced to a maximum size of 11" x 17"). Include colors and material type. Renderings are to be dimensioned and must show placement on building and height.
- Details (color picture) of all existing wall signs on the same building elevation. A photograph of the building with sign location shown is recommended.
- Three site plans. Not required for wall signs. Plans must be dimensioned.
- Three sets of lighting details. Include type, location, number, and wattage of fixtures.
- Submit Sign Permit Application

NOTE: Approval by the Architectural Board is not permission to begin construction; a building permit must first be obtained.

Date Applied: _____ Date of Meeting: _____ Item No. _____

**DEPARTMENT OF BUILDING INSPECTION
APPLICATION FOR SIGN PERMIT**

PERMIT # _____

JOB LOCATION 1023 E Capital Dr. TAX KEY # _____
OWNER Zion Lutheran PHONE _____
ADDRESS _____ CITY _____ STATE _____ ZIP _____
CONTRACTOR Baker Sign Company PHONE _____
ADDRESS _____ CITY _____ STATE _____ ZIP _____

SIGN TYPE: WALL PROJECTING AWNING, CANOPY GROUND
 PORTABLE/TRAINING REAL ESTATE PERM. REAL ESTATE TEMP.

WORDS AS THEY WILL APPEAR ON THE SIGN:
Zion Lutheran School

OVERALL DIMENSIONS OF SIGN 18' x 3' COLOR OF BACKGROUND _____

SIZE OF LETTERS IN INCHES Largest 3' x 2' COLOR OF LETTERS Green

CONSTRUCTION MATERIALS OF SIGN BACKGROUND (i.e. WOOD, ALUM, ETC.)
Aluminum

ILLUMINATED? YES NO INTERNALLY EXTERNALLY

SIGN PLANS MUST BE APPROVED BY ARCHITECTURAL BOARD PRIOR TO PERMIT BEING APPROVED (SEE ARCHITECTURAL BOARD APPLICATION)

ESTIMATED COST OF ABOVE SIGN \$ 5290.00

TO THE BUILDING INSPECTOR: THE UNDERSIGNED HEREBY APPLIES FOR A PERMIT TO DO WORK HEREIN DESCRIBED ACCORDING TO THE PLANS AND SPECIFICATIONS FILED HERewith AND LOCATED AS SHOWN ON THIS APPLICATION. THE UNDERSIGNED AGREES THAT SUCH WORK WILL BE DONE IN ACCORDANCE WITH THE SAID DESCRIPTION, PLANS AND SPECIFICATIONS AND IN COMPLIANCE WITH ZONING ORDINANCE AND ALL OTHER ORDINANCES OF THE VILLAGE OF HARTLAND AND WITH ALL THE LAWS AND ORDERS OF THE STATE OF WISCONSIN APPLICABLE TO SAID PREMISES.

APPLICANT _____ DATE _____

PLANS APPROVED: ARCHITECTURAL BOARD _____

APPLICATION APPROVED: BUILDING INSPECTOR _____ DATE _____

TOTAL FEES: _____ DATE PAID _____ RECEIPT # _____

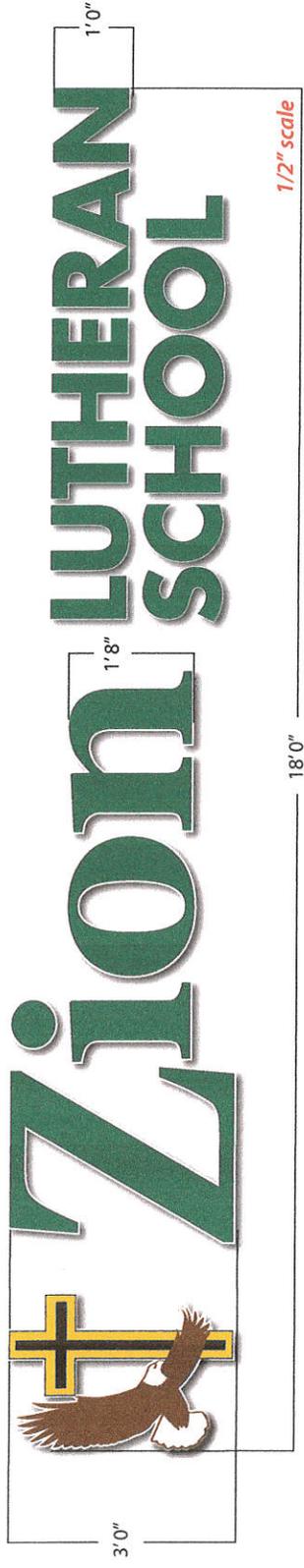
SAVED AS Zion Lutheran School
 LOCATION Hartland WI
 SALES REP Bob Hacker
 DATE 25 Mar 16
 REVISION



Award Winning
 Graphic Design

wire bauersignusa.com
 voice 262.784.0500
 fax 262.784.6675

2500 South 170th Street
 New Berlin, Wisconsin 53151
 Proudly Made In the USA!



SPECIFICATIONS

FABRICATE AND INSTALL (1SET) INTERNALLY ILLUMINATED, RACEWAY MOUNTED CHANNEL LETTERS.

- FACES TO BE #7328 WHITE PLEXIGLASS SHEETED WITH 3630-26 GREEN TRANSLUCENT VINYL OVERLAYS
- LOGO MODULE FACE TO BE DECORATED WITH TRANSLUCENT VINYL OVERLAYS RETURNS TO BE .050X5" AND BACKS TO BE .063 ALUMINUM
- TRIMCAPS TO BE 1" WHITE
- EXTERIORS PAINTED WHITE
- INTERIORS PAINTED WHITE
- ILLUMINATED WITH WHITE LEDS
- POWERED WITH APPROPRIATE LOAD POWER SUPPLIES
- RACEWAY TO BE 7"x 4.5" x 18"0" AND PAINTED MP02770 FAN TAN

Zion Lutheran School
 channel letters B



Printed artwork colors are not always representative of final product colors. Please refer to specifications for call out or salesman for samples. These drawings are the exclusive property of Bauer Sign Company. Not to be duplicated in any way without expressed written permission!

FINAL ELECTRICAL CONNECTION IS CLIENT'S RESPONSIBILITY

our products are certified by Underwriters Laboratories, Inc.

APPROVAL / DATE

This sign shall be manufactured in accordance with the applicable UL codes. This includes proper wiring and mounting, correct UL label.



2500 South 170th Street
New Berlin Wisconsin 53151
voice 262.784.0500
fax 262.784.6675

DATE 10/27/16 PHONE/FAX 262-538-1413

CUSTOMER(BUYER) Zion Lutheran School (Peter Booth)

ADDRESS 1023 E. Capitol Dr.

CITY, STATE Hartland, WI ZIP

JOB NAME Zion Lutheran School Wall Sign

ADDRESS Same

CITY, STATE Same ZIP

pl.booth1999@gmail.com

PROPOSAL/CONTRACT

BAUER SIGN COMPANY WILL SUPPLY LABOR MATERIALS & NECESSARY EQUIPMENT TO PERFORM THE FOLLOWING:
Fabricate and install one (1) set of custom designed, internally illuminated, raceway mounted channel letters, with logo, per the specifications noted on the attached drawing. Letters to be constructed from all aluminum materials, with acrylic faces and translucent vinyl overlays. Illumination by white LED's powered by 120v, 20amp, 60w power packs mounted within a raceway painted to closely match the mounting wall. (MP02770 Fan Tan).

PRICE QUOTED DOES NOT INCLUDE STATE SALES TAXES (ASSUMED TO BE TAX EXEMPT); LOCAL PERMIT; PERMIT ACQUISITION FEE OF \$250.00; PRIMARY ELECTRICAL FEED TO THE SIGN OR FINAL HOOK UP (BY ELECTRICAL CONTRACTOR). 50% NON-REFUNDABLE DEPOSIT IS DUE WITH SIGN CONTRACT WITH FINAL PAYMENT DUE UPON DELIVERY.

PRICE: \$5290.00
\$4490.00 (if not illuminated)

Please allow 5-7 week(s) for installation. Install date is contingent upon customer and city approval and receipt of deposit. Additional foundation costs incurred as a result of abnormal soil conditions, rock, water intrusions and/or underground obstructions will be billed additional to the amount of this contract. IT IS EXPRESSLY AGREED AND UNDERSTOOD THAT PRIMARY ELECTRIC SERVICE, PHONE LINES AND HOOKUPS ARE THE BUYERS RESPONSIBILITY AND THE CONTRACT BECOMES DUE AND PAYABLE UPON DELIVERY OF THE SIGN DISPLAY REGARDLESS OF THE EXISTENCE OF THE SAME.

SALE PRICE see above This price is is not (check one) Inclusive of state sales tax, the cost of permit acquisition and permit. All payments over 30 days shall bear interest at 1.5% per month.

DOWN PAYMENT 50% BALANCE UPON DELIVERY AND PRIOR TO INSTALLATION ANY ALTERATIONS OR DEVIATION FROM ABOVE SPECIFICATIONS INVOLVING EXTRA COST WILL BECOME AN EXTRA CHARGE OVER AND ABOVE THE QUOTED PRICE. MY SIGNATURE BELOW INDICATES THAT I HAVE READ AND UNDERSTAND THE TERMS OF THIS CONTRACT. rah INITIAL



PD.# 185866
6-22-17
\$300

ADMINISTRATION
210 COTTONWOOD AVENUE
HARTLAND, WI 53029
PHONE (262) 367-2714
FAX (262) 367-2430

**APPLICATION FOR
PLAN COMMISSION**

\$300 PLAN REVIEW FEE DUE AT TIME OF APPLICATION

Project Description STORAGE Building			
Proposed Use STORAGE		No. of Employees 2	
Project Location 357 COTTONWOOD AVENUE - VILLAGE OF HARTLAND			
Project Name HARTLAND MEADOWS STORAGE BUILDING			
Owner BYRON & NAUCY Dideenko		Phone 262 6462169 cell 262 3060310	
Address W320 N1161 Botten Out Ridge Ct		City DELAFIELD	State WI Zip 53018
Engineer/Architect TDI ASSOCIATES		Phone 262 4092534	FAX 262 4092534
Address 18422350 JOHN SAK DR		City WAUKESHA	State WI Zip
Contact Person BOB WILLIAMS	Phone 262-4092534	FAX	E-mail BOB.W@TDIAE.COM

The Plan Commission meets on the third Monday of the Month at 7:00 PM in the Village Board Room of the Hartland Municipal Building located at 210 Cottonwood Avenue, Hartland.

The deadline for filing is a minimum of fifteen (15) working days before the meeting.

All of the requested information must be received prior to the deadline in order to be placed on the agenda. Village Plan Review Staff has been directed to delay placement on the Plan Commission Agenda based on incomplete submittals.

Four (4) sets of bound site plans and ten (10) sets of reduced site plans (11" x 17") copy must be submitted showing the following existing and proposed information:

- > Complete dimensions (lot, building, setbacks, parking, drives, etc.)
- > Scale and north arrow
- > All structures (include building elevations and height)
- > Drainage and grades (include design calculations for drainage)
- > Storm Water Management Plan
- > Utilities and easements (sewer, water, storm etc.)
- > Calculation of lot coverage
- > Parking stalls (stalls to be minimum 180 s.f., driving lanes minimum 24 ft. wide and 30 ft. maximum at street right-of-way, asphalt to be minimum 3 ft. from lot lines)
- > Grading and erosion control
- > Landscaping, including a Tree Protection Plan
- > Exterior lighting details
- > Exterior HVAC equipment location
- > Dumpster location (screening required)
- > Street right-of-way
- > Miscellaneous, 100 year floodplain, wetland boundary, environmental corridor

Additional information may be requested by the Plan Commission or Staff.

Date Applied 6-22-17	Date of Meeting:	Return Comments by:
-----------------------------	------------------	---------------------

**Village of Hartland
Professional Services Reimbursement Form**

The Village of Hartland has determined that whenever the services of the Village Attorney, Village Engineer, Village Planner or any other of the Village's professional staff results in a charge to the Village for that professional's time and services and such services is not a service supplied to the Village as a whole, the Village Clerk shall charge that service for the fees incurred by the Village. Also, be advised that the Village may pass on other certain fees, costs, and charges which will be the responsibility of the property owner or responsible party.

I, the undersigned, have been advised that, pursuant to this Agreement between the Village and, The responsible party listed below, if the Village Attorney, Village Engineer, Village Planner or any other Village professional provides services to the Village because of activities incurred by the responsible party, whether at our request or at the request of the Village, we shall be responsible for the fees and expenses incurred by the Village. In addition, we have been advised that certain other fees, costs, and charges will be our responsibility.

Responsible Party Name, Mailing Address, Signature and Date:

- A. BYRON DIDEKTO Byron Didekto June 21 2017
 Printed Name Signature Date
- B. W320 W1101
Butter Not Ridge Ct DEAFIELD WI 53018
 Street City State Zip
- C. Phone 262 26462169 Fax: 262 6462169 E-Mail bdidekto@yoo400.com

Property Owner Name, Mailing Address, Signature & Date:

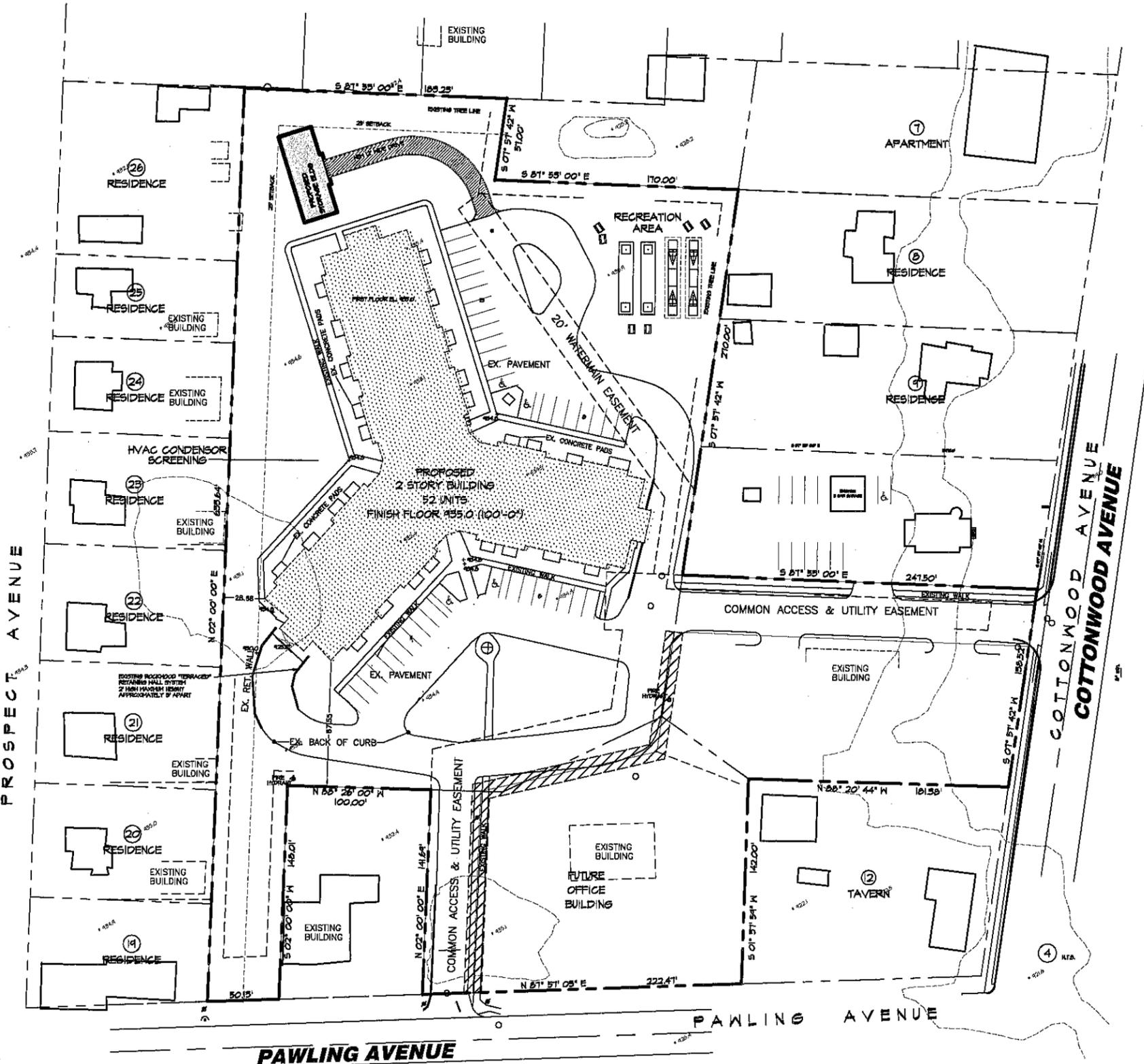
- A. BYRON DIDEKTO Byron Didekto June 21 2017
 Printed Name Signature Date
- B. W320 W1101
Butter Not Ridge Ct DEAFIELD WI 53018
 Street City State Zip
- C. Phone 262 26462169 Fax: 262 6462169 E-Mail bdidekto@yoo400.com

Village Official Accepting Form & Date _____

INTERNAL USE ONLY

Amount Due: \$ _____ Check #: _____ Date Paid: ___/___/___ Rec'd By: _____

Plan Commission Project Number: _____



PRE-DEVELOPMENT SITE DATA:

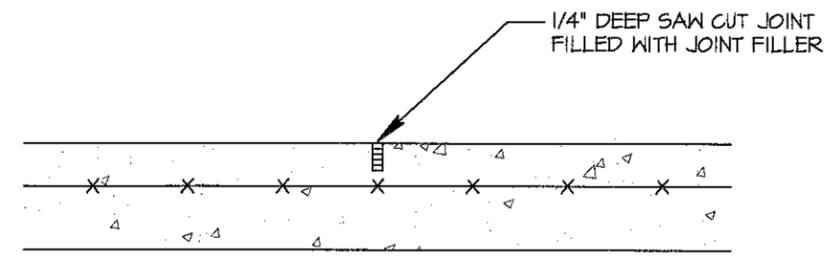
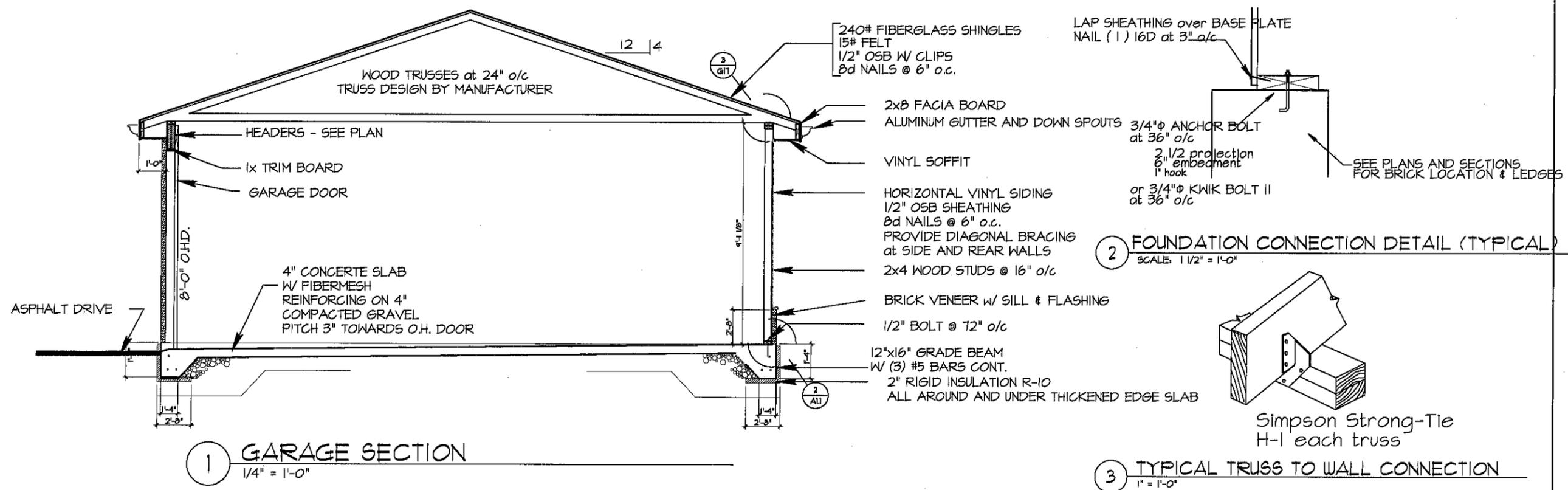
GROSS LOT AREA	3.87 ACRES
ZONING:	PUD
BUILDING FOOTPRINT	29,105 SQ. FEET=0.668 ACRES
PARKING AND WALKWAYS	61,127 SQ. FEET 1.40ACRES
GREEN SPACE	1.802 ACRES (46.56%)
SURFACE PARKING STALLS	40 STALLS

PROPOSED-DEVELOPMENT SITE DATA:

GROSS LOT AREA	3.87 ACRES
ZONING:	PUD
BUILDING FOOTPRINT	30,637 SQ. FEET=0.70 ACRES
PARKING AND WALKWAYS	62,815 SQ. FEET 1.44ACRES
GREEN SPACE	1.73 ACRES (44.70%)
SURFACE PARKING STALLS	40 STALLS

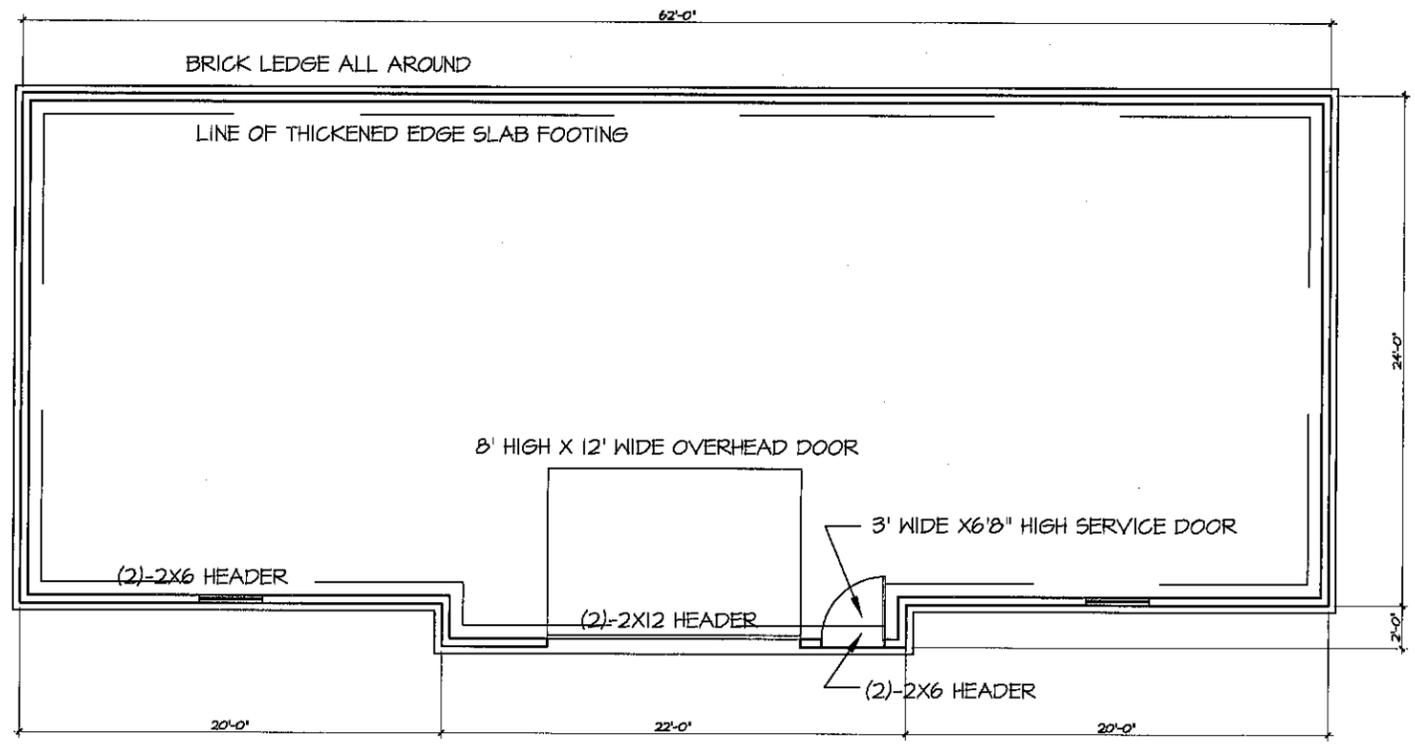
REVISIONS:	
NOTE	DATE

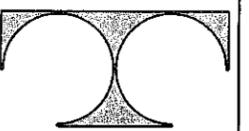
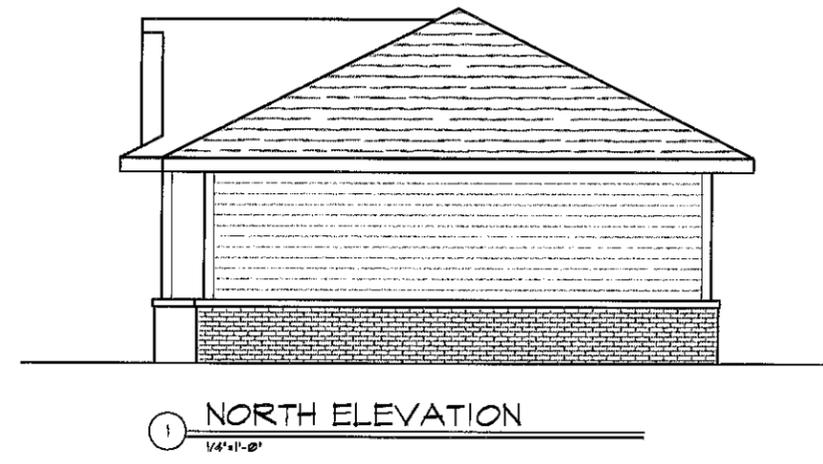
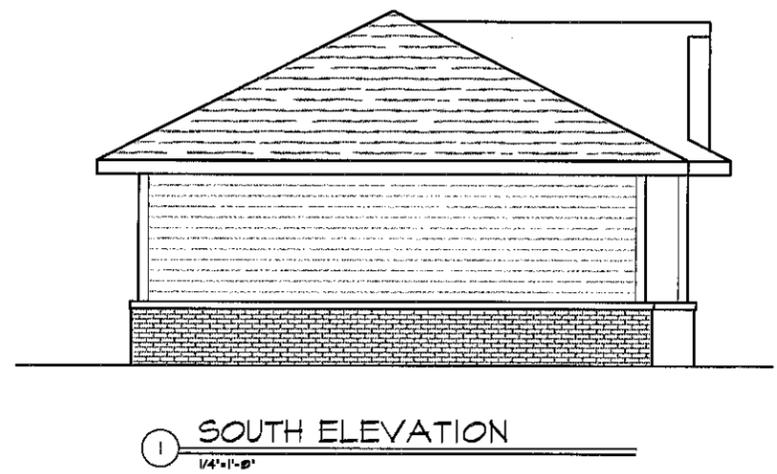
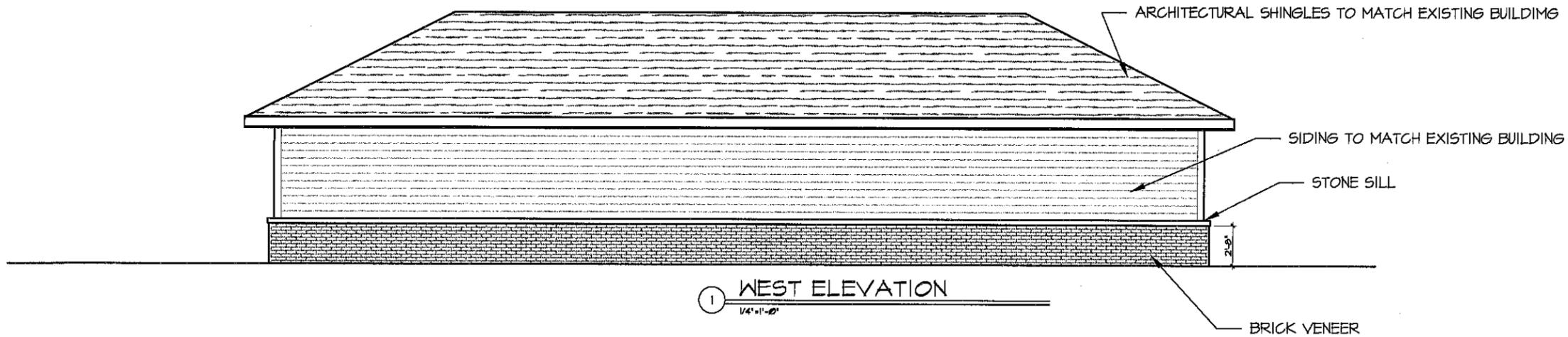
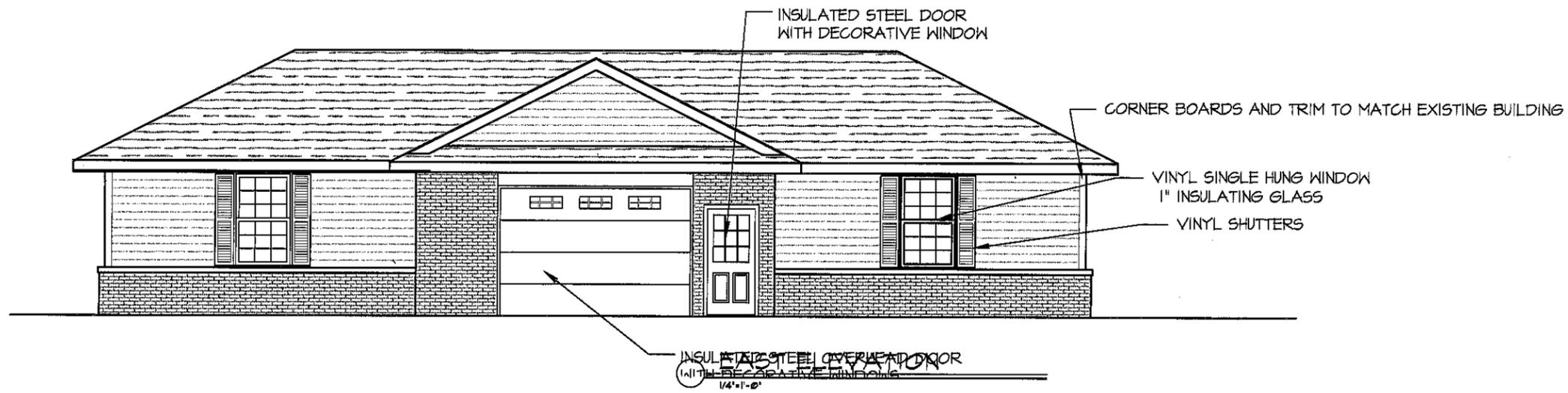
TDI ASSOCIATES, INC. All Rights Reserved 48 W2250 JOHNSON DRIVE, SUITE 84 WAUKESHA, WISCONSIN 53186 PHONE: 262-405-2200 FAX: 262-405-2291	 <p>OWNERSHIP OF DOCUMENTS This document, and the ideas and designs contained herein, are the intellectual property of TDI Associates, Inc. and shall not be used in whole or in part for any other project or purpose without the express written consent of TDI Associates, Inc.</p>	
TDI ASSOCIATES, INC. ARCHITECTURE, ENGINEERING, PLANNING		
VILLAGE OF HARTLAND, WI HARTLAND MEADOWS STORAGE BUILDING SITE DEVELOPMENT PLAN		
SCALE: 1" = 40'-0"	JOB NO: 17-194.000	DATE: 6-19-2017
DESIGNED BY: REW	DRAWN BY: REW	CHECKED BY: REW
APPROVED BY:	DATE:	SHEET C-2.0



4 TYPICAL CONTROL JOINT
1" = 1'-0"

NOTE: SAW CUT JOINT AS SOON AS POSSIBLE WITHOUT RAVELING CONCRETE (WITHIN 8 HOURS OF POUR)





TDI ASSOCIATES, INC.
ARCHITECTURE, ENGINEERING, PLANNING

N8 W22350 JOHNSON DRIVE, SUITE B4
WAUKESHA, WISCONSIN 53186
PHONE 262-409-2530 FAX 262-409-2531

HARTLAND MEADOWS
STORAGE BUILDING

357 COTTONWOOD AVENUE
VILLAGE OF HARTLAND, WISCONSIN 53029

TDI ASSOCIATES, INC
All Rights Reserved

OWNERSHIP OF DOCUMENTS

This document, and the ideas and design incorporated herein, as an instrument of professional service, is the sole property of TDI Associates, Inc., and is not to be used in whole or in part for any other project or purpose without the expressed written authorization of TDI Associates, Inc.

Sheet Title
ELEVATIONS

Issued For: _____ Date: _____

Date: 06-19-17

Job NO.: 17-194,000

Drawn By: REW

Sheet No.

A2.1

DALEYS WOODS LLC
810 CARDINAL LN STE 100
HARTLAND WI 53029-2390

FIRST BANK FINANCIAL CENTRE
C/O ACCOUNTS PAYABLE
155 W WISCONSIN AVE
OCONOMOWOC WI 53066

HERAEUS ELECTRO-NITE CO LLC
RICHARD A FALK
541 S INDUSTRIAL DR
HARTLAND WI 53029-2323

HM INVESTMENT PARTNERS LLC
581 S INDUSTRIAL DR
HARTLAND WI 53029

JAMES ORDWAY
KRISTIN ORDWAY
N45W29221 FORSETH DR
HARTLAND WI 53029

JOHN GEBHARD
TRUDY GEBHARD
N56W28754 CTH K
HARTLAND WI 53029

LAKE COUNTRY RACQUET & ATHLETIC CLUB INC
560 INDUSTRIAL DR
PO BOX 76
HARTLAND WI 53029

LAUDERMILK 710 LLC
710 CARDINAL LN
HARTLAND WI 53029

TROMPLER PROPERTIES LLC
580 S INDUSTRIAL DR
HARTLAND WI 53029-2357



Pd \$300⁰⁰ 6/27/17
 Rpt 185929

ADMINISTRATION
 210 COTTONWOOD AVENUE
 HARTLAND, WI 53029
 PHONE (262) 367-2714
 FAX (262) 367-2430

**APPLICATION FOR
 PLAN COMMISSION**

\$300 PLAN REVIEW FEE DUE AT TIME OF APPLICATION

Project Description				APPROXIMATE 26,000 SQ ADDITION			
Proposed Use				STORAGE			
Project Location				581 S. INDUSTRIAL DR			
Project Name				HM PRODUCT SOLUTIONS			
Owner		ROB MAYNOR		Phone		(262) 754-0424	
Address		581 S. INDUSTRIAL DR		City		HARTLAND	
				State		WI	
				Zip		53029	
Engineer/Architect		MSI GENERAL		Phone		(262) 367-3661	
				FAX			
Address		PO Box 7		City		Oconomowoc	
				State		WI	
				Zip		53066	
Contact Person		TIM KNEPPLER		Phone		(414) 550-9400	
				FAX			
				E-mail		TIM.K@MSIGENERAL.COM	

The Plan Commission meets on the third Monday of the Month at 7:00 PM in the Village Board Room of the Hartland Municipal Building located at 210 Cottonwood Avenue, Hartland.

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- > Drainage and grades (include design calculations for drainage)
- > Storm Water Management Plan
- > Utilities and easements (sewer, water, storm etc.)
- > Calculation of lot coverage
- > Parking stalls (stalls to be minimum 180 s.f., driving lanes minimum 24 ft. wide and 30 ft. maximum at street right-of-way, asphalt to be minimum 3 ft. from lot lines)
- > Grading and erosion control
- > Landscaping, including a Tree Protection Plan
- > Exterior lighting details
- > Exterior HVAC equipment location
- > Dumpster location (screening required)
- > Street right-of-way
- > Miscellaneous, 100 year floodplain, wetland boundary, environmental corridor

Additional information may be requested by the Plan Commission or Staff.

Date Applied: 6/26/17	Date of Meeting: 7/17	Return Comments by:
-----------------------	-----------------------	---------------------

**DEPARTMENT OF BUILDING INSPECTION
APPLICATION FOR ARCHITECTURAL BOARD**

Job Address 581 S INDUSTRIAL DR				
Lot	Block	Subdivision	Key No. HAV	
Owner HMI INVESTMENT PARTNERS LLC		EMAIL R.MAYNOR@HMPSLTD.COM		Phone
Address 581 S INDUSTRIAL DR		City HARTLAND		State WI Zip 53029
Contractor MSI GENERAL		Phone (414) 550-9400	FAX	EMAIL TIM.K@MSIGENERAL.COM
Address PO Box 7		City Oconomowoc		State WI Zip 5306

The Architectural Board meets on the **THIRD MONDAY** of the Month at 7:00 p.m. in the Board Room of the Hartland Municipal Building located at 210 Cottonwood Avenue in the Village of Hartland.

The DEADLINE for filing is **THREE WEEKS PRIOR TO THE MEETING DATE** at 4:30 p.m. All of the following information must be received prior to the deadline in order to be placed on the agenda.

Commercial/Industrial/Multifamily:

- Three bound sets of plans (one of the sets must be reduced to a maximum size of 11" x 17"). Plans must show all sides of building, materials and colors, exterior HVAC locations, appearance, and dumpster location.
- Three site plans. Plans must be dimensioned.
- Three landscape plans.
- Three exterior lighting plans. Include type, location, number and wattage of fixtures.

Signs:

- Three renderings (one of the renderings must be reduced to a maximum size of 11" x 17"). Include colors and material type. Renderings are to be dimensioned and must show placement on building and height.
- Details (color picture) of all existing wall signs on the same building elevation. A photograph of the building with sign location shown is recommended.
- Three site plans. Not required for wall signs. Plans must be dimensioned.
- Three sets of lighting details. Include type, location, number, and wattage of fixtures.
- Submit Sign Permit Application

NOTE: Approval by the Architectural Board is not permission to begin construction; a building permit must first be obtained.

Date Applied: _____ Date of Meeting: _____ Item No. _____

**Village of Hartland
Professional Services Reimbursement Form**

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Responsible Party Name, Mailing Address, Signature and Date:

- A. Rob Maynor [Signature] 6/26/17
Printed Name Signature Date
- B. 581 S. INDUSTRIAL DR HARTLAND WI 53029
Street City State Zip
- C. Phone 262 754-0424 Fax: _____ E-Mail Rmaynor@HmpSLTD.com

Property Owner Name, Mailing Address, Signature & Date:

- A. HM INVESTMENT PARTNERS, LLL [Signature] 6/26/17
Printed Name Signature Date
- B. 581 S. INDUSTRIAL DR HARTLAND WI 53029
Street City State Zip
- C. Phone (262) 754-0424 Fax: _____ E-Mail Rmaynor@HmpSLTD.com

Village Official Accepting Form & Date

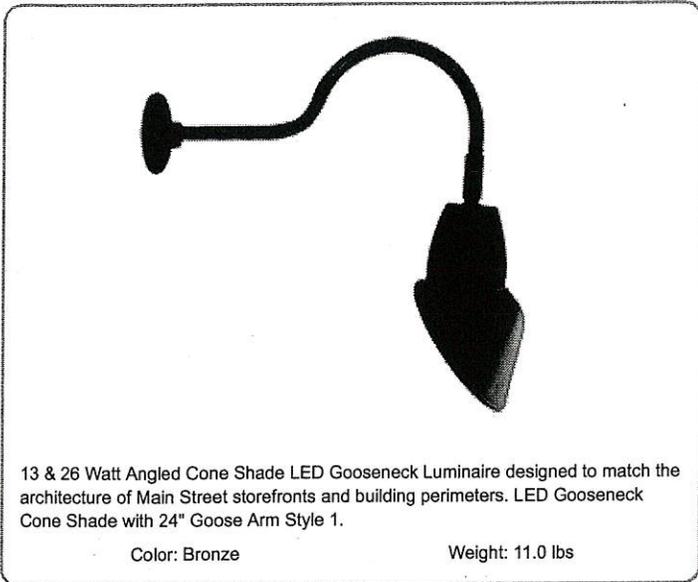
INTERNAL USE ONLY

Amount Due: \$ _____ Check #: _____ Date Paid: ___ / ___ / ___ Rec'd By: _____

Plan Commission Project Number: _____

GN1LED13NAC11A

1



Project:	Type: Gooseneck
Prepared By:	Date:

Driver Info		LED Info	
Type:	Constant Current	Watts:	13W
120V:	0.3A	Color Temp:	4000K
208V:	0.3A	Color Accuracy:	86 CRI
240V:	0.3A	L70 Lifespan:	100000
277V:	0.15A	Lumens:	388
Input Watts:	15W	Efficacy:	25 LPW
Efficiency:	85%		

Technical Specifications

LED Characteristics

Color Accuracy (CRI):

CRI can change due to the fixture color. Please contact the RAB Lighting Design department for more details.

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

LED:

Single multi-chip, 13W high-output, long-life LED.

Correlated Color Temp. (Nominal CCT):

4000K

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2015.

Listings

UL Listing:

Suitable for wet locations. Suitable for mounting within 1.2m (4ft) of the ground.

IESNA LM-79 & IESNA LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and 80, and have received the Department of Energy "Lighting Facts" label.

Sensor Characteristics

Lead Time:

3 weeks expedited shipping. 6 weeks standard shipping.

Construction

Fixture:

The GN1LED13NAC11A comes with the GOOSE1A arm.

Housing:

Precision die-cast aluminum housing, lens frame and mounting plate.

Gaskets:

High Temperature Silicone

Mounting:

Heavy-duty mounting arm with "O" ring seal and stainless steel screw.

Cold Weather Starting:

Minimum starting temperature is -40° F (-40° C)

Finish:

Formulated for high-durability and long lasting color.

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

Electrical

Driver:

Constant Current, Class 2, 100-277V, 50/60 Hz, 100-240VAC 0.3 - 0.15A, 277VAC 0.15A, THD ≤20%, PF 97.5%.

Surge Protection:

4kv

Other

Shades:

11" Angled Cone Shade offered.

California Title 24:

Goosenecks complies with 2013 California Title 24 building and electrical codes as a commercial outdoor non-pole-mounted fixture < 30 Watts when used with a photosensor control. Select catalog number PCS900(120V) or PCS900/277 to order a photosensor.

Patents:

The design of the Gooseneck is protected by patents pending in US, Canada, China and Taiwan.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. See our full warranty

Country of Origin:

Designed by RAB in New Jersey and assembled in Taiwan.

Trade Agreements Act Compliant:

This product is a product of Taiwan and a "designated country" end product that complies with the Trade Agreements Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

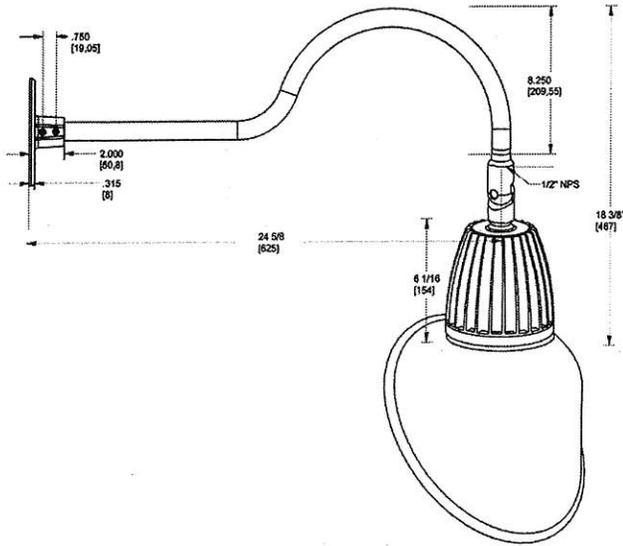
Equivalency:

Equivalent to 75W incandescent, 50W Metal Halide or 18W CFL.

GN1LED13NAC11A



Dimensions



Features

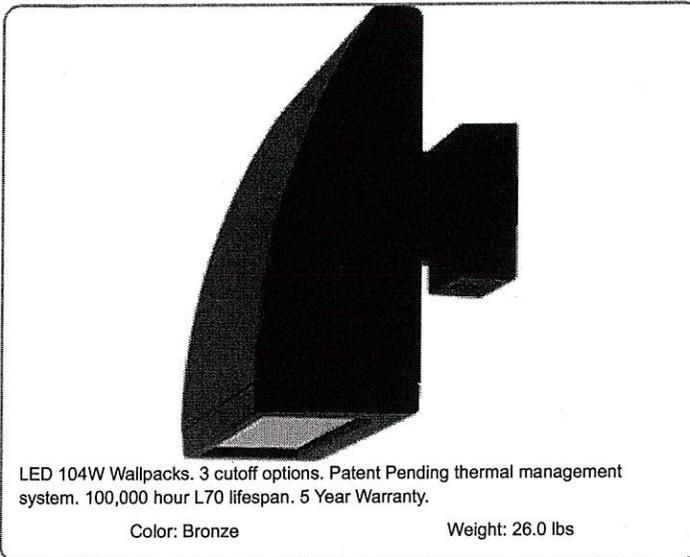
- Adjustable 45° swivel joint
- Superior heat sink
- Die-cast aluminum housing
- 5 year LED warranty

Ordering Matrix

Family	Watts	Color Temp	Reflector	Shade	ShadeSize	Finish
GN1LED	13	N		AC	11	A
	13 = 13W 26 = 26W	Y = 3000K (Warm) N = 4000K (Neutral)	Blank = Flood R = Rectangular S = Spot	AC = Angled Cone	11 = 11" Blank = 15"	B = Black W = White A = Bronze S = Silver G = Hunter Green YL = Yellow LB = Light Blue BL = Royal Blue BWN = Brown I = Ivory R = Red

WPLEDFC104

2



LED 104W Wallpacks. 3 cutoff options. Patent Pending thermal management system. 100,000 hour L70 lifespan. 5 Year Warranty.

Color: Bronze

Weight: 26.0 lbs

Project:	Type: Wall Pack
Prepared By:	Date:

Driver Info		LED Info	
Type:	Constant Current	Watts:	104W
120V:	0.95A	Color Temp:	5000K
208V:	0.59A	Color Accuracy:	71 CRI
240V:	0.51A	L70 Lifespan:	100000
277V:	0.44A	Lumens:	13120
Input Watts:	106W	Efficacy:	124 LPW
Efficiency:	98%		

Technical Specifications

Listings

UL Listing:

UL Suitable for Wet Locations as Uplight and Downlight Wall Mount Only.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.
DLC Product Code: P000017AU

Dark Sky Approved:

The International Dark Sky Association has approved this product as a full cutoff, fully shielded luminaire.

IESNA LM-79 & LM-80 Testing:

RAB LED Luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

Construction

IP Rating:

Ingress Protection rating of IP66 for dust and water

For use on LEED Buildings:

IDA Dark Sky Approval means that this fixture can be used to achieve LEED Credits for Light Pollution Reduction.

Cold Weather Starting:

Minimum starting temperature is -40° F (-40° C)

Maximum Ambient Temperature:

Suitable for use in 104° F (40°C) ambient temperatures

Housing:

Precision die-cast aluminum housing, door frame arm and wall bracket.

Mounting:

Die-cast aluminum wall bracket with (5) 1/2" conduit openings with plugs. Two-piece bracket with tether for ease of installation and wiring.

Arm:

Die-cast aluminum with wiring access plate.

Cutoff:

Full cutoff (0°)

Lens:

Tempered glass

Reflector:

Specular vacuum metallized polycarbonate.

Gaskets:

High-temperature silicone

Finish:

Formulated for high-durability and long lasting color.

Green Technology:

Mercury and UV free. RoHS compliant components. Polyester powder coat finish formulated without the use of VOC or toxic heavy metals.

LED Characteristics

LEDs:

Four multi-chip, high-output, long-life LEDs.

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377.2011.

Electrical

Driver:

Constant current, Class 1, 100-277V, 50/60 Hz, 4kV Surge Protection, 700mA, 100-277V = 0.95A, Power Factor 99.3%.

THD:

5.1% at 120V, 10.1% at 277V

Power Factor:

99.6% at 120V, 91.9% at 277V

Other

California Title 24:

See WPLEDFC104/BL for a 2013 California Title 24 compliant product. Any additional component requirements will be listed in the Title 24 section under technical specifications on the product page.

Technical Specifications (continued)

Other

Patents:

The design of the WPLEDFC104 is protected by patents pending in US, Canada, China, Taiwan and Mexico.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010).

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Equivalency:

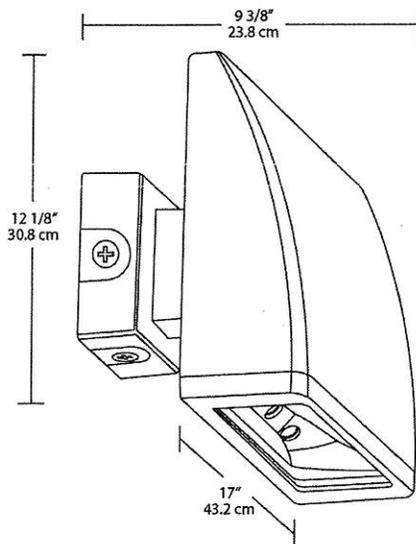
Equivalent to 400W Metal Halide.

Optical

BUG Rating:

B2 U0 G1

Dimensions



Features

- High performance LED light engine
- Maintains 70% of initial lumens at 100,000 hours
- Weatherproof high temperature silicone gaskets
- Superior heat sinking with die cast aluminum housing and external fins
- Replaces 400W MH
- 100 up to 277 Volts
- 5-year warranty

Ordering Matrix

Family	Cutoff	Watts	Color Temp	Finish	Voltage	Photocell	Bi-Level
WPLED							
	Blank = Standard C = Cutoff FC = Full Cutoff	104 = 104W	Blank = 5000K (Cool) Y = 3000K (Warm) N = 4000K (Neutral)	Blank = Bronze W = White	Blank = 120-277V /480 = 480V	Blank = No Photocell /PCS = 120V Swivel /PCS2 = 277V Swivel	Blank = No Bi-Level /BL = Bi-Level

COOPER LIGHTING - SURE-LITES®

DESCRIPTION

The All Pro Series Remote is the most economical LED Emergency Light Remote for general purpose applications. The durable, injection molded thermoplastic material resists discoloration due to UV radiation. The mounting plate employs a snap-fit construction to further improve the installation time. The All Pro Series Remote Heads are fully adjustable, insuring that light can be put where it is needed

Catalog #	APWR2	Type	Remote Emergency
Project		Date	
Comments			
Prepared by			

SPECIFICATION FEATURES

Electrical

- 3.6V DC Input Voltage

Lampholder/Mounting Plate Construction

- Flame resistant and impact resistant, injection molded thermoplastic
- Lamp heads adjust 80° from vertical with 358° rotation
- Universal mounting plate

Code Compliance

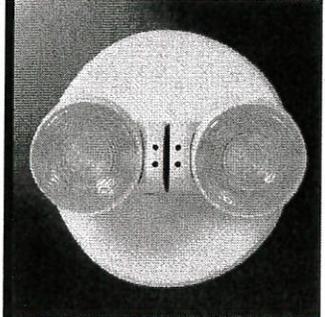
- UL 924 Listed
- Damp Location Listed (APR)
- Wet Location Listed (APWR)

Warranty

- Five-year warranty

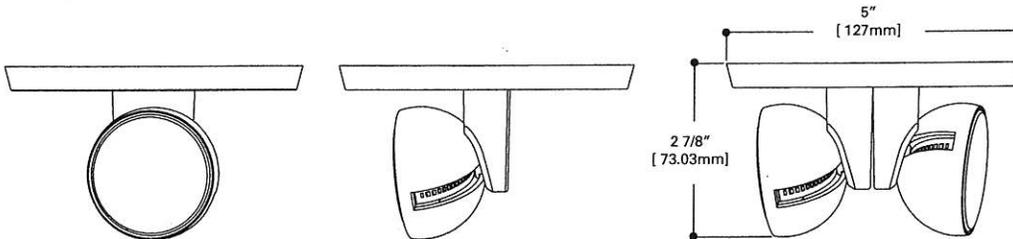
Head/Lamp Data

- Long Life LED Emergency Heads
- Fully adjustable
- High impact thermoplastic
- Matches housing finish
- 3.6V, .78W DC Long Lasting LED Heads



APR / APWR SERIES

REMOTE HEADS
LED EMERGENCY HEADS
WET AND
DAMP LISTED HEADS



TOTALLY PREDICTABLE
RELIABILITY

ORDERING INFORMATION

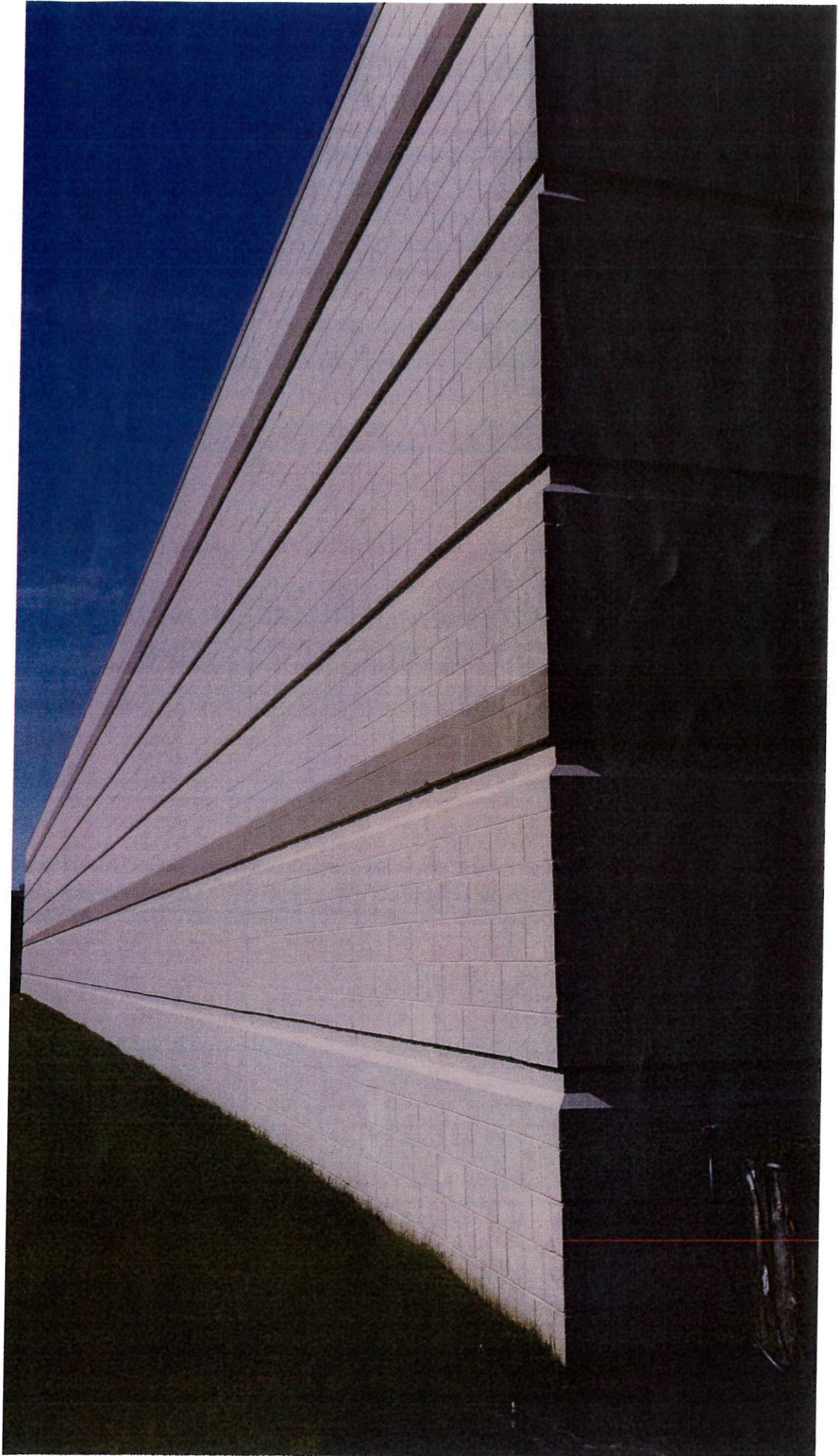
Sample Number: APR1

Family

- APR1=Single Head Remote, Damp Location Listed
- APR2=Double Head Remote, Damp Location Listed
- APWR1=Single Head Remote, Wet Location Listed
- APWR2=Double Head Remote, Wet Location Listed

ENERGY DATA

Power Consumption is equal to LED head wattage.



DEPARTMENT OF BUILDING INSPECTION
APPLICATION FOR SIGN PERMIT

PERMIT # _____

JOB LOCATION 581 S. INDUSTRIAL DR TAX KEY # _____
OWNER ROBERT MAYNOR PHONE _____
ADDRESS 581 S. INDUSTRIAL DR CITY HARTLAND STATE WI ZIP 53029
CONTRACTOR MSI GENERAL PHONE _____
ADDRESS PO. BOX 7 CITY _____ STATE WI ZIP 53066
OLODONOVIC

SIGN TYPE: WALL PROJECTING AWNING, CANOPY GROUND
 PORTABLE/TRAINING REAL ESTATE PERM. REAL ESTATE TEMP.

WORDS AS THEY WILL APPEAR ON THE SIGN:
H.M. PRODUCT SOLUTIONS

OVERALL DIMENSIONS OF SIGN 27'-8" COLOR OF BACKGROUND _____
SIZE OF LETTERS IN INCHES 2'-0" COLOR OF LETTERS BLUE

CONSTRUCTION MATERIALS OF SIGN ~~BACKGROUND~~ (i.e. WOOD, ALUM, ETC.)
ACRYLIC LETTERS MOUNTED TO WEST WALL
DEPERSONAL LETTERS
ILLUMINATED? YES NO INTERNALLY EXTERNALLY

SIGN PLANS MUST BE APPROVED BY ARCHITECTURAL BOARD PRIOR TO PERMIT BEING APPROVED (SEE ARCHITECTURAL BOARD APPLICATION)

ESTIMATED COST OF ABOVE SIGN \$ T.B.D.

TO THE BUILDING INSPECTOR: THE UNDERSIGNED HEREBY APPLIES FOR A PERMIT TO DO WORK HEREIN DESCRIBED ACCORDING TO THE PLANS AND SPECIFICATIONS FILED HERewith AND LOCATED AS SHOWN ON THIS APPLICATION. THE UNDERSIGNED AGREES THAT SUCH WORK WILL BE DONE IN ACCORDANCE WITH THE SAID DESCRIPTION, PLANS AND SPECIFICATIONS AND IN COMPLIANCE WITH ZONING ORDINANCE AND ALL OTHER ORDINANCES OF THE VILLAGE OF HARTLAND AND WITH ALL THE LAWS AND ORDERS OF THE STATE OF WISCONSIN APPLICABLE TO SAID PREMISES.

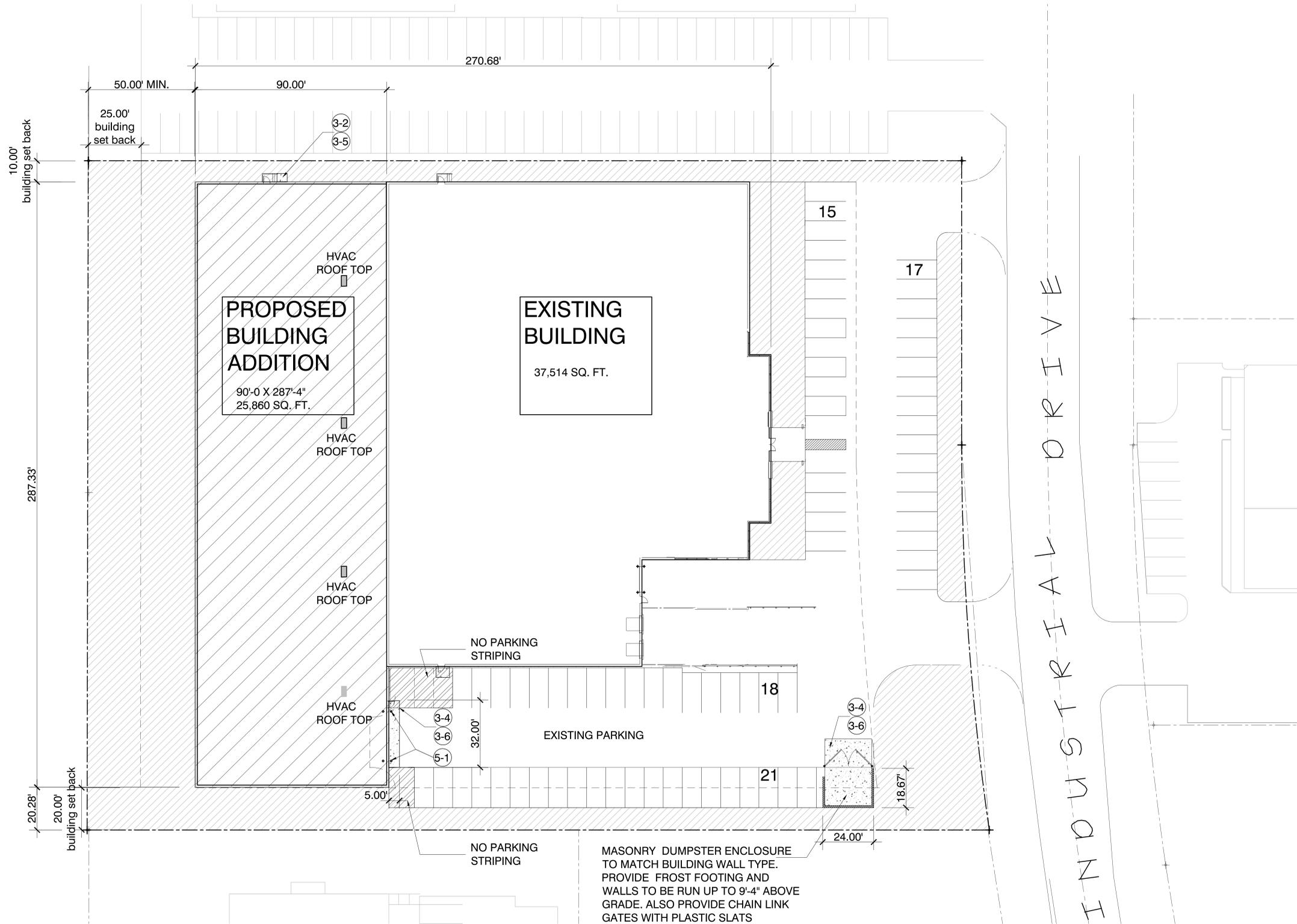
APPLICANT ANTHONY F. ZULLI DATE 6-27-17

PLANS APPROVED: ARCHITECTURAL BOARD _____

APPLICATION APPROVED: BUILDING INSPECTOR _____ DATE _____

TOTAL FEES: _____ DATE PAID _____ RECEIPT # _____

STATE HWY. 83



MASONRY DUMPSTER ENCLOSURE TO MATCH BUILDING WALL TYPE. PROVIDE FROST FOOTING AND WALLS TO BE RUN UP TO 9'-4" ABOVE GRADE. ALSO PROVIDE CHAIN LINK GATES WITH PLASTIC SLATS

Site Area	131,328 sq. ft. aprox. 3.01 ac.	Building Area	- Existing Building 37,514 Sq. Ft. - Proposed Addition 25,860 Sq. Ft. Total Building Area 63,374 Sq. Ft.
Green Space	33,697 = 25.6 %		
Parking	71 Stalls		

REFERENCE KEYNOTES		Division 03- Concrete	Division 04- Masonry	Division 05- Metals	Division 07- Thermal and Moisture Protection	Division 08- Doors and Windows	Division 09- Finishes
01	10.00' building set back	01	01	01	01	01	01
02	20.28' building set back	02	02	02	02	02	02
03	20.00' building set back	03	03	03	03	03	03
04	20.00' building set back	04	04	04	04	04	04
05	20.00' building set back	05	05	05	05	05	05
06	20.00' building set back	06	06	06	06	06	06
07	20.00' building set back	07	07	07	07	07	07
08	20.00' building set back	08	08	08	08	08	08
09	20.00' building set back	09	09	09	09	09	09
10	20.00' building set back	10	10	10	10	10	10
11	20.00' building set back	11	11	11	11	11	11
12	20.00' building set back	12	12	12	12	12	12
13	20.00' building set back	13	13	13	13	13	13
14	20.00' building set back	14	14	14	14	14	14
15	20.00' building set back	15	15	15	15	15	15
16	20.00' building set back	16	16	16	16	16	16
17	20.00' building set back	17	17	17	17	17	17
18	20.00' building set back	18	18	18	18	18	18
19	20.00' building set back	19	19	19	19	19	19
20	20.00' building set back	20	20	20	20	20	20
21	20.00' building set back	21	21	21	21	21	21
22	20.00' building set back	22	22	22	22	22	22
23	20.00' building set back	23	23	23	23	23	23
24	20.00' building set back	24	24	24	24	24	24
25	20.00' building set back	25	25	25	25	25	25
26	20.00' building set back	26	26	26	26	26	26
27	20.00' building set back	27	27	27	27	27	27
28	20.00' building set back	28	28	28	28	28	28
29	20.00' building set back	29	29	29	29	29	29
30	20.00' building set back	30	30	30	30	30	30
31	20.00' building set back	31	31	31	31	31	31
32	20.00' building set back	32	32	32	32	32	32
33	20.00' building set back	33	33	33	33	33	33
34	20.00' building set back	34	34	34	34	34	34
35	20.00' building set back	35	35	35	35	35	35
36	20.00' building set back	36	36	36	36	36	36
37	20.00' building set back	37	37	37	37	37	37
38	20.00' building set back	38	38	38	38	38	38
39	20.00' building set back	39	39	39	39	39	39
40	20.00' building set back	40	40	40	40	40	40
41	20.00' building set back	41	41	41	41	41	41
42	20.00' building set back	42	42	42	42	42	42
43	20.00' building set back	43	43	43	43	43	43
44	20.00' building set back	44	44	44	44	44	44
45	20.00' building set back	45	45	45	45	45	45
46	20.00' building set back	46	46	46	46	46	46
47	20.00' building set back	47	47	47	47	47	47
48	20.00' building set back	48	48	48	48	48	48
49	20.00' building set back	49	49	49	49	49	49
50	20.00' building set back	50	50	50	50	50	50
51	20.00' building set back	51	51	51	51	51	51
52	20.00' building set back	52	52	52	52	52	52
53	20.00' building set back	53	53	53	53	53	53

SITE PLAN 1" = 20'-0"



MSI GENERAL CORPORATION
P.O. BOX: 7
OCONOMOWOC, WI 53066
PHONE: 262-567-3661
FAX: 262-567-7390

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PROJECT ADDRESS:
PROJECT NAME
HM Products
STREET ADDRESS
581 South Industrial Drive
CITY STATE / ZIP
Village of Hartland

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Date: 6-14-17 Drawn By: Tony Zulli
Sheet Title: SITE PLAN
Sheet Number: C-101
Project Number: P11959
P-11959

MANAGERS

ENGINEERS

CONTRACTORS

ARCHITECTS



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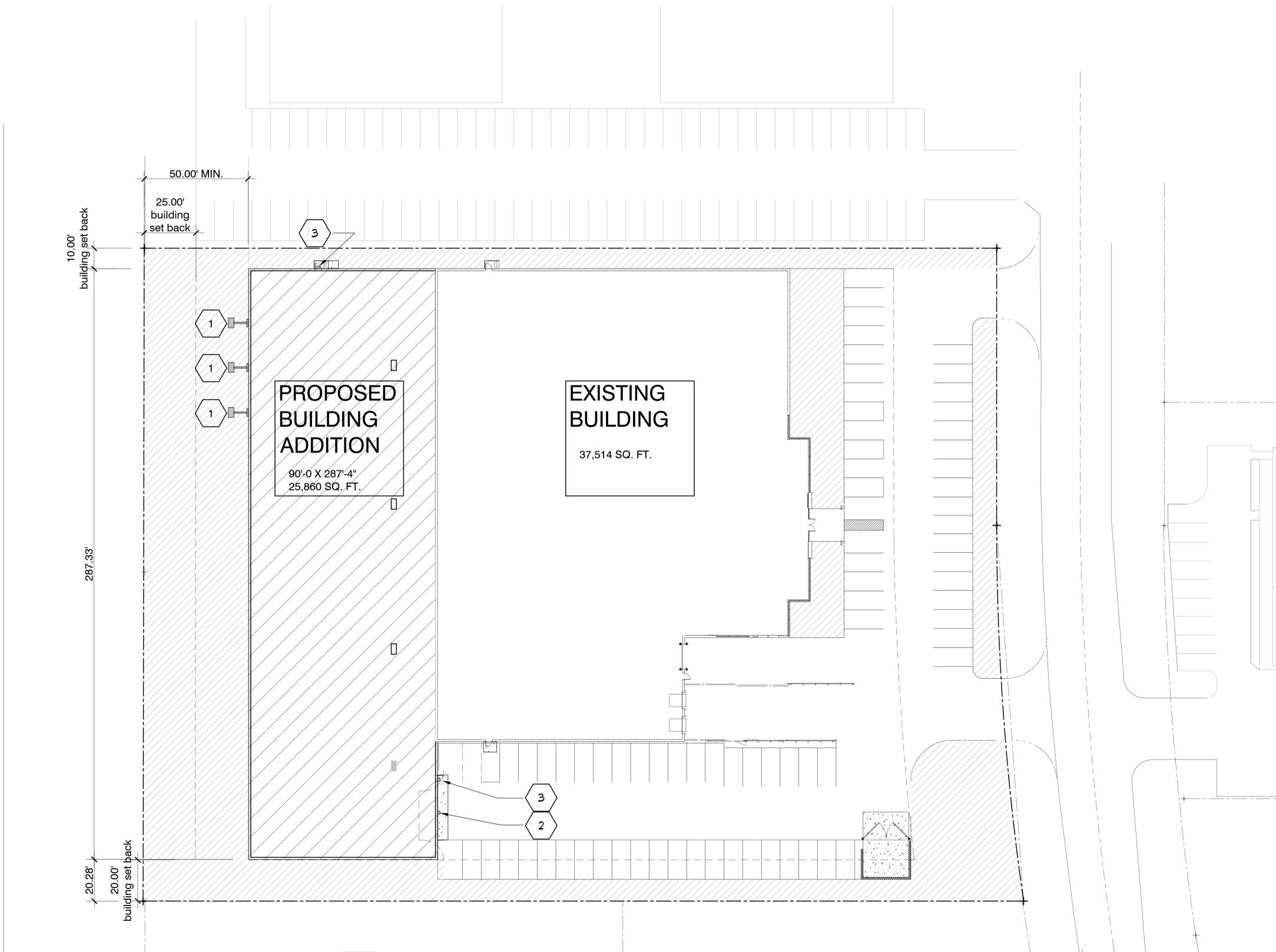
PROJECT NAME
 HM Products
 STREET ADDRESS
 581 South Industrial Drive
 CITY/STATE / ZIP
 Village of Hartland

ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

Date: 6-14-17 Drawn By: Tony Zulli

Sheet Title:
SITE LIGHTING PLAN

Sheet Number:
C-106
 Project Number: P11595
P-11959



REFERENCE KEYNOTES

Division 01- General (11) 1/2" PRECAST LINE LOADS(0410) (12) 1/2" PRECAST LINE LOADS(0410) (13) 1/2" PRECAST LINE LOADS(0410) (14) 1/2" PRECAST LINE LOADS(0410) (15) 1/2" PRECAST LINE LOADS(0410) (16) 1/2" PRECAST LINE LOADS(0410)	Division 03- Concrete (31) CONCRETE OVERHUNG HOLD FOUNDATION WALL W/ 8# ON FINISHES FLOOR(0200 & 0300) (32) 4" POLURED CONCRETE FLOOR W/ 4" STONE & 2" T.B. LPT(0200, 0300) (33) 4" POLURED CONCRETE FLOOR W/ 4" STONE & 2" T.B. LPT(0200, 0300) (34) 4" POLURED CONCRETE FLOOR W/ 4" STONE & 2" T.B. LPT(0200, 0300) (35) 4" POLURED CONCRETE FLOOR W/ 4" STONE & 2" T.B. LPT(0200, 0300) (36) CONCRETE REINF. W/ 6# W/ 10" W.P. (0300) (37) CONCRETE REINF. W/ 6# W/ 10" W.P. (0300) (38) CONCRETE REINF. W/ 6# W/ 10" W.P. (0300) (39) CONCRETE REINF. W/ 6# W/ 10" W.P. (0300)	Division 04- Masonry (41) 4" STANDARD CONCRETE MASONRY UNIT(0400) (42) 4" STANDARD CONCRETE MASONRY UNIT(0400) (43) 4" STANDARD CONCRETE MASONRY UNIT(0400) (44) 4" STANDARD CONCRETE MASONRY UNIT(0400) (45) 4" STANDARD CONCRETE MASONRY UNIT(0400) (46) 4" STANDARD CONCRETE MASONRY UNIT(0400) (47) 4" STANDARD CONCRETE MASONRY UNIT(0400) (48) 4" STANDARD CONCRETE MASONRY UNIT(0400) (49) 4" STANDARD CONCRETE MASONRY UNIT(0400)	Division 05- Metals (51) 4" DIA. CONCRETE FILLED PIPE BOLLARD SET IN 3/4" DIA. CONC. MASS (0500) W/ 1/2" X 1/2" X 1/2" (52) 20 GAUGE METAL DECK, 24" JOISTS AND TRUSS GIRDERS (0510) 1/2" X 1/2" X 1/2" (53) METAL STEEL JOIST W/ 1/2" X 1/2" X 1/2" TRACK CLOSED RIBS(0510) (54) CONCRETE FILLED METAL PAN STEEL JOIST W/ CLOSED RIBS(0510) (55) 1/2" DIA. METAL BALUNGS(0500)	Division 07- Thermal and Moisture Protection (71) PERIMETER INSULATION(0700) (72) PERLITE LOOSE-FILL INSULATION IN CORERS OF BLOCK(0700) (73) EPDM BALLASTED ROOF SYSTEM W/ 2" GIB INSULATION IN 1/4" X 1/4" EPS INSULATION IN 1/4" DIA. TOTAL R VALUE 50.1 (0700) (74) 3/4" GAGE CONCEALED FASTENER METAL ROOF PANEL (75) 3/4" GAGE SIDE LAP FASTENER METAL ROOF OR WALL PANEL(0710) (76) 3/4" GAGE SCUFFURED STEEL/WALL PANEL (77) 20 GAGE PREPUNCHED METAL LIGHT PANEL (78) 1/2" VINYL FACED BLANKET INSULATION(0700) (79) 1/2" FRICTION FIT INSULATION(0700) (80) EPS EXTERIOR INSULATION FINISH SYSTEM(EPS/EIFS) (81) FOAM FILL INSULATION IN CORERS OF BLOCK	Division 08- Doors and Windows (81) BRICKSTONE INSULATED LOW E GLASS(0811/0800) (82) GREYSTONE INSULATED LOW E GLASS(0811/0800) (83) CLEAR INSULATED LOW E GLASS(0811/0800) (84) BRICKSTONE ANODIZED ALUMINUM THERMAL BREAK FRAMING(0810) (85) CLEAR ANODIZED ALUMINUM THERMAL BREAK FRAMING(0810) (86) H.M. SDRBOROARD LITE	Division 09- Finishes (91) SUSPENDED CEILING SYSTEM(0910) (92) METAL SOFFIT PANEL	Division 10- Misc (101) FLAG POLE (102) MONUMENT SIGN (103) DUMPSTER ENCLOSURE (104) ROOF HATCH AND LADDER
---	--	---	---	--	---	--	---

EXTERIOR LIGHTING KEY NOTES

(1) FRONT LIT LIGHTING FOR BUILDING SIGN (MIN. OF 3 FIXTURES)	(2) WALL PAK LIGHT FIXTURE	(3) EMERGENCY EXIT DOOR LIGHT FIXTURE
---	----------------------------	---------------------------------------

SITE LIGHTING PLAN 1" = 20'-0"

MANAGERS

ENGINEERS

CONTRACTORS

ARCHITECTS



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PROJECT ADDRESS:

PROJECT NAME
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ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

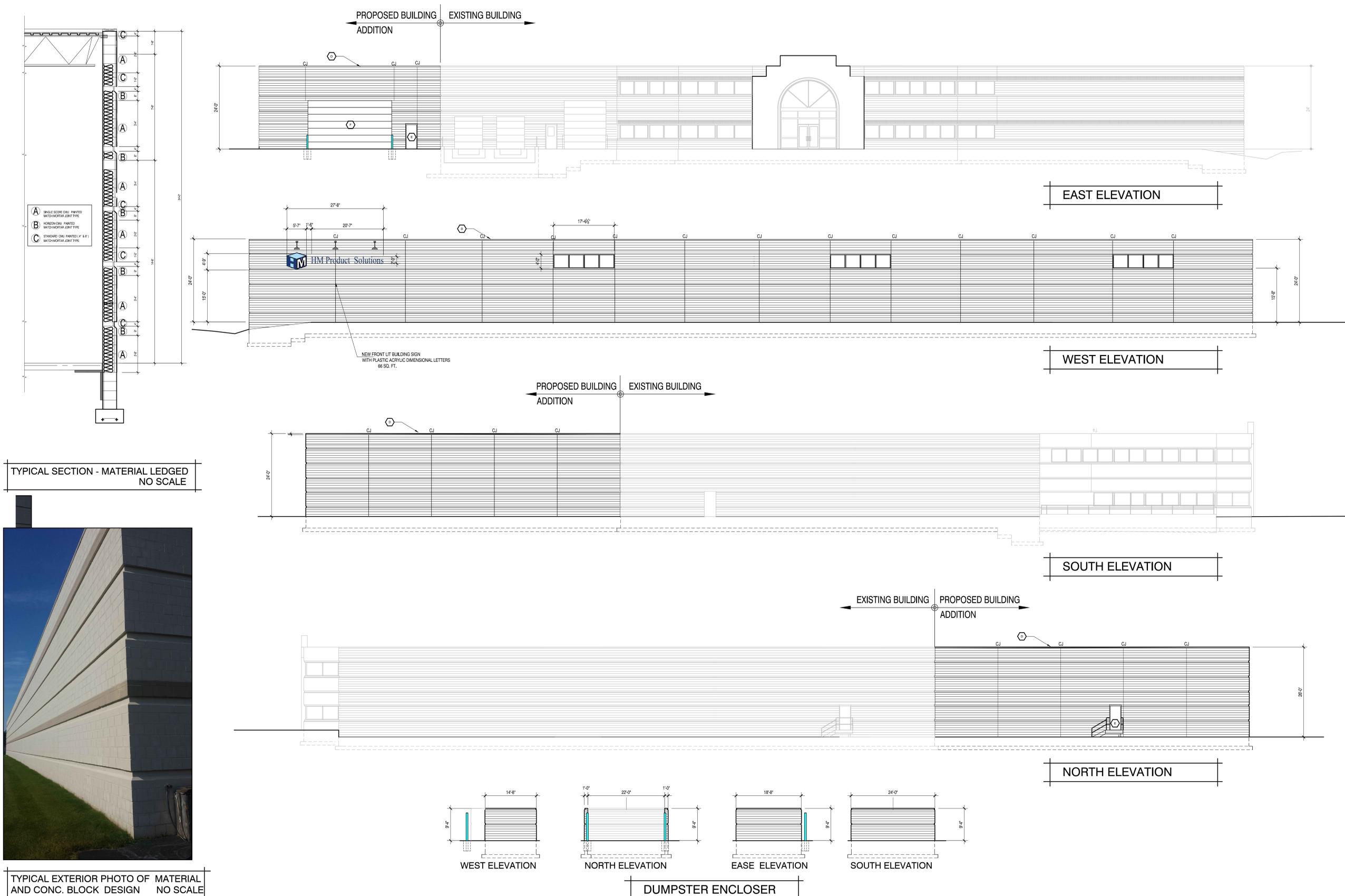
Date: 6-14-17 Drawn By: Tony Zulli
 Sheet Title: EXTERIOR ELEVATIONS
 Sheet Number: A-201
 Project Number: P11959

MANAGERS

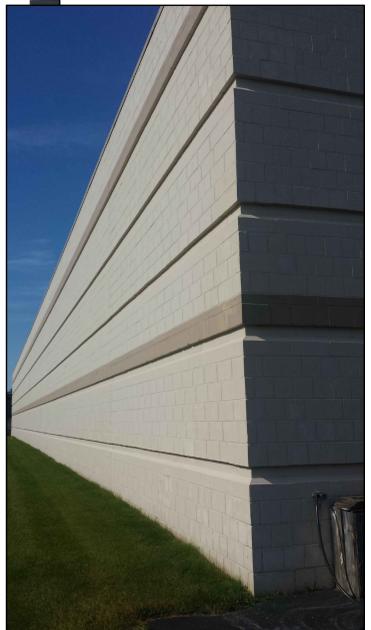
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TYPICAL SECTION - MATERIAL LEDGED
 NO SCALE

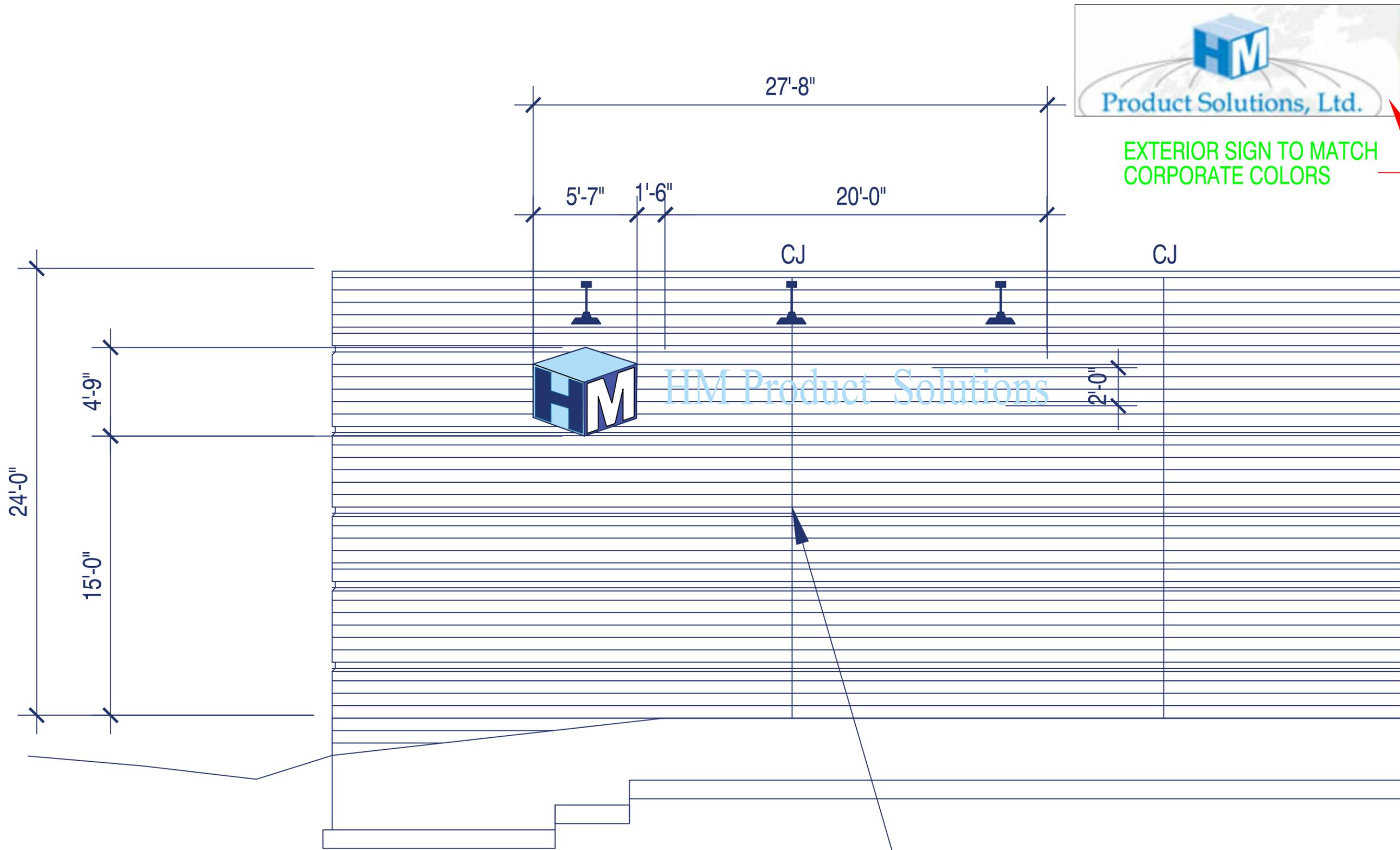


TYPICAL EXTERIOR PHOTO OF MATERIAL
 AND CONC. BLOCK DESIGN
 NO SCALE

EXTERIOR MATERIAL KEY NOTES

- A SINGLE SCORE CMU PAINTED MATCH MORTAR JOINT TYPE
- B HORIZON CMU PAINTED MATCH MORTAR JOINT TYPE
- C STANDARD CMU PAINTED (4" & 8") MATCH MORTAR JOINT TYPE
- D METAL CAP FLASHING TO MATCH EXISTING CONDITIONS
- E 3070 H.M. DOOR AND FRAME PAINTED AND MATCH EXISTING CONDITIONS
- F 24" X 14" INSULATED OVERHEAD DOORS WITH WINDOW UNITS MATCH EXISTING DOORS

ELEVATIONS 3/32" = 1'-0"



EXTERIOR SIGN TO MATCH CORPORATE COLORS

NEW FRONT LIT BUILDING SIGN
MADE UP OF DIMENSIONAL ACRYLIC LETTERS
67 SQ. FT.

WEST ELEVATION



MSI GENERAL CORPORATION
P.O. BOX 7
OCONOMOWOC, WI 53066
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FAX: 262.567.2764

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SINGLE SOURCE RESPONSIBILITY™
ALL WORK TO BE COMPLETED AS SHOWN, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MSI GENERAL MASTER SPECIFICATION

HM Product Solution
Exterior Sign Design

PROJECT NAME
HM Product Solutions
STREET ADDRESS
581 S. Industrial Drive
CITY/STATE/ZIP
Village of Hartland

Date: 06/26/17
Scale: 3/16" = 1'-0"
Drawn By: Tony Zulli
Sheet Number: P11959
Project Number: P11959

ARCHITECTS

CONTRACTORS

ENGINEERS

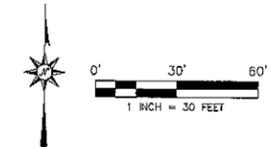
MANAGERS

PLAT OF SURVEY

PART OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 3, TOWNSHIP 7 NORTH, RANGE 18 EAST, VILLAGE OF HARTLAND, WAUKESHA COUNTY, WISCONSIN.

LEGAL DESCRIPTION
 LOT 12 EXCEPT THE NORTH 8.00 FEET THEREOF, AND ALL OF LOT 13, BLOCK 2, LAKE COUNTRY INDUSTRIAL PARK, BEING A SUBDIVISION LOCATED IN THE SW 1/4 OF THE NW 1/4, AND IN THE NW 1/4 AND SW 1/4 OF THE SW 1/4, ALL W/ SECTION 3, TOWN 7 NORTH, RANGE 18 EAST, VILLAGE OF HARTLAND, COUNTY OF WAUKESHA, STATE OF WISCONSIN.

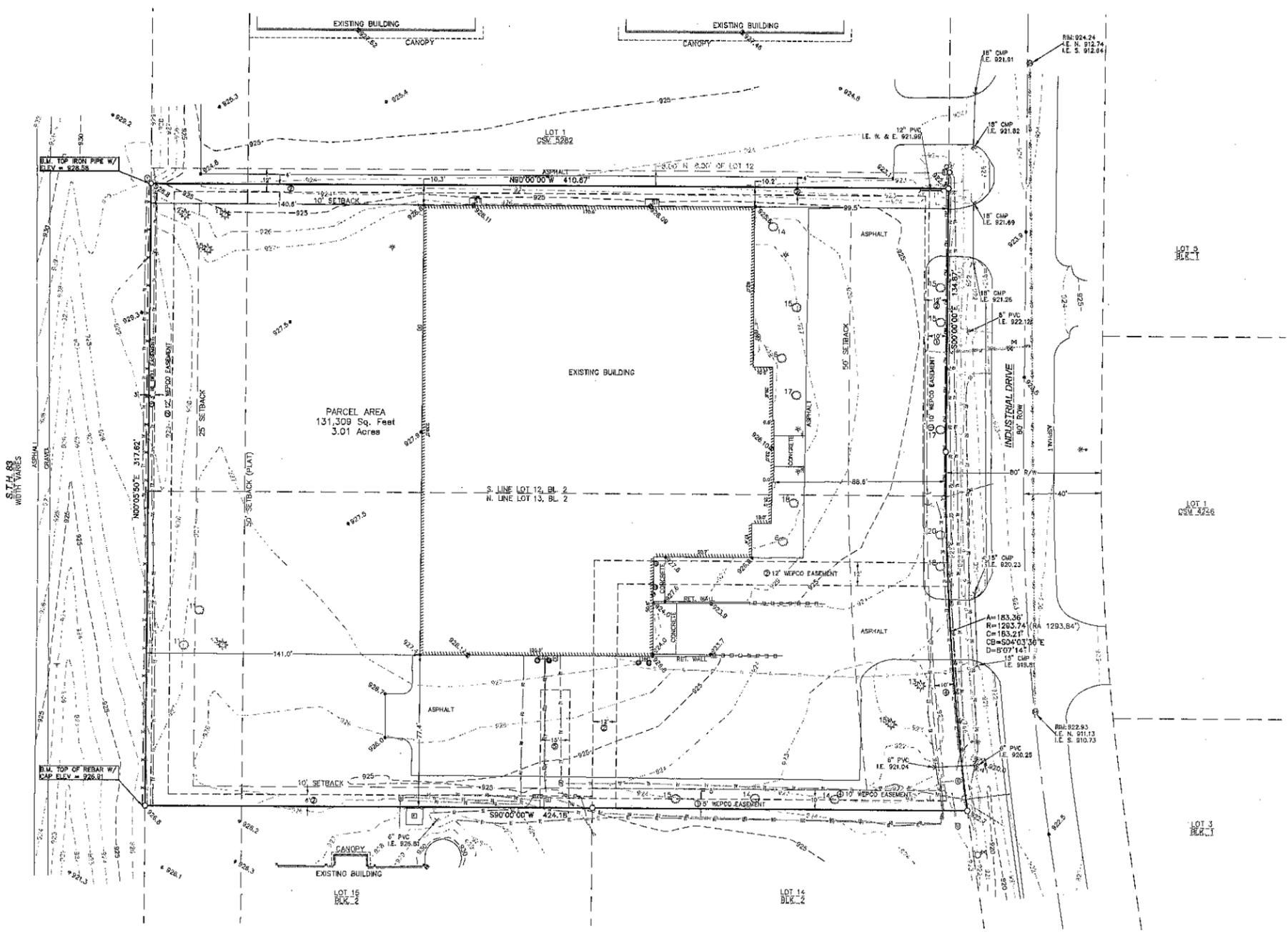
TAX KEY No.: HAV 0731.023



- NOTES:**
- VERTICAL DATUM IS NGVD 29 AND REFERENCED TO THE SOUTHWEST CORNER OF SECTION 3-7-18, CONC. MON. WITH BRASS CAP PUBLISHED BY SEMPC ELEV. 808.66
 - BEARINGS ARE REFERENCED TO THE WEST LINE OF LOTS 12 AND 13, BLOCK 2 AS RECORDED IN LAKE COUNTRY INDUSTRIAL PARK, NO. 177569 WITH AN EFFECTIVE DATE OF JUNE 12, 2017. AN ADDITIONAL SEARCH FOR EASEMENTS OF RECORD HAS NOT BEEN COMPLETED.
 - NO DIRECT VEHICULAR ACCESS TO S.T.H. 83 PER LOP PLAT.
 - UNDERGROUND UTILITIES LOCATED PER DIGGER'S HOTLINE TICKET ORDERED BY OTHERS.
 - LAKE COUNTRY INDUSTRIAL PARK COVENANT PER DOC. NO. 278168 SETBACKS:
 - 50' FRONT
 - 10' SIDE MIN. 30' TOTAL
 - 25' REAR
 - OWNER: HM INVESTMENT PARTNERS, LLC

LEGEND

- FOUND 1" IRON PIPE
- FOUND REBAR W/ CAP
- ⊙ ELECTRIC PEDESTAL
- ⊙ CLEANOUT
- ⊙ UTILITY PEDESTAL
- ⊙ TV PEDESTAL
- ⊙ TELEPHONE MANHOLE
- ⊙ SANITARY MANHOLE
- ⊙ ELECTRIC TRANSFORMER
- ⊙ HYDRANT
- ⊙ WATER VALVE
- ⊙ GUY WIRE
- ⊙ UTILITY POLE
- ⊙ LIGHT POLE WITH MAST
- ⊙ YARD LIGHT
- ⊙ GAS METER
- ⊙ ELECTRIC CONTROL BOX
- ⊙ CULVERT SIZE AND TYPE NOTED
- ⊙ BOLLARD/POST
- ⊙ SIGN
- ST STEPS
- 1" CONIF. TREE W/ TRUNK DIA.
- 1" DECID. TREE W/ TRUNK DIA.
- 926.3 ♣ FLOOR ELEVATION
- 926.3 ♣ EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- RIP RAP
- GUARD RAIL
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND GAS LINE
- UNDERGROUND FIBER OPTIC LINE
- UNDERGROUND TV LINE
- WATERLINE
- SANITARY LINE
- OVERHEAD UTILITY
- x NO ACCESS



PARCEL AREA
 131,309 Sq. Feet
 3.01 Acres

- EASEMENT NOTES (PER TITLE SEARCH)**
- UTILITY EASEMENT GRANTED TO WISCONSIN ELECTRIC POWER COMPANY, ITS SUCCESSORS AND/OR ASSIGNS, BY AN INSTRUMENT RECORDED ON MARCH 31, 1975, IN REEL/VOLUME 113, IMAGE/PAGE 544, AS DOCUMENT NO. 906511.
 - UTILITY EASEMENT GRANTED TO WISCONSIN ELECTRIC POWER COMPANY, ITS SUCCESSORS AND/OR ASSIGNS, BY AN INSTRUMENT RECORDED ON MAY 14, 1971, IN REEL 357, IMAGE 8, AS DOCUMENT NO. 1000444.
 - RIGHT-OF-WAY GRANT GRANTED TO WISCONSIN BELL, INC., ITS SUCCESSORS AND/OR ASSIGNS, RECORDED ON NOVEMBER 20, 1990 IN REEL 1295, IMAGE 825, AS DOCUMENT NO. 1623195
 - EASEMENT GRANTED TO WISCONSIN ELECTRIC POWER COMPANY BY AN INSTRUMENT RECORDED ON JUNE 2, 1992, IN REEL 1488, IMAGE 1131, AS DOCUMENT NO. 1737928.
 - EASEMENT GRANTED TO WISCONSIN ELECTRIC POWER COMPANY BY AN INSTRUMENT RECORDED ON DECEMBER 4, 1992, IN REEL 1608, IMAGE 00D9, AS DOCUMENT NO. 1791020.

SURVEYOR'S CERTIFICATION:

I HEREBY CERTIFY THAT I HAVE SURVEYED THE ABOVE DESCRIBED PROPERTY AND THE ABOVE MAP IS A TRUE REPRESENTATION THEREOF AND SHOWS THE SIZE AND LOCATION OF THE PROPERTY, ITS EXTERIOR BOUNDARIES, THE LOCATION OF ALL VISIBLE STRUCTURES AND DIMENSIONS OF ALL PRINCIPAL BUILDINGS THEREON, BOUNDARY FENCES, APPARENT EASEMENTS, ROADWAY AND VISIBLE ENVIROACHMENTS, IF ANY. THIS SURVEY IS MADE FOR THE EXCLUSIVE USE OF THE PRESENT OWNERS OF THE PROPERTY, AND ALSO THOSE WHO PURCHASE, MORTGAGE, OR GUARANTEE, THE TITLE THERETO WITHIN ONE (1) YEAR FROM DATE HEREOF.

SIGNED: MATTHEW T. O'ROURKE, PROFESSIONAL LAND SURVEYOR S-2771



LOCATION:	581 INDUSTRIAL DRIVE HARTLAND WISCONSIN
CLIENT:	MSI GENERAL
PROJECT NAME:	BOUNDARY/TOPOGRAPHY PLAT OF SURVEY
	SHEET 1 OF 1
	DATE: 6-28-2017
REVISED:	RE:
DRWN: MTD	CHKD: JDD
	PROJ. NO.: 17076
	FILE NO.: 17076_SURVEY.DWG

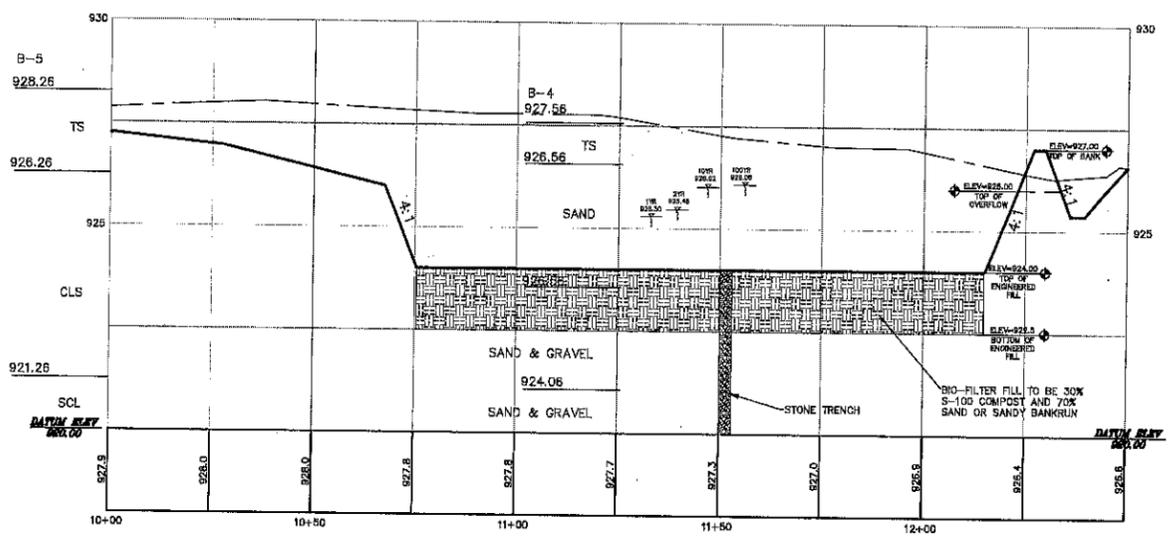
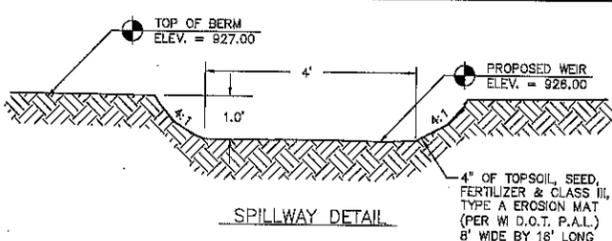
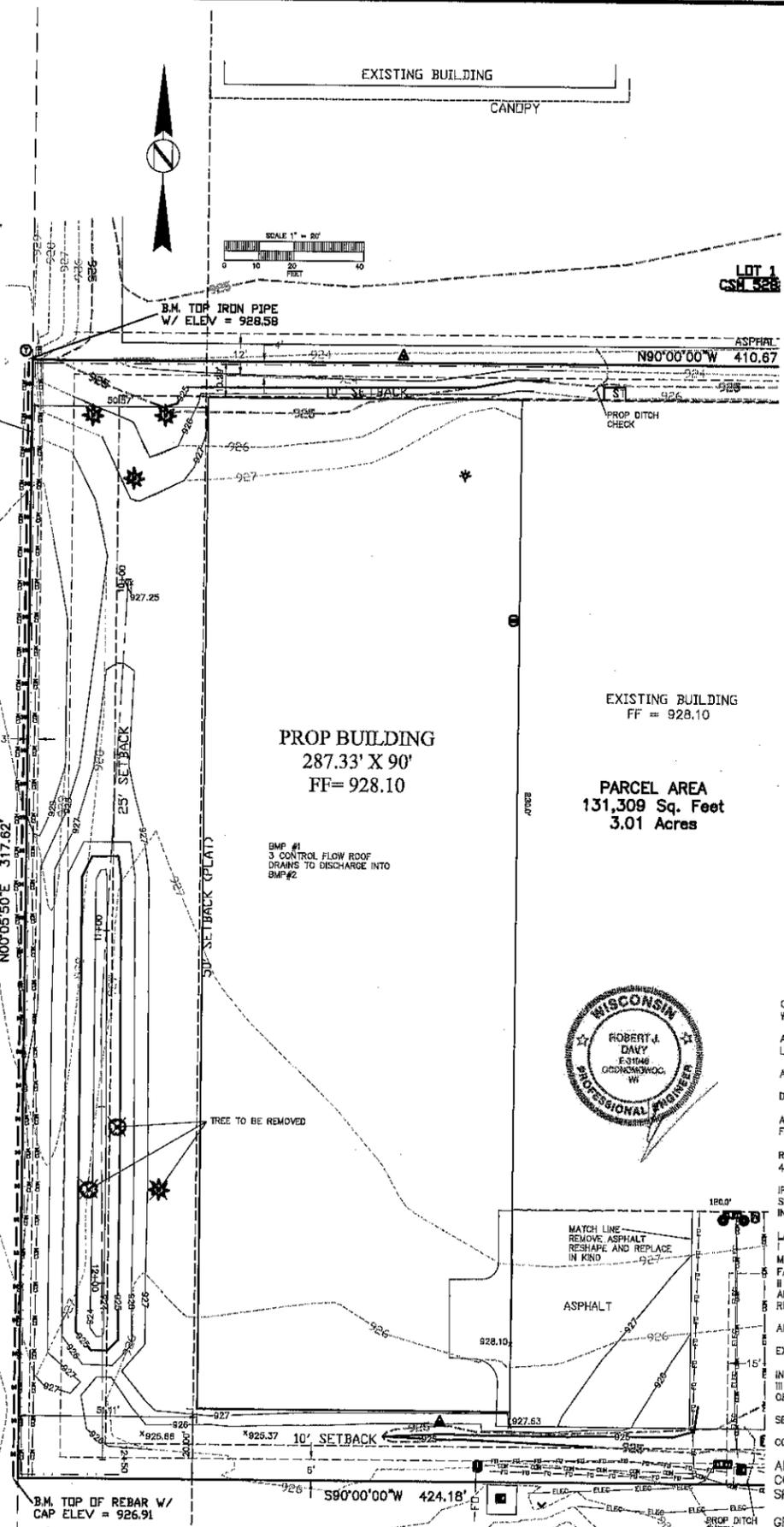
GENERAL UTILITY NOTES

- 1.) ALL UNDERGROUND STRUCTURES AND UTILITIES HAVE BEEN SHOWN TO A REASONABLE DEGREE OF ACCURACY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THEIR EXACT LOCATION.
- 2.) EXISTING CONDITIONS, INCLUDING UTILITY SIZES AND ELEVATIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND DISCREPANCIES REPORTED TO THE ENGINEER PRIOR TO STARTING OF WORK.
- 3.) MAINTAIN CONTINUOUS UTILITY SERVICE AT ALL TIMES.
- 4.) CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES IN EXISTING UTILITY ALIGNMENTS SO THAT ADJUSTMENTS IN DEPTH AND/OR ALIGNMENT MAY BE MADE.
- 5.) PIPE LENGTHS AND INVERTS ARE TO CENTER OF STRUCTURE.

IN ACCORDANCE WITH WISCONSIN STATUTE 182.0175, DAMAGE TO TRANSMISSION FACILITIES, EXCAVATOR SHALL BE SOLELY RESPONSIBLE TO PROVIDE ADVANCE NOTICE TO THE DESIGNATED "ONE CALL SYSTEM" NOT LESS THAN THREE WORKING DAYS PRIOR TO COMMENCEMENT OF ANY EXCAVATION REQUIRED TO PERFORM WORK CONTAINED ON THIS DRAWING. AND FURTHER EXCAVATOR SHALL COMPLY WITH ALL OTHER REQUIREMENTS OF THIS STATUTE RELATIVE TO EXCAVATOR'S WORK.



Toll Free (800) 242-8511
 Milwaukee Area (414) 259-1181
 Hearing Impaired TDD (800) 542-2289
 www.diggershotline.com



BIO-FILTER NOTES
 CONTRACTOR TO DIG BMP 2 TO AN ELEVATION OF 924.00 AND WILL ACT AS A SED TRAP DURING CONSTRUCTION. SEED AND EROSION MAT THE SIDE SLOPES. ONCE BUILDING IS BUILT AND SITE RESTORED, CONTRACTOR TO REMOVE 6" OF MATERIAL, TO GET TO AN ELEVATION OF 923.5. THEN PLACE 5" OF S100 COMPOST ON TOP AND TILL IT INTO THE SAND (APPROX. 18" DEEP). TOP OF ENGINEERED FILL TO APPROX 924.2 TO ALLOW FOR SETTLEMENT AND DECAY. RESTORE BOTTOM OF BASIN WITH PRAIRIE NURSERY LAND RESTORATION MIX (OR EQUAL) 1.5LBS/5000 SQ.FT. AND 1 LBS / 1000 SQ.FT OF AN ANNUAL RYE
 Mix to Contain at least 10 wildflowers & 3 or more grasses.
 Wildflowers:
 Nodding Pink Onion / Smooth Aster / Blue False Indigo / White False Indigo / Pale Indian Plantain / Wild Senna / Lanceleaf Coreopsis / Purple Prairie Clover / Canada Tick Trefoil / Pale Purple Coneflower / Purple Coneflower / Showy Sunflower / Ox Eye Sunflower / Bergamot / Smooth Penstemon / Yellow Coneflower / Black Eyed Susan / Sweet Black Eyed Susan / Brown Eyed Susan / Roseweed / Compositant / Prairie Dock / Stiff Galdenrod
 Grasses:
 Big Bluestem / Sideoats Grama / Canada Wild Rye / Switchgrass / Little Bluestem / Indiangrass

CONSTRUCTION SEQUENCE

- 1) INSTALL ALL EROSION CONTROL MEASURES, (SILT FENCE, & DITCH CHECKS) TRACKING DRIVE TO BE EXISTING PARKING LOT. CONTRACTOR TO KEEP INDUSTRIAL DRIVE CLEAN.
- 2) STRIP TOPSOIL & STOCKPILE WHAT IS NEEDED TO RESTOR AND REMOVE THE REST OF THE TOPSOIL (SEED WITH RYE GRASS IF LEFT INACTIVE FOR MORE THAN 7 DAYS), PLACE SILT FENCE ON DOWN SLOPE.
- 3) GRADE SITE AND REMOVE ALL EXCESS MATERIAL (INCLUDING SEDIMENT TRAP)
- 4) START CONSTRUCTION OF BUILDING.
- 5) ONCE BUILDING IS COMPLETED INSTALL LANDSCAPING AND AND FINALIZE RESTORATION INCLUDING BASIN REMEDIATION.
- 6) ONCE SITE IS VEGETATED AND VILLAGE APPROVES REMOVE ALL EROSION CONTROL.

CONSTRUCT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE WISCONSIN DNR'S STORM WATER CONSTRUCTION AND POST-CONSTRUCTION TECHNICAL STANDARDS.

ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE MONITORED DAILY FOR STABILITY AND OPERATION AND REPORTED AT LEAST ONCE PER WEEK AND FOLLOWING EVERY 0.5" RAINFALL.

ALL INLET PROTECTION TO CONFORM TO EITHER WDOT PAL LIST OR WDNR T.S. 106D
 DUST CONTROL TO FOLLOW WDNR T.S. 106B

ALL RESTORATION TO BE IN ACCORDANCE WITH WDNR'S CONSERVATION PRACTICE STD 1059. CUT AND FILL SLOPES WILL BE 3:1 OR FLATTER OUTSIDE ROAD RIGHT OF WAY & 4:1 OR FLATTER WITHIN ROAD RIGHT OF WAY.

RESTORATION TO BE TOP SOILED (6" MIN), (IF GRADED), SEED, FERTILIZED, AND MULCHED UNLESS OTHERWISE NOTED. ON SLOPES 4:1 OR STEEPER CLASS I TYPE B (WSDOT PAL) EROSION MAT REQUIRED.

IF THE SITE OR PORTIONS OF THE SITE ARE TO REMAIN INACTIVE FOR GREATER THAN 7 DAYS TEMPORARY STABILIZATION MEASURES SUCH AS SOIL TREATMENT, TEMPORARY SEEDING OR MULCHING SHALL BE TAKEN WITHIN 7 DAYS FROM THE SITE BEING LEFT INACTIVE.

LATE SEASON STABILIZATION BETWEEN OCTOBER 15TH AND NOVEMBER 15TH
 SEEDING RATE: PERENNIAL SEED MIX RATE MUST BE APPLIED AT 1.5 x THE WSDOT SECTION 630 RATES AND MUST INCLUDE A MINIMUM OF 2 LBS PER 1000 SQ.FT. OF TEMPORARY COVER (IE WINTER WHEAT OR ANNUAL RYE GRASS FOR FALL PLANTINGS).

II EROSION CONTROL: IN ADDITION TO APPLYING TOPSOIL THE ABOVE NOTED SEED MIX AND STARTER FERTILIZER, THE FOLLOWING ARE MINIMUM REQUIREMENTS FOR STABILIZING SITES DURING THIS PERIOD. APPROVED EROSION CONTROL PLANS MAY BE MORE RESTRICTIVE

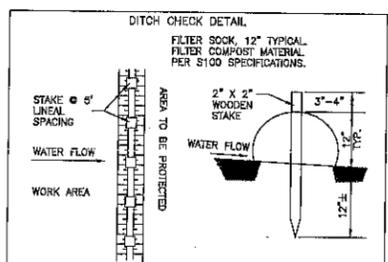
1. CHANNEL FLOW AND BACKSLOPES: APPLY STAKED PAL CLASS 3 TYPE A EROSION MATTING THE ENTIRE CHANNEL AND ALL BACKSLOPES.
2. OTHER AREAS: APPLY TYPE A SOIL STABILIZER FROM THE PAL TO ALL OTHER DISTURBED AREAS THAT REMAIN EXPOSED. CLASS 3 TYPE A EROSION MATTING WITH TYPE B SOIL STABILIZER UNDER IT IS ACCEPTABLE.
3. INFALLS / OUTFALLS: INSTALL SOD PADS (2 ROLLS) AT ALL CULVERT OUTFALLS, AND OTHER HIGH-EROSION LOCATIONS IN ACCORDANCE WITH DNR STANDARDS.
- IV MAINTENANCE: INSPECT ALL SEEDING AREAS WEEKLY, ENSURE ADEQUATE WATER IS PROVIDED UNTIL FULL TEMPORARY COVER IS OBTAINED, AND REPAIR ANY EROSION PROBLEMS, WASHOUTS, ETC.

SEED TYPE TO BE TURF TYPE. RATE TO BE APPLIED PER MANUFACTURERS RECOMMENDATIONS UNLESS SPECIFIED ON PLANS.

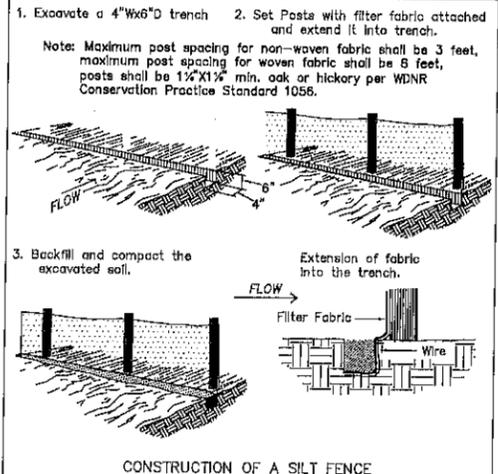
CONTRACTOR TO FOLLOW STANDARD PROCEDURES FOR SPILL PREVENTION AND RESPONSE

ALL UTILITY WORK TO BE INSTALLED THE STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN LATEST EDITION, AND VILLAGE OF HARTLAND STANDARD SPECIFICATIONS

GRADING AND PAVING PER STATE OF WISCONSIN STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION LATEST EDITION

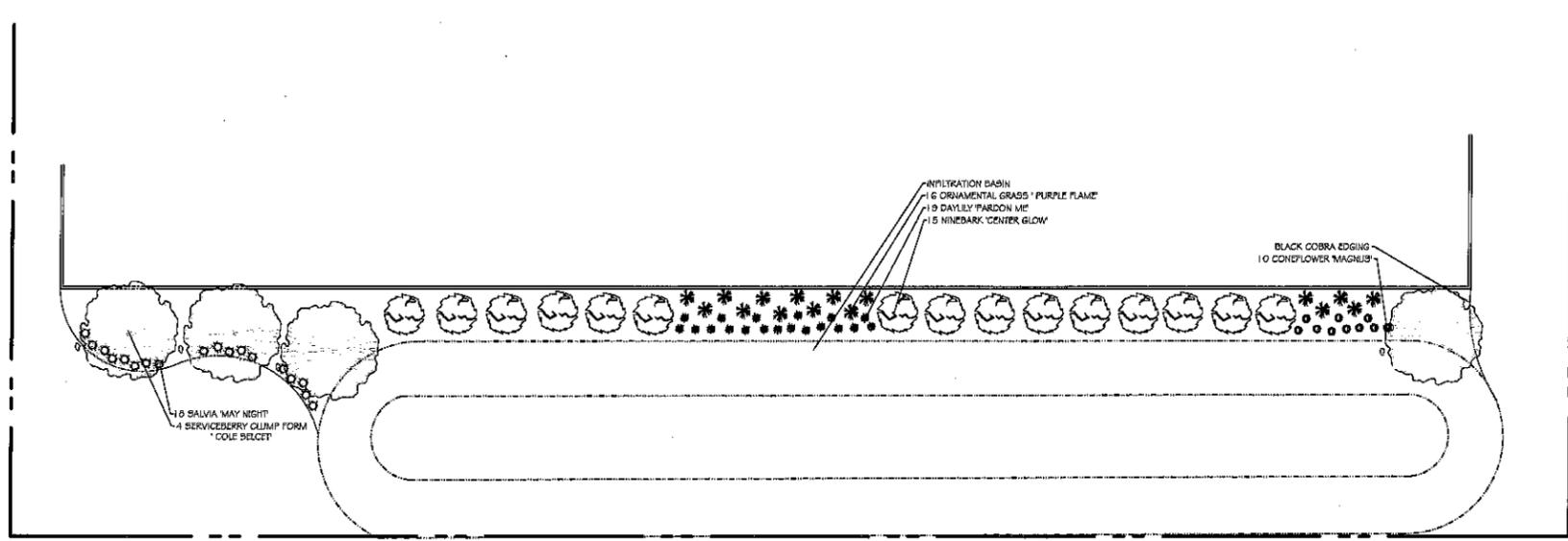


- NOTES:**
1. ALL MATERIAL TO MEET WI D.O.T. P.A.L. SPECIFICATIONS.
 2. THE CONTRACTOR SHALL ROUTINELY INSPECT, MAINTAIN AND REPAIR THE FILTER SOCK THROUGHOUT CONSTRUCTION.
 3. DURING CONSTRUCTION THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE FILTER WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE FILTER, OR AS DIRECTED BY THE ENGINEER.



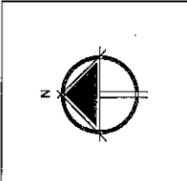
LAKE COUNTRY ENGINEERING, INC.
 Consulting Engineers - Surveyors
 970 S. Silver Lake Street, Suite 105, Oconomowoc, WI 53066
 Phone (262) 569-9316 Fax (262) 569-9316
 DATE: JUL 1, 2017
 CHECKED BY: R. J. DAVY
 DRAFTED BY: R.A.D.
 SCALE: 1" = 20'
 REVISION DATE
 REMARKS

GRADING AND EROSION CONTROL PLAN
 PROJ. # 17-3209
 SHEET # 2 OF 2



DETAILS MATTER
 -LANDSCAPE DESIGN - CONSTRUCTION -
 -HORTICULTURAL CARE -
 -DECORATIVE MASONRY - CONCRETE -
 SEASONALSERVICES.COM
 262-392-3444

PROJECT NAME: **HM Product Solutions**
 581 S. Industrial Drive
 Hartland, WI 53029
 DATE: July 1, 2017 SCALE: 1" = 16'
 REVISION DATE:
 DRAWN BY: KW
 PROJECT NAME: HM Product Solutions
 581 S. Industrial Drive
 Hartland, WI 53029
 DATE: July 1, 2017 SCALE: 1" = 16'
 REVISION DATE:
 DRAWN BY: KW



PAGE:
 1 of 1

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810 CARDINAL LN STE 100
HARTLAND WI 53029-2390

FIRST BANK FINANCIAL CENTRE
C/O ACCOUNTS PAYABLE
155 W WISCONSIN AVE
OCONOMOWOC WI 53066

HERAEUS ELECTRO-NITE CO LLC
RICHARD A FALK
541 S INDUSTRIAL DR
HARTLAND WI 53029-2323

HM INVESTMENT PARTNERS LLC
581 S INDUSTRIAL DR
HARTLAND WI 53029

JAMES ORDWAY
KRISTIN ORDWAY
N45W29221 FORSETH DR
HARTLAND WI 53029

JOHN GEBHARD
TRUDY GEBHARD
N56W28754 CTH K
HARTLAND WI 53029

LAKE COUNTRY RACQUET & ATHLETIC CLUB INC
560 INDUSTRIAL DR
PO BOX 76
HARTLAND WI 53029

LAUDERMILK 710 LLC
710 CARDINAL LN
HARTLAND WI 53029

TROMPLER PROPERTIES LLC
580 S INDUSTRIAL DR
HARTLAND WI 53029-2357



VILLAGE OF HARTLAND
PETITION FOR:



CONDITIONAL USE

With Approval for Location and Plan of Operation
(REQUIRES 2 PLAN COMMISSION MEETINGS, A PUBLIC HEARING AT THE SECOND
PLAN COMMISSION MEETING AND 1 VILLAGE BOARD MEETING)

FEE: \$150.00 + \$300 Professional Fee Deposit

Date: <u>6-27-17</u>	Fee Paid: <u>450.00</u>
Date Filed:	Receipt No. <u>185928</u>

- Name: ILLINOIS CEMENT COMPANY
Address of Owner/Agent: PO BOX 442, 1601 ROCKWELL ROAD
LASALLE, IL 61301
Phone Number of Owner/Agent: 815.224.2112 x134, CELL 630.542.0005
FAX No. 815.224.4358 E-mail wamme@okymc.com
- Give complete legal description of property to be considered. (Attach a separate sheet with description and label sheet "Exhibit A").
701 WEST CAPITAL DRIVE, HARTLAND, IL 61301
- State present use of property and intended use. ZONED "O-1"
PRESENT USE - CEMENT DISTRIBUTION FACILITY,
ADDITION OF A SECOND STORAGE SILO

Wayne W. Emme
Signature of Petitioner

PO BOX 442, 1601 ROCKWELL ROAD, LASALLE, IL 61301
Address
815.224.2112 x134, CELL 630.542.0005
Phone

over

Narrative for Conditional Use Permit Application for additional silo

Applicant: Illinois Cement (aka Wisconsin Cement, aka ICC)

Address: 701 West Capitol Drive, Hartland, WI

Site and current facility description

Illinois Cement currently owns and operates a cement distribution facility at 701 West Capitol Drive. This site has been operated by Illinois Cement (aka Wisconsin Cement, aka ICC) since 1982 when the original silo was constructed. This site was previously used as a facility to load railcars with sand and gravel. The site is divided into two parcels and the total acreage is approximately 3.4 acres. Most of the eastern one-third of the site is undeveloped and is wooded with dense vegetation.

The site is zoned "Q-1" and is bounded on the north by West Capitol Drive and Vettelson Road. Ozinga operates a ready mix concrete facility on the north side of West Capitol Drive which is also zoned "Q-1". To the east of the Ozinga facility, the adjoining parcel is zoned "RD-2". The site is bounded on the south by the Canadian Pacific railway. The area to the south of the railway is zoned "M-1". Route 83 is west of the site. The parcel to the east of the site is zoned "RM-3".

The facility is used as a Portland cement distribution facility. Cement is a major constituent of concrete and is considered the "glue" which bonds the sand and gravel to form concrete. Trucks deliver cement to the site from ICC's production operation in LaSalle, Illinois. Arriving trucks unload the cement into the silo where it is stored until it is then loaded into customer trucks by a gravity discharge. There are dust collection systems to contain fugitive dust for both the truck unloading and truck loading processes.

Trucks access the site via Route 83 and West Capitol Drive. The driveway is paved and the area around the facility has a manicured lawn and mature pine trees to screen the unloading and loading activities from public view along West Capitol Drive.

Project Description

The project will include the installation of a 14' diameter silo to store a second type of cement at the facility. The product is Skyway Cement and is desirable in the market. Skyway Cement is considered a "green" building product as it is recycled from the blast furnace slag. This material can be used by builders and developers to earn certification in the LEED building material certification program.

The new silo will be installed near the existing silo and will be the same overall height and color as the existing silo. The existing silo is approximately 96' above grade and is 26' in diameter. The new silo will be only 14' in diameter. The visual impact of the new silo will be minimal as it will be inline (in a east-west orientation) with the existing silo, will be smaller in diameter and the same color. The new silo will use the same truck loadout system and fit into the existing footprint of the scale and paved area. This will minimize any impact on the site. The new silo will have its own dust collection system for unloading trucks to eliminate contamination of differing cements between silos. The dust collection system will be installed with BACT (Best Available Control Technology) to minimize emissions.

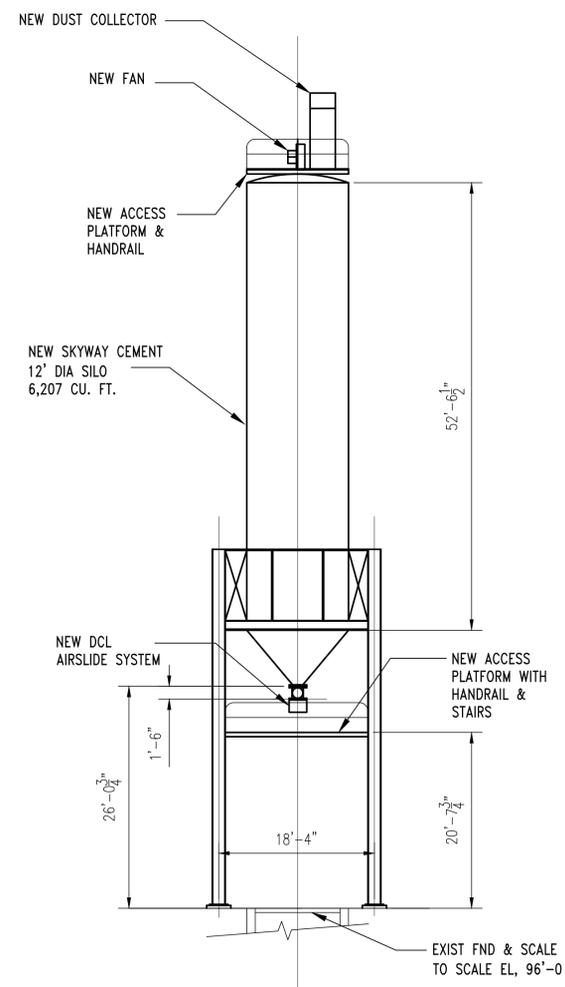
There are existing utilities at the facility for the project.

Traffic impact

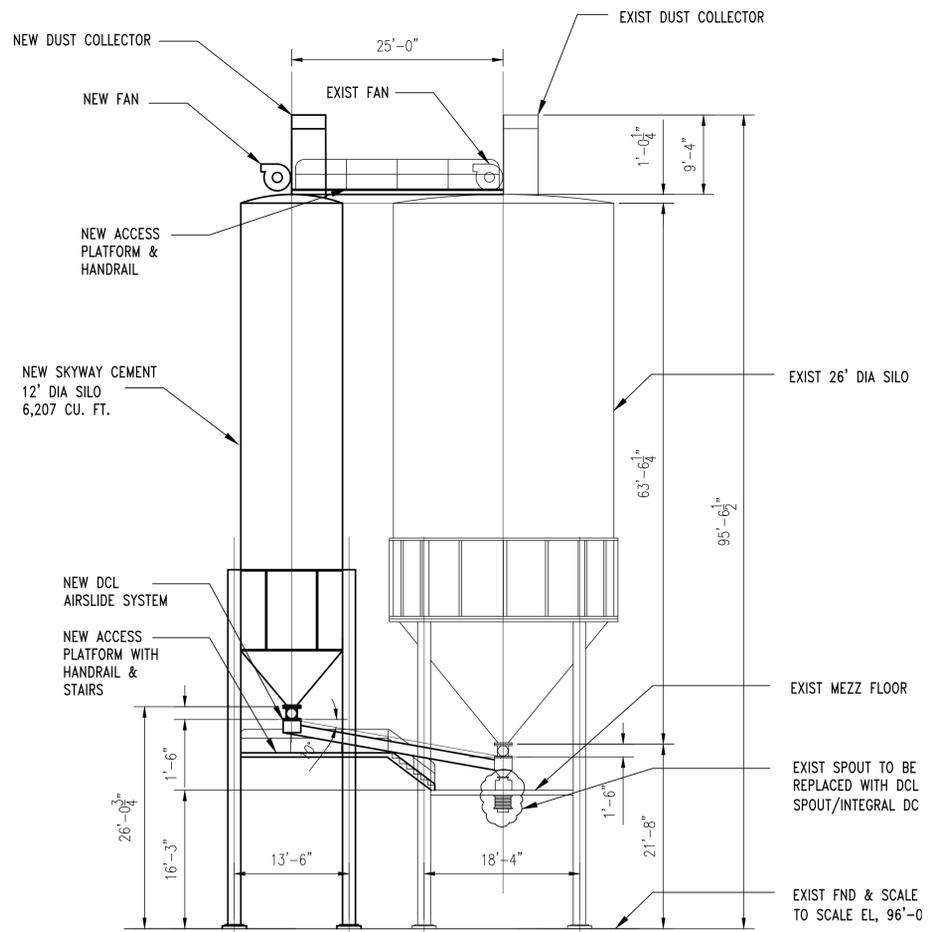
Trucks access the facility via Route 83 and West Capitol Drive. Illinois Cement can provide historical information to substantiate the average daily truck count at the facility in the peak shipping months is less than 10 trucks per day. It is anticipated that the average daily truck count will increase to 15 trucks per day in the peak shipping months with the second product being shipped from the facility. Demand for the product drops off in the winter months and the peak shipping months are from May thru November.

Summary

This project is planned at a site which has been operating as a cement distribution facility since 1982. The site is zoned "Q-1". The new silo will provide Illinois Cement with the opportunity to provide a needed building material to the local market in an economical and safe manner, one that is also considered a "green" building material. There will be minimal impact to traffic and the new silo will blend-in with the existing silo and create minimal visual impact. The new silo will be constructed in the existing developed footprint of the facility and will utilize BACT (Best Available Control Technology) for emissions and noise control.



ELEV LOOKING EAST
SCALE: 1" = 10'

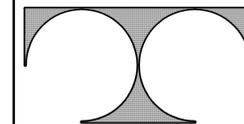


ELEV LOOKING NORTH
SCALE: 1" = 10'

CONCEPTUAL DESIGN NOT FOR CONSTRUCTION

R:\500CS00102 MGR0VE

				Dr MGR0VE 6-13-17		DJB PROJECT MANAGEMENT, LLC PO BOX 634, VAN METER ROAD SMITHTON, PA 15479 PHONE: (724) 787-4722 EMAIL: djblasko626@gmail.com		OWNER ILLINOIS CEMENT 701 WEST CAPITOL DRIVE HARTLAND, WI		Sheet Title				
				Des DJBLASKO 6-13-17						PLANT SITE PLAN				
				Ckr DJBLASKO 6-13-17										
				App DJBLASKO (P.E. 35445) 6-13-17										
Drawing No	Reference Drawings	Rev	Date	Description	By	App	Acad File	Plot Scale	djb Drawing Number	Scale	AS NOTED	Drawing Number	Sheet	Rev
		0	6-13-17	ISSUED FOR REVIEW			500CS00102.DWG	1:1	500-CS-001	Proj. No.	500	500-CS-001	2	0
CEMENT TERMINAL EXPANSION														



TDI ASSOCIATES, INC.
ARCHITECTURE, ENGINEERING, PLANNING

N8 W22350 JOHNSON DRIVE, SUITE B4
WAUKESHA, WISCONSIN 53186
PHONE 262-409-2530 FAX 262-409-2531

ILLINOIS CEMENT
HARTLAND TERMINAL EXPANSION
701 WEST CAPITOL DRIVE
HARTLAND, WISCONSIN

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Sheet Title
SITE DEVELOPMENT PLAN

Issued For: Date:

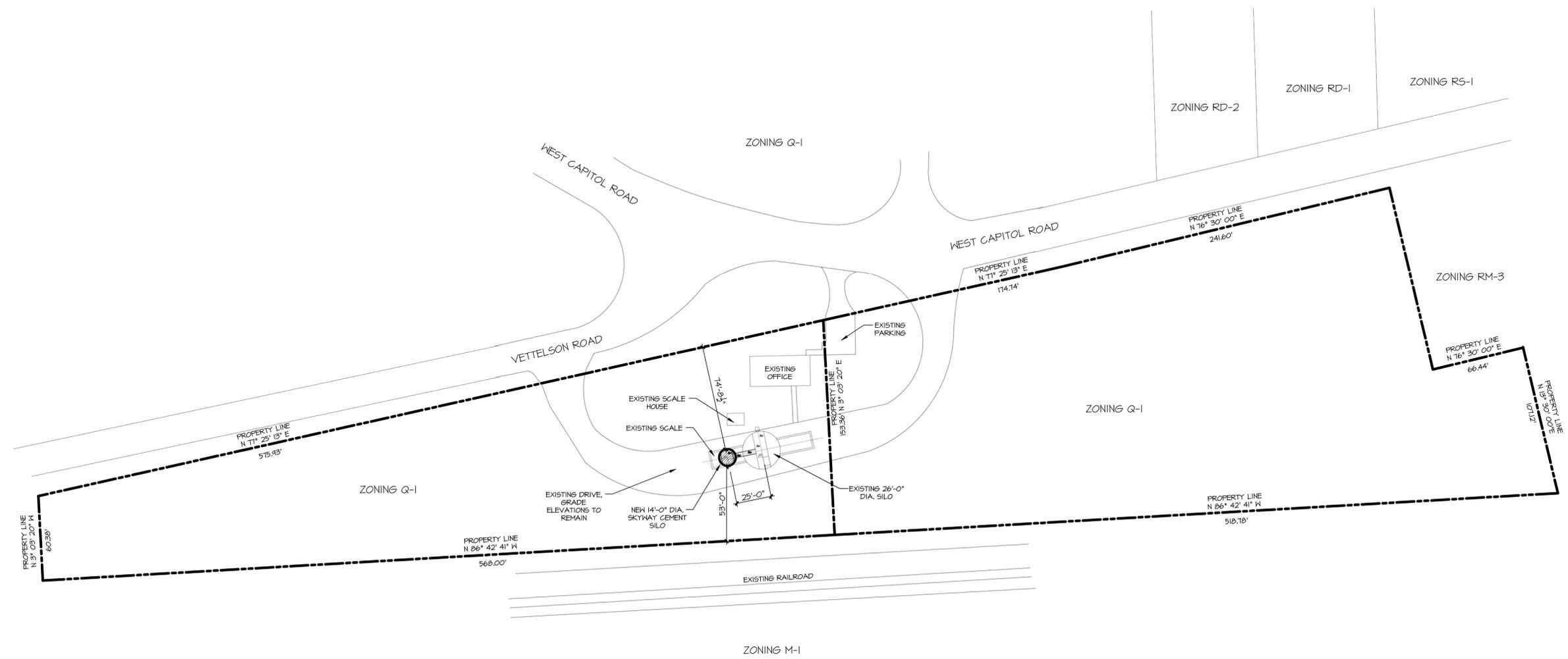
Date: **06-27-2017**

Job NO.: **17313.000**

Drawn By:

Sheet No.

SD1.1



1 SITE PLAN
1" = 40' - 0"



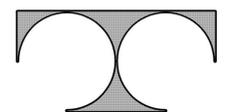


EXISTING SILO
LOOKING SOUTHWEST ON CAPITOL DRIVE



EXISTING SILO
LOOKING SOUTHEAST ON CAPITOL DRIVE

ILLINOIS CEMENT
HARTLAND TERMINAL
EXPANSION



TDI ASSOCIATES, INC.
ARCHITECTS, ENGINEERS, PLANNERS

NS W2250 JOHNSON DRIVE, SUITE B4
WAIKESHA, WISCONSIN 53186
PHONE 262-409-2530 FAX 262-409-2531

JUNE 29TH, 2017

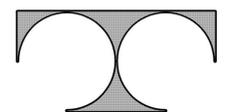


PROPOSED SILO
LOOKING SOUTHWEST ON CAPITOL DRIVE



PROPOSED SILO
LOOKING SOUTHEAST ON CAPITOL DRIVE

ILLINOIS CEMENT
HARTLAND TERMINAL
EXPANSION



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JUNE 29TH, 2017

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PRINCETON NJ 08540-5421

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HARTLAND WI 53029

ALEX LEYKIN
W188S7820 W RACINE AVE
MUSKEGO WI 53150

AMY JO BENSON
530 WINDSTONE DR UNIT 112
HARTLAND WI 53029-1657

ANDREW J SALOMONE
337 PROSPECT AVE
HARTLAND WI 53029-2022

ANDREW KOPCZYK
ANNA KOPCZYK
14130 SHEFFIELD DR APT 301
HOMER GLEN IL 60491-7891

ANTHONY M DIGIACOMO
520 WINDSTONE DR UNIT 312
HARTLAND WI 53029-1655

BARBARA E SAMUELSON
530 WINDSTONE DR UNIT 109
HARTLAND WI 53029

BRADLEY SMITH
LYNDSEE KRAMM
608 W CAPITOL DR
HARTLAND WI 53029

BRANDON ORDWAY
520 WINDSTONE DR UNIT 204
HARTLAND WI 53029

BRET LEHMAN
530 WINDSTONE DR UNIT 312
HARTLAND WI 53029

BRIAN W MONTAG TRUST
530 WINDSTONE DR UNIT 105
HARTLAND WI 53029

BRIANA V DENEVAN
530 WINDSTONE DR UNIT 212
HARTLAND WI 53029

CAITY CUMMINGS
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MILWAUKEE WI 53214-3314

CAROLINE B JOYCE
526 W CAPITOL DR
HARTLAND WI 53029

CHRISTINA L DESAUTELLE
520 WINDSTONE DR UNIT 304
HARTLAND WI 53029-1655

CLINTON J DEKKER
520 WINDSTONE DR #201
HARTLAND WI 53029

DAN AND KIM SCHLISE INC
269 KILLARNEY RD
HARTFORD WI 53027-9739

DAN AND KIM SCHLISE INC
269 KILLARNEY RD
HARTFORD WI 53027-9739

DAN AND KIM SCHLISE INC
269 KILLARNEY RD
HARTFORD WI 53027-9739

DANIEL D PFEFFER
KELLY E BABCOCK
530 WINDSTONE DR UNIT 208
HARTLAND WI 53029-1658

DANIEL G ANDERSON
SALLY J ANDERSON
315 W CAPITOL DR
HARTLAND WI 53029

DARRELL R NULAND
JUDITH L NULAND
530 WINDSTONE DR UNIT 206
HARTLAND WI 53029-1658

DAVE HYLAND
DAWN HYLAND
440 W CAPITOL DR
HARTLAND WI 53029

DAVID A ZUEGE
KAREN M ZUEGE
1223A MILWAUKEE ST
DELAFIELD WI 53018-1630

DAVID BYCZEK CHILDS TRUST
C/O ELIZABETH ODEJA TRUSTEE
333 BISHOPS WAY STE 141
BROOKFIELD WI 53005-6209

DAVID C PANAWASH
530 WINDSTONE DR UNIT 104
HARTLAND WI 53029

DAVID PEERS
ERICA D PEERS
345 PROSPECT AVE
HARTLAND WI 53029-2022

DEBRA J JENCEN
LEO G JENCEN
S22W38420 KINCAID LN
DOUSMAN WI 53118

DONALD G LUND 2013 LIVING TRUST
432 W CAPITOL DR
HARTLAND WI 53029

DONALD G LUND 2013 LIVING TRUST
432 W CAPITOL DR
HARTLAND WI 53029

DOWNING BROTHERS BUILDERS INC
W267S3742 VELMA CT
WAUKESHA WI 53188-6609

EDWARD O HOOVER
W296N471 BLODWEN DR
WAUKESHA WI 53188-9456

ERIC HARMELINK
201 KESTREL WAY
HARTLAND WI 53029-2917

FRIEDA CORPORATION
13150 N CAROLINE CT
ELM GROVE WI 53122

G DASON SCHULTZ
JESSICA SCHULTZ
1009 MILWAUKEE ST
DELAFIELD WI 53018-1626

GARY L WARD
520 WINDSTONE DR UNIT 210
HARTLAND WI 53029

GEOFFREY A YOUNG
664 HILL ST
HARTLAND WI 53029

GEORGE G GARNEAU JR
330 ZION ST
HARTLAND WI 53029

HAO LI
17320 BARD LN
BROOKFIELD WI 53045-1251

HARTLAND SQUARE APARTMENTS LLC
W312S9003 MOCCASIN TRL
MUKWONAGO WI 53149

HILL STREET PARTNERS LLC
W393N5888 MARY LN
OCONOMOWOC WI 53066-2112

ILLINOIS CEMENT CO
PO BOX 442
LA SALLE IL 61301

JANET K ADLER
520 WINDSTONE DR UNIT 104
HARTLAND WI 53029-1653

JANET L STAHNKE
530 WINDSTONE DR #107
HARTLAND WI 53029

JASON MALDONADO
MELISSA MALDONADO
520 WINDSTONE DR UNIT 107
HARTLAND WI 53029

JAYNE WEYER TRUST
13716 W WHITE WOOD DR
SUN CITY WEST AZ 85375-5845

JEAN A LARSEN
642 HILL ST
HARTLAND WI 53029

JEANNE A HOPPE
520 WINDSTONE DR UNIT 207
HARTLAND WI 53029

JENNIFER L MOHR-WHITMAN
448 W CAPITOL DR
HARTLAND WI 53029-1921

JENNIFER L MOHR-WHITMAN
448 W CAPITOL DR
HARTLAND WI 53029-1921

JENNIFER L WAGNER
520 WINDSTONE DR UNIT 202
HARTLAND WI 53029-1654

JEROME JACKSON
SHERI JACKSON
431 HILL ST
HARTLAND WI 53029

JOANN PAPA IRREVOCABLE TRUST
520 WINDSTONE DR UNIT 309
HARTLAND WI 53029-1655

JOHN FOLTZ
LYNNE FOLTZ
421 HILL ST
HARTLAND WI 53029

JOHN L KOSAK
MARY A KOSAK
530 WINDSTONE DR UNIT 108
HARTLAND WI 53029

JOHN M GOSA
WANDA E GOSA ET AL
530 WINDSTONE DR UNIT 111
HARTLAND WI 53029-1657

JOHN P LYNE
530 WINDSTONE DR UNIT 201
HARTLAND WI 53029

JOHN ROHR & DORALYNNE METZ
REVOCABLE LIVING TRUST
16755 SHORE LINE DR
BROOKFIELD WI 53005-2138

JONATHAN KLIPPSTEIN
RICHARD J KLIPPSTEIN ET AL
335 HILL ST
HARTLAND WI 53029-2003

JOSHUA D BUEGE
530 WINDSTONE DR #207
HARTLAND WI 53029

JSO PROPERTIES LLC
614 W CAPITOL DR
HARTLAND WI 53029

JUSTIN J LEWANDOWSKI
520 WINDSTONE DR UNIT 112
HARTLAND WI 53029-1653

KAREN K KOTTKE
520 WINDSTONE DR UNIT 212
HARTLAND WI 53029

KATHLEEN A ORLIKOWSKI
520 WINDSTONE DR UNIT 205
HARTLAND WI 53029

KRISTIN ROGACZEWSKI
520 WINDSTONE DR UNIT 108
HARTLAND WI 53029-1653

LAKE COUNTRY CONGREGATIONAL
CHURCH
400 W CAPITOL DR
HARTLAND WI 53029

LARRY C COMPTON JR
530 WINDSTONE DR #305
HARTLAND WI 53029

LEROY L INGRAHAM
DORIS R INGRAHAM
780 SCENIC HEIGHTS DR
DELAFIELD WI 53018

LESLIE A MOATS
512 W CAPITOL DR
HARTLAND WI 53029-1923

LEWIS R WOLF
520 WINDSTONE DR UNIT 110
HARTLAND WI 53029

LOLA M VANHIERDEN
520 WINDSTONE DR UNIT 306
HARTLAND WI 53029

MAC HOLDINGS LLC
PO BOX 602
HARTLAND WI 53029

MAHVASH SHAKER
600 THAMES PKWY APT 2C
PARKRIDGE IL 60068-3679

MARGIT TROMPLER
530 WINDSTONE DR UNIT 110
HARTLAND WI 53029

MARK A KRAUS JR
520 WINDSTONE DR UNIT 102
HARTLAND WI 53029

MARK CONLEY
ELIZABETH CONLEY
320 ZION ST
HARTLAND WI 53029

MARLENE M KNOTHE
530 WINDSTONE DR UNIT 101
HARTLAND WI 53029

MARY ELLEN THOSS
530 WINDSTONE DR UNIT 309
HARTLAND WI 53029-1659

MARY S MUTH
520 WINDSTONE DR UNIT 106
HARTLAND WI 53029-1653

MATTHEW T ANDERSON
MARIA K ANDERSON
520 WINDSTONE DR UNIT 307
HARTLAND WI 53029

MELISSA M LOSINIECKI
520 WINDSTONE DR UNIT 105
HARTLAND WI 53029-1653

MEYER MATERIAL COMPANY
1300 S IL ROUTE 31
SOUTH ELGIN IL 60177-9724

MEYER MATERIAL COMPANY
1300 S IL ROUTE 31
SOUTH ELGIN IL 60177-9724

MEYER MATERIAL COMPANY
1300 S IL ROUTE 31
SOUTH ELGIN IL 60177-9724

MEYER MATERIAL COMPANY
1300 S IL ROUTE 31
SOUTH ELGIN IL 60177-9724

MICHAEL A CLARK
DONNA M CLARK
530 WINDSTONE DR UNIT 203
HARTLAND WI 53029

MICHAEL BELLAND
RAELLE BELLAND
S12W31280 RUCCI DR
WALES WI 53183-9722

MICHAEL J & RAYNELLE A CHYCINSKI
JOINT REV TRUST
1000 SW 5TH AVE
BOYNTON BEACH FL 33426-4734

MICHELLE A PARKHURST
520 WINDSTONE DR UNIT 302
HARTLAND WI 53029

MITCHELL HORN
530 WINDSTONE DR UNIT 303
HARTLAND WI 53029-1659

NELSON HOME ENTERPRISES LLC
S4W32726 GOVERNMENT HILL RD
DELAFIELD WI 53018-3141

PAMELA L GROSS
24159 HARBORVIEW RD
PUNTE GORDA FL 33980

PAUL A RADDATZ
520 WINDSTONE DR UNIT 109
HARTLAND WI 53029

PAUL BRANDES
520 WINDSTONE DR UNIT 310
HARTLAND WI 53029

PHILIP M & CLARENE J DALEY TRUST
DATED NOVEMBER 30, 2005
510 HILL ST
HARTLAND WI 53029

PREMIER HARTLAND LLC
19105 W CAPITOL DR
BROOKFIELD WI 53045-2708

RANDALL L BEDORE
BRIAN H BEDORE ET AL
C/O RUBY G BEDORE
375 HILL ST

RICHARD J GOEPEL
RITA L GOEPEL
530 WINDSTONE DR UNIT 311
HARTLAND WI 53029-1659

RISING HIGH LLC
313 WOOD SIDE DR
OCONOMOWOC WI 53066-8637

ROBERT J DOOME
LISA L GIEG-DOOME ET AL
530 WINDSTONE DR UNIT 211
HARTLAND WI 53029-1658

RONALD BYCZEK CUSTODIAN FOR
OLIVIA BYCZEK
333 BISHOPS WAY STE 141
BROOKFIELD WI 53005-6209

RONALD BYCZEK CUSTODIAN FOR
OLIVIA BYCZEK
333 BISHOPS WAY STE 141
BROOKFIELD WI 53005-6209

RONALD W NUNN JR
DIANE L NUNN
530 WINDSTONE DR UNIT 102
HARTLAND WI 53029

SANDRA C MATUSHINEC
530 WINDSTONE DR UNIT 301
HARTLAND WI 53029

SHAUNA M YOUNG
2262 28TH ST
ASTORIA NY 11105

STACY A DEAN
520 WINDSTONE DR UNIT 311
HARTLAND WI 53029

STEPHANIE OLSON
BRADLEY A OLSON ET AL
341 ZION ST
HARTLAND WI 53029-1928

STEVEN G HANSON
DANIELLE R HANSON ET AL
745 SPRING WATERS DR
OCONOMOWOC WI 53066-4178

STEWART R COUILLARD
SUSAN M COUILLARD
636 W CAPITOL DR
HARTLAND WI 53029-1925

SUMMIT LAKES APARTMENTS LLC
19105 W CAPITOL DR STE 200
BROOKFIELD WI 53045

SUMMIT LAKES APARTMENTS LLC
19105 W CAPITOL DR STE 200
BROOKFIELD WI 53045

TAMMY A ST JOHN
530 WINDSTONE DR UNIT 310
HARTLAND WI 53029

THOMAS H BEAUMONT
310 ZION ST
HARTLAND WI 53029

THOMAS H BEAUMONT
310 ZION ST
HARTLAND WI 53029

TIMOTHY L HANSEN
530 WINDSTONE DR UNIT 205
HARTLAND WI 53029

VICKI L SIELAFF
520 WINDSTONE DR UNIT 209
HARTLAND WI 53029

VILLAGE OF HARTLAND
C/O VILLAGE TREASURER
210 COTTONWOOD AVE
HARTLAND WI 53029-2017

VILLAGE OF HARTLAND
210 COTTONWOOD AVE
HARTLAND WI 53029

VILLAGE OF HARTLAND
210 COTTONWOOD AVE
HARTLAND WI 53029

DALEYS WOODS LLC
810 CARDINAL LN STE 100
HARTLAND WI 53029-2390

FIRST BANK FINANCIAL CENTRE
C/O ACCOUNTS PAYABLE
155 W WISCONSIN AVE
OCONOMOWOC WI 53066

HERAEUS ELECTRO-NITE CO LLC
RICHARD A FALK
541 S INDUSTRIAL DR
HARTLAND WI 53029-2323

HM INVESTMENT PARTNERS LLC
581 S INDUSTRIAL DR
HARTLAND WI 53029

JAMES ORDWAY
KRISTIN ORDWAY
N45W29221 FORSETH DR
HARTLAND WI 53029

JOHN GEBHARD
TRUDY GEBHARD
N56W28754 CTH K
HARTLAND WI 53029

LAKE COUNTRY RACQUET & ATHLETIC CLUB INC
560 INDUSTRIAL DR
PO BOX 76
HARTLAND WI 53029

LAUDERMILK 710 LLC
710 CARDINAL LN
HARTLAND WI 53029

TROMPLER PROPERTIES LLC
580 S INDUSTRIAL DR
HARTLAND WI 53029-2357