

CITY OF FRANKLIN  
PLAN COMMISSION MEETING\*  
FRANKLIN CITY HALL COUNCIL CHAMBERS  
9229 W. LOOMIS ROAD, FRANKLIN, WISCONSIN  
AGENDA  
THURSDAY, JUNE 6, 2019, 7:00 P.M.

A. **Call to Order and Roll Call**

B. **Approval of Minutes**

1. Approval of regular meeting of May 23, 2019.

C. **Public Hearing Business Matters** (action may be taken on all matters following the respective Public Hearing thereon)

1. **ACTION PDR, INC., A RESIDENTIAL PROPERTY DAMAGE REPAIR CONTRACTOR, FIRE AND WATER DAMAGE REPAIR BUSINESS.** Special Use application by Justin Johnson, President of Action PDR, Inc., a residential property damage repair contractor, to operate a fire and water damage repair business, primarily for insurance companies, out of an existing 1,700 square foot structure (900 square feet will be warehouse use and 800 square feet will be office use; employee vehicles will be parked outside at the front of the building (3/4 ton pick-up trucks and cargo vans)), with hours of operation from 7:00 a.m. to 6:00 p.m. weekdays, occasional Saturdays, and any time emergency repair work is required, property zoned M-1 Limited Industrial District, located at 10700 West Venture Drive, Suite F; Tax Key No. 705-8989-011. **A PUBLIC HEARING IS SCHEDULED FOR THIS MEETING UPON THIS MATTER.**
2. **UNITED STATES CELLULAR OPERATING COMPANY LLC INSTALLATION OF A TELECOMMUNICATIONS TOWER MONOPOLE AT ANDY'S GAS STATION.** Special Use application by United States Cellular Operating Company LLC, to allow for the installation of a 125 foot monopole tower at Andy's gas station. The lease area (approximately 3,600 square feet (which includes a 2,304 square foot fenced compound), located in the northwest corner of the property) will consist of a gravel surface and will include a chain-link fence, the tower and ground equipment, and a 30 foot wide United States Cellular Access and Utility Easement is also proposed adjacent to the lease area located at 5120 West Ryan Road, property zoned B-3 Community Business District, bearing Tax Key No. 882-9999-002. **A PUBLIC HEARING IS SCHEDULED FOR THIS MEETING UPON THIS MATTER.**

D. **Business Matters** (no Public Hearing is required upon the following matters; action may be taken on all matters)

## Franklin Plan Commission Agenda

6/6/19

Page 2

1. **WYNDHAM HOMES LAND DIVISION.** Certified Survey Map application by Wyndham Homes LLC, to divide an existing approximately 4.97 acre property into two separate lots (Lot 1, with an existing single-family residence (which will be razed), will be approximately 2.48 acres and Lot 2 will be approximately 2.48 acres), property located at 3031 West Forest Hill Avenue, zoned R-3 Suburban/Estate Single-Family Residence District; Tax Key No. 832-9901-000.

### E. Adjournment

\*Supporting documentation and details of these agenda items are available at City hall during normal business hours.

\*\*Notice is given that a majority of the Common Council may attend this meeting to gather information about an agenda item over which they have decision-making responsibility. This may constitute a meeting of the Common Council per *State ex rel. Badke v. Greendale Village Board*, even though the Common Council will not take formal action at this meeting.

[Note: Upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through appropriate aids and services. For additional information, contact the City Clerk's office at (414) 425-7500.]

#### REMINDERS:

Next Regular Plan Commission Meeting: June 20, 2019

**City of Franklin  
Plan Commission Meeting  
May 23, 2019  
Minutes**

unapproved

**A. Call to Order and Roll Call**

Mayor Steve Olson called the May 23, 2019 regular Plan Commission meeting to order at 7:00 p.m. in the Council Chambers at Franklin City Hall, 9229 West Loomis Road, Franklin, Wisconsin.

Present were Commissioners, Patricia Hogan, Adam Burckhardt, Alderman Mark Dandrea and City Engineer Glen Morrow. Excused was Commissioners Kevin Haley and David Fowler. Also present were Planning Manager Joel Dietl, Principal Planner Ben Kohout, City Attorney Jesse Wesolowski and Alderwoman Kristin Wilhelm.

**B. Approval of Minutes**

1. Regular Meeting of May 9, 2019. Commissioner Hogan moved and Commissioner Burckhardt seconded approval of the May 9, 2019 minutes of the regular meeting of the Plan Commission. On voice vote, all voted 'aye'. Motion carried (4-0-2).

**C. Public Hearing Business Matters**

**1. STAR TRUCKING LLC OVER-THE-ROAD TRUCKING COMPANY BUSINESS.** Natural Resource Features Special Exception application by Boris Strbac, owner, Star Trucking LLC, to allow an existing gravel parking area and to remain within protected natural resource features consisting of 0.102 acres of wetland buffer and 0.22 acres of shore buffer (of which 0.106 acres are also wetland setback) to construct a gravel parking lot for an over-the-road trucking company business with a maximum of thirteen semi-trucks and trailers parked overnight on the east side of the property, such property zoned M-1 Limited Industrial District and C-1 Conservancy District, located at 11141 West Forest Home Avenue; Tax Key No. 704-9990-003.

Planning Manager Joel Dietl presented the request by Boris Strbac, owner, Star Trucking LLC, to allow an existing gravel parking area and to remain within protected natural resource features consisting of 0.102 acres of wetland buffer and 0.22 acres of shore buffer (of which 0.106 acres are also wetland setback) to construct a gravel parking lot for an over-the-road trucking company business with a maximum of thirteen semi-trucks and trailers parked overnight on the east side of the property, such property zoned M-1 Limited Industrial District and C-1 Conservancy District, located at 11141 West Forest Home Avenue.

The Official Notice of Public Hearing was read in to the record by Principal Planner Ben Kohout and the Public Hearing was opened at 7:05 and closed at 7:10.

Commissioner Burckhardt moved and no one seconded a motion to recommend approval of the Start Trucking LLC Natural Resource Features Special Exception pursuant to the Standards, Findings and Decision recommended by the Plan Commission and Common Council consideration of the Environmental Commission recommendations. Therefore the motion failed due to lack of a second.

Alderman Dandrea moved and Commissioner Hogan

seconded a motion to recommend denial of the Star Trucking LLC Natural Resource Features Special Exception. On voice vote, all voted 'aye'. Motion was approved (4-0-2).

**2. WOODLAND'S EDGE AT FRANKLIN SENIOR INDEPENDENT LIVING APARTMENT COMPLEX DEVELOPMENT.** Special Use

Amendment application by Herman & Kittle Properties, Inc., for construction of a 48-unit senior independent living apartment complex consisting of 6 separate one-story cottage style buildings (one 12-unit, approximately 10,000 square feet, one 10-unit, approximately 8,400 square feet, one 8-unit, approximately 6,800 square feet, and three 6-unit buildings, approximately 6,750 square feet each, with 8 units proposed as market rate units) (30 one-bedroom and 18 two-bedroom units)) and a separate clubhouse, and associated landscaping, lighting, sanitary sewer, storm sewer and building elevation plans [the facility will be designed, marketed and restricted to those 55 years and older with household incomes of 30%, 50% and 60% of Area Median Household Income], upon property zoned R-8 Multiple-Family Residence District, located at 3709 West College Avenue; Tax Key No. 713-9996-003 [this application is amending Resolution No. 2017-7330, which approved a Special Use Amendment allowing a two story, 48 unit multi-family senior independent living apartment complex development use (formerly named "The Lakeview at Franklin") that did not move forward following use and site plan approvals].

Planning Manager Joel Dietl presented the request by Herman & Kittle Properties, Inc., for construction of a 48-unit senior independent living apartment complex consisting of 6 separate one-story cottage style buildings (one 12-unit, approximately 10,000 square feet, one 10-unit, approximately 8,400 square feet, one 8-unit, approximately 6,800 square feet, and three 6-unit buildings, approximately 6,750 square feet each, with 8 units proposed as market rate units) (30 one-bedroom and 18 two-bedroom units)) and a separate clubhouse, and associated landscaping, lighting, sanitary sewer, storm sewer and building elevation plans [the facility will be designed, marketed and restricted to those 55 years and older with household incomes of 30%, 50% and 60% of Area Median Household Income], upon property zoned R-8 Multiple-Family Residence District, located at 3709 West College Avenue.

The Official Notice of Public hearing was read in to the record by Principal Planner Kohout and the Public Hearing was opened at 7:24 p.m. and closed at 8:02 p.m.

Alderman Dandrea moved and Commissioner Hogan seconded a motion to recommend approval of a Resolution to amend Resolution No. 2017-7246 imposing conditions and restrictions for the approval of a Special Use for a single-story, 48 unit multi-family senior independent living apartment complex development use located at 3709 West College Avenue to allow for construction of Woodland's Edge at Franklin 48 unit senior independent living apartment complex subject to addition of the suggestion in the staff report pertaining to architecture and that all resident parking be provided in garages. On voice vote, all voted 'aye'. Motion carried (4-0-2).

**D. Business Matters**

**2. TAX INCREMENTAL DISTRICT NO. 5 PLANNED**

City Attorney Jesse Wesolowski presented the request by the Developer who has requested the issuance of temporary



**DEVELOPMENT DISTRICT NO. 37  
(THE ROCK SPORTS  
COMPLEX/BALLPARK  
COMMONS) BALLPARK  
COMMONS SPORTS ANCHORED  
MIXED-USE DEVELOPMENT  
PROJECT TEMPORARY  
OCCUPANCY PERMITS FOR THE  
BUILDING C1 (OFFICE/RETAIL)  
AND THE STADIUM USES AND  
ADDITIONAL/FUTURE  
BUILDINGS USES.**

The Developer has requested the issuance of temporary occupancy permits for the Building C1 (office/retail) and the Stadium uses north of West Rawson Avenue in the Ballpark Commons development and additional/future buildings uses. This subject is provided for the Plan Commission's information.

occupancy permits for the Building C1 (office/retail), the Stadium uses north of West Rawson Avenue, and additional/future building uses in the Ballpark Commons development.

The City Attorney further noted that this subject was provided for the Plan Commission's information, and that no action was required.

**3. POLISH COMMUNITY  
CENTER PARKING LOT  
EXPANSION AND CREATION.**

Unified Development Ordinance §15-3.0433 Planned Development District No. 28 (Polish Festivals, Inc. – Polish Community Center) Minor Amendment and Site Plan Amendment applications by Polish Heritage Alliance, Inc., applicant/property owner, Planned Development District No. 28 Amendment to allow additional parking spaces, in excess of the current number of parking spaces allowed by Planned Development District No. 28; Site Plan Amendment to expand the easterly parking lot to create 36 new parking stalls, 360 feet of new curb and gutter, 122 feet of storm sewer, lights and grading work (12,687 square feet of additional paved asphalt surface), removal of 28 existing trees which will be replaced with evergreen and canopy/shade trees, and to construct a new parking lot on the southwest side of the Polish

Planning Manager Joel Dietl presented the request by Polish Heritage Alliance, Inc., applicant/property owner, Planned Development District No. 28 Amendment to allow additional parking spaces, in excess of the current number of parking spaces allowed by Planned Development District No. 28; Site Plan Amendment to expand the easterly parking lot to create 36 new parking stalls, 360 feet of new curb and gutter, 122 feet of storm sewer, lights and grading work (12,687 square feet of additional paved asphalt surface), removal of 28 existing trees which will be replaced with evergreen and canopy/shade trees, and to construct a new parking lot on the southwest side of the Polish

**Minor Amendment Determination**

City Engineer Morrow moved and Alderman Dandrea seconded a motion determining the proposed amendment to be a Minor Amendment. On voice vote, all voted 'aye'. Motion carried (4-0-2).

**Planned Development District Ordinance Amendment**

Commissioner Hogan moved and Commissioner Burckhardt seconded a motion to recommend approval of an Ordinance to amend §15-3.0433 of the Unified Development Ordinance, Planned Development District No. 28 (Polish Festivals, Inc. – Polish Community Center) to allow for additional parking (6941 South 68<sup>th</sup> Street) All voted "aye". Motion carried (4-0-2).

**Site Plan Amendment**

Commissioner Hogan moved and City Engineer Morrow seconded a motion to approve a Resolution amending the Site Plan for property located at 6941 South 68<sup>th</sup> Street to allow for expansion of the easterly parking lot and creation of a southwest parking lot for the Polish Community Center (Tax Key No. 743-8978-004) with addition of a new condition, condition number 8, removing the proposed conditions pertaining to required UDO landscaping standards and that the applicant shall instead replace all existing native trees and all landscape plan required trees as they are removed or may die within this or other future projects within five years of such project approvals, on a one to one basis with native trees on the premises, or, if no room is available for the viable survival of said replacement trees on the premises, with an approved street tree placement, as approved by the City Engineer or designee, and that the applicant shall present a landscaping plan reflecting this condition subject to staff review and approval prior to final approval of this parking lot project showing the proposed planting placement and tree species satisfying these landscaping standards for this project. All voted “aye”. Motion carried (4-0-2).

**1. PLANNED DEVELOPMENT DISTRICT NO. 37 (THE ROCK SPORTS COMPLEX/BALLPARK COMMONS) BASEBALL STADIUM TEMPORARY USES AND STADIUM SIGNAGE REVIEW REQUIREMENT.**

The applicant is required, for the first annual review, to submit all plans and details for all semi-portable, semi-temporary, temporary, and product hawking structures, uses, and activities planned to occur at the stadium, to the Plan Commission for review and approval pursuant to Condition No. 4. of Plan Commission Resolution No. 2018-016; the applicant is required to submit a stadium Sign Plan clearly identifying all sign types, sizes, locations, colors, materials and lighting, and clearly identify which signage is viewable outside of the stadium, to the Plan Commission for review and approval pursuant to Condition No. 13. of Plan Commission Resolution No. 2018-016;

Planning Manager Joel Dietl presented a PLANNED DEVELOPMENT DISTRICT NO. 37 (THE ROCK SPORTS COMPLEX/BALLPARK COMMONS) BASEBALL STADIUM TEMPORARY USES AND STADIUM SIGNAGE REVIEW REQUIREMENT. The applicant is required, for the first annual review, to submit all plans and details for all semi-portable, semi-temporary, temporary, and product hawking structures, uses, and activities planned to occur at the stadium, to the Plan Commission for review and approval pursuant to Condition No. 4. of Plan Commission Resolution No. 2018-016; the applicant is required to submit a stadium Sign Plan clearly identifying all sign types, sizes, locations, colors, materials and lighting, and clearly identify which signage is viewable outside of the stadium, to the Plan Commission for review and approval pursuant to Condition No. 13. of Plan Commission Resolution No. 2018-016; property zoned Planned Development District No. 37 (The Rock Sports Complex/Ballpark Commons) and FW Floodway District, located at approximately 7005 South Ballpark Drive.

Commissioner Hogan moved and Alderman Dandrea seconded a motion to further revise the applicant’s proposed baseball stadium temporary uses request as set forth in the Project Description/Analysis section of the Staff Report to

property zoned Planned Development District No. 37 (The Rock Sports Complex/Ballpark Commons) and FW Floodway District, located at approximately 7005 South Ballpark Drive.

the Plan Commission Meeting of May 23, 2019 subject to: addition of staff comment #1; revision of staff comment #2 to also approve fireworks on the opening week Thursday and Monday for this year only; revision of staff comment #3 to allow the scout camp out use subject to the provision of additional details to, and approvals from, the Police, Fire, and Health Departments, and that plans be submitted for City review at least two weeks before each event; and addition of staff comments #4, 5, 6, 7, and 8 All voted “aye”. Motion carried (4-0-2).

Commissioner Hogan and City Engineer Morrow seconded a motion to approve the Baseball Stadium signage subject to the staff’s review and approval. All voted “aye”. Motion carried (4-0-2).

## **Adjournment**

Commissioner Hogan moved and Alderman Dandrea seconded a motion to adjourn the Plan Commission meeting of May 23, 2019 at 9:17 p.m. All voted ‘aye’; motion carried. (4-0-2).

**CITY OF FRANKLIN**  
**REPORT TO THE PLAN COMMISSION**

**Meeting of June 6, 2019**

**Special Use**

---

**RECOMMENDATION:** City Development Staff recommends approval of the proposed Special Use application for a Fire and Water Damage Clean Up and Repair business use for Action PDR, Inc., upon property located at 10700 West Venture Drive, Suite F, subject to the conditions set forth in the attached draft resolution.

---

<b>Project Name:</b>	Action PDR, Inc., Special Use
<b>Project Address:</b>	10700 West Venture Drive, Suite F
<b>Applicant:</b>	Action PDR, Inc., Justin Johnson
<b>Owners (property):</b>	Kendall Breunig (dba Sunset Investors)
<b>Current Zoning (easement area):</b>	M-1 Limited Industrial District
<b>Use of Surrounding Properties:</b>	Automobile dealerships to the north and south and industrial uses to the east and west
<b>Applicant Action Requested:</b>	Recommendation of approval to the Common Council for the proposed Special Use application for a fire and water damage clean up and repair business use upon property located at 10700 West Venture Drive, Suite F.

---

**Introduction:**

On March 18, 2019, Justin Johnson filed a Special Use application with the Department of City Development for a fire and water damage clean up and repair business use out of an existing structure upon property located at 10700 West Venture Drive, Suite F. The property is zoned M-1 Limited Industrial District, which allows Standard Industrial Classification (SIC) Title No. 1521 "General Contractors-Single-Family Houses" as a Special Use.

**Project Description/Analysis:**

According to the applicant, Action PDR, Inc., is a residential property damage repair contractor that does fire and water damage repairs, primarily for insurance companies. Their number of employees working out of the property are anticipated at 3, with subcontractors reporting to the job site. The hours of operation are proposed to be from 7:00 am to 6:00 pm, Monday through Friday, Saturdays on occasion and any time when there is emergency work to be done.

They anticipate on occupying 900 s.f. of space for warehouse use and 800 s.f. on the second floor space as office use.

For vehicles related to the business, they state in the project summary employee vehicles will be parked outside in front of the building and include ¾ Ton pick up trucks and cargo vans, which are rated at 6,000 pounds. A cube van is proposed to be stored at EZ Self Storage facility adjacent to this property. If vehicles 8,000 pounds or greater were to be proposed to be stored

overnight, a special use request would need to be made for this. The applicant is not proposing this. Staff has no concerns with the proposed parking situation.

The applicant is not proposing any exterior building or site modifications at this time. The applicant is also not proposing any outside storage of materials with this request, nor would staff approve of this.

**Staff Recommendation:**

City Development Staff recommends approval of the proposed Special Use application for a fire and water damage clean up and repair business use for Action PDR, Inc., upon property located at 10700 West Venture Drive, Suite F, subject to the conditions set forth in the attached draft resolution.

## RESOLUTION NO. 2019-\_\_\_\_\_

A RESOLUTION IMPOSING CONDITIONS AND RESTRICTIONS  
FOR THE APPROVAL OF A SPECIAL USE FOR A RESIDENTIAL  
PROPERTY DAMAGE REPAIR BUSINESS PERFORMING FIRE AND  
WATER DAMAGE REPAIRS USE UPON PROPERTY LOCATED AT  
10700 WEST VENTURE DRIVE, SUITE F  
(JUSTIN JOHNSON, PRESIDENT OF ACTION PDR, INC., APPLICANT)

---

WHEREAS, Justin Johnson, President of Action PDR, Inc., a residential property damage repair contractor, having petitioned the City of Franklin for the approval of a Special Use within an M-1 Limited Industrial District under Standard Industrial Classification Title No. 1521 "General Contractors-Single-Family Houses", to operate a fire and water damage repair business, primarily for insurance companies, out of an existing 1,700 square foot structure (900 square feet will be warehouse use and 800 square feet will be office use; employee vehicles will be parked outside at the front of the building (3/4 ton pick-up trucks and cargo vans)), with hours of operation from 7:00 a.m. to 6:00 p.m. weekdays, occasional Saturdays, and any time emergency repair work is required, upon property located at 10700 West Venture Drive, Suite F, bearing Tax Key No. 705-8989-011, more particularly described as follows:

Parcel 2 of Certified Survey Map No. 4804, being a part of the North West 1/4 of the North West 1/4 of Section 5, in Township 5 North, Range 21 East in the City of Franklin, County of Milwaukee, State of Wisconsin, being a redivision of Parcel Nos. 2 and 3 of Certified Survey Map No. 4743, recorded on August 21, 1986, Reel 1942, Image 1197, as Document No. 5953282; and

WHEREAS, such petition having been duly referred to the Plan Commission of the City of Franklin for a public hearing, pursuant to the requirements of §15-9.0103D. of the Unified Development Ordinance, and a public hearing having been held before the Plan Commission on the 6th day of June, 2019, and the Plan Commission thereafter having determined to recommend that the proposed Special Use be approved, subject to certain conditions, and the Plan Commission further finding that the proposed Special Use upon such conditions, pursuant to §15-3.0701 of the Unified Development Ordinance, will be in harmony with the purposes of the Unified Development Ordinance and the Comprehensive Master Plan; that it will not have an undue adverse impact upon adjoining property; that it will not interfere with the development of neighboring property; that it will be served adequately by essential public facilities and services; that it will not cause undue traffic congestion; and that it will not result in damage to property of significant importance to nature, history or the like; and

WHEREAS, the Common Council having received such Plan Commission

JUSTIN JOHNSON, PRESIDENT OF ACTION PDR, INC. – SPECIAL USE  
RESOLUTION NO. 2019-\_\_\_\_\_

Page 2

recommendation and also having found that the proposed Special Use, subject to conditions, meets the standards set forth under §15-3.0701 of the Unified Development Ordinance.

NOW, THEREFORE, BE IT RESOLVED, by the Mayor and Common Council of the City of Franklin, Wisconsin, that the petition of Justin Johnson, President of Action PDR, Inc., for the approval of a Special Use for the property particularly described in the preamble to this Resolution, be and the same is hereby approved, subject to the following conditions and restrictions:

1. That this Special Use is approved only for the use of the subject property by Justin Johnson, President of Action PDR, Inc., successors and assigns, as a fire and water damage repair business use, which shall be developed in substantial compliance with, and operated and maintained by Justin Johnson, President of Action PDR, Inc., pursuant to those plans City file-stamped May 23, 2019 and annexed hereto and incorporated herein as Exhibit A.
2. Justin Johnson, President of Action PDR, Inc., successors and assigns, shall pay to the City of Franklin the amount of all development compliance, inspection and review fees incurred by the City of Franklin, including fees of consults to the City of Franklin, for the Action PDR, Inc. fire and water damage repair business, within 30 days of invoice for same. Any violation of this provision shall be a violation of the Unified Development Ordinance, and subject to §15-9.0502 thereof and §1-19. of the Municipal Code, the general penalties and remedies provisions, as amended from time to time.
3. The approval granted hereunder is conditional upon Justin Johnson, President of Action PDR, Inc. and the fire and water damage repair business use for the property located at 10700 West Venture Drive, Suite F: (i) being in compliance with all applicable governmental laws, statutes, rules, codes, orders and ordinances; and (ii) obtaining all other governmental approvals, permits, licenses and the like, required for and applicable to the project to be developed and as presented for this approval.
4. There shall be no outside storage of vehicles, except for vehicles which do not exceed 8,000 pounds rated gross vehicle weight.
5. There shall be no outdoor storage of materials allowed on the property.
6. [other conditions, etc.]

BE IT FURTHER RESOLVED, that in the event Justin Johnson, President of Action PDR, Inc., successors or assigns, or any owner of the subject property, does not comply with one or any of the conditions and restrictions of this Special Use Resolution, following a ten (10) day notice to cure, and failure to comply within such time period, the Common Council,

JUSTIN JOHNSON, PRESIDENT OF ACTION PDR, INC. – SPECIAL USE  
RESOLUTION NO. 2019-\_\_\_\_\_  
PAGE 3

upon notice and hearing, may revoke the Special Use permission granted under this Resolution.

BE IT FURTHER RESOLVED, that any violation of any term, condition or restriction of this Resolution is hereby deemed to be, and therefore shall be, a violation of the Unified Development Ordinance, and pursuant to §15-9.0502 thereof and §1-19. of the Municipal Code, the penalty for such violation shall be a forfeiture of no more than \$2,500.00, or such other maximum amount and together with such other costs and terms as may be specified therein from time to time. Each day that such violation continues shall be a separate violation. Failure of the City to enforce any such violation shall not be a waiver of that or any other violation.

BE IT FURTHER RESOLVED, that this Resolution shall be construed to be such Special Use Permit as is contemplated by §15-9.0103 of the Unified Development Ordinance.

BE IT FURTHER RESOLVED, pursuant to §15-9.0103G. of the Unified Development Ordinance, that the Special Use permission granted under this Resolution shall be null and void upon the expiration of one year from the date of adoption of this Resolution, unless the Special Use has been established by way of the issuance of an occupancy permit for such use.

BE IT FINALLY RESOLVED, that the City Clerk be and is hereby directed to obtain the recording of a certified copy of this Resolution in the Office of the Register of Deeds for Milwaukee County, Wisconsin.

Introduced at a regular meeting of the Common Council of the City of Franklin this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

Passed and adopted at a regular meeting of the Common Council of the City of Franklin this \_\_\_\_\_ day of \_\_\_\_\_, 2019.



JUSTIN JOHNSON, PRESIDENT OF ACTION PDR, INC. – SPECIAL USE  
RESOLUTION NO. 2019-\_\_\_\_\_  
PAGE 4

APPROVED:

\_\_\_\_\_  
Stephen R. Olson, Mayor

ATTEST:

\_\_\_\_\_  
Sandra L. Wesolowski, City Clerk

AYES \_\_\_\_\_ NOES \_\_\_\_\_ ABSENT \_\_\_\_\_

## Benjamin Kohout

---

**From:** Benjamin Kohout  
**Sent:** Wednesday, May 22, 2019 5:51 PM  
**To:** justin@actionpdr.com  
**Cc:** Kendall Breunig; Joel Dietl; Gail Olsen  
**Subject:** Staff Comments for June 6 Special Use for 10700 W Venture Drive  
**Attachments:** 10700 Site Photos 11x17.pdf; 180213 Franklin Venture C100.pdf; Action PDR Special Use application.pdf; Legal Description for 10700 W.docx; Special Use General Standards Response.docx; ZONIG-CO.DOC

Justin,

Nice speaking with you on the phone today.

Staff has reviewed your request and offers the following comments:

1. No outside storage of vehicles, except for vehicles which do not exceed 8,000 pounds rated gross vehicle weight.
2. No outdoor storage of materials be allowed on the property.

Fire Department:

No Comments

Police Department:

No Comments

Engineering:

No Comments

**Please provide this office with 12 collated copies of the original submittal materials, which I am attaching to this email, by no later than Friday, May 24 by 5pm. If you plan on delivering sometime next week, please our office know (Gail or myself) asap.**

Regards,

**Ben Kohout, AICP**

Principal Planner

City of Franklin

9229 W. Loomis Rd.

Franklin, WI 53132

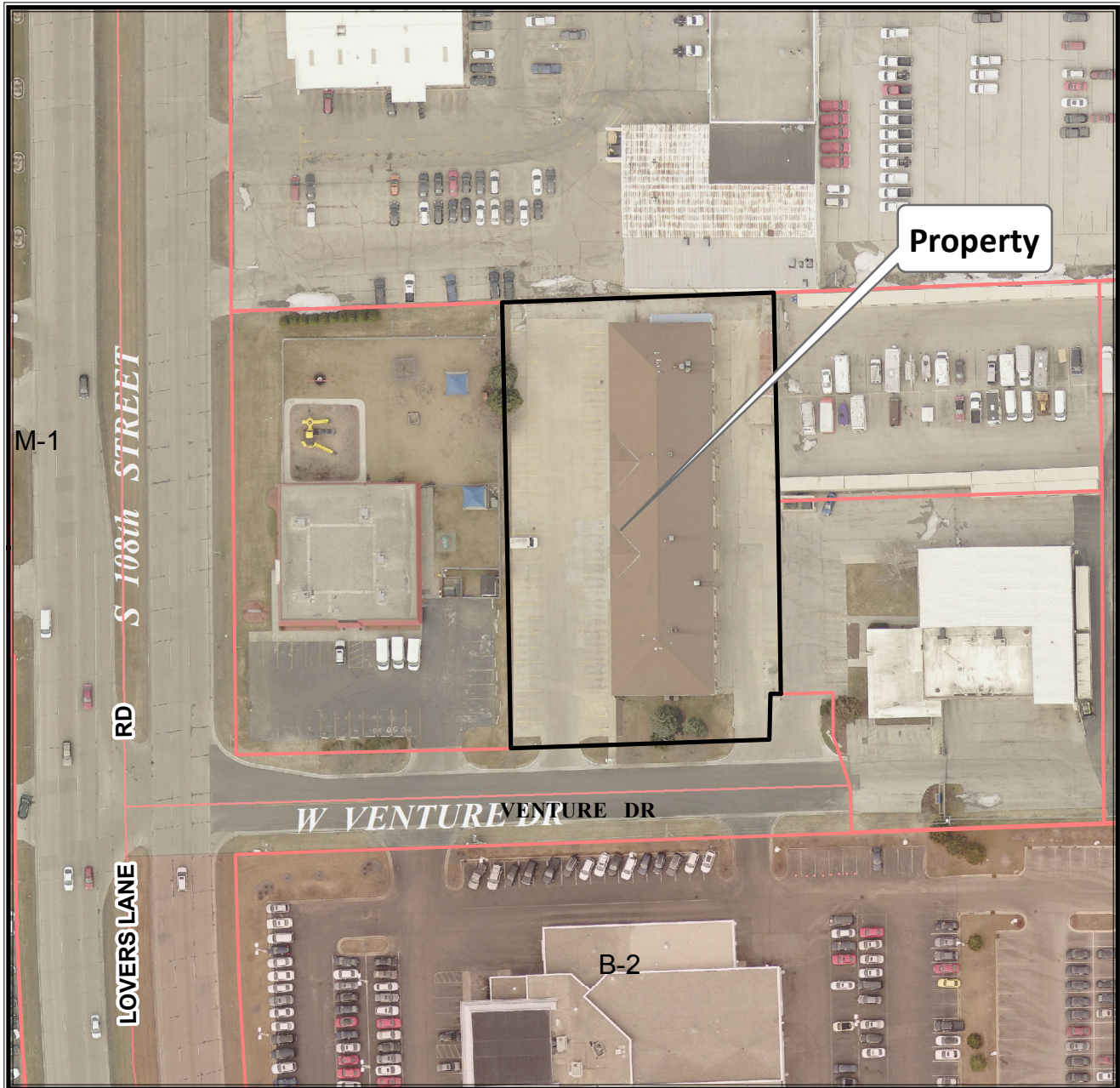
O: (414) 425-4024

[bkohout@franklinwi.gov](mailto:bkohout@franklinwi.gov)

[City of Franklin Planning Website](#)



10700 W. Venture Drive  
TKN: 705 8989 011



Planning Department  
(414) 425-4024

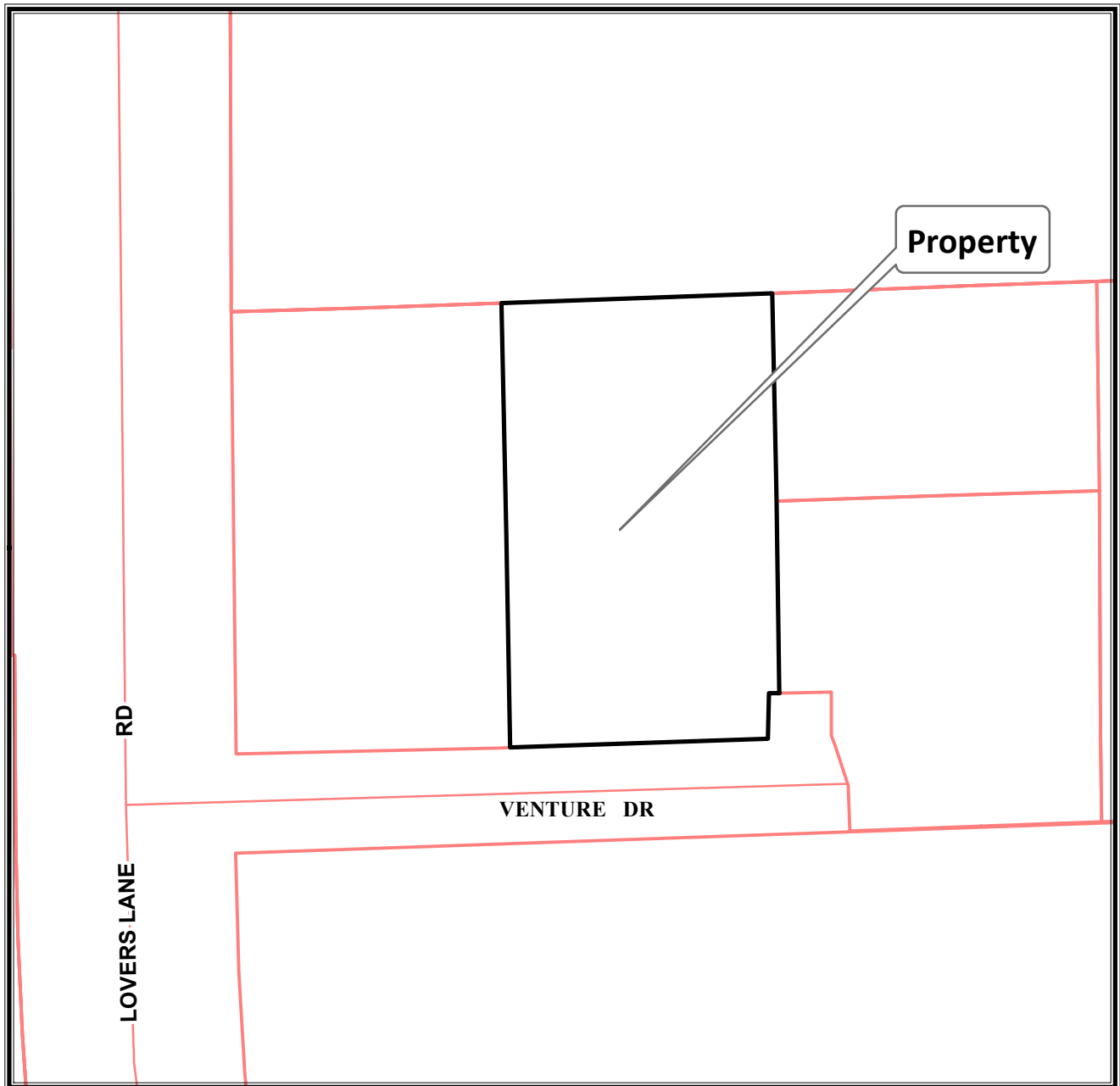
0 60 120 240 Feet

*This map shows the approximate relative location of property boundaries but was not prepared by a professional land surveyor. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering, or surveying purposes.*

  
**NORTH**  
2017 Aerial Photo



10700 W. Venture Drive  
TKN: 705 8989 011



**Planning Department**  
**(414) 425-4024**

0 60 120 240 Feet

*This map shows the approximate relative location of property boundaries but was not prepared by a professional land surveyor. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering, or surveying purposes.*





Date of Application: \_\_\_\_\_

## SPECIAL USE / SPECIAL USE AMENDMENT APPLICATION

Complete, accurate and specific information must be entered. **Please Print.**

**Applicant (Full Legal Name[s]):**

Name: Justin Johnson  
Company: Action PDR, Inc  
Mailing Address: 11102 W. Denis Ave  
City / State: Hales Corners WI Zip: 53130  
Phone: 414-755-9534  
Email Address: justin@actionpdr.com

**Applicant is Represented by: (contact person)(Full Legal Name[s])**

Name: \_\_\_\_\_  
Company: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
City / State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Email Address: \_\_\_\_\_

**Project Property Information:**

Property Address: 10700 W Venture Drive, Suite F  
Property Owner(s): Sunset Investors Venture, LLC  
c/o Kendall Breunig  
Mailing Address: 10535 W College Ave  
City / State: Franklin WI Zip: 53132  
Email Address: ken@sunsetinvestors.com

Tax Key Nos: 7050499000  
Existing Zoning: M-1  
Existing Use: \_\_\_\_\_  
Proposed Use: SIC 1521 Fire and water damage clean up and repair  
Future Land Use Identification: M-1

\*The 2025 Comprehensive Master Plan Future Land Use Map is available at: <http://www.franklinwi.gov/Home/ResourcesDocuments/Maps.htm>

**Special Use/Special Use Amendment submittals for review must include and be accompanied by the following:**


- ☒ This Application form accurately completed with original signature(s). Facsimiles and copies will not be accepted.
- ☒ Application Filing Fee, payable to City of Franklin: ☐ \$1000 Special Use Amendment  
☐ \$1500, New Special Use over 4,000 square feet ☒ \$750, New Special Use under 4,000 square feet
- ☒ Legal Description for the subject property (WORD.doc or compatible format).
- ☒ One copy of a response to the General Standards, Special Standards (if applicable), and Considerations found in Section 15-3.0701(A), (B), and (C) of the Unified Development Ordinance available at [www.franklinwi.gov](http://www.franklinwi.gov).
- ☒ Seven (7) complete collated sets of Application materials to include:
- ☐ One (1) original and six (6) copies of a written Project Summary, including description of any new building construction and site work, interior/exterior building modifications or additions to be made to property, site improvement costs, estimate of project value and any other information that is available.)
- ☐ Three (3) **folded** full size, drawn to scale copies (at least 24" x 36") of the Site Plan/Site Plan Amendment package. (The submittal should include only those plans/items as set forth in Section 17-7.0101, 15-7.0301 and 15-5.0402 of the Unified Development Ordinance that are impacted by the development. (e.g., Site Plan, Building Elevations, Landscape Plan, Outdoor Lighting Plan, Natural Resource Protection Plan, etc.)
- ☐ Four (4) **folded** reduced size (11"x17") copies of the Site Plan/Site Plan Amendment package.
- ☒ One colored copy (11"x17") of the building elevations, if applicable.
- ☐ Three copies of the Natural Resource Protection Plan and report, if applicable (see Section 15-4.0102 & 15-7.0201 of the UDO).
- ☒ Email (or CD ROM) with all plans/submittal materials. Plans must be submitted in both Adobe PDF and AutoCAD compatible format (where applicable).

•Upon receipt of a complete submittal, staff review will be conducted within ten business days.

•Special Use/Special Use Amendment requests require Plan Commission review, a Public Hearing and Common Council approval.

The applicant and property owner(s) hereby certify that: (1) all statements and other information submitted as part of this application are true and correct to the best of applicant's and property owner(s)' knowledge; (2) the applicant and property owner(s) has/have read and understand all information in this application; and (3) the applicant and property owner(s) agree that any approvals based on representations made by them in this Application and its submittal, and any subsequently issued building permits or other type of permits, may be revoked without notice if there is a breach of such representation(s) or any condition(s) of approval. By execution of this application, the property owner(s) authorize the City of Franklin and/or its agents to enter upon the subject property(ies) between the hours of 7:00 a.m. and 7:00 p.m. daily for the purpose of inspection while the application is under review. The property owner(s) grant this authorization even if the property has been posted against trespassing pursuant to Wis. Stat. §943.13.

(The applicant's signature must be from a Managing Member if the business is an LLC, or from the President or Vice President if the business is a corporation. A signed applicant's authorization letter may be provided in lieu of the applicant's signature below, and a signed property owner's authorization letter may be provided in lieu of the property owner's signature[s] below. If more than one, all of the owners of the property must sign this Application).


  
Signature - Property Owner  
**KENDALL BREUNIG, MANAGER + OWNER**  
Name & Title (PRINT)

Date: 3/11/2019

Signature - Property Owner

Name & Title (PRINT)

Date: \_\_\_\_\_

  
Signature - Applicant  
**Justin Johnson, President**  
Name & Title (PRINT)

Date: 3/11/19

Signature - Applicant's Representative

Name & Title (PRINT)

Date: \_\_\_\_\_

# **Zoning Compliance Application**

## **PROJECT SUMMARY**

**For:** Action PDR, Inc

**Date:** March 11, 2019

**Location:** 10700 W. Venture Drive  
Suite F  
Franklin WI 53132

**Action PDR, Inc** is a residential Property Damage Repair contractor that does fire and water damage repairs, primarily for insurance companies.

**New Building Construction:** None, Cost \$0

**Site Work:** None, Cost \$0

**Interior and Exterior modifications:** None, Cost \$0

**Number of Employees:** 3. Could grow by a couple more in the future. Additional subcontractors hired on larger repair projects primarily work at the job site.

**Hours of Operation:** 7am to 6pm weekdays, Saturdays on occasion, and any time when there is emergency repair work being done.

**Size of Suite:** 1,700sf, which consists of 900sf of warehouse, 800sf of second floor office. The shop will be for storing equipment and construction materials.

**Vehicles:** Employee vehicles will be parked outside in front of the building. Vehicles are ¾ ton pick up trucks and cargo vans which are rated as 6,000 pounds. A cube van will be stored at EZ Self Storage next door.

## **DIVISION 15-3.0700      SPECIAL USE STANDARDS AND REGULATIONS**

### **SECTION 15-3.0701      GENERAL STANDARDS FOR SPECIAL USES**

- A. **General Standards.** No special use permit shall be recommended or granted pursuant to this Ordinance unless the applicant shall establish the following:

1. **Ordinance and Comprehensive Master Plan Purposes and Intent.** The proposed use and development will be in harmony with the general and specific purposes for which this Ordinance was enacted and for which the regulations of the zoning district in question were established and with the general purpose and intent of the City of Franklin Comprehensive Master Plan or element thereof.

*M-1 is the preferred location per the UDO for General and Specialty Contractors. The only other Zoning they are allowed in is Landfill. SIC 1521 is single family housing construction. About 70% of Action PDR's work is on single family, other 30% is on commercial buildings, which would be SIC 1751 which is a Permitted use.*

2. **No Undue Adverse Impact.** The proposed use and development will not have a substantial or undue adverse or detrimental effect upon or endanger adjacent property, the character of the area, or the public health, safety, morals, comfort, and general welfare and not substantially diminish and impair property values within the community or neighborhood.

*Use by a Remodeling contractor will not have an undue adverse impact. No outside storage is requested. The building does not abut a residential district. Many other tenants in the building are specialty contractors, which are similar. On site work is mainly storage of equipment inside of their warehouse space.*

3. **No Interference with Surrounding Development.** The proposed use and development will be constructed, arranged, and operated so as not to dominate the immediate vicinity or to interfere with the use and development of neighboring property in accordance with the applicable zoning district regulations.

*This is occupancy of an existing office/warehouse suite used prior by an HVAC contractor. It is fenced from Holz Chevrolet and Kindercare. No outside storage, so it will not interfere in any way.*

4. **Adequate Public Facilities.** The proposed use and development will be served adequately by essential public facilities and services such as streets, public utilities including public water supply system and sanitary sewer, police and fire protection, refuse disposal, public parks, libraries, schools, and other public facilities and utilities or the applicant will provide adequately for such facilities.

*Adequate Public Facilities exist. This is an existing 30 year old building with all utilities existing already. There is a screened refuse disposal area shared by all the building tenants located behind the building.*

5. **No Traffic Congestion.** The proposed use and development will not cause undue traffic congestion nor draw significant amounts of traffic through residential streets. Adequate measures will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets.

*This is a low volume traffic business. On very rare occasion a customer might come to the office and there is sufficient parking for customers and employees in the front of the building.*

6. **No Destruction of Significant Features.** The proposed use and development will not result in the destruction, loss, or damage of any natural, scenic, or historic feature of significant importance.

*There is no destruction and there is no construction. This is an existing building.*

7. **Compliance with Standards.** The special use shall, in all other respects, conform to the applicable regulations of the district in which it is located, except as such regulations may, in each instance, be modified by the Common Council pursuant to the recommendations of the Plan Commission. The proposed use and development shall comply with all additional standards imposed on it by the particular provision of this Division and Ordinance authorizing such use.

*All M-1 Zoning standards are complied with.*

- B. **Special Standards for Specified Special Uses.** When the zoning district regulations authorize a special use in a particular zoning district and that special use is indicated as having special standards, as set forth in Section 15-3.0702 and 15-3.0703 of this Division, a Special Use Permit for such use in such zoning district shall not be recommended or granted unless the applicant shall establish compliance with all such special standards.

*None listed.*

- C. **Considerations.** In determining whether the applicant's evidence establishes that the foregoing standards have been met, the Plan Commission and the Common Council shall consider the following:
  1. **Public Benefit.** Whether and to what extent the proposed use and development at the particular location requested is necessary or desirable to provide a service or a facility that is in the interest of the public convenience or that will contribute to the general welfare of the neighborhood or community.



*The majority of Action PDR's work is within 30 miles of their office. So their services will be marketed in Franklin and surrounding areas.*

2. **Alternative Locations.** Whether and to what extent such public goals can be met by the location of the proposed use and development at some other site or in some other area that may be more appropriate than the proposed site.

*M-1 is the only zoning a remodeling contractor fits in Franklin. There is very limited M-1 zoning in Franklin.*

3. **Mitigation of Adverse Impacts.** Whether and to what extent all steps possible have been taken to minimize any adverse effects of the proposed use and development on the immediate vicinity through building design, site design, landscaping, and screening.

*The office entrance is visible to the public and landscaped. The truck access and overhead door are to the rear and pretty much impossible for the public to see from any street. Other than parking and loading at the garage door, no other activity takes place outside.*

4. **Establishment of Precedent of Incompatible Uses in the Surrounding Area.** Whether the use will establish a precedent of, or encourage, more intensive or incompatible uses in the surrounding area.

*Numerous other specialty contractors are approved uses, as well as commercial carpentry contractors, which is very close. Simply changing the customer base to more commercial would make Action PDR an Approved Use. This is the zoning district the UDO pushes this type of contractor to.*

## Legal Description for 10700 W. Venture Drive, Franklin

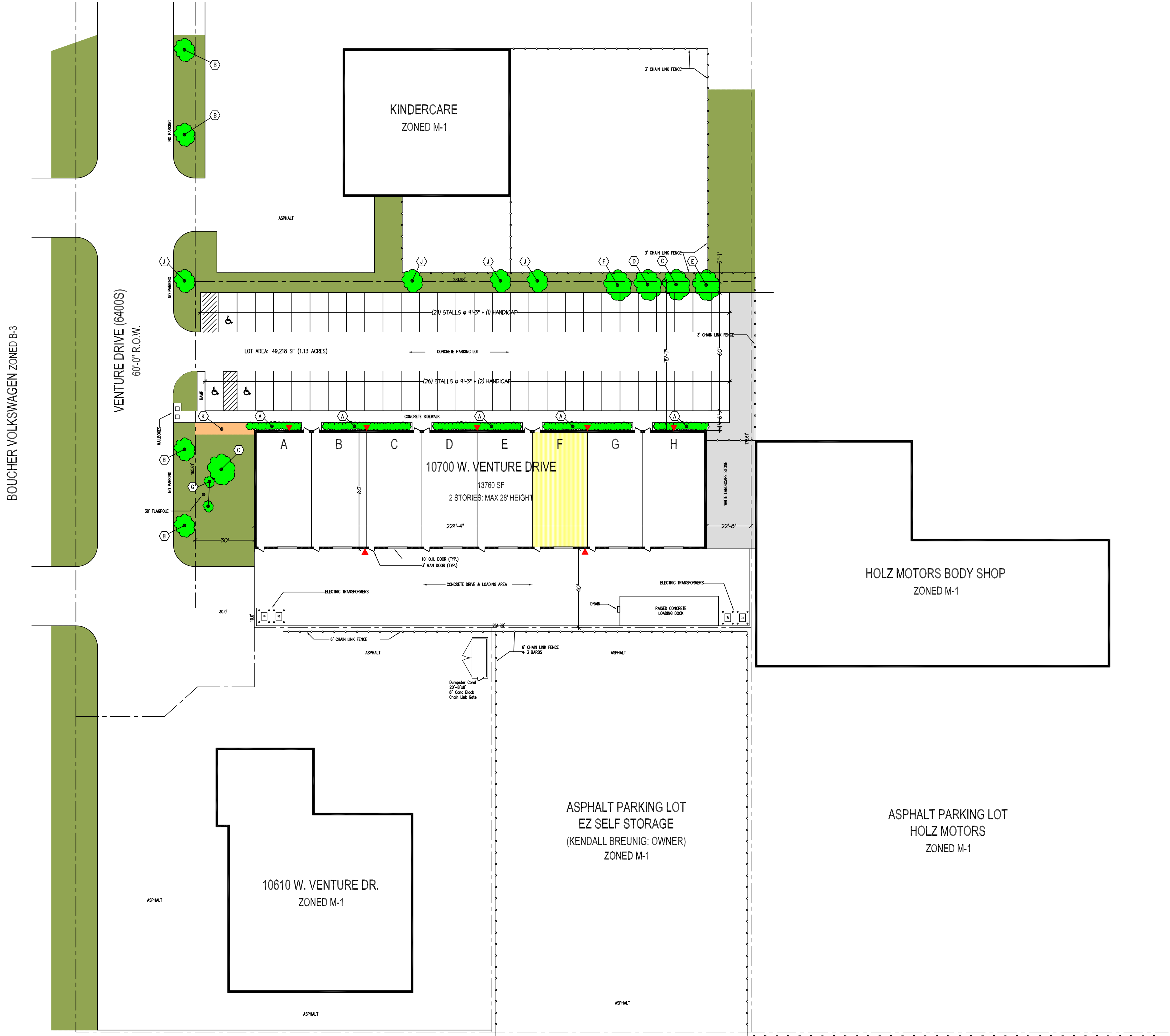
Parcel 2 of Certified Survey Map No. 4804, being a part of the North West  $\frac{1}{4}$  of the North West  $\frac{1}{4}$  of Section 5, in Township 5 North, Range 21 East in the City of Franklin, County of Milwaukee, State of Wisconsin, being a redivision of parcel nos. 2 and 3 of Certified Survey Map No. 4743, recoded on August 21, 1986, Reel 1942, Image 1197, as Document No. 5953282

10700 W. VENTURE DRIVE OCCUPANCY SCHEDULE			REQUIRED PARKING	COMPANY VEHICLES ON-SITE
OWNER		TENANT		
A	KENDALL BREUNIG	LOWER: SUNSHINE PRODUCTS, LLC	4.8	0
		UPPER: PACKAGING PARTNERS	5.6	0
B	KENDALL BREUNIG	WE CARE LAWN CARE	3.1	0
C	KENDALL BREUNIG	LOWER: A2Z BATHROOM REPAIRS	1.7	0
		UPPER: BADGER ALARM & SECURITY	5.6	0
D	KENDALL BREUNIG	TIGHTSEAL EXTERIORS	2.6	1
			3.1	0
E	KENDALL BREUNIG	POSS PAINTING	0.9	0
F	KENDALL BREUNIG	LOWER: FRANKLIN CITY INVESTMENTS LLC	2.6	0
		UPPER: ACTION PDR, INC	3.6	0
G	KENDALL BREUNIG	LOWER: SPECIALTY PRODUCTS, INC.	4.8	0
		UPPER: INTERACTIVE MARKETING PROMOTIONS	5.6	0
H	KENDALL BREUNIG	INTERACTIVE MARKETING PROMOTIONS	6.0	0
TOTAL			51	

EXISTING LANDSCAPE SCHEDULE	TYPE	SCIENTIFIC NAME
A SPREADING JUNIPERS: FULLY DEVELOPED HEDGE	SHRUB	JUNIPERUS COMMUNIS
B NORWAY MAPLE (6" Ø)	SHADE TREE	ACER PLATANOIDES
C 20' COLORADO GREEN SPRUCE	EVERGREEN	PICEA PUNGENS
D 24' DOUG FIR	EVERGREEN	PICEA PUNGENS
E 15' MULLBERRY (16"Ø)	CANDY TREE	MORUS RUBRA
F 20' MULLBERRY (20"Ø)	CANDY TREE	MORUS RUBRA
G MUGO PINE	EVERGREEN	PINUS MUGO
H BARBERRY	SHRUB	BERBERIS
J MIYABE MAPLE (STATE STREET MAPLE) (2.5"Ø)	SHADE TREE	ACER MIYABEI
K MULCH BED w/ (20) STELLA DE ORO DAY LILY	PERENIAL	HOMOCALLIS STELLA DE ORO

GENERAL NOTES
PARKING: PARKING IS NOT ASSIGNED. IN GENERAL, THE PARKING FOR ANY UNIT IS NEAR THEIR FRONT DOOR, BUT CAN BE ANYWHERE IN THE WEST PARKING LOT.
REAR LOADING AREA: IS FOR LOADING AND SHORT TERM PARKING ONLY.
SIGNAGE: SIGNAGE IS ALLOWED BY LEASE FOR EACH SPACE ON THE 10' x 20' INTERNALLY LIT SIGNS ON THE FRONT OF EACH SUITE, AND ON THE ENTRANCE DOOR GLASS TO EACH UNIT. THERE ARE 8 SUCH SIGNS ON THE BUILDING, ONE FOR EACH SUITE, AND HAVE BEEN THERE SINCE THE BUILDING WAS CONSTRUCTED IN 1987. LIGHTS ARE ON TIMERS FOR 5pm-11pm.
LIGHTING: ▲ = 70 WATT LED WALL PACK MOUNTED 17' HIGH

SETBACK SCHEDULE	REQUIRED per M-1	PROVIDED
FRONT YARD	30'-0"	75'-7"
REAR YARD	15'-0"	40'-0"
SIDE YARD	20'-0"	22'-8"
CORNERSIDE YARD	30'-0"	30'-0"



SITE and LANDSCAPE PLAN

Scale : 1" = 30'-0"

Revisions:

ENGINEER:

Kendall Breunig, P.E.  
10535 W. College Avenue  
Franklin, WI 53132  
414-529-8352

APPLICANT:

Action PDR, Inc.  
c/o Justin Johnson  
11102 W. Denis Avenue  
Hales Corners, WI 53130  
414-755-9534

ZONING APPROVAL FOR:

Action PDR, Inc  
10700 W. Venture Drive  
Unit F Upper  
Franklin, WI 53132

SUNSET INVESTORS

10535 W. College Avenue  
Franklin, WI  
414-529-8352

Drawn By:

Checked By : -

SITE PLAN

Date: February 13, 2018

Sheet No.

C-100





## AIRIAL VIEW




# FRONT FACADE



## FRONT ENTRY & SIGN



## REAR ELEVATION

DATE: 01/14/2009  SHEET 1	DRAWN BY: CHRISTOPHER PAPKE	 <p><b>SUNSET INVESTORS</b> REAL ESTATE / DEVELOPMENT / CONSTRUCTION 10535 W. COLLEGE AVENUE FRANKLIN WI 53132  PHONE: (414) 529-8352 FAX: (414) 529-7454 www.sunsetinvestors.com</p>	SPECIAL USE APPROVAL	APPLICANT:	OWNER:	ENGINEER:
	CHECKED BY: KENDALL BREUNIG				SUNSET INVESTORS: KENDALL BREUNIG 10535 W. COLLEGE AVE FRANKLIN WI 53132 PH (414) 529-8352	KENDALL BREUNIG, PE 10535 W. COLLEGE AVE. FRANKLIN WI 53132 PH (414) 529-8352

# CITY OF FRANKLIN

## REPORT TO THE PLAN COMMISSION

Meeting of June 6, 2019

### Special Use

---

**RECOMMENDATION:** City Development Staff recommends approval of the proposed Special Use Application, subject to the conditions in the draft resolution.

---

<b>Project Name:</b>	United States Cellular Operating Co., LLC
<b>Project Address:</b>	5120 W. Ryan Rd.
<b>Applicant:</b>	Richard Rogers, United States Cellular Operating Co., LLC
<b>Owners (property):</b>	5100 LLC (aka Andy's Gas Station)
<b>Current Zoning:</b>	B-3, Community Business District
<b>Applicant Action Requested:</b>	Recommendation of approval of the Special Use Application

---

#### **Introduction:**

On October 1, 2018, the applicant filed a Special Use Application requesting to install a monopole tower at the Andy's Gas Station property located at 5120 West Ryan Road.

This item was re-noticed due to a lack of detail in the notification scheduled to be held at the Plan Commission meeting on May 9, 2019 and per approval from the applicant, was republished and properly noticed to be heard at the June 6, 2019 Plan Commission meeting.

Attached to this report is a Wisconsin Legislative Council Information Memorandum regarding State law related to cell phone transmission towers. This memo outlines the process and submittal requirements for new towers and substantial changes (class 1) and minor changes (class 2) for cell phone transmission towers. The memo also provides a list of items in which the City may not do in consideration of new towers or class 1 or class 2 collocations.

As required by State law, a sworn statement was not received from the applicants indicating the need for additional network capacity near the intersection of Ryan Road and 51<sup>st</sup> Street. Information was provided in a statement prepared by Jeff Banaszek of U.S. Cellular does explain why the site was chosen and why US Cellular did not choose to collocate on a nearby tower. However, the applicant did not supply information regarding collocation possibilities as of the writing of this staff summary, which is a State requirement.

Staff would just note that the nearest towers are located at 8222 S. 51<sup>st</sup> St., approximately 9,000 feet to the north and 5572 W. Airways Avenue, approximately 2,500 feet southwest of the proposed US Cellular site.

#### **Project Description/Analysis:**

The lease area for US Cellular is 50' x 72' (3,600 square feet) and will consist of a concrete pad for current and future equipment and gravel surface. The lease area will include a chain-link fence, the tower, and ground equipment. A gravel turnaround area is also proposed adjacent to the lease area.

The proposed monopole tower is 129-feet in height (125-foot overall height with appurtenances). All equipment is either contained within the proposed fenced in area, on the pole or directly mounted to the pole.

The City Ordinances call for submitting a landscape plan, a natural resource protection plan (or letter from qualified personnel specified in UDO stating no natural resources) and other additional items referenced in Staff Comments sent to the applicants on October 24, 2018. Some of the items have been addressed while others have not been addressed and are outlined in the attached resolution for consideration by the Plan Commission.

**Staff Recommendation:**

City Development Staff recommends approval of the proposed cellular tower, subject to the conditions in the draft resolution.

## RESOLUTION NO. 2019-\_\_\_\_\_

A RESOLUTION IMPOSING CONDITIONS AND RESTRICTIONS  
FOR THE APPROVAL OF A SPECIAL USE TO ALLOW FOR THE  
INSTALLATION OF A 125 FOOT TELECOMMUNICATIONS TOWER  
MONOPOLE AT ANDY'S GAS STATION PROPERTY LOCATED AT 5120  
WEST RYAN ROAD, BEARING TAX KEY NO. 882-9999-002  
(UNITED STATES CELLULAR OPERATING COMPANY LLC, APPLICANT)

---

WHEREAS, United States Cellular Operating Company LLC having petitioned the City of Franklin for the approval of a Special Use under in part, §15-3.0805 WIRELESS TELECOMMUNICATIONS TOWERS AND ANTENNAS, subs. G. Special Uses, and §15-3.0701 GENERAL STANDARDS FOR SPECIAL USES, of the City of Franklin Unified Development Ordinance, to allow for the installation of a 125 foot telecommunications tower monopole at Andy's gas station. The lease area (approximately 3,600 square feet (which includes a 2,304 square foot fenced compound), located in the northwest corner of the property) will consist of a gravel surface and will include a chain-link fence, the tower and ground equipment, and a 30 foot wide United States Cellular Access and Utility Easement is also proposed leading from S. 51<sup>st</sup> St., westerly across the existing parking lot area to the lease area located at 5120 West Ryan Road, property zoned B-3 Community Business District, more particularly described as follows:

UNITED STATES CELLULAR OPERATING COMPANY LLC LEASE

PARCEL:

A part of the Southeast Quarter (SE1/4) of the Southwest Quarter (SW1/4) of Section Twenty-Three (23), Township Five (5) North, Range Twenty-One (21) East, City of Franklin, Milwaukee County, Wisconsin containing 3,600 square feet (0.083 acres) of land and being described by: Commencing at the South Quarter Corner of said Section 23; thence N00°-24'-05"W 475.00 feet along the east line of the SW1/4 of said Section 23; thence S88°-22'-14"W 381.43 feet; thence S01°-37'-46"E 20.71 feet to the point of beginning; thence S01°-03'-48"E 50.00 feet; thence S88°-56'-12"W 72.00 feet; thence N00°-23'-52"W 50.00 feet; thence N88°-56'-12"E 72.00 feet to the point of beginning, being subject to any and all easements and restrictions of record.

30' WIDE INGRESS/EGRESS & UTILITY EASEMENT:

A part of the Southeast Quarter (SE1/4) of the Southwest Quarter (SW1/4) of Section Twenty-Three (23), Township Five (5) North, Range Twenty-One (21) East, City of Franklin, Milwaukee County, Wisconsin containing 16,208 square feet (0.372 acres) of land and being Fifteen (15) feet each side of and parallel with the following described line: Commencing at the South Quarter Corner of said Section 23; thence N00°-24'-05"W 455.85 feet along the east



UNITED STATES CELLULAR OPERATING COMPANY LLC – SPECIAL USE  
RESOLUTION NO. 2019-\_\_\_\_\_

Page 2

line of the SW1/4 of said Section 23; thence S88°-22'-14"W 33.04 feet to a point on the west line of S. 51st Street; thence continue S88°-22'-14"W 424.95 feet; thence S00°-23'-52"E 70.00 feet to the point of beginning; thence N88°-56'-12"E 18.31 feet to a point herein after referred to as "Point A"; thence continue N88°-56'-12"E 36.69 feet to the point of termination. Also, beginning at said Point "A"; thence S43°-27'-54"E 50.77 feet; thence S89°-56'-09"E 101.72 feet; thence N00°-03'-51"E 56.98 feet; thence S89°-56'09"E 240.48 feet; thence S54°-08'-19"E 35.32 feet to a point on the West Right of Way line of S. 51st Street and the point of termination. The side lot lines of said easement are to be shortened or lengthened to terminate on the West Right of Way line of S. 51st Street.

10' WIDE UTILITY EASEMENT:

A part of the Southeast Quarter (SE1/4) of the Southwest Quarter (SW1/4) of Section Twenty-Three (23), Township Five (5) North, Range Twenty-One (21) East, City of Franklin, Milwaukee County, Wisconsin containing 8,045 square feet (0.185 acres) of land and being Five (5) feet each side of and parallel with the following described line: Commencing at the South Quarter Corner of said Section 23; thence N00°-24'-05"W 455.85 feet along the east line of the SW1/4 of said Section 23; thence S88°-22'-14"W 33.04 feet to a point on the West Right of Way line of S. 51st Street and the point of beginning; thence continue S88°-22'-14"W 251.78 feet to a point herein after referred to as "Point B"; thence S01°-37'-46"E 19.62 feet to the point of termination. Also, beginning at said "Point B", thence S88°-22'-14"W 173.17 feet; thence S00°-23'-52"E 359.95 feet to a point on the North Right of Way line of W. Ryan Road and the point of termination. The side lot lines of said easement shall be shortened or lengthened to terminate on the North Right of Way line of W. Ryan Road and the West Right of Way line of S. 51st Street.

ANDY'S PROPERTY

(Tax Key No. 882-9999-002)

Part of the Southeast 1/4 of the Southwest 1/4 of Section 23, Town 5 North, Range 21 East, City of Franklin, Milwaukee County, Wisconsin and being more particularly described as follows: Commencing at the Southeast corner of the Southwest 1/4 of said Section 23; thence North 00°24'05" West along the East line of the Southwest 1/4 of said Section 23, 60.02 feet to a point on the North right-o-way line of West Ryan Road and to the point of beginning; thence continuing North 00°24'05" West along said East line, 414.98 feet; thence South 88°22'46" West, 473.00 feet; thence South 00°24'05" East, 414.98 feet to said North right-of-way line; thence North 88°22'46" East along said right-of-way line, 473.00 feet to the point of beginning and containing



UNITED STATES CELLULAR OPERATING COMPANY LLC – SPECIAL USE  
RESOLUTION NO. 2019-\_\_\_\_\_

Page 3

4.505 acres (196,241 sq. ft.) of land, more or less, and being subject to all easements and restrictions of record; and

WHEREAS, such petition having been duly referred to the Plan Commission of the City of Franklin for a public hearing, pursuant to the requirements of §15-3.0805 and §15-9.0103D. of the Unified Development Ordinance, and a public hearing having been held before the Plan Commission on the 9th day of May, 2019, and the Plan Commission thereafter having determined to recommend that the proposed Special Use be approved, subject to certain conditions, and the Plan Commission further finding that the proposed Special Use upon such conditions, pursuant to §15-3.0701 of the Unified Development Ordinance, will be in harmony with the purposes of the Unified Development Ordinance and the Comprehensive Master Plan; that it will not have an undue adverse impact upon adjoining property; that it will not interfere with the development of neighboring property; that it will be served adequately by essential public facilities and services; that it will not cause undue traffic congestion; and that it will not result in damage to property of significant importance to nature, history or the like; and

WHEREAS, the Common Council having received such Plan Commission recommendation and also having found that the proposed Special Use, subject to conditions, meets the standards set forth under §15-3.0805 and §15-3.0701 of the Unified Development Ordinance; recognizing, that in part, §15-3.0805 WIRELESS TELECOMMUNICATIONS TOWERS AND ANTENNAS, and §15-3.0701 GENERAL STANDARDS FOR SPECIAL USES, of the City of Franklin Unified Development Ordinance, include terms and provisions thereof which have been preempted by Wis. Stat. § 66.0404 Mobile tower siting regulations, as they pertain to the subject application. Wis. Stat. § 66.0404(4) Limitations, provides in part: “[w]ith regard to an activity described... [mobile tower installation], a political subdivision *may not* do any of the following: \*\*\*

(c) Enact an ordinance prohibiting the placement of a mobile service support structure in particular locations within the political subdivision. \*\*\*

(g) Disapprove an application to conduct an activity described... [mobile tower installation] based solely on aesthetic concerns. \*\*\*

(L) Disapprove an application based solely on the height of the mobile service support structure or on whether the structure requires lighting. \*\*\*

(p) Disapprove an application based on an assessment by the political subdivision of the suitability of other locations for conducting the activity. \*\*\*

(r) Impose a setback or fall zone requirement for a mobile service support structure that is different from a requirement that is imposed on other types of commercial structures. \*\*\*

(u) Limit the height of a mobile service support structure to under 200 feet. \*\*\*\*”; and that such terms and provisions which have been preempted have not been applied to the subject application review and approval.

UNITED STATES CELLULAR OPERATING COMPANY LLC – SPECIAL USE  
RESOLUTION NO. 2019-\_\_\_\_\_

Page 4

NOW, THEREFORE, BE IT RESOLVED, by the Mayor and Common Council of the City of Franklin, Wisconsin, that the petition of United States Cellular Operating Company LLC, for the approval of a Special Use for the property particularly described in the preamble to this Resolution, be and the same is hereby approved, subject to the following conditions and restrictions:

1. That this Special Use is approved only for the use of the subject property by United States Cellular Operating Company LLC (d/b/a US Cellular), successors and assigns, for the telecommunications tower monopole installation use, which shall be developed in substantial compliance with, and operated and maintained by United States Cellular Operating Company LLC (d/b/a US Cellular), pursuant to those plans City file-stamped March 29, 2019 and annexed hereto and incorporated herein as Exhibit A.
2. United States Cellular Operating Company LLC (d/b/a US Cellular), successors and assigns, shall pay to the City of Franklin the amount of all development compliance, inspection and review fees incurred by the City of Franklin, including fees of consults to the City of Franklin, for the United States Cellular Operating Company LLC (d/b/a US Cellular) telecommunications tower monopole installation use, within 30 days of invoice for same. Any violation of this provision shall be a violation of the Unified Development Ordinance, and subject to §15-9.0502 thereof and §1-19. of the Municipal Code, the general penalties and remedies provisions, as amended from time to time.
3. The approval granted hereunder is conditional upon the United States Cellular Operating Company LLC (d/b/a US Cellular) telecommunications tower monopole installation use, for the property located as set forth above: (i) being in compliance with all applicable governmental laws, statutes, rules, codes, orders and ordinances; and (ii) obtaining all other governmental approvals, permits, licenses and the like, required for and applicable to the project to be developed and as presented for this approval.
4. Applicant shall amend the site plan by placing the width of all right-of-ways and label “ROW” and resubmit for City Development staff approval prior to building permit approval.
5. Applicant shall submit a Natural Resource Protection Plan to the City Development staff as required by Section 15-7.0103-Q of the UDO, or a letter from a qualified natural resource specialist meeting UDO criteria stating no natural resources require protection prior to building permit approval.
6. Applicant shall submit a landscape plan to the City Development staff for approval

UNITED STATES CELLULAR OPERATING COMPANY LLC – SPECIAL USE  
RESOLUTION NO. 2019-\_\_\_\_\_

Page 5

per Section 15-7.0103(R) and 15-7.0300 of the UDO prior to building permit approval.

7. Applicant shall submit a written project summary for the proposed development per Section 15-7.0103-CC of the UDO to the City Development staff prior to building permit approval.
8. Applicant shall amend the site plan by labeling the ultimate right-of-way line on the Site Plan and showing on the site plan the proposed Monopole complies with the minimum setback requirement per Table 15-5.0103 and Section 15-5.0108B and submitting to the City Development staff for approval prior to building permit approval.
9. An engineering certification shall be provided to the Department of City Development for review and approval that evaluates the fall zone of the tower related to buildings and parking areas onsite and adjacent buildings and properties, prior to issuance of a Building Permit.
10. A structural analysis of the tower, stamped by a Structural Engineer, shall be submitted for Department of City Development review and approval that demonstrates the strength of the pole to support the current equipment proposed as well as demonstrate the feasibility of the planned future collocation as indicated by the applicant, prior to issuance of a Building Permit.
11. No fencing onsite shall contain barb wire.
12. A gravel surface shall be allowed within the fenced-in area only; any improved areas outside of the fenced-in area shall be paved.
13. A Building Permit shall be issued prior to the commencement of any work. All applicable City and State building and electrical codes shall be met.
14. Upon the event of the monopole no longer serving the special use as described herein, the applicant shall remove the pole within 90 days.
15. Details related to ice shedding and ice throw risk as well as mitigation measures shall be submitted for Department of City Development staff review and approval, prior to the issuance of a Building Permit.
16. An erosion control plan shall be submitted for Engineering Department review and approval prior to the issuance of a Building Permit.
17. If the monopole collapses for any reason, the applicant shall remove the pole from the site within 12 hours. In cases of emergency where the City must move or relocate a

UNITED STATES CELLULAR OPERATING COMPANY LLC – SPECIAL USE  
RESOLUTION NO. 2019-\_\_\_\_\_

Page 6

fallen pole, the applicant is responsible for all related costs.

18. The applicant shall install, keep and maintain all parts of the system in good and proper operating condition.
19. If signage will be proposed, a sign permit will need to be approved by the City prior to installation of the signage.
20. The applicant shall maintain and operate the system in full compliance with the laws, statutes, orders, rules and regulations of the Federal Communication Commission, the United States Congress or the State of Wisconsin. [Amended 12-15-1998 by Ord. No. 98-1526]
21. [other conditions, etc.]

BE IT FURTHER RESOLVED, that in the event United States Cellular Operating Company LLC, successors or assigns, or any owner of the subject property, does not comply with one or any of the conditions and restrictions of this Special Use Resolution, following a ten (10) day notice to cure, and failure to comply within such time period, the Common Council, upon notice and hearing, may revoke the Special Use permission granted under this Resolution.

BE IT FURTHER RESOLVED, that any violation of any term, condition or restriction of this Resolution is hereby deemed to be, and therefore shall be, a violation of the Unified Development Ordinance, and pursuant to §15-9.0502 thereof and §1-19. of the Municipal Code, the penalty for such violation shall be a forfeiture of no more than \$2,500.00, or such other maximum amount and together with such other costs and terms as may be specified therein from time to time. Each day that such violation continues shall be a separate violation. Failure of the City to enforce any such violation shall not be a waiver of that or any other violation.

BE IT FURTHER RESOLVED, that this Resolution shall be construed to be such  
UNITED STATES CELLULAR OPERATING COMPANY LLC – SPECIAL USE  
RESOLUTION NO. 2019-\_\_\_\_\_

Page 7

Special Use Permit as is contemplated by §15-9.0103 of the Unified Development Ordinance.

BE IT FURTHER RESOLVED, pursuant to §15-9.0103G. of the Unified Development Ordinance, that the Special Use permission granted under this Resolution shall be null and void upon the expiration of one year from the date of adoption of this Resolution,

UNITED STATES CELLULAR OPERATING COMPANY LLC – SPECIAL USE  
RESOLUTION NO. 2019-\_\_\_\_\_

Page 7

unless the Special Use has been established by way of the issuance of an occupancy permit for such use.

BE IT FINALLY RESOLVED, that the City Clerk be and is hereby directed to obtain the recording of a certified copy of this Resolution in the Office of the Register of Deeds for Milwaukee County, Wisconsin.

Introduced at a regular meeting of the Common Council of the City of Franklin this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

Passed and adopted at a regular meeting of the Common Council of the City of Franklin this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

APPROVED:

\_\_\_\_\_  
Stephen R. Olson, Mayor

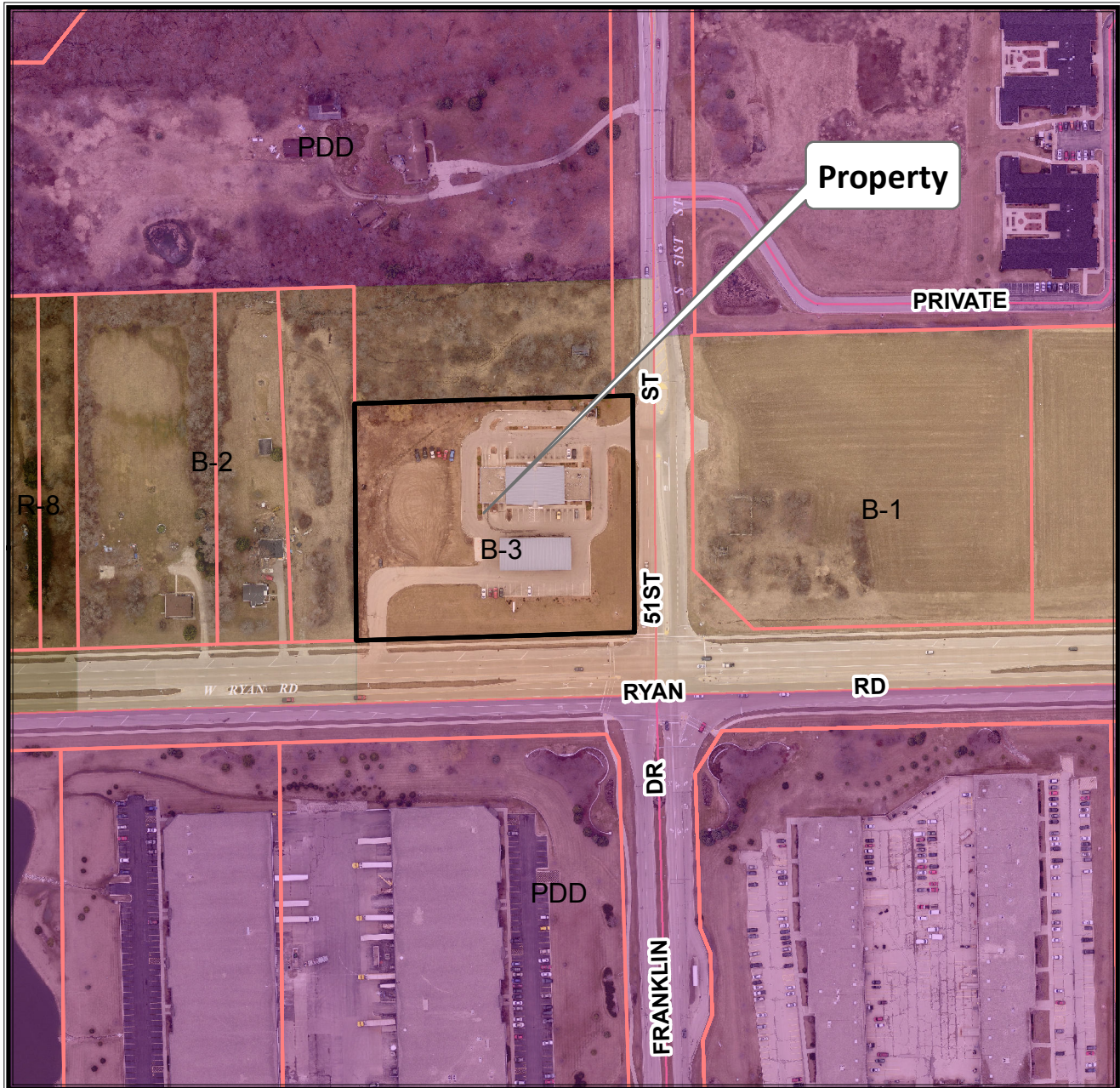
ATTEST:

\_\_\_\_\_  
Sandra L. Wesolowski, City Clerk

AYES \_\_\_\_\_ NOES \_\_\_\_\_ ABSENT \_\_\_\_\_



5120 W. Ryan Road  
TKN: 882 9999 002



Planning Department  
(414) 425-4024

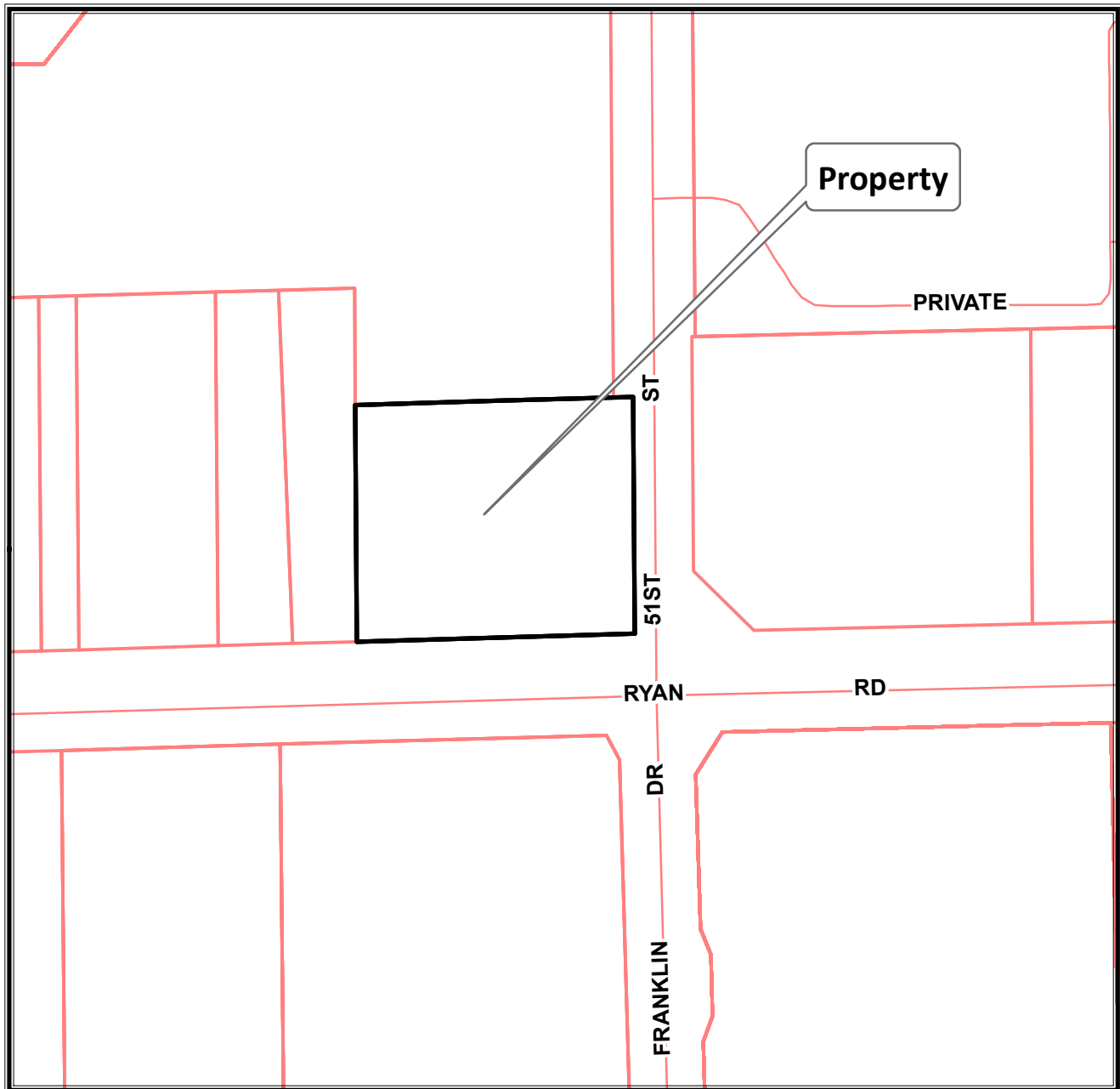
0 155 310 620 Feet

*This map shows the approximate relative location of property boundaries but was not prepared by a professional land surveyor. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering, or surveying purposes.*

  
**NORTH**  
2017 Aerial Photo



5120 W. Ryan Road  
TKN: 882 9999 002



Planning Department  
(414) 425-4024

0 155 310 620 Feet

*This map shows the approximate relative location of property boundaries but was not prepared by a professional land surveyor. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering, or surveying purposes.*



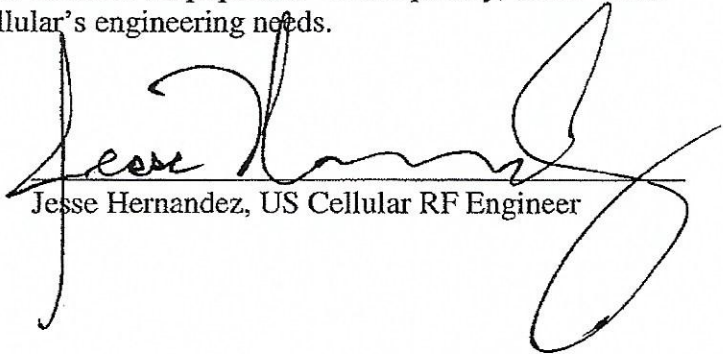


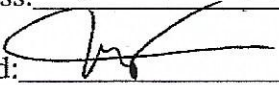
---

**SWORN STATEMENT OF JESSE HERNANDEZ**  
**IN SUPPORT OF NEW TOWER CONSTRUCTION PURSUANT TO WIS. STAT §66.0404**

---

1. My name is Jesse Hernandez.
2. I am a radio frequency engineer employed by United States Cellular Operating Company LLC.
3. My job duties include responsibility over the placement of the mobile service support structure being proposed at 5120 W. Ryan Road in the City of Franklin.
4. This sworn statement is made pursuant to Wis. Stat. §66.0404(2)(b)6.
5. US Cellular has coverage and system capacity problems in the subject area and needs to build a tower to provide enhanced coverage and significantly more capacity to maintain a viable and properly functioning network. There are no existing towers or structures in the area that USCOC can collocate on. There is a monopole tower approximately ½ mile southwest of the proposed location and this tower was evaluated by US Cellular. The tower is at maximum capacity and does not have enough loading to accommodate US Cellular. There are no other tall structures in the area that could accommodate US Cellular's equipment. Consequently, a new tower must be built to address US Cellular's engineering needs.

  
Jesse Hernandez, US Cellular RF Engineer

Witness: ION NAVARRO  
Signed:   
Date: 5/28/19





© 2018 Google  
© 2019 Google

Report a problem





5120 W Ryan Rd

Approximately 1/2 mile from proposed tower location

S 54th St

S 53rd St

S 52nd St

© 2018 Google

2000

42°52'10.62" N 87°59'05.07" W





FRANKLIN INDUSTRIAL PARK (#784700)  
FRANKLIN, WISCONSIN  
CONSTRUCTION DRAWINGS  
125' MONOPOLE

CONSULTANT:  
**Edge**  
Consulting Engineers, Inc.  
624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
808.644.1449 VOICE  
808.644.1549 FAX  
www.edgeconsult.com

CLIENT:  
**U.S. Cellular**  
U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT. NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

TITLE SHEET  
FRANKLIN INDUSTRIAL PARK (#784700)  
FRANKLIN, WISCONSIN

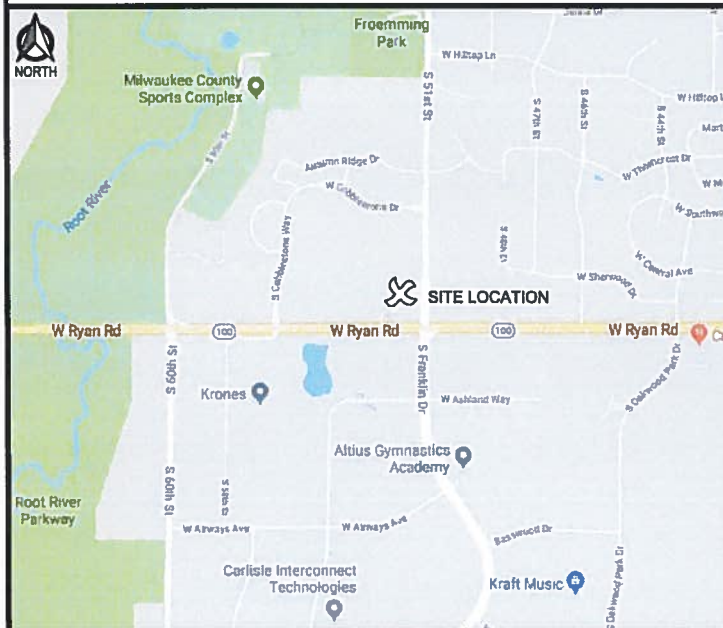
SHEET TITLE:

SUBMITTAL:

INT.	DATE	DESCRIPTION
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. D

CHECKED BY	DL
PLOT DATE	4/4/2019
PROJECT NUMBER	18791
SET TYPE	PERMIT CDs
SHEET NUMBER	G-001

SITE LOCATION MAPS



SHEET INDEX

NO.:	SHEET TITLE
G-001	TITLE SHEET
G-002	GENERAL SPECIFICATIONS
G-003	GENERAL SPECIFICATIONS
G-004	GENERAL SPECIFICATIONS
1-3	TOPOGRAPHIC SITE SURVEY *
C-101	SITE PLAN
C-102	ENLARGED SITE PLAN
C-501	CONSTRUCTION DETAILS
C-502	FENCE DETAILS
T-001	ANTENNA SPECIFICATIONS
T-002	EQUIPMENT SPECIFICATIONS
T-003	MOUNTING SPECIFICATIONS
T-201	SITE ELEVATION
T-301	ANTENNA AND EQUIPMENT CONFIGURATION
T-501	INSTALLATION DETAILS
T-502	CABLE DETAILS
T-503	CABLE BANDING DETAILS
T-504	ICE BRIDGE DETAILS
T-505	PLUMBING DIAGRAM
A-001	EQUIPMENT PAD NOTES
A-002	EQUIPMENT CABINET SPECIFICATIONS
A-101	EQUIPMENT PAD PLAN
A-102	EQUIPMENT PAD PLAN
A-201	EQUIPMENT PAD ELEVATIONS
A-501	EQUIPMENT PAD DETAILS
E-101	GROUNDING PLAN
E-501	GROUNDING DETAILS
E-502	GROUNDING DETAILS
E-503	UTILITY DETAILS
E-504	UTILITY RACK DETAILS

\* PREPARED BY OTHERS

CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS/CONDITIONS ON SITE. IMMEDIATELY NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO PERFORMING ANY WORK OR BE RESPONSIBLE FOR THE SAME.

DIRECTORY

CLIENT:  
U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT. NE SUITE 101  
CEDAR RAPIDS, IA 52402  
CONTACT: KEVIN HAINES  
PHONE: 319.560.3944

ENGINEERING COMPANY:  
EDGE CONSULTING ENGINEERS, INC.  
624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
PROJECT MANAGER: DAVE LYSHEK  
PHONE: 808.644.1449  
FAX: 808.644.1549

SITE ACQUISITION:  
WIRELESS PLANNING, LLC  
100 W. HENRY CLAY STREET  
WHITEFISH BAY, WI 53217  
CONTACT: DICK ROGERS  
PHONE: 414.507.3751

SURVEYOR:  
MERIDIAN SURVEYING, LLC  
N8774 FIRELANE 1  
MENASHA, WI 54952  
CONTACT: CRAIG KEACH  
PHONE: 920.993.0881

PROJECT INFO

SITE LOCATION:  
5120 W. RYAN ROAD  
FRANKLIN, WI 53132

E911 ADDRESS: TBD

SITE #: 784700

PROPERTY OWNER:  
ANDY K. KHULLAR  
8200 W. BROWN DEER ROAD, SUITE 301  
MILWAUKEE, WI 53223

SITE COORDINATES (PER 1-A CERTIFICATE):  
AT TOWER BASE  
TBD

PLSS INFORMATION:  
PART OF S1/4 OF THE SW1/4,  
SECTION 23, T.5N., R.21E.,  
CITY OF FRANKLIN,  
MILWAUKEE COUNTY  
WISCONSIN

TAX KEY NUMBER:  
882-9999-002

SCOPE OF WORK

PROJECT DESCRIPTION:  
125' MONOPOLE  
OUTDOOR LTE EQUIPMENT  
LEASE AREA: 50' x 72'

LOADING TYPE:  
PLUMBING DIAGRAM #X109  
E// B71/B12 / B2/B4

PROPOSED ANTENNAS:  
(6) LTE PANEL ANTENNAS

PROPOSED RF EQUIPMENT:  
(2) SURGE PROTECTOR DEVICES (SDP)  
(6) REMOTE RADIO UNITS (RRU)

PROPOSED CABLING:  
(1) 1-1/4" EUPEN HYBRID CABLE  
(1) 1-1/4" POWER CABLE

UTILITY INFORMATION

ELECTRIC SERVICE PROVIDER: WE ENERGIES

FIBER PROVIDER: TBD



TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN, CALL DIGGERS HOTLINE

TOLL FREE: 1-800-242-8511  
FAX A LOCATE: 1-800-242-5811

WI STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

ENGINEER SEAL:



I HEREBY CERTIFY THAT THIS PLAN SET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION OTHER THAN THE EXCEPTIONS NOTED IN THE SHEET INDEX, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.

SIGNATURE:

DATE:

4/4/2019

GENERAL REQUIREMENTS

1.

SITE WORK SHALL BE COMPLETED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS (U.S. CELLULAR STANDARD PLANS AND SPECIFICATIONS) AND THE REFERENCED STANDARDS.
- A.

ALL APPLICABLE LOCAL, STATE AND FEDERAL CODES AND REGULATIONS.
- B.

UNIFORM BUILDING CODE (UBC) BUILDING OFFICIALS & CODE ADMINISTRATORS (BOCA) AS APPLICABLE.
- C.

AMERICAN CONCRETE INSTITUTE (ACI).
- D.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM).
- E.

ELECTRONICS INDUSTRIES ASSOCIATION STANDARDS (EIA/TIA-222-F) MOST CURRENT VERSION ADOPTED BY SUBJECT STATE.
- F.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
2.

WHERE A CONFLICT OCCURS BETWEEN REFERENCED STANDARDS AND U.S. CELLULAR STANDARD PLANS AND SPECIFICATIONS, THE MORE STRINGENT STANDARD SHALL APPLY.
3.

THE FACILITY IS AN UNOCCUPIED SPECIALIZED MOBILE RADIO FACILITY.
4.

PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC UTLINE ONLY, UNLESS NOTED OTHERWISE THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
5.

PRIOR TO THE SUBMISSIONS OF THE BIDS, THE CONTRACTOR SHALL VISIT THE JOB SITE AND BECOME FAMILIAR WITH THE FIELD CONDITIONS. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE.
6.

THE CONTRACTOR SHALL RECEIVE IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY IDENTIFIED BY THE CONTRACT DOCUMENTS.
7.

THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY OTHERWISE NOTED.
8.

THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING BEST SKILLED PERSONNEL. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT INCLUDING CONTACT AND COORDINATION WITH THE LANDLORDS AUTHORIZED REPRESENTATIVE.
9.

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF THE SITE AND NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES BEFORE STARTING ANY WORK.
10.

WHEN CONTRACTOR'S ACTIVITIES IMPEDE OR OBSTRUCT TRAFFIC FLOW, CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL DEVICES, SIGNS, AND FLAGMEN IN ACCORDANCE WITH PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AS PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
11.

THE CONTRACTOR SHALL COORDINATE SITE ACCESS AND SECURITY WITH THE PROPERTY OWNER AND U.S. CELLULAR PRIOR TO CONSTRUCTION.
12.

THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS SUCH AS BUT NOT LIMITED TO, PAVING, CURBS, AGRICULTURAL CROPS, DRAIN TILE, FENCES, LANDSCAPING, GALVANIZED SURFACES, ETC. AND UPON COMPLETION OF WORK REPAIR ANY DAMAGE THAT OCCURRED DURING CONSTRUCTION.
13.

THE LOCATIONS OF UTILITIES SHOWN ON THE PLAN ARE BASED ON EXISTING RECORDS, FIELD LOCATIONS OR OWNER SUPPLIED INFORMATION AND MAY NOT BE ACCURATE. THE CONTRACTOR SHALL MARK ALL PUBLIC & PRIVATE UTILITIES. THE CONTRACTOR SHALL CALL THE LOCAL "ONE CALL" PROVIDER A MINIMUM OF THREE BUSINESS DAYS PRIOR TO EXCAVATING TO ALLOW MEMBER UTILITIES TO LOCATE THEIR FACILITIES. THE PROPERTY OWNER SHALL BE NOTIFIED IN A SIMILAR FASHION TO ALLOW HIM TO LOCATE HIS PRIVATE UTILITIES.
14.

WHEN EXCAVATING AROUND UTILITIES, THE CONTRACTOR SHALL USE REASONABLE CARE IN LOCATING AND PROTECTING UTILITIES. U.S. CELLULAR SHALL BE NOTIFIED IMMEDIATELY OF ANY CONFLICTS BETWEEN EXISTING UTILITIES AND PROPOSED CONSTRUCTION.
15.

DAMAGE TO PUBLIC OR PRIVATE UTILITIES SHALL BE REPORTED TO U.S. CELLULAR AND THE OWNER OF THE UTILITY IMMEDIATELY. ANY DAMAGE RESULTING FROM CONTRACTOR'S NEGLIGENCE OR FAILURE TO ACT WITH DUE REGARD SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
16.

UNLESS OTHERWISE NOTED ON THE PLANS, CONTRACTOR SHALL ASSUME ALL SURFACE FEATURES SUCH AS BUILDINGS, PAVEMENTS, LANDSCAPING FEATURES AND PLANTS ARE TO BE SAVED AND PROTECTED FROM DAMAGE.
17.

KEEP THE CONSTRUCTION SITE CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.

18.

THE CONTRACTOR SHALL PROVIDE ON-SITE TRASH RECEPTACLES FOR COLLECTION OF NON-TOXIC DEBRIS. ALL TRASH SHALL BE COLLECTED ON A DAILY BASIS.
19.

ALL TOXIC AND ENVIRONMENTALLY HAZARDOUS SUBSTANCES SHALL BE USED AND DISPOSED OF IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS. UNDER NO CIRCUMSTANCES SHALL RINSING OR DUMPING OF THESE SUBSTANCES OCCUR ON-SITE.
20.

THE CONTRACTOR SHALL MAINTAIN AND SUPPLY U.S. CELLULAR WITH AS-BUILT PLANS UPON COMPLETION OF THE PROJECT.
21.

MEANS AND METHODS OF CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, THE DESIGN AND PLACEMENT OF FORMS AND SHORING ARE THE RESPONSIBILITY OF THE CONTRACTOR.
22.

THE GENERAL CONTRACTOR SHALL COORDINATE/ASSIST DIFFERENT TRADE CONTRACTORS IN TERMS OF COORDINATION OF SITE ACCESS.
23.

ALL ARCHITECTURAL, MECHANICAL & ELECTRICAL SYSTEM AND COMPONENTS IN THIS FACILITY SHALL BE INSTALLED TO RESIST WIND, ICE AND SNOW FORCES AS PER NATIONAL STANDARDS AND BUILDING CODES (LATEST ADOPTED EDITION).
24.

U.S. CELLULAR WILL OBTAIN NECESSARY PERMITS AND LICENSES FROM THE FEDERAL COMMUNICATIONS COMMISSION (FCC) AND THE FEDERAL AVIATION ADMINISTRATION (FAA). UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIAL PROVISIONS, CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL OTHER PERMITS NECESSARY FOR CONSTRUCTION.
25.

U.S. CELLULAR WILL ORDER AND PAY FOR ANY NECESSARY ELECTRIC AND TELEPHONE UTILITY INSTALLATIONS TO THE POINT OF TERMINATION AS SHOWN ON THE PROJECT PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH UTILITIES.
26.

U.S. CELLULAR WILL PROVIDE PRIMARY HORIZONTAL AND VERTICAL CONTROL FOR CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE TO CORRECTLY TRANSFER LINE AND GRADE. THE CONTRACTOR SHALL PROVIDE ANY ADDITIONAL STAKING OR RE-STAKING.
27.

U.S. CELLULAR MAY RETAIN THE SERVICES OF A TESTING LABORATORY TO PERFORM QUALITY ASSURANCE TESTING ON VARIOUS PORTIONS OF THE CONTRACTORS WORK. WHEN REQUESTED, THE CONTRACTOR SHALL INFORM THE TESTING LABORATORY AND ASSIST THEM IN COMPLETING TESTS.
28.

THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY UTILITIES OR FACILITIES IT DEEMS NECESSARY TO COMPLETE IT'S WORK. THIS INCLUDES, BUT IS NOT LIMITED TO WATER, SEWER, POWER, TELEPHONE, HEAT, LIGHTING OR SECURITY.
29.

NOTIFY ENGINEER 2 DAYS IN ADVANCE OF INITIATING SITE CONSTRUCTION ACTIVITIES.

DEMOLITION

1.

PERFORM DEMOLITION AND REMOVAL OF EXISTING MATERIALS OR STRUCTURES AS SHOWN ON THE PLANS AND AS SPECIFIED IN SPECIAL CONDITIONS. PROTECT EXISTING FACILITIES OR STRUCTURES THAT ARE TO REMAIN.
2.

COMPLETE DEMOLITION IN A SYSTEMATIC MANNER BEGINNING AT THE HIGHEST LEVEL.
3.

NEATLY SAW OR CUT JOINTS AT THE LIMITS OF REMOVAL; WHENEVER POSSIBLE LOCATE CUTS AT EXISTING JOINTS.
4.

PATCH AND REPAIR ANY DAMAGED SURFACES OR STRUCTURAL MEMBERS AT THE LIMITS OF REMOVAL.
5.

REMOVAL DEMOLITION DEBRIS FROM THE SITE ON A REGULAR BASIS. DISPOSE ALL DEBRIS OFFSITE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS. BURNING OF MATERIAL SHALL NOT BE ALLOWED UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIAL PROVISIONS.

CLEARING AND GRUBBING

1.

REMOVE TREES, STUMPS, SHRUBS, GRASS AND OTHER VEGETATION AS SHOWN ON THE PLANS TO ALLOW FOR CONSTRUCTION OF NEW CELLULAR FACILITIES.
2.

WHEN POSSIBLE, NEATLY TRIM OR CUT BACK EXISTING TREES OR VEGETATION TO ALLOW FOR CONSTRUCTION OF NEW CELLULAR FACILITIES.
3.

WHEN CLEARING TREES, PROTECT ALL SURROUNDING STRUCTURES, PAVEMENTS AND LANDSCAPING BY TOPPING, TRIMMING AND USING GUY LINES.
4.

COMPLETELY REMOVE ALL STUMPS AND ROOTS. STUMPS AND ROOTS MAY BE REMOVED BY GRUBBING, CHIPPING OR GRINDING.
5.

DISPOSE OF ALL DEBRIS OFFSITE IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS. BURNING OF MATERIAL SHALL NOT BE ALLOWED UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIAL PROVISIONS.

EARTHWORK

1.

REMOVE TOPSOIL FROM BENEATH ALL PROPOSED ROADS, PARKING AREAS, BUILDINGS AND AREAS TO RECEIVE MORE THAN 6" OF FILL. STOCKPILE TOPSOIL FOR USE DURING RESTORATION.
2.

ALL TREES DESIGNATED TO REMAIN SHALL BE PROTECTED DURING CONSTRUCTION BY A 5 FOOT HIGH TREE BARRIER UTILIZING WIRE FENCING, OR PROTECTIVE SAFETY NETTING.
3.

GRADE AREAS IN ACCORDANCE WITH ELEVATIONS AND GRADES SHOWN ON THE PLANS OR AS NECESSARY IN GRADING TO PROVIDE DRAINAGE.
4.

FILL MATERIAL USED IN GRADING OPERATIONS SHALL CONSIST OF EARTH WHICH IS FREE OF DEBRIS, BOULDERS OR ORGANIC MATERIAL. FILL SHALL BE PLACED IN 12" LIFTS AND COMPACTED TO 90% OF MODIFIED PROCTOR MAXIMUM DRY DENSITY.
5.

ALL FILL SHALL BE TESTED FOR FIELD DENSITY. TESTS SHALL BE TAKEN IN EACH LIFT OF FILL AT LOCATIONS DESIGNATED BY THE OWNER'S REPRESENTATIVE.
6.

SELECT GRANULAR FILL SHALL BE USED WHEN FILLING OR BACKFILLING BENEATH AND/OR AROUND ANY STRUCTURES, ROADS OR PARKING AREAS. SELECT FILL SHALL BE PLACED IN 9" LIFTS AND COMPACTED TO 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. SELECT GRANULAR FILL SHALL CONSIST OF SAND, GRAVEL OR MIXTURE OF SAND AND GRAVEL FREE OF ORGANIC MATERIAL. THE MATERIAL SHALL HAVE A 2" MAXIMUM SIZE, LESS THAN 10% PASSING NO. 200 SIEVE, A PLASTICITY INDEX OF 6 OR LESS, AND A UNIFORMITY COEFFICIENT OF 5 OR GREATER.
7.

ALL DISTURBED AREAS SHALL BE RESTORED AS SOON AS POSSIBLE WITH 4" TOPSOIL, SEED, FERTILIZER AND MULCH. GRASS SEED SHALL BE A SUITABLE MIX CONTAINING BOTH ANNUAL AND PERENNIAL VARIETIES OF FESCUE, RYE AND BLUEGRASS. FERTILIZER SHALL CONTAIN A MINIMUM OF 10% EACH OF NITROGEN, PHOSPHORIC ACID AND POTASH. MULCH SHALL BE A STRAW OR HAY MIXTURE FREE OF NOXIOUS WEED SEEDS. APPLY SEED AND FERTILIZER AS RECOMMENDED BY MANUFACTURER. MULCH SHALL BE CRIMPED AFTER APPLICATION.
8.

THE CONTRACTOR SHALL VERIFY, UPON COMPLETION OF DEVELOPMENT, THE SITE IS PROPERLY STABILIZED AND ALL INDICATED SWALES AND STORMWATER FACILITIES ARE CONSTRUCTED AS INDICATED ON THE PLANS.
9.

TOWER, TOWER FOUNDATIONS, SLABS, MODULAR BUILDINGS, AND ELECTRICAL AND MECHANICAL FEATURES ARE TO BE DESIGNED AND SPECIFIED BY OTHERS.

EROSION CONTROL

1.

CONTRACTOR SHALL PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH THE MOST STRINGENT OF: PROJECT PLANS, SPECIAL PROVISIONS, APPLICABLE STATE DEPARTMENT OF NATURAL RESOURCES OR LOCAL ORDINANCES.
2.

ESTABLISH EROSION CONTROL MEASURES PRIOR TO STARTING CONSTRUCTION AND MAINTAIN THROUGHOUT CONSTRUCTION. INSPECT EROSION CONTROL MEASURES FOLLOWING EACH RAINFALL EVENT AND REPAIR AS NECESSARY.
3.

SEDIMENTATION CONTROL SHALL BE ACCOMPLISHED DURING CONSTRUCTION THROUGH THE USE OF SILT FENCING PLACED AS SHOWN ON THE ATTACHED PLAN. THE CONTROL DEVICES SHALL BE SET AT THE ONSET OF SITE GRADING TO PREVENT SILTING OF THE EXISTING STORMWATER FACILITIES.

ROAD AND PARKING AREA CONSTRUCTION

1.

PREPARE SUBGRADE FOR ROADS AND PARKING AREAS IN ACCORDANCE WITH "EARTHWORK" SECTION.
2.

PROOF ROLL ROAD TO IDENTIFY UNSUITABLE MATERIALS. EXCAVATE UNSUITABLE MATERIAL AND DISPOSE OFFSITE. BACKFILL UNDERCUT EXCAVATION USING 3" BREAKER RUN MATERIAL. BREAKER RUN MATERIAL SHALL BE CRUSHED STONE MEETING THE FOLLOWING GRADATION:

	SIEVE SIZE	% WEIGHT PASSING
	3"	100
	1-1/2"	0-50
	3/4"	0-20
	#200	0-10
3.

PLACE CRUSHED AGGREGATE BASE COURSE IN MAXIMUM OF 6" THICK LIFTS IN ACCORDANCE WITH DETAIL DRAWINGS. MOISTURE CONDITION BASE COURSE AS NECESSARY TO ACHIEVE COMPACTION. BASE COURSE SHALL BE COMPACTED TO 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY. BASE COURSE MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS:

3" BASE COURSE	SIEVE SIZE	% WEIGHT PASSING
	3"	100
	2-1/2"	25-60
	3/4"	0-20
	3/8"	0-5

1-1/2" BASE COURSE	SIEVE SIZE	% WEIGHT PASSING
	1-1/2"	100
	1"	70-100
	3/4"	55-95
	3/8"	30-65
	#4	25-55
	#10	15-40
	#200	0-10
4.

PLACE BASE COURSE WITH CROWN OR UNIFORM SLOPE AS NECESSARY TO PROVIDE DRAINAGE FROM THE SITE.
5.

GEOTEXTILE FABRIC SHALL BE USED IN THE EVENT OF UNSTABLE SOIL CONDITIONS. VERIFICATION OF SUCH CONDITIONS IS THE RESPONSIBILITY OF THE CONTRACTOR.

CONSULTANT:



Edge

Consulting Engineers, Inc.

624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

CLIENT:



U.S. CELLULAR - CEDAR RAPIDS

4201 RIVER CENTER CT, NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

GENERAL SPECIFICATIONS  
FRANKLIN INDUSTRIAL PARK (#784700)  
FRANKLIN, WISCONSIN

SHEET TITLE

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. 0

CHECKED BY	DL
PLOT DATE	4/4/2019
PROJECT NUMBER	18791
SET TYPE	PERMIT CDs
SHEET NUMBER	G-002

K:\187001\18791\CAD\PLT\CDs\G-002.dgn

© EDGE CONSULTING ENGINEERS, INC.



CONCRETE AND STEEL REINFORCEMENT

1.

CONCRETE SHALL BE MIXED AND DELIVERED IN ACCORDANCE WITH ASTM C94. CONCRETE SHALL BE 6 BAG MIX HAVING A 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI, MAXIMUM AGGREGATE SIZE OF 1", MAXIMUM WATER CEMENT RATIO OF 0.45, AIR ENTRAINMENT OF 6% +/- 1%, AND SLUMP OF 3" +/- 1". DEVIATIONS FROM THE MIX MUST BE APPROVED BY U.S. CELLULAR PRIOR TO USE.
2.

CONCRETE CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE MOST STRINGENT OF: PROJECT PLANS, SPECIAL PROVISIONS, OR THE AMERICAN CONCRETE INSTITUTE (ACI) PUBLICATIONS. CONCRETE WORK FOR TOWER FOUNDATIONS SHALL BE COMPLETED IN ACCORDANCE WITH PLANS AND SPECIFICATIONS PROVIDED BY THE TOWER VENDOR.
3.

FORM MATERIALS WILL COMPLY WITH ACI 301. PLYWOOD FORMS SHALL BE APA B-B PLYFORM CLASS I SOUND SHEETS. LUMBER SHALL BE SPRUCE-PINE-FIR SPECIES #2 OR BETTER GRADE. TUBULAR COLUMN FORMS MAY BE SPIRALLY WOUND LAMINATED FIBER MATERIAL. FORM TIES SHALL BE REMOVABLE OR SNAP-OFF METAL TYPE.
4.

CONCRETE SHALL BE MADE OF CEMENT MEETING THE REQUIREMENTS OF ASTM C150, NORMAL, TYPE I PORTLAND, FINE AND COARSE AGGREGATES FOR CONCRETE SHALL MEET THE REQUIREMENTS OF ASTM C33.
5.

PLACE, SUPPORT AND SECURE REINFORCEMENT STEEL AT LOCATIONS SHOWN ON PLANS. REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH ACI 315. REBAR YIELD STRENGTH = 60,000 PSI.
6.

AIR ENTRAINING ADMIXTURES SHALL MEET THE REQUIREMENTS OF ASTM C260; WATER REDUCING ADMIXTURES SHALL MEET THE REQUIREMENTS OF ASTM C494, TYPE A. ALL OTHER ADMIXTURES ARE PROHIBITED WITHOUT PRIOR APPROVAL BY U.S. CELLULAR.
7.

VAPOR BARRIER SHALL BE 6 MIL THICK POLYETHYLENE, MEETING THE REQUIREMENTS OF ASTM D2103.
8.

CURING COMPOUND SHALL MEET THE REQUIREMENTS OF ASTM C309.
9.

WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
10.

ALL CONSTRUCTION AND EXPANSION JOINTS SHALL BE INSTALLED PER THE DRAWINGS.
11.

ALL EXPOSED CORNERS OF CONCRETE WORK SHALL BE CHAMFERED 3/4 " UNLESS NOTED OTHERWISE.
12.

PLACE, SUPPORT AND SECURE REINFORCEMENT STEEL AT LOCATIONS SHOWN ON PLANS. REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH ACI 315.
13.

ALL FORM WORK SHALL BE RIGID, TIGHT, LEVEL, PLUMB AND SUFFICIENTLY SHORED TO RESIST CONSTRUCTION LOAD CONDITIONS. COAT FORMS WITH RELEASE AGENT PRIOR TO PLACING REINFORCING STEEL.
14.

PREPARE SUBGRADE FOR CONCRETE IN ACCORDANCE WITH PROJECT PLANS AND SPECIAL PROVISION. DO NOT PLACE CONCRETE ON FROZEN SUBGRADE.
15.

PROVIDE U.S. CELLULAR A MINIMUM OF 48 HRS. NOTICE PRIOR TO PLACING CONCRETE TO ALLOW FOR INSPECTION AND SCHEDULING OF TESTING.
16.

UTILIZE CHUTES, TROUGHS OR CONVEYORS TO PLACE CONCRETE SO THAT HANDLING OF CONCRETE IS MINIMIZED. AVOID SEGREGATION OF THE AGGREGATE AND DISTURBING REINFORCING STEEL.
17.

UNIFORMLY CONSOLIDATE CONCRETE USING HAND TOOLS OR MECHANICAL VIBRATORS. THOROUGHLY CONSOLIDATE EACH LAYER PRIOR TO PLACING SUBSEQUENT LAYERS.
18.

WHEN PLACING OPERATIONS ARE TEMPORARILY SUSPENDED, THE UNFINISHED FACE OF THE POUR SHALL BE COVERED WITH WET BURLAP UNTIL PLACING OPERATIONS ARE RESUMED. WHEN PLACING OPERATIONS ARE SUSPENDED FOR MORE THAN 30 MINUTES, PROVIDE AN BONDING AGENT TO CONSTRUCTION JOINT.
19.

TROWEL FINISH SURFACES UNLESS OTHERWISE DIRECTED ON THE PLANS.
20.

AFTER FINAL FINISHING, PROVIDE POLYETHYLENE VAPOR BARRIER OR CURING COMPOUND TO MAINTAIN MOISTURE AND TEMPERATURE OF CONCRETE.
21.

IN EXTREME WEATHER PLACE AND CURE CONCRETE IN ACCORDANCE WITH EITHER ACI 306R-89 FOR COLD WEATHER OR ACI 305R-89 FOR HOT WEATHER.
22.

WELDING OF REINFORCING STEEL IS PROHIBITED.
23.

REMOVE FORMS IN A MANNER THAT DOES NOT DAMAGE THE CONCRETE. FILL AND PATCH POCKETS OR HOLES ON EXPOSED SURFACES USING MORTAR MIXTURE.
24.

PROVIDE TEST CYLINDERS AS FOLLOWS:

A. EQUIPMENT ENCLOSURE:

1 CYLINDER AT 7 DAYS.  
1 CYLINDER AT 14 DAYS.  
2 CYLINDERS AT 28 DAYS.
25.

NOTIFY ENGINEER 48 HOURS IN ADVANCE OF TOWER FOUNDATION INSTALLATION.
26.

REFER TO TOWER MANUFACTURER SPECIFICATIONS REGARDING FOUNDATION REQUIREMENTS.

CHAINLINK FENCING

- 1.0

SCOPE:
- 1.1

THIS SECTION COVERS THE REQUIREMENTS FOR THE MATERIALS AND THE CONSTRUCTION OF SITE FENCING. SEE SITE PLAN AND DRAWINGS FOR DETAILS.
- 2.0

SPECIAL REQUIREMENTS:
- 2.1

ALL WIRE, FABRIC, FITTINGS, HARDWARE AND STEEL MEMBERS USED FOR SITE AREA FENCING SHALL BE HOT DIPPED GALVANIZED (ASTM A153) OR OTHER APPROVED NON CORROSIVE MATERIAL AND CONFORM TO FEDERAL SPEC RR-F-191G (1-25-74).
- 2.2

ALL NON-CORROSIVE MATERIAL SHALL BE PRE-APPROVED BY THE PROJECT MANAGER.
- 2.3

ANY DAMAGE TO GALVANIZING OR NON-CORROSIVE COATING DURING CONSTRUCTION SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S RECOMMENDED METHODS.
- 3.0

GATE:
- 3.1

LOCATION OF GATE SHALL CONFORM TO THE SITE PLAN.
- 3.2

ALL JOINTS BETWEEN TUBULAR GATE MEMBERS SHALL BE WELDED OR HEAVY FITTINGS PROVIDING RIGID AND WATERTIGHT CONNECTIONS.
- 3.3

GATE HINGES SHALL PROVIDE FOR 180 DEGREE RADIUS GATE SWING. ALL HINGE NUTS SHALL BE ON THE INSIDE AND DOUBLE-NUT TO DETER UNAUTHORIZED ENTRY.
- 3.4

BARBED WIRE GUARD SHALL BE INSTALLED ON TOP OF GATES. ADEQUATE CLEARANCE SHALL BE MAINTAINED TO ALLOW GATE OPERATION.
- 3.5

GATE SHALL BE INSTALLED PLUMB AND SHALL OPEN AND CLOSE FREELY.
- 3.6

GATE POSTS SHALL NOT BE SHARED AS A CORNER POST.
- 4.0

FENCE POSTS:
- 4.1

LOCATION OF CORNER POSTS SHALL BE DETERMINED FROM STAKES AND PROPERTY PINS INSTALLED BY THE REGISTERED LAND SURVEYOR UNDER CONTRACT FOR THE PROJECT. IF THE STAKES ARE NOT PRESENT OR DO NOT CONFORM TO THE SITE PLAN, CONSULT WITH THE PROJECT MANAGER.
- 4.2

CORNER POSTS SHALL BE SET WITHIN ONE INCH (1") OF DIMENSIONS INDICATED ON THE SITE PLAN.
- 4.3

FENCE POSTS SHALL BE VERTICALLY PLUMB IN ALL PLANES WITHIN 1/2 INCH (1/2").
- 4.4

LINE POSTS BETWEEN CORNER AND GATE POSTS SHALL BE EQUALLY SPACED WITH A TEN FOOT (10') MAXIMUM SPACING. GATE POST LOCATIONS SHALL BE IN ACCORDANCE WITH SITE PLAN AND SHALL BE VERIFIED WITH THE PROJECT MANAGER.
- 4.5

ALL FOUR CORNERS POSTS AND BOTH GATE POSTS SHALL BE CONNECTED TO THE SITE GROUNDING SYSTEM (REFER TO GROUNDING SYSTEM STANDARD).
- 4.6

FENCE POST OUTSIDE DIAMETER (O.D.) ARE MINIMUM SPECIFICATIONS. LARGER SIZES MAY BE SUBSTITUTED WITH APPROVAL FROM PROJECT MANAGER.
- 5.0

FABRIC:
- 5.1

FABRIC SHALL BE TENSIONED PER MANUFACTURER'S RECOMMENDATIONS TO PRESENT A NEAT APPEARANCE.
- 5.2

FABRIC SHALL BE SECURED AT CORNER AND GATE POSTS USING STRETCHER BARS AND TENSION BAND CLIPS.
- 5.3

FABRIC SHALL BE SECURED TO THE TOP RAIL AND BRACE RODS USING TIE CLIPS.

THIS SPACE INTENTIONALLY LEFT BLANK

CONSULTANT:



**Edge**  
Consulting Engineers, Inc.  
624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

CLIENT:



**US Cellular**  
U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT, NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

GENERAL SPECIFICATIONS  
FRANKLIN INDUSTRIAL PARK (#784700)  
FRANKLIN, WISCONSIN

SHEET TITLE

SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. C

CHECKED BY	DL
PLOT DATE	4/4/2019
PROJECT NUMBER	18791
SET TYPE	PERMIT CDs
SHEET NUMBER	G-003

ELECTRICAL NOTES

1.0 GENERAL

- 1.1

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC. FOR A COMPLETE AND PROPERLY OPERATING SYSTEM ENERGIZED THROUGHOUT AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.
- 1.2

CONTRACTOR IS TO COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF PERMANENT POWER TO THE SITE.
- 1.3

CONTRACTOR SHALL OBTAIN ALL NECESSARY BUILDING PERMITS, INSPECTIONS AND APPROVALS, AND PAY ALL REQUIRED FEES PURSUANT TO THE WORK.
- 1.4

ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST VERSION OF THE NATIONAL ELECTRICAL CODE AND ANY APPLICABLE NATIONAL, STATE AND LOCAL CODES. ALL COMPONENTS SHALL BE U.L. APPROVED.
- 1.5

CONTRACTOR SHALL BEFORE SUBMITTING HIS BID, VISIT THE SITE OF THE PROJECT AND BECOME FAMILIAR WITH THE CONDITIONS. NO ALLOWANCE WILL BE MADE FOR EXISTING CONDITIONS OR FAILURE OF THE CONTRACTOR TO OBSERVE THEM.
- 1.6

EXACT LOCATION OF ALL EQUIPMENT SHALL BE COORDINATED WITH OWNER AND OTHER TRADES.
- 1.7

CONTRACTOR SHALL PROVIDE ALL VERIFICATION OBSERVATION TESTS AND EXAMINE ALL WORK PRIOR TO ORDERING THE ELECTRICAL EQUIPMENT AND THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT/ENGINEER LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES.
- 1.8

ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN SAFE CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT (SEE NOTE 1.7 FOR EXCEPTIONS). MATERIALS SHALL MEET WITH APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY AND ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA, NBFU AND "UL" LISTED.
- 1.9

WHERE EQUIPMENT IS SPECIFIED BY MANUFACTURER AND TYPE, SUBSTITUTION SHALL ONLY BE MADE WITH THE APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL SUBMIT DETAILS OF PROPOSED MATERIALS, REASON FOR CHANGE AND CHANGE IN CONTRACT AMOUNT.
- 1.10

EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY LABELED WITH ENGRAVED PLASTIC LABELS FOR EACH PANELBOARD, PULL BOX, J-BOX, SWITCH BOX, ETC. IN COMPLIANCE WITH OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)
- 1.11

THESE PLANS ARE DIAGRAMMATIC ONLY AND ARE TO BE FOLLOWED AS CLOSELY AS POSSIBLE.
- 1.12

THE TEMPERATURE RATING ASSOCIATED WITH THE AMPACITY OF A CONDUCTOR SHALL BE SO SELECTED AND COORDINATED AS TO NOT EXCEED THE LOWEST TEMPERATURE RATING OF ANY CONNECTED TERMINATION, CONDUCTOR, OR DEVICE.
- 1.13

ALL ENCLOSURES CONTAINING THE SERVICE CONDUCTORS-SERVICE RACEWAY, CABLE ARMOR, BOXES, FITTINGS, CABINETS MUST BE EFFECTIVELY BONDED TOGETHER.
- 1.14

ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40 UNLESS OTHERWISE SPECIFIED, WITH UV PROTECTION (UNLESS NOTED OTHERWISE) AT A MINIMUM DEPTH SPECIFIED BY NATIONAL STATE AND LOCAL CODES. IT IS REQUIRED AND WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO NOTIFY THE DIGGER HOTLINE OR OTHER SUCH NOTIFYING AGENCY PRIOR TO THE START OF DIGGING, TRENCHING, EXCAVATION, OR OTHER SUCH EARTH REMOVAL; SEE G-001 FOR NOTIFICATION REQUIREMENTS.
- 1.15

THE UNDERGROUND SERVICE ENTRANCE WORK MUST BE CONSTRUCTED ACCORDING TO THE LOCAL BUILDING CODE, NEC & UTILITY STANDARDS. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRICAL UTILITY BEFORE QUOTING AND DURING THE CONSTRUCTION.

ELECTRICAL NOTES (CONTINUED)

2.0 MATERIALS, ELECTRICAL WIRING AND RACEWAYS

- 2.1

ALL CIRCUIT BREAKERS, FUSES, CONDUCTORS AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING SHORT CIRCUIT TO WHICH THEY MAY BE SUBJECTED AND A MINIMUM OF 10,000 AIC RATING UNLESS SPECIFIED OTHERWISE.
- 2.2

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 COVER PLATES.
- 2.3

METER SOCKET AMPERAGE, VOLTAGE AND NUMBER OF PHASES SHALL BE AS NOTED ON THE DRAWINGS AND MANUFACTURED BY SQUARE "D" COMPANY OR AN APPROVED EQUAL.
- 2.4

INSTALLATION OF RIGID METAL CONDUIT SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF ARTICLES 300 & 346-NEC. SHALL BE UL APPROVED.
- 2.5

INSTALLATION OF ELECTRICAL METALLIC TUBING (EMT) SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF ARTICLES 300 & 348-NEC. SHALL BE U.L. APPROVED.
- 2.6

INSTALLATION OF INTERMEDIATE METAL CONDUIT (IMC) SHALL COMPLY WITH THE APPLICABLE PROVISIONS OF ARTICLES 300 & 348-NEC. SHALL BE UL APPROVED.
- 2.7

PLASTIC CONDUIT SHALL BE SCHEDULE 40, HIGH IMPACT, POLYVINYL CHLORIDE AND SHALL BE USED WITH UNTHREADED SOLVENT CEMENT PLASTIC CONDUIT FITTINGS. COUPLINGS SHALL HAVE A CENTER STOP TO TYPE ENSURE PROPER SEATING. CONDUIT SHALL BE MANUFACTURED BY CARLON OR ACCEPTABLE EQUAL SHALL BE IN COMPLIANCE WITH ART 300 & 347-NEC, UL APPROVED.
- 2.8

ALL WIRING OF ALL KINDS MUST BE INSTALLED IN CONDUIT, UNLESS OTHERWISE NOTED OR APPROVED BY THE ELECTRICAL ENGINEER.
- 2.9

ALL WIRING SHALL BE IN ACCORDANCE WITH THE (NEC) NATIONAL ELECTRICAL CODE OR AS INDICATED ON PLANS.
- 2.10

RACEWAYS SHALL BE STEEL GALVANIZED AND/OR PAINTED, WITH SIZE AS SPECIFIED AND IN ACCORDANCE WITH THE (NEC) NATIONAL ELECTRICAL CODE UNLESS OTHERWISE NOTED ON PLANS. ALL RACEWAYS SHALL BE APPROVED PRIOR TO INSTALLATION.
- 2.11

JUNCTION BOXES OR PULL BOXES SHALL MEET (NEC) NATIONAL ELECTRICAL CODE STANDARDS AND AS APPROVED FOR INSTALLATION OF RACEWAYS AND WIRING.
- 2.12

THE RACEWAY AND WIRING INSTALLATION SHALL BE GROUNDED PERMANENTLY AND EFFECTIVELY IN ACCORDANCE WITH ARTICLE 250 OF THE (NEC) NATIONAL ELECTRICAL CODE.
- 2.13

THE CONTRACTOR SHALL BE AWARE THAT ALL STATE AND LOCAL CODES SHALL APPLY TO THIS INSTALLATION AND MUST BE ADHERED TO.

3.0 SCOPE OF WORK

- 3.1

THE CONTRACTOR SHALL PROVIDE ALL ELECTRICAL WIRING AND EQUIPMENT UNLESS OTHERWISE INDICATED. MAIN COMPONENTS ARE AS FOLLOWS:

A. PROVIDE ELECTRICAL SERVICE AS INDICATED ON THE DRAWINGS.

B. PROVIDE FIBER CONDUIT WITH PULL WIRE AS INDICATED HEREIN AND ON DRAWINGS.

C. COORDINATE ELECTRICAL SERVICE WITH LOCAL POWER COMPANY.

E. COORDINATE FIBER SERVICE WITH LOCAL FIBER COMPANY.

F. INSTALL WIRE AND CONDUIT AS INDICATED. PROVIDE CABLE SUPPORTS AS INDICATED.

G. PROVIDE GROUNDING AS INDICATED.
- 3.2

ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" OR "AS-BUILT" DRAWINGS AT THE COMPLETION OF THE JOB SHOWING ACTUAL DIMENSIONS, ROUTINGS AND CIRCUITS SHALL BE PROVIDED TO CLIENT. ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO CLIENT AT JOB COMPLETION.
- 3.3

PATCH, REPAIR AND PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF ELECTRICAL WORK.
- 3.4

UPON COMPLETION OF WORK, CONDUIT CONTINUITY, SHORT CIRCUIT, AND GROUNDING FALL POTENTIAL TEST WILL BE MADE FOR APPROVAL. SUBMIT TEST REPORTS TO CLIENT. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE IN A COMPLETE AND UNDAMAGED CONDITION.
- 3.5

THE COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF SITE ACCEPTANCE BY CLIENT. ANY WORK MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AND AT THE EXPENSE OF THE CONTRACTOR.
- 3.6

THE ELECTRICAL CONTRACTOR SHALL VERIFY THE ELECTRICAL EQUIPMENT PROVIDED BY CLIENT'S SUPPLIERS.

CONSULTANT:



**Edge**  
Consulting Engineers, Inc.  
624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

CLIENT:



**US Cellular**  
U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT, NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

**GENERAL SPECIFICATIONS**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

SHEET TITLE

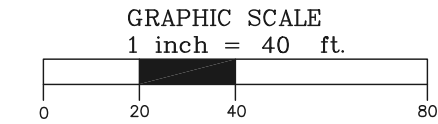
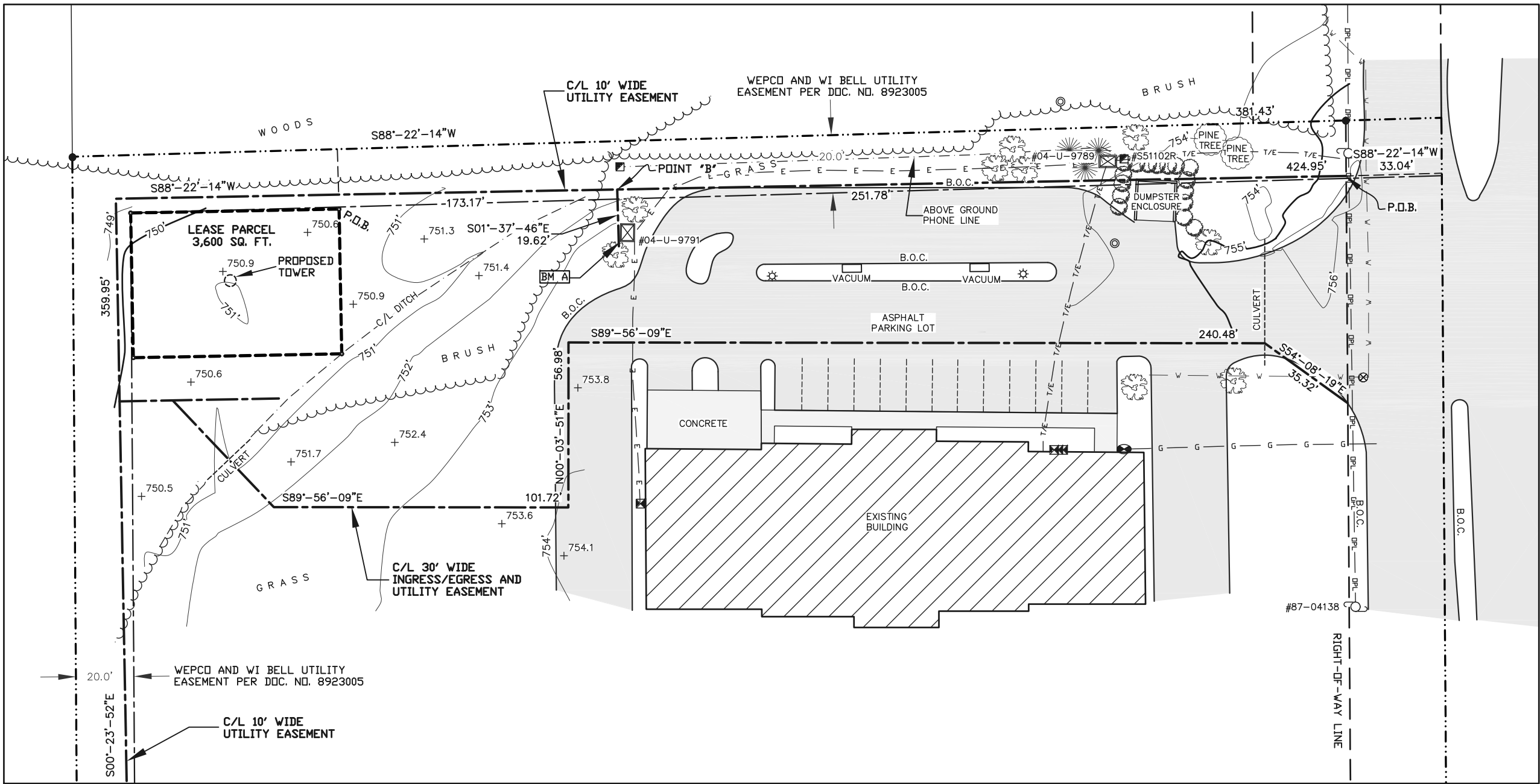
SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. C

CHECKED BY:	DL
PLOT DATE	4/4/2019
PROJECT NUMBER	18791
SET TYPE	PERMIT CDs
SHEET NUMBER	<b>G-004</b>







**BENCHMARK INFORMATION**  
SITE BENCHMARK: (BM A)  
TOP OF SW CORNER OF CONCRETE BASE OF  
ELECTRIC TRANSFORMER NO. 04-U-9791  
ELEVATION: 753.79'

**SURVEYOR'S CERTIFICATE**  
I, Craig A. Keach, 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 \_\_\_\_\_, 2019.

WISCONSIN PROFESSIONAL LAND SURVEYOR  
Craig A. Keach, S-2333

- LEGEND—**
- = 1" X 18" IRON PIPE SET
  - = 1" IRON PIPE FOUND
  - ⊙ = COUNTY MONUMENT FOUND
  - ⊗ = GROUNDING PORT
  - ⊕ = WATER VALVE
  - ⊖ = GAS METER
  - ⊗ = TELEPHONE PEDESTAL
  - ⊕ = LIGHT POLE
  - ⊖ = ELECTRIC METER
  - ⊗ = ELECTRIC TRANSFORMER
  - ⊕ = EXISTING POWER POLE
  - E — E — = B.O.C. = BACK OF CURB
  - W — W — = EDGE OF BRUSH/WOODS
  - G — G — = PROPERTY LINE
  - E — E — = BURIED ELECTRIC
  - OPL — OPL — = OVERHEAD ELECTRIC
  - T/E — T/E — = BURIED ELEC. & TELE.
  - W — W — = WATER MAIN
  - G — G — = BURIED GAS LINE
  - ☼ = EXISTING SPRUCE TREE
  - ⊙ = EXISTING CEDAR TREE
  - ⊕ = EXISTING TREE

BEARINGS REFERENCED TO THE WISCONSIN  
STATE PLANE COORDINATE SYSTEM (NAD27)  
— SOUTH ZONE AND THE EAST LINE OF  
THE SW1/4, SECTION 23, T.5N., R.21E.,  
WHICH BEARS: N00°-24'-05"W

**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. 20181506471 & 20181600863.

—NO TITLE SEARCH FOR PARCEL OWNERSHIP OR EXISTENCE OR NONEXISTENCE  
OF RECORDED OR UNRECORDED EASEMENTS HAS BEEN COMPLETED AS PART  
OF THIS SURVEY.

—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.  
55079C0226E, DATED SEPTEMBER 26 2008, 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.

SURVEYED FOR:

**Edge**  
Consulting Engineers, Inc.

624 Water Street  
Prairie du Sac, WI 53578  
608.644.1449 voice  
608.644.1549 fax  
www.edgeconsult.com

SURVEYED FOR:

**U.S. Cellular**

8410 BRYN MAWR AVENUE  
CHICAGO, IL 60631

**MERIDIAN**  
SURVEYING, LLC

N9637 Friendship Drive Office: 920-993-0881  
Kaukauna, WI 54130 Fax: 920-273-6037

SITE NAME:  
**FRANKLIN INDUSTRIAL PARK**

SITE NUMBER:  
**784700**

SITE ADDRESS:  
**5112 W. RYAN ROAD  
FRANKLIN, WI 53132**

PROPERTY OWNER:  
5100 LLC  
8200 W. BROWN DEER ROAD  
SUITE 301  
MILWAUKEE, WI 53223

PARCEL NO.: 882-9999-002

ZONED: COMMERCIAL

DEED REFERENCE: DOC. NO. 10330962

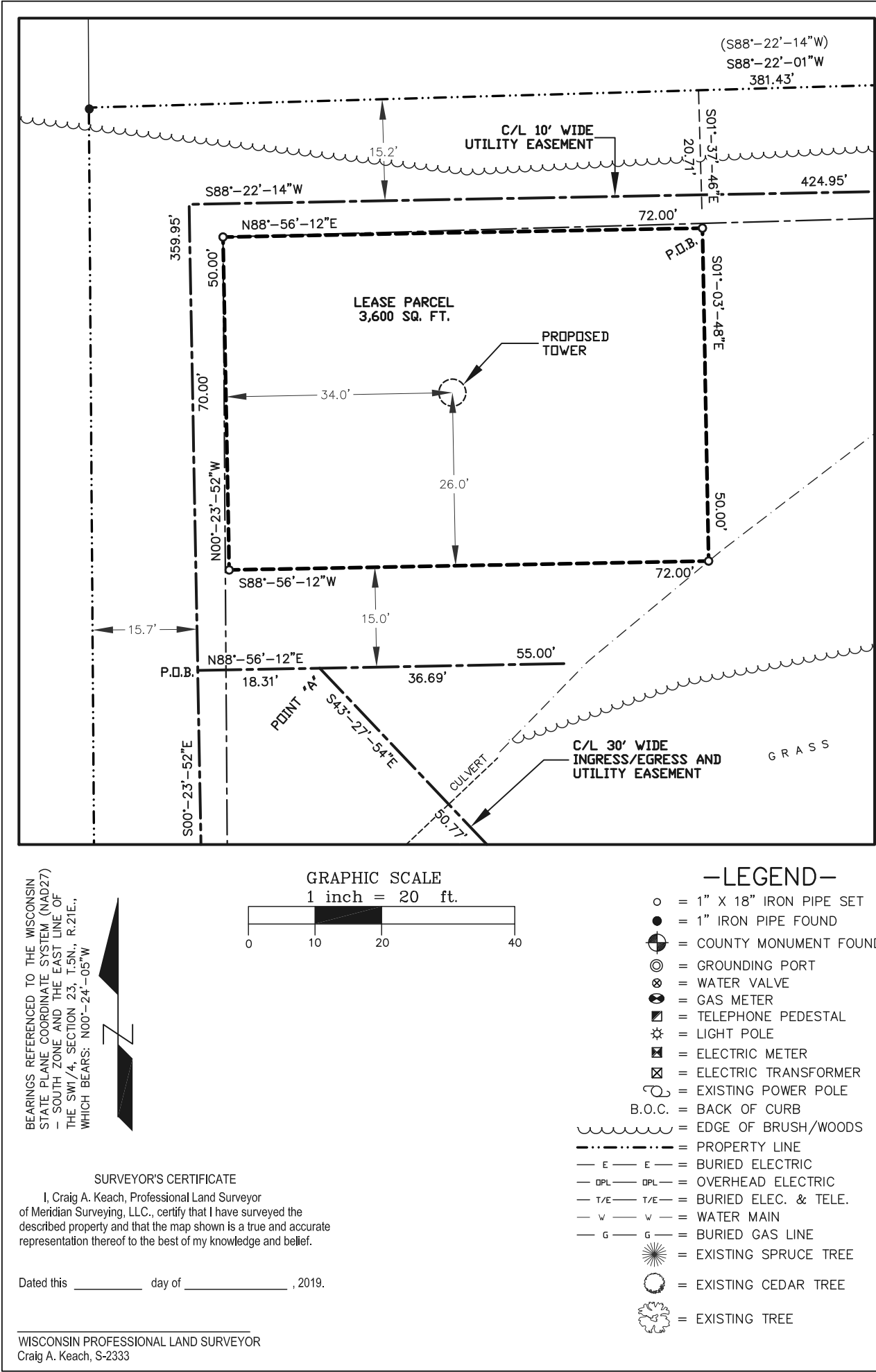
**LEASE EXHIBIT**  
FOR  
**US CELLULAR**

BEING A PART OF THE SE1/4 OF THE  
SW1/4, SECTION 23, T.5N., R.21E.,  
CITY OF FRANKLIN, MILWAUKEE COUNTY,  
WISCONSIN

NO.	DATE	DESCRIPTION	BY
4	2/12/19	Revised Tower, Lease & Ease.	JB
3	2/8/19	Revised Tower, Lease & Ease.	JD
2	5/2/18	Added Tower, Lease, & Ease.	JB
1	4/18/18	Preliminary Survey	JD

DRAWN BY: J.D.	FIELD WORK DATE: 4/16/18
CHECKED BY: S.C.D.	FIELD BOOK: M-45, PG. 53
JOB NO.: 10217	SHEET 2 OF 3





LEASE PARCEL

A part of the Southeast Quarter (SE1/4) of the Southwest Quarter (SW1/4) of Section Twenty-Three (23), Township Five (5) North, Range Twenty-One (21) East, City of Franklin, Milwaukee County, Wisconsin containing 3,600 square feet (0.083 acres) of land and being described by:

Commencing at the South Quarter Corner of said Section 23; thence N00°-24'-05"W 475.00 feet along the east line of the SW1/4 of said Section 23; thence S88°-22'-14"W 381.43 feet; thence S01°-37'-46"E 20.71 feet to the point of beginning; thence S01°-03'-48"E 50.00 feet; thence S88°-56'-12"W 72.00 feet; thence N00°-23'-52"W 50.00 feet; thence N88°-56'-12"E 72.00 feet to the point of beginning, being subject to any and all easements and restrictions of record.

30' WIDE INGRESS/EGRESS & UTILITY EASEMENT

A part of the Southeast Quarter (SE1/4) of the Southwest Quarter (SW1/4) of Section Twenty-Three (23), Township Five (5) North, Range Twenty-One (21) East, City of Franklin, Milwaukee County, Wisconsin containing 16,208 square feet (0.372 acres) of land and being Fifteen (15) feet each side of and parallel with the following described line:

Commencing at the South Quarter Corner of said Section 23; thence N00°-24'-05"W 455.85 feet along the east line of the SW1/4 of said Section 23; thence S88°-22'-14"W 33.04 feet to a point on the west line of S. 51st Street; thence continue S88°-22'-14"W 424.95 feet; thence S00°-23'-52"E 70.00 feet to the point of beginning; thence N88°-56'-12"E 18.31 feet to a point herein after referred to as "Point A"; thence continue N88°-56'-12"E 36.69 feet to the point of termination. Also, beginning at said Point "A"; thence S43°-27'-54"E 50.77 feet; thence S89°-56'-09"E 101.72 feet; thence N00°-03'-51"E 56.98 feet; thence S89°-56'-09"E 240.48 feet; thence S54°-08'-19"E 35.32 feet to a point on the West Right of Way line of S. 51st Street and the point of termination. The side lot lines of said easement are to be shortened or lengthened to terminate on the West Right of Way line of S. 51st Street.

10' WIDE UTILITY EASEMENT

A part of the Southeast Quarter (SE1/4) of the Southwest Quarter (SW1/4) of Section Twenty-Three (23), Township Five (5) North, Range Twenty-One (21) East, City of Franklin, Milwaukee County, Wisconsin containing 8,045 square feet (0.185 acres) of land and being Five (5) feet each side of and parallel with the following described line:

Commencing at the South Quarter Corner of said Section 23; thence N00°-24'-05"W 455.85 feet along the east line of the SW1/4 of said Section 23; thence S88°-22'-14"W 33.04 feet to a point on the West Right of Way line of S. 51st Street and the point of beginning; thence continue S88°-22'-14"W 251.78 feet to a point herein after referred to as "Point B"; thence S01°-37'-46"E 19.62 feet to the point of termination. Also, beginning at said "Point B", thence S88°-22'-14"W 173.17 feet; thence S00°-23'-52"E 359.95 feet to a point on the North Right of Way line of W. Ryan Road and the point of termination. The side lot lines of said easement shall be shortened or lengthened to terminate on the North Right of Way line of W. Ryan Road and the West Right of Way line of S. 51st Street

SURVEYED FOR:



SURVEYED FOR:



SITE NAME:  
FRANKLIN INDUSTRIAL PARK

SITE NUMBER:  
784700

SITE ADDRESS:  
5112 W. RYAN ROAD  
FRANKLIN, WI 53132

PROPERTY OWNER:  
5100 LLC  
8200 W. BROWN DEER ROAD  
SUITE 301  
MILWAUKEE, WI 53223

PARCEL NO.: 882-9999-002

ZONED: COMMERCIAL

DEED REFERENCE: DOC. NO. 10330962

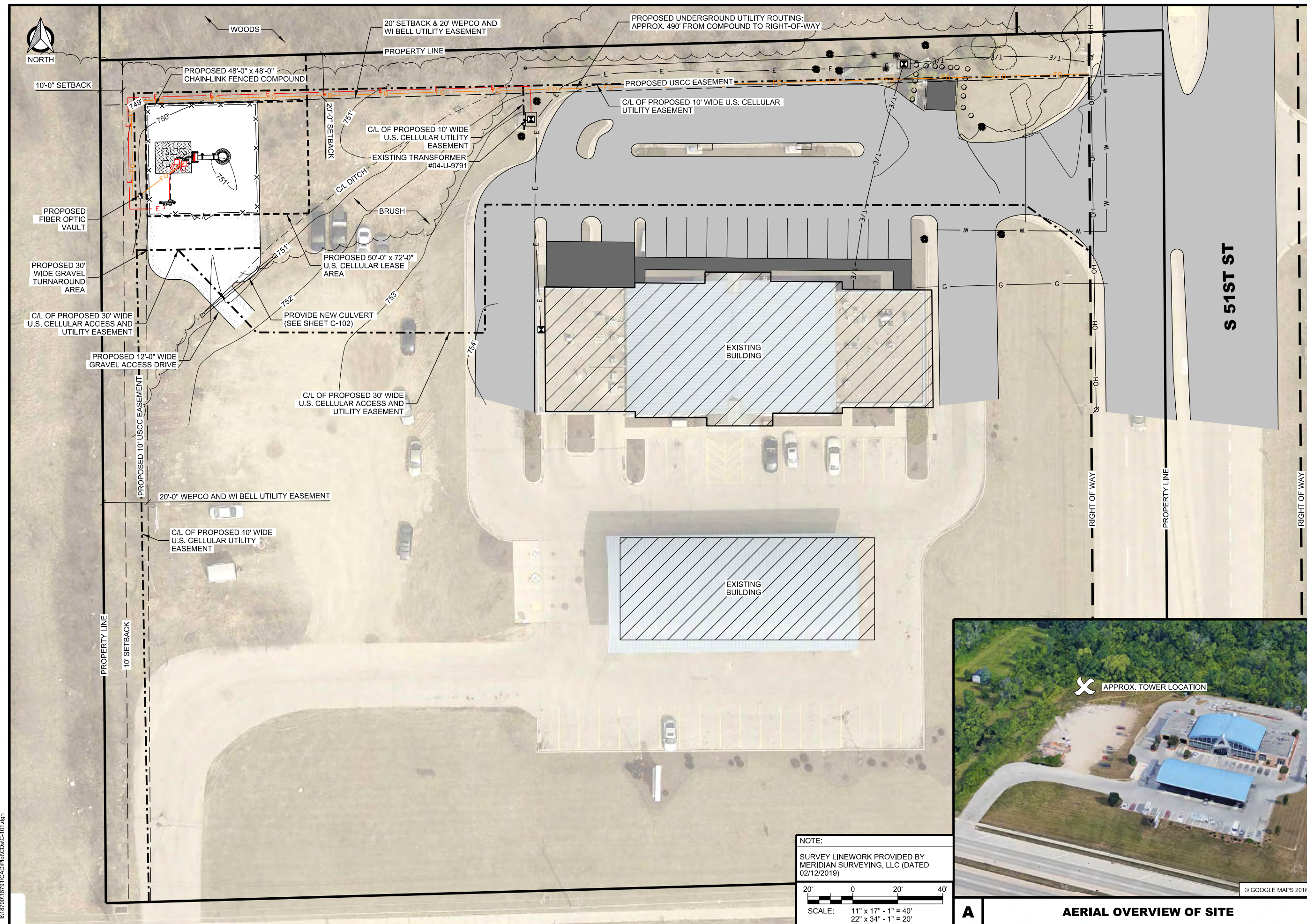
LEASE EXHIBIT  
FOR  
US CELLULAR

BEING A PART OF THE SE1/4 OF THE  
SW1/4, SECTION 23, T.5N., R.21E.,  
CITY OF FRANKLIN, MILWAUKEE COUNTY,  
WISCONSIN

NO.	DATE	DESCRIPTION	BY
4	2/12/19	Revised Tower, Lease & Ease.	JB
3	2/8/19	Revised Tower, Lease & Ease.	JD
2	5/2/18	Added Tower, Lease, & Ease.	JB
1	4/18/18	Preliminary Survey	JD

DRAWN BY:	J.D.	FIELD WORK DATE:	4/16/18
CHECKED BY:	S.C.D.	FIELD BOOK:	M-45, PG. 53
JOB NO.:	10217	SHEET	3 OF 3





CONSULTANT:

**CLIENT:**

# **SITE PLAN**

## **FRANKLIN INDUSTRIAL PARK (#784700)**

### **FRANKLIN, WISCONSIN**

SHEET TITLE F.

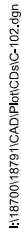
**SUBMITTAL:**

CHECKED BY


PROJECT NUMBER	18791
-------------------	-------

SHEET  
NUMBER





CLIENT:

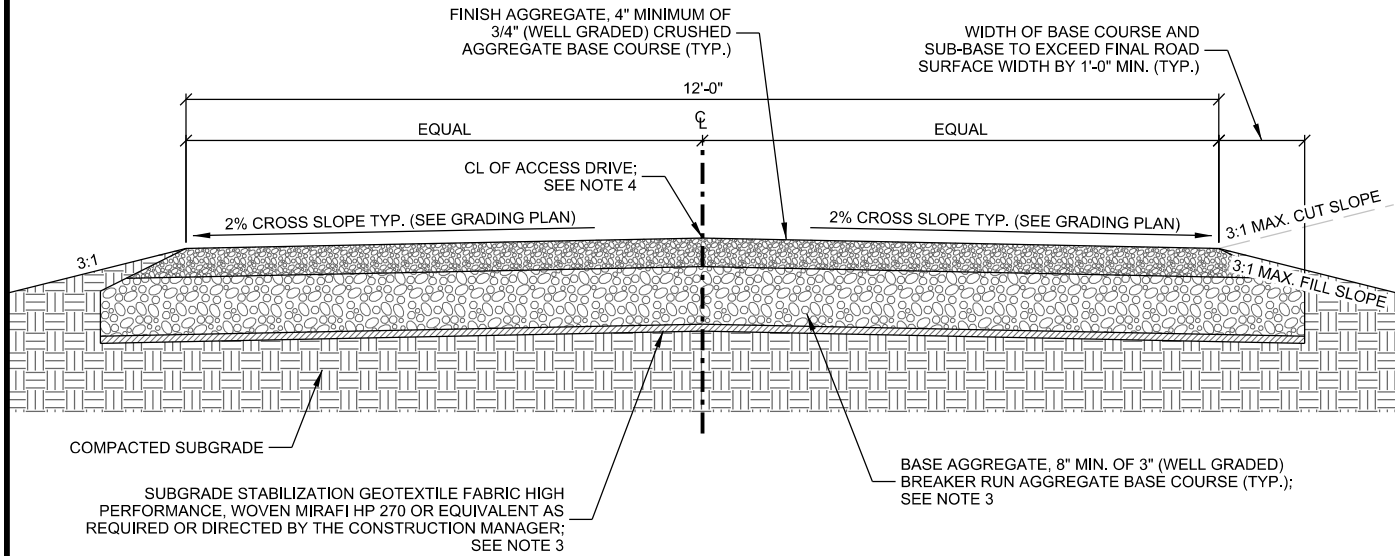
 **US Cellular**

U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT, NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

**ENLARGED SITE PLAN**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

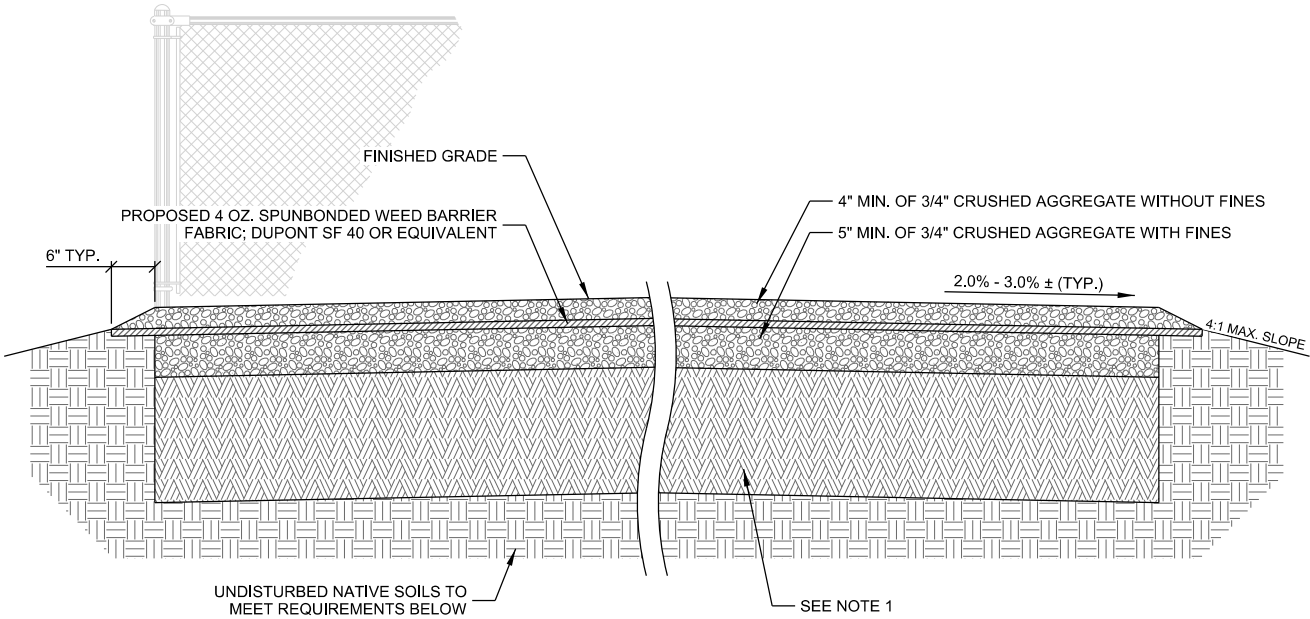
SHEET TITLE SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. 0
CHECKED BY		DL
PLOT DATE		4/4/2019
PROJECT NUMBER		18791
SET TYPE		PERMIT CDs
SHEET NUMBER		C-102

© EDGE CONSULTING ENGINEERS, INC



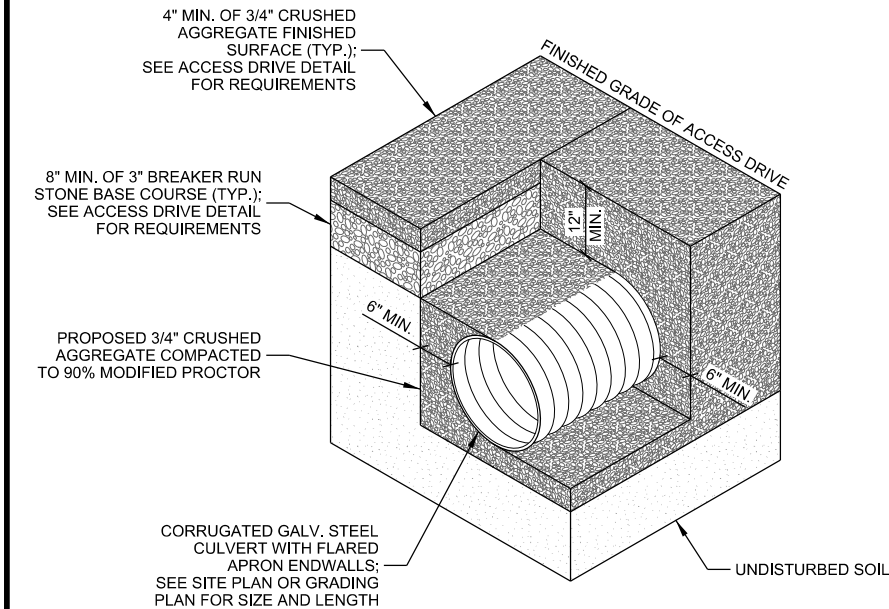
- GENERAL NOTES:
1. REMOVE ALL TOPSOIL, ORGANIC MATERIAL AND WET OR POOR SOILS ALONG ACCESS DRIVE. CONTRACTOR TO REVIEW SITE CONDITIONS AND CONSULT GEOTECHNICAL REPORT FOR ANTICIPATED DEPTH OF SOILS THAT WILL REQUIRE REMOVAL. IF POOR SOILS ARE ENCOUNTERED AT A DEPTH OF MORE THAN 12", CONTACT CONSTRUCTION MANAGER FOR GUIDANCE.
  2. SUBGRADE TO BE COMPACTED TO 95% MODIFIED PROCTOR AND VERIFIED BY PROOF-ROLL WITH LOADED TRI-AXLE DUMP TRUCK. CONTACT CONSTRUCTION MANAGER FOR GUIDANCE FOR FAILING SUBGRADE SOILS.
  3. FAILING AREAS OF SUBGRADE SHALL BE UNDERCUT TO A MINIMUM DEPTH OF 18" BELOW FINISH AGGREGATE AND STABILIZED WITH 3" (WELL GRADED) BREAKER RUN AGGREGATE OVER SUBGRADE STABILIZATION GEOTEXTILE FABRIC.
  4. CONSULT GRADING PLAN OR SITE PLAN FOR FINAL SITE GRADES.
  5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ASPHALT ACCESS DRIVE REPAIR AND RESTORATION FOLLOWING CONSTRUCTION COMPLETION. ANY DISTURBED OR DAMAGED AREAS SHALL BE RESTORED TO THEIR ORIGINAL OR BETTER CONDITION UPON COMPLETION OF WORK.

**A GRAVEL DRIVE CROSS SECTION**



- NOTES:
1. REMOVE ALL TOPSOIL, ORGANIC MATERIAL AND WET OR POOR SOILS WITHIN COMPOUND AREA. CONTRACTOR TO REVIEW SITE CONDITIONS AND CONSULT GEOTECHNICAL REPORT FOR ANTICIPATED DEPTH OF SOILS THAT WILL REQUIRE REMOVAL. IF POOR SOILS ARE ENCOUNTERED SELECT FILL MAY BE REQUIRED. CONTACT CONSTRUCTION MANAGER FOR GUIDANCE.
  2. FINAL TOWER FOUNDATION DESIGN RECOMMENDATIONS TO SUPERCEDE GRADING PLAN OR SITE PLAN ELEVATIONS.

**B COMPOUND CROSS SECTION**



- NOTES:
1. FOR CULVERT TRENCHES LOCATED OUTSIDE OF OF ACCESS DRIVE AREAS, BACKFILL MATERIAL MAY BE USED TO ACHIEVE REQUIRED COVER AFTER MINIMUM BEDDING REQUIREMENTS HAVE BEEN MET.
  2. BACKFILL MATERIAL TO BE COMPACTED TO 90% MODIFIED PROCTOR AND TO BE FREE OF FROZEN CLOUDS AND STONES LARGER THAN 6".
  3. GRADE AREAS UPSTREAM AND DOWNSTREAM OF CULVERT TO ACHIEVE POSITIVE DRAINAGE. SEE SITE PLAN OR GRADING PLAN FOR DETAILS.

**C CULVERT**

THIS SPACE INTENTIONALLY LEFT BLANK

CONSULTANT:

**Edge**  
Consulting Engineers, Inc.

624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

CLIENT:

**U.S. Cellular**

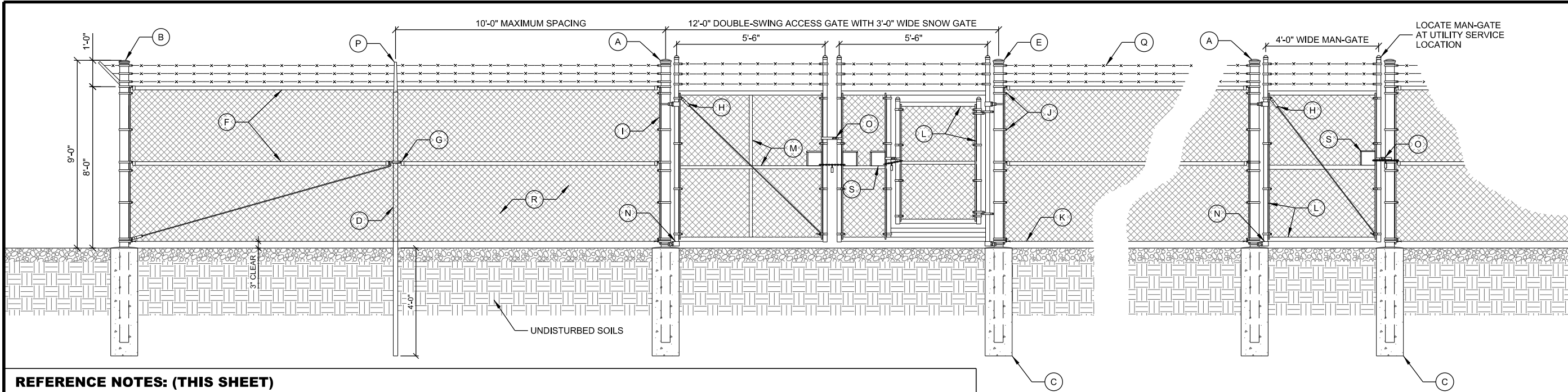
U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT, NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

**CONSTRUCTION DETAILS**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

SHEET TITLE:

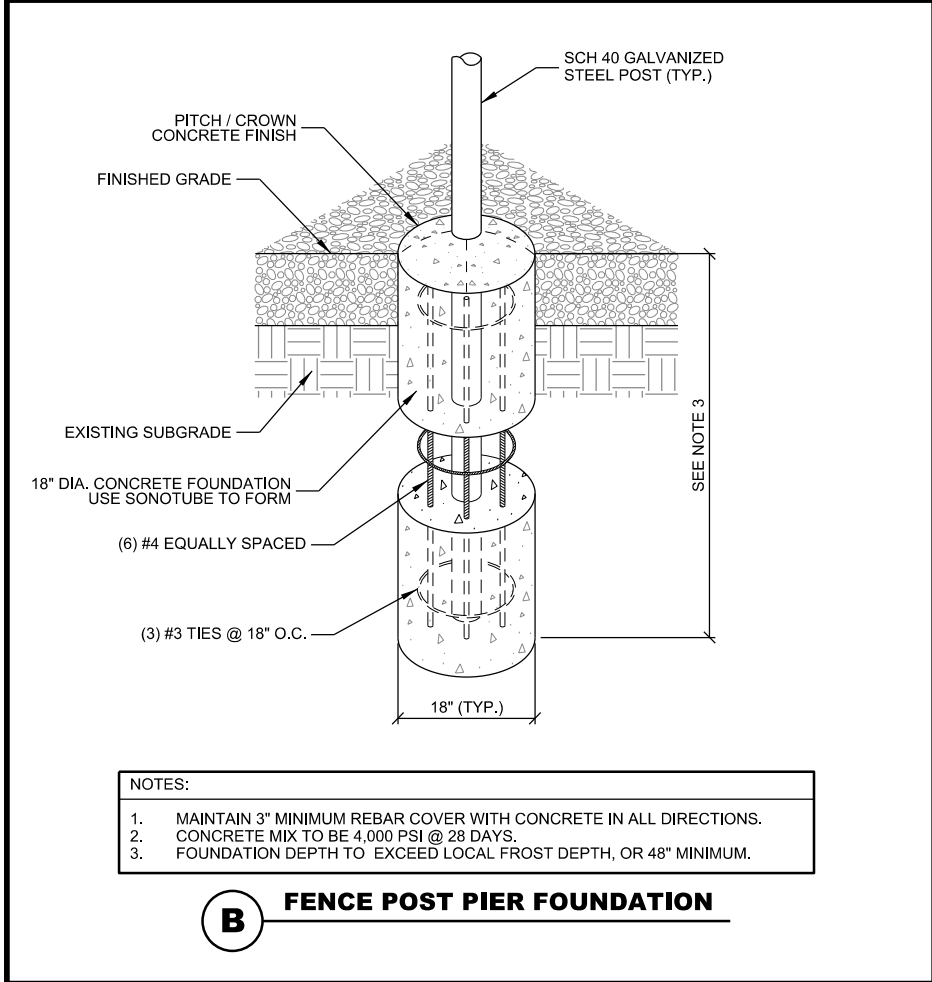
SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. C

CHECKED BY:	DL
PLOT DATE:	4/4/2019
PROJECT NUMBER:	18791
SET TYPE:	PERMIT CDs
SHEET NUMBER:	<b>C-501</b>

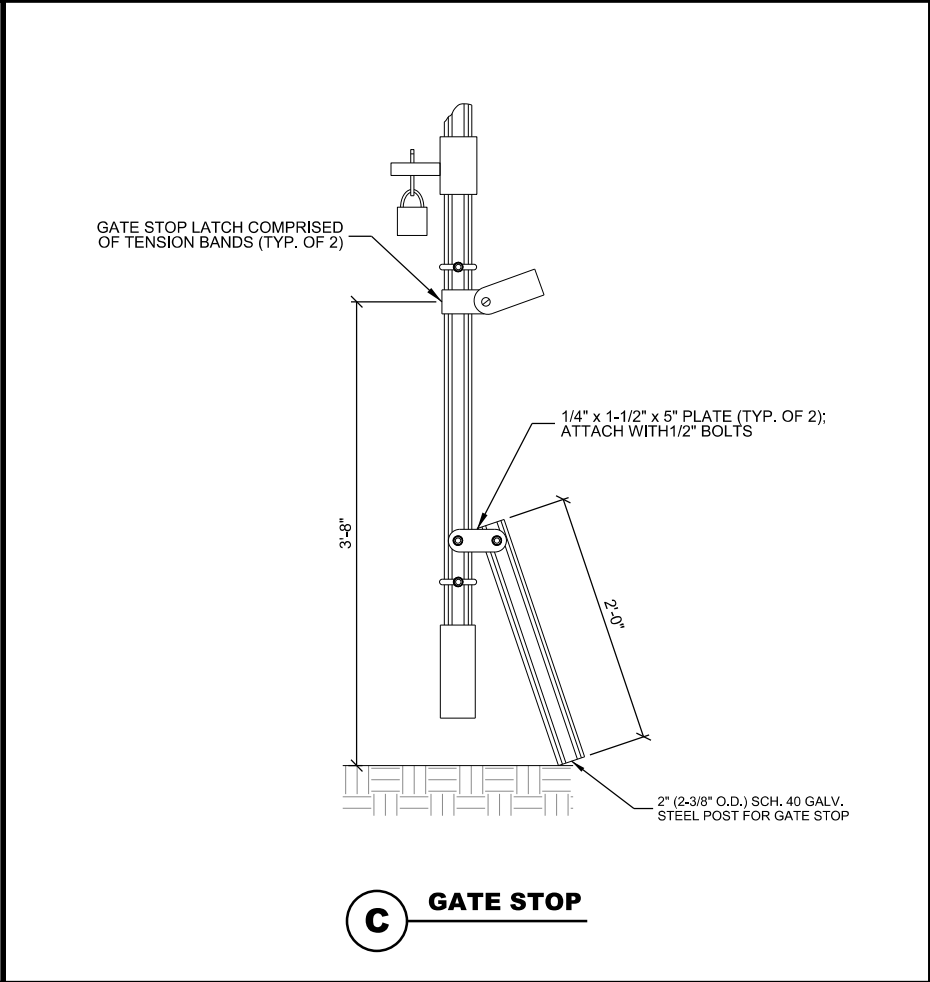


REFERENCE NOTES: (THIS SHEET)		
(A) 4" (4-1/2" O.D.) SCH. 40 GALV. STEEL GATE POST	(G) OFFSET BRACE RAIL ENDS FOR MID BRACE RAIL	(N) MALLEABLE BUTT HINGES (TYP.)
(B) 4" (4-1/2" O.D.) SCH. 40 GALV. STEEL CORNER POST	(H) 5/16" O.D. TRUSS ROD WITH TRUSS TIGHTENER ASSEMBLY	(O) GATE LATCH; VERIFY REQUIREMENTS WITH FENCE MANUFACTURER
(C) CONCRETE PIER FOUNDATION AT CORNERS AND GATE; SEE DETAIL BELOW	(I) 3/16" x 3/4" STRETCHER BAR; TO EXTEND FULL HEIGHT OF FENCE FABRIC	(P) 45° BARB ARM FENCE POST CAP
(D) 2" (2-3/8" O.D.) SCH. 40 GALV. STEEL INTERMEDIARY LINE POSTS; LINE POSTS SHALL BE EQUALLY SPACED AT MAXIMUM 10'-0" O.C.	(J) 3/4" TENSION BAND (TYP.).	(Q) (3) STRANDS OF 4 PT. GALV. BARB WIRE
(E) FENCE POST CAP (SIZE VARIES)	(K) TENSION WIRE	(R) #9 GAUGE GALV. CHAIN LINK FENCE FABRIC WITH TWISTED TOP SELVAGE AND KNUCKLED BOTTOM SELVAGE
(F) 1-1/4" (1.66" O.D.) TOP RAIL & MID BRACE RAIL PIPE	(L) 1-1/2" (1.9" O.D.) SCH. 40 GALV. STEEL FENCE GATE FRAME	(S) 6" x 6" HANDHOLE FOR CHAIN LOCK
	(M) 1-1/4" (1.66" O.D.) SCH. 40 GALV. STEEL HORIZONTAL AND VERTICAL GATE BRACES	

**A COMPOUND FENCE**



**B FENCE POST PIER FOUNDATION**



**C GATE STOP**

THIS SPACE INTENTIONALLY LEFT BLANK

CONSULTANT:  
**Edge**  
Consulting Engineers, Inc.  
624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

CLIENT:  
**U.S. Cellular**  
U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT., NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

**FENCE DETAILS**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

SHEET TITLE

SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. C

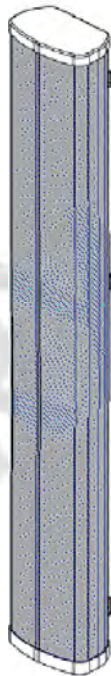
CHECKED BY	DL
PLOT DATE	4/4/2019
PROJECT NUMBER	18791
SET TYPE	PERMIT CDs
SHEET NUMBER	<b>C-502</b>



TWIN658LU0p0G

TWIN DUAL BAND | 8-PORT PANEL | XPOL | 65° | 2433 MM (95.8 IN)

PRODUCT OVERVIEW	Frequency Range (MHz)	617-906	617-906	1695-2700	1695-2700
	Array	■ R1	■ R2	■ Y1	■ Y2
	Connector	1-2	3-4	5-6	7-8
	Connector Type	4,3-10 Female Long Neck	4,3-10 Female Long Neck	4,3-10 Female Long Neck	4,3-10 Female Long Neck
	Polarization	XPOL	XPOL	XPOL	XPOL
	Azimuth Beamwidth (avg)	65°	65°	65°	65°
	Electrical Downtilt	0-10°	0-10°	2-10°	2-10°
	Dimensions	2433 x 660 x 214 mm (95.8 x 26.0 x 8.4 in)			



ELECTRICAL SPECIFICATIONS Low Band

■ R1 ■ R2

Frequency Range		MHz	(2x) 617-906		
Frequency Sub-Range		MHz	617-698	698-798	800-906
Polarization		---	(2x) ±45°		
Gain	Low Tilt	dBi	15.1	15.2	15.5
	Mid Tilt	dBi	15.2	15.3	15.6
	High Tilt	dBi	15.3	15.4	15.7
	Over all Tilts	dBi	15.2 ± 0.6	15.3 ± 0.5	15.6 ± 0.5
Azimuth Beamwidth (3 dB)		degrees	68.9 ± 2.6	68.6 ± 3.2	68.4 ± 4.3
Elevation Beamwidth (3 dB)		degrees	10.0 ± 0.7	9.0 ± 0.5	8.0 ± 0.4
Electrical Downtilt		degrees	0-10		
Impedance		Ohms	50		
VSWR		---	1.5:1		
Passive Intermodulation 3rd Order for 2x20 W Carriers		dBm (dBc)	< -110 (< -153)		
Front-to-Back Ratio ± 30° @ 180° from boresite		dB	> 27.7	> 27	> 26.0
Upper Sidelobe Rejection 20° Sector Above Main Beam		dB	> 20.6	> 19	> 17.9
Cross Polar Discrimination at Mechanical Boresight (0°)		dB	> 20.8	> 21	> 23.1
Maximum Power Per Port		Watts	500		
Interband/Intraband Isolation		dB	25/30	25/30	25/30

Standard values based on NGMN-P-BASTA version 9.6 recommendation.

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

REV082318NA

CONNECTING PEOPLE + TECHNOLOGY  
www.amphenol-antennas.com

1 of 6

TWIN658LU000G

TWIN DUAL BAND | 8-PORT PANEL | XPOL | 65° | 2433 MM (95.8 IN)

MECHANICAL SPECIFICATIONS

Antenna	Length	mm (in)	2433 (95.8)
	Width	mm (in)	660 (26.0)
	Depth	mm (in)	214 (8.4)
Net Weight - Antenna Only		kg (lbs)	TBD
Windload	Calculation	km/h (mph)	161 (100)
	Frontal	N (lbf)	1364 (308)
	Lateral	N (lbf)	240 (54)
Survival Wind Speed		km/h (mph)	241 (150)
Connector	Type	---	4,3-10 Female
	Quantity	---	8
	Position	---	Bottom
Radome Color		---	ANSI 70 Gray
Radome Material		---	UV Stabilized ABS or Hips
Lightning Protection (Grounding Type)		---	Direct Ground
Shipping	Length	mm (in)	TBD
	Width	mm (in)	TBD
	Depth	mm (in)	TBD
	Shipping Weight	kg (lbs)	TBD
	Shipping Volume	m <sup>3</sup> (ft <sup>3</sup> )	TBD

Quoted performance parameters are provided to offer typical, peak or range values only and may vary as a result of normal testing, manufacturing and operational conditions. Extreme operational conditions and/or stress on structural supports is beyond our control. Such conditions may result in damage to this product. Improvements to products may be made without notice.

REV082318NA

CONNECTING PEOPLE + TECHNOLOGY  
www.amphenol-antennas.com

5 of 6

CONSULTANT:

**Edge**  
Consulting Engineers, Inc.  
624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

CLIENT:

**U.S. Cellular**  
U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT, NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

**ANTENNA SPECIFICATIONS**  
FRANKLIN INDUSTRIAL PARK (#784700)  
FRANKLIN, WISCONSIN

SHEET TITLE

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. C

CHECKED BY:

DL

PLOT DATE:

4/4/2019

PROJECT NUMBER:

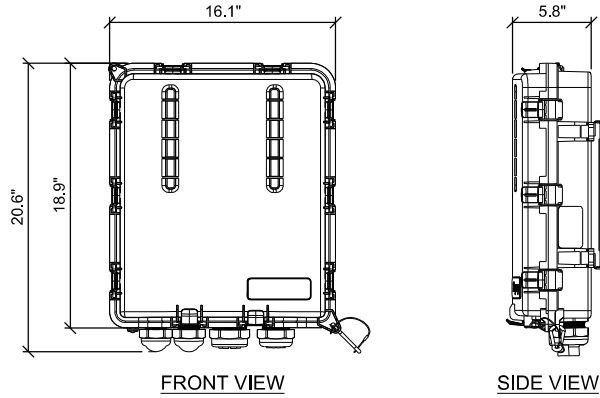
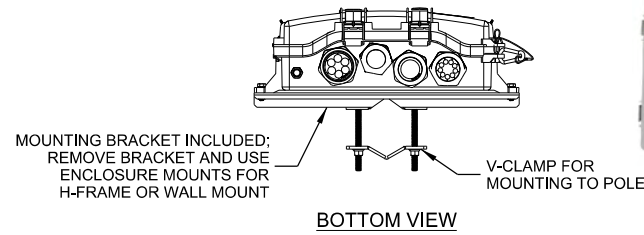
18791

SET TYPE:

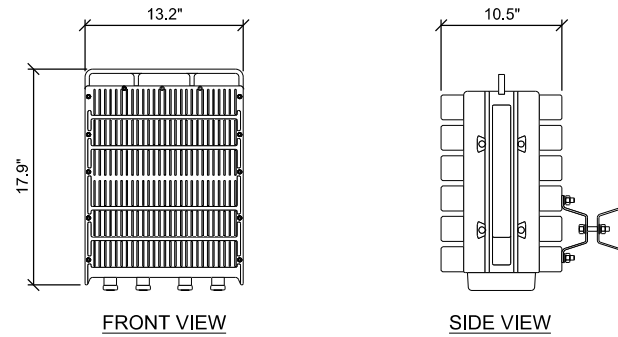
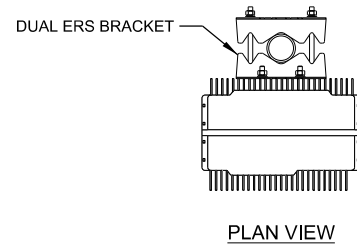
PERMIT CDs

SHEET NUMBER:

**T-001**

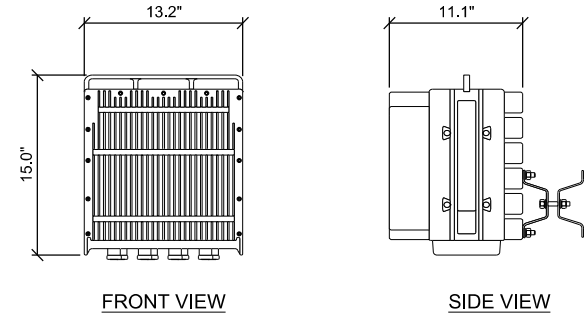
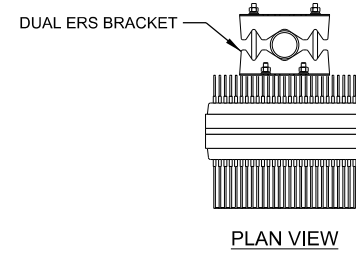


## **A RAYCAP SURGE PROTECTOR DEVICE (SPD)**



1. REMOTE RADIO UNITS MUST BE POWERED UP WITHIN 48 HOURS OF INSTALLATION.

## B REMOTE RADIO UNIT (RRU)



1. REMOTE RADIO UNITS MUST BE POWERED UP WITHIN 48 HOURS OF INSTALLATION.

## C REMOTE RADIO UNIT (RRU)



**Edge**  
Consulting Engineers, Inc.  
624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
[www.edgeconsult.com](http://www.edgeconsult.com)



U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT. NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

## **EQUIPMENT SPECIFICATIONS**

**SHEET TITLE:**

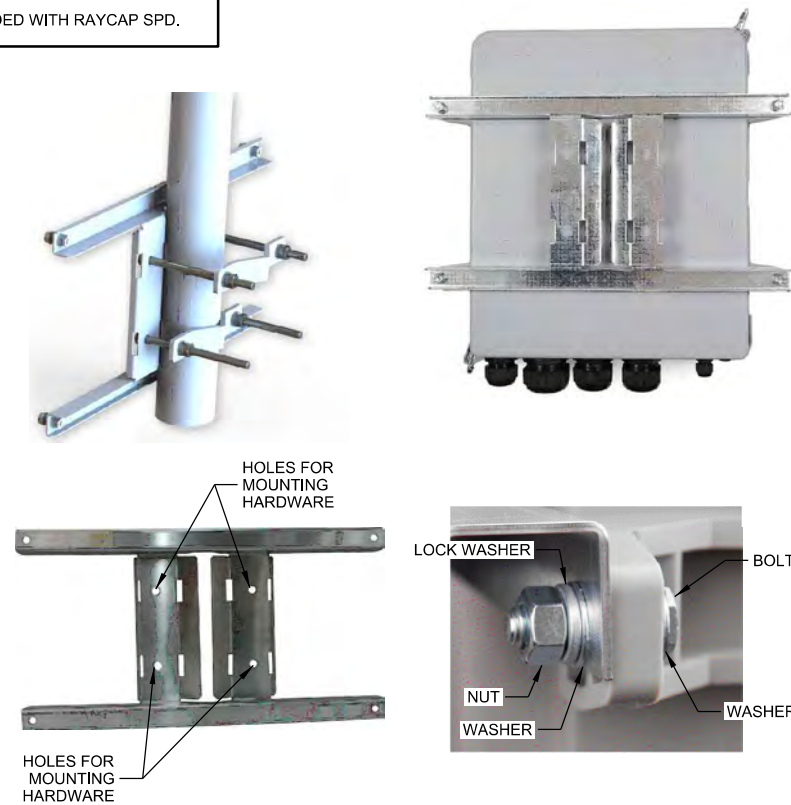
INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. 0

CHECKED BY	DL
PLOT DATE	4/4/2019
PROJECT NUMBER	18791
SET TYPE	PERMIT CDs
SHEET NUMBER	<b>T-002</b>

I:\18700\18791\CAD\Plot\CDs\T-002.dgn

**THIS SPACE INTENTIONALLY LEFT BLANK**

**MANUFACTURER:** RAYCAP  
**MODEL:** MOUNTING BRACKET  
**INCLUDED WITH RAYCAP SPD.**

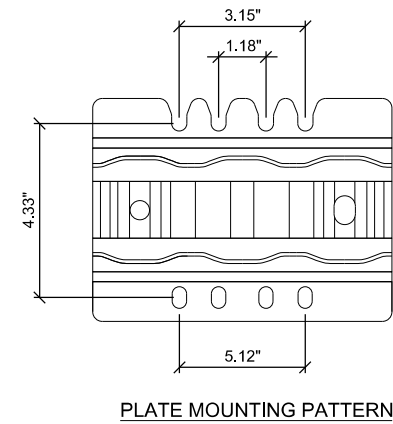


## A RAYCAP SURGE PROTECTOR DEVICE (SPD) MOUNT

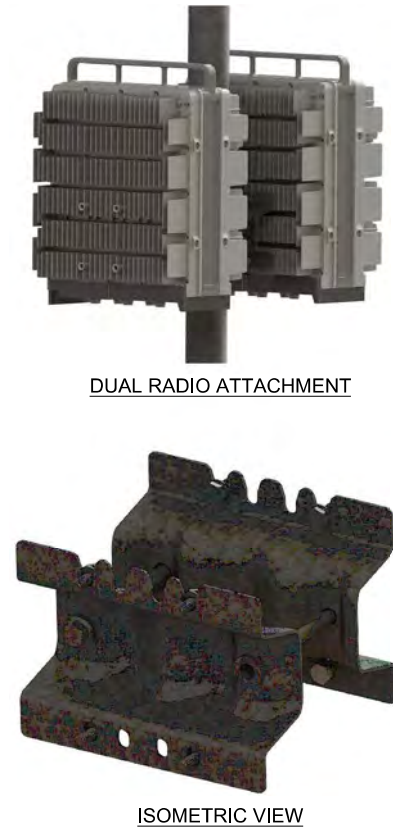
**MANUFACTURER:** ERICSSON  
**MODEL:** SXK 109 1973/2  
**WEIGHT:** 3.75 LBS

BRACKET FOR ATTACHING TWO STANDARD OR HEAVY ERS UNITS WITH A HOLE PATTERN OF CC 30 MM AND/OR CC 80 MM., EITHER TO A POLE, WALL, ANGLE TOWER OR SQUARE TUBE.

BOLTS FOR ATTACHING TWO ERS UNITS ARE SUPPLIED IN THE PACKAGE.



## **B** DUAL ERS BRACKET




**THIS SPACE INTENTIONALLY LEFT BLANK**

**CONSULTANT:**

 **Edge**  
**Consulting Engineers, Inc.**

624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
[www.edgeconsult.com](http://www.edgeconsult.com)

CLIENT:

 **US Cellular**

U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT, NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

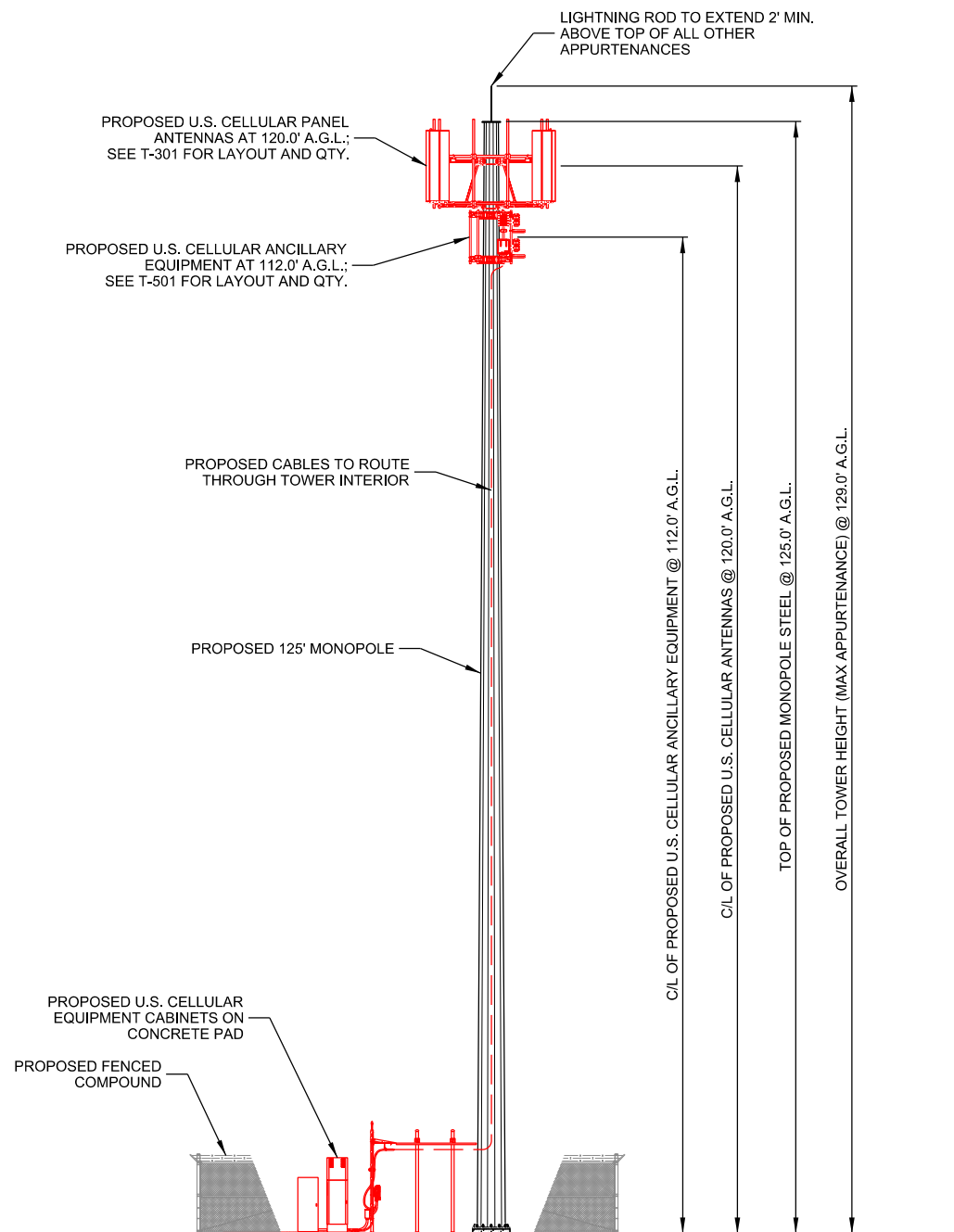
**MOUNTING SPECIFICATIONS**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

SHEET TITLE: F.

SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. 0
CHECKED BY	DL	
PLOT DATE	4/4/2019	
PROJECT NUMBER	18791	
SET TYPE	PERMIT CDs	
SHEET NUMBER	<b>T-003</b>	



K:\187901\18791\CAD\PLT\CDs\T-201.dgn



NOTES:

1. CONTRACTOR TO VERIFY HEIGHT AND DIRECTION OF ANTENNAS WITH PROJECT MANAGER.
2. CONTRACTOR TO VERIFY LIGHTNING ROD EXTENDS 2' MIN. ABOVE ALL ANTENNAS & EQUIPMENT.



**SITE ELEVATION**

SCALE: 11" x 17" - 1" = 20'-0"  
22" x 34" - 1" = 10'-0"

CONSULTANT:



CLIENT:



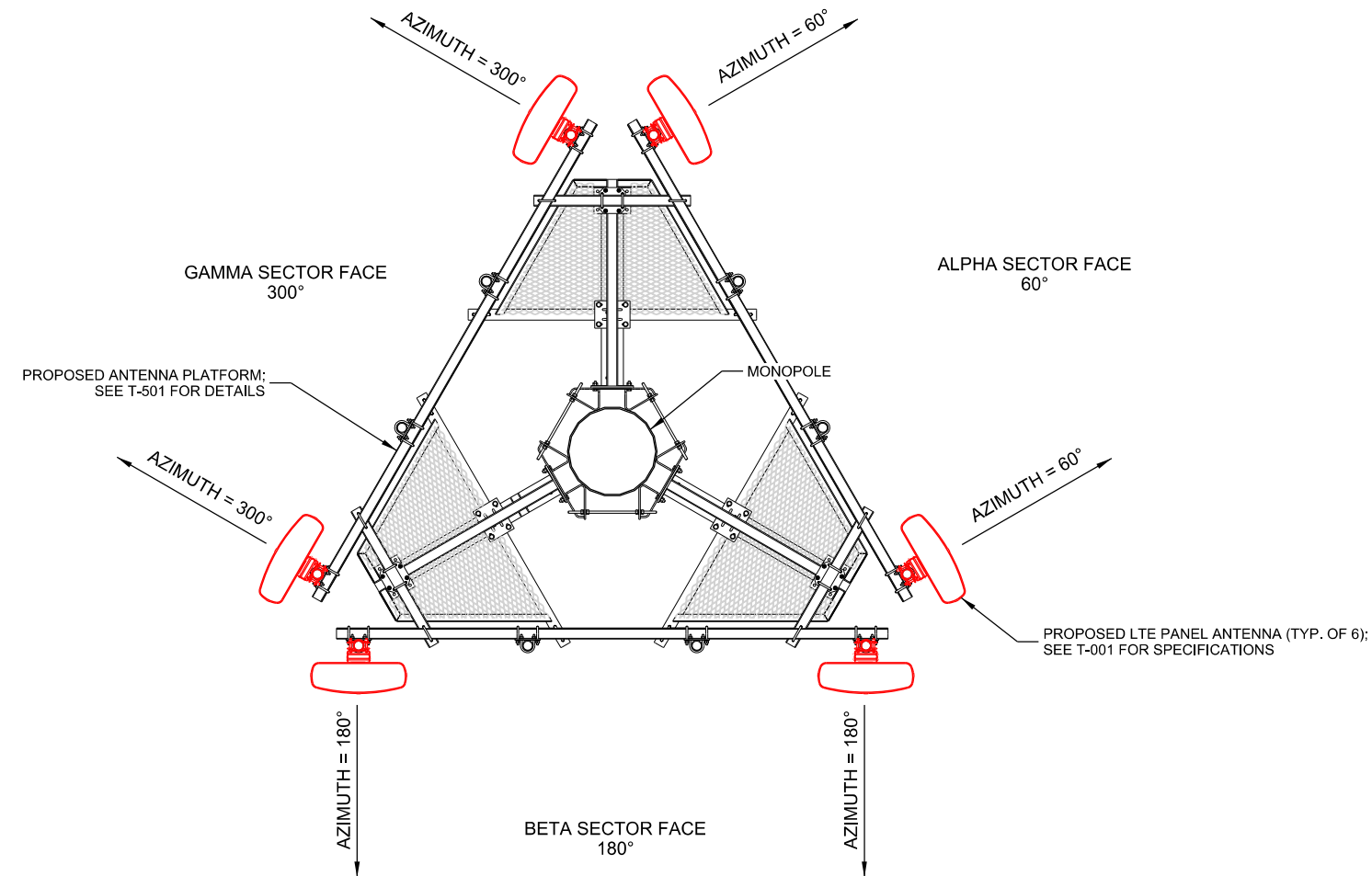
SHEET TITLE

**SITE ELEVATION**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. C

CHECKED BY:	DL
PLOT DATE:	4/4/2019
PROJECT NUMBER:	18791
SET TYPE:	PERMIT CDs
SHEET NUMBER:	<b>T-201</b>



Proposed Loading :																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
--------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

NOTE:  
1. ALL ANTENNA AZIMUTHS TO BE FROM TRUE NORTH.

**A ANTENNA AND EQUIPMENT LAYOUT**  
SCALE: 11" x 17" - 1/4" = 1'-0"  
22" x 34" - 1/2" = 1'-0"

CONSULTANT:  
**Edge**  
Consulting Engineers, Inc.  
624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

CLIENT:  
**U.S. Cellular**  
U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT, NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

**ANTENNA AND EQUIPMENT CONFIGURATION**  
FRANKLIN INDUSTRIAL PARK (#784700)  
FRANKLIN, WISCONSIN

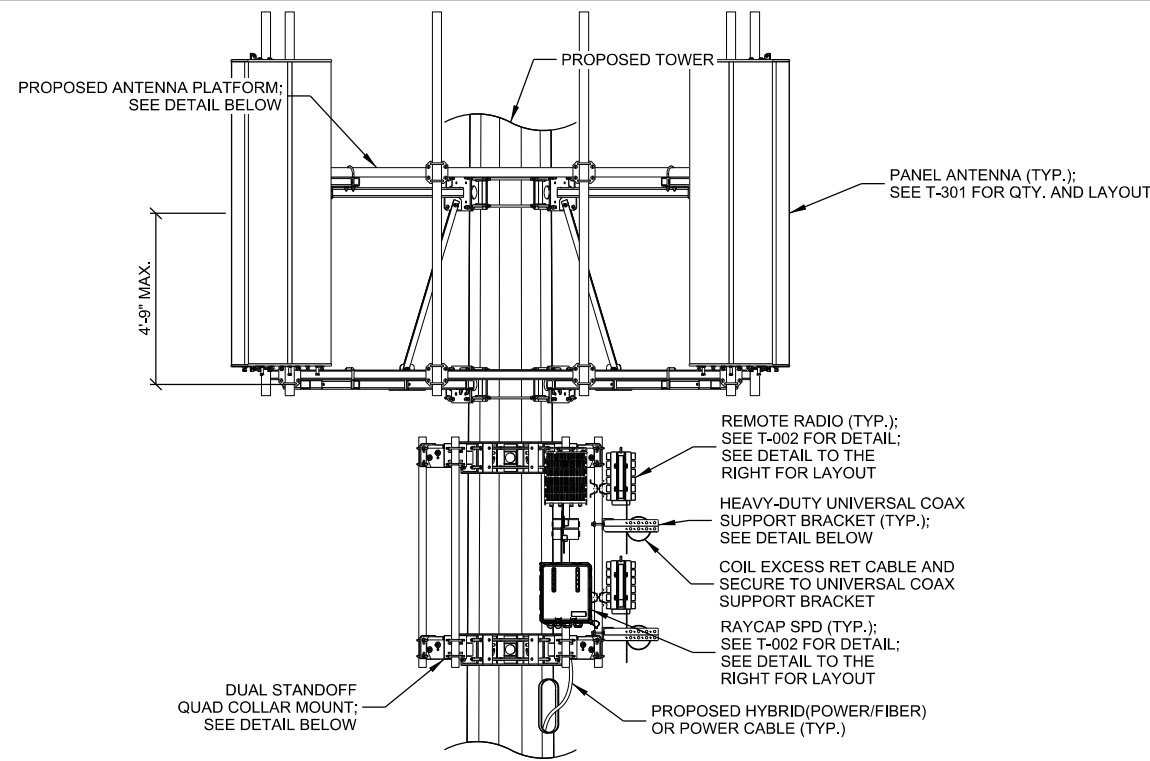
SHEET TITLE

SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. C

CHECKED BY:	DL
PLOT DATE:	4/4/2019
PROJECT NUMBER:	18791
SET TYPE:	PERMIT CDs

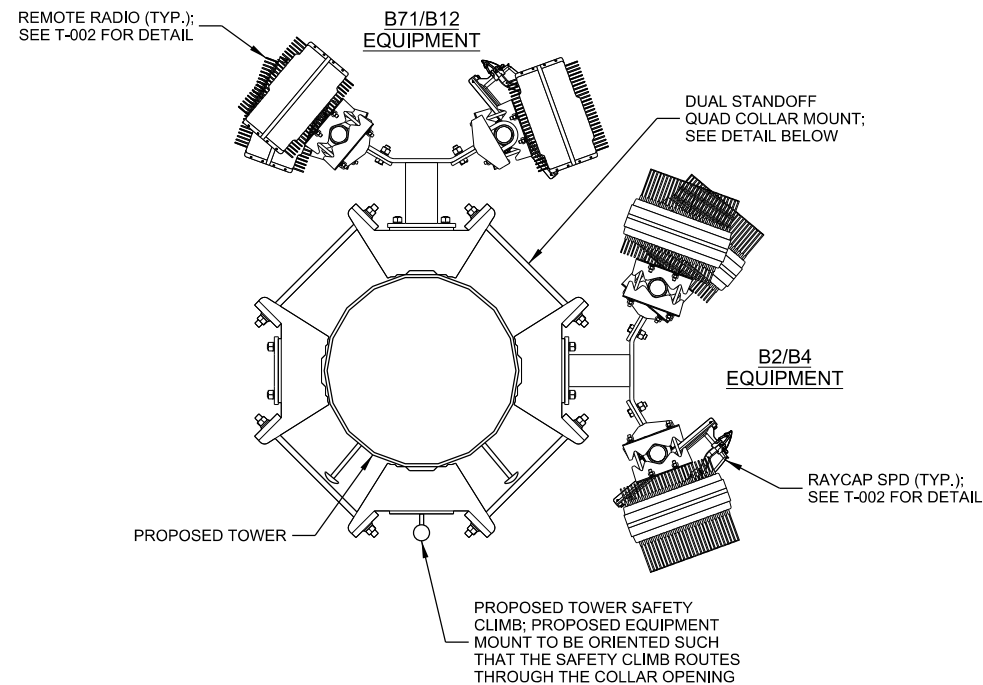
SHEET NUMBER  
**T-301**

PER U.S. CELLULAR RDP DATED  
04/04/2019 PROVIDED BY OTHERS



- NOTE:
1. ROUTE CABLES ALONG ROUND MEMBERS ON TOWER STANDOFFS OR TRAP BOXES AND SNAP-IN HANGERS; SEE T-502 FOR DETAIL.
  2. ROUTE POWER AND FIBER CABLES FROM RAYCAP SPD TO REMOTE RADIOS IN 1-1/4" INNERDUCT (TYP. EACH SECTOR); CONTRACTOR TO INSTALL INNERDUCT SO THAT THE ENDS TERMINATE EITHER HORIZONTALLY OR DOWN TO PREVENT WATER INGRESS.

## A ANTENNA & EQUIPMENT MOUNTING



- NOTE:
1. THIS DETAIL IS A GENERAL SCHEMATIC, SEE T-301 FOR ACTUAL TOWER ORIENTATION AND EQUIPMENT QUANTITIES.
  2. RAYCAP SPD AND REMOTE RADIOS AND MAY NOT BE INSTALLED ON TOWER LEGS THAT HAVE CLIMBER PEGS/SAFETY CLIMBS; CONTRACTOR TO AVOID PEGS/SAFETY CLIMB AS NECESSARY.
  3. PER TIA STANDARDS: FALL PROTECTION ANCHORAGES SHALL BE AVAILABLE AT A MAXIMUM SPACING OF FOUR (4) FEET OVER THE HEIGHT NOT EQUIPPED WITH A SAFETY CLIMB SYSTEM OR OVER THE LENGTH OF THE OBSTRUCTION TO THE CLIMBING FACILITY.

## B RADIO EQUIPMENT LAYOUT PLAN

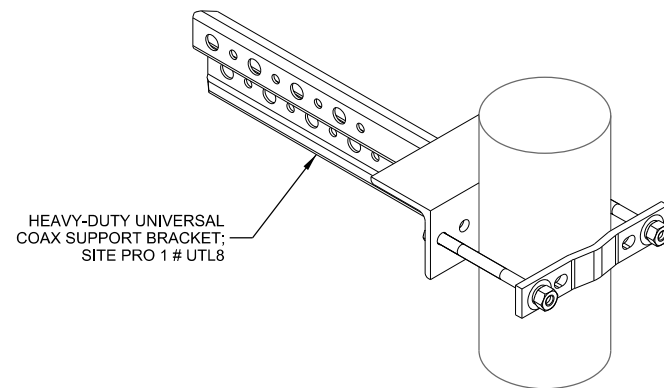
**MANUFACTURER:** SITE PRO 1  
**MODEL:** UTL8

HEAVY-DUTY UNIVERSAL SUPPORT BRACKET  
MOUNTS TO ROUND MEMBERS (1-1/2" O.D. TO 5-1/2" O.D.)

PUNCHED WITH 3/4" DIA. HOLES FOR SNAP-IN HANGERS AND 7/16" DIA. HOLES FOR HARDWARE

HOT-DIP GALVANIZED

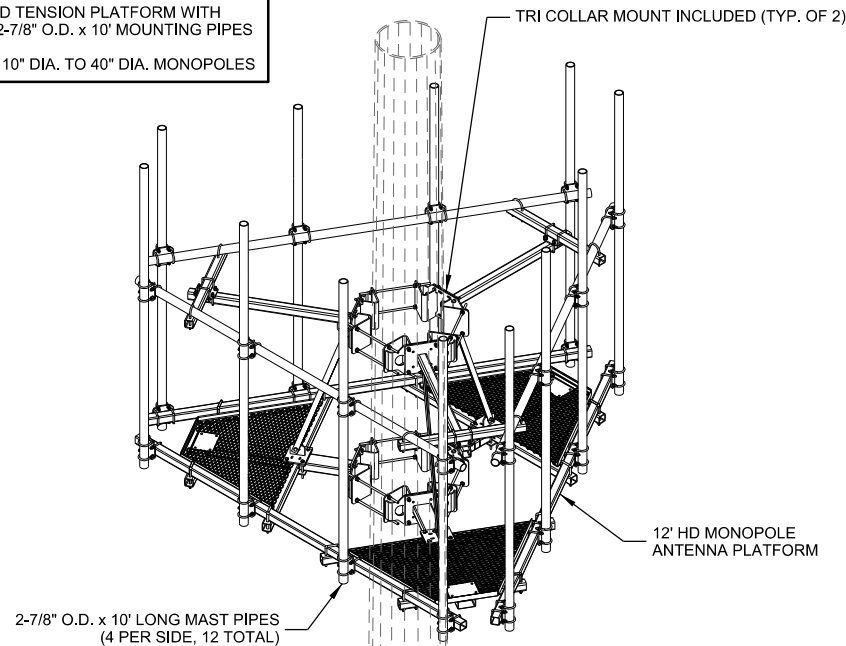
CAN BE BOLTED DIRECTLY TO PIROD KNOCK-DOWN LEGS WITH INCLUDED HARDWARE



## C HEAVY-DUTY UNIVERSAL COAX SUPPORT BRACKET

**MANUFACTURER:** SABRE  
**MODEL:** C10855721C

12' HD TENSION PLATFORM WITH (12) 2-7/8" O.D. x 10' MOUNTING PIPES  
FITS 10" DIA. TO 40" DIA. MONOPOLES



- NOTE:
1. CONTRACTOR TO VERIFY POLE DIAMETER AND SUITABILITY OF PROPOSED MOUNT FOR SITUATION. IF AN ALTERNATIVE SOLUTION IS PROPOSED, NOTIFY ENGINEER AND OWNER PRIOR TO PROCEEDING.

## D MONOPOLE ANTENNA PLATFORM

**MANUFACTURER:** SITE PRO 1  
**MODEL:** CWT8

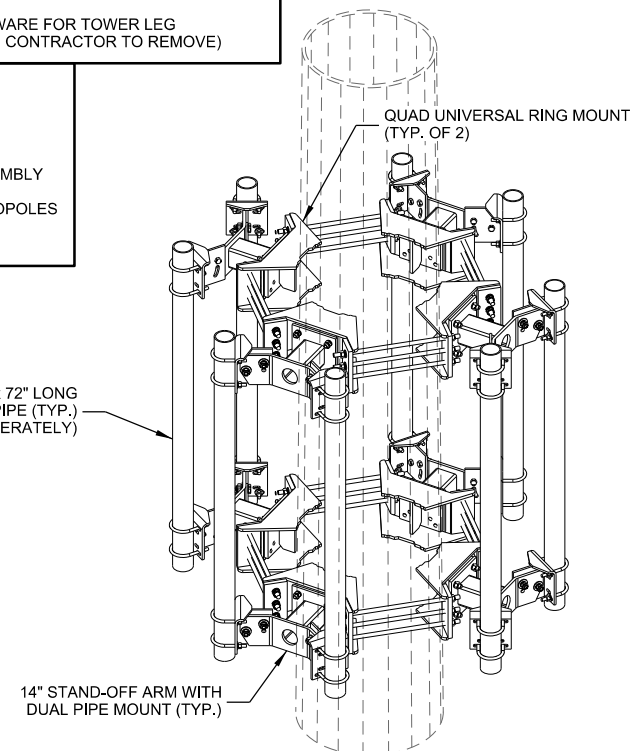
DUAL PIPE MOUNT WITH 14" STANDOFF  
ACCEPTS 2-3/8", 2-7/8", OR 3-1/2" O.D. PIPES (ORDER SEPARATELY)

INCLUDES ATTACHMENT HARDWARE FOR TOWER LEG (NOT NECESSARY FOR INSTALL, CONTRACTOR TO REMOVE)

**MANUFACTURER:** SITE PRO 1  
**MODEL:** UQB4

QUAD UNIVERSAL RING MOUNT  
FOUR SIDED RING MOUNT ASSEMBLY  
FITS 12" TO 60" DIAMETER MONOPOLES  
6" x 6" BOLT PATTERN

2" SCH 40 (2-3/8" O.D.) x 72" LONG GALV. PIPE (TYP.) (ORDER SEPARATELY)



## E DUAL STANDOFF QUAD COLLAR MOUNT

**CONSULTANT:**

**Edge**  
Consulting Engineers, Inc.

624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

**CLIENT:**

**U.S. Cellular**

U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT, NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

**INSTALLATION DETAILS**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

SHEET TITLE

SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. C

CHECKED BY:	DL
PLOT DATE:	4/4/2019
PROJECT NUMBER:	18791
SET TYPE:	PERMIT CDs
SHEET NUMBER:	<b>T-501</b>



EUPEN CABLE LENGTH	
HYBRID CABLE QUANTITY FROM EQUIPMENT CABINET	1
POWER CABLE QUANTITY FROM EQUIPMENT CABINET	1
LENGTH ALONG ICE BRIDGE	15 FT
LENGTH FROM T.O.C. TO TOWER TOP RAYCAP SPD	115 FT
TOTAL LENGTH OF HYBRID CABLE	130 FT
ROUNDED LENGTH **	140 FT
U.S. CELLULAR PRE-ORDERED HYBRID CABLE LENGTH	TBD
* 410' MAX = TYPICAL HYBRID CABLE	
* 550' MAX = LOW INDUCTANCE HYBRID CABLE	

RET CABLE INFO			
ANTENNA TO REMOTE RADIO			
	QUANTITY	LENGTH	
ALPHA SECTOR	2	32.8 FT	10 m
BETA SECTOR	2	32.8 FT	10 m
GAMMA SECTOR	2	32.8 FT	10 m
* STANDARD RET CABLE LENGTH OF 10 METERS; RF APPROVAL REQ'D FOR ADDITIONAL RET CABLE LENGTH			

POWER JUMPER CABLE INFO				
RAYCAP SPD TO REMOTE RADIO (B71/B12)				
	QUANTITY	LENGTH		
ALPHA SECTOR	2	16.4 FT	5 m	
BETA SECTOR	2	16.4 FT	5 m	
GAMMA SECTOR	2	16.4 FT	5 m	
RAYCAP SPD TO REMOTE RADIO (B2/B4)				
	QUANTITY	LENGTH		
ALPHA SECTOR	2	16.4 FT	5 m	
BETA SECTOR	2	16.4 FT	5 m	
GAMMA SECTOR	2	16.4 FT	5 m	
ALL SECTORS MUST HAVE THE SAME JUMPER LENGTHS * PREFERRED JUMPER LENGTH OF 5m (16.4') * MAXIMUM JUMPER LENGTH OF 6m (19.7')				

FIBER JUMPER CABLE INFO				
RAYCAP SPD TO REMOTE RADIO (B71/B12)				
	QUANTITY	LENGTH		
ALPHA SECTOR	2	16.4 FT	5 m	
BETA SECTOR	2	16.4 FT	5 m	
GAMMA SECTOR	2	16.4 FT	5 m	
RAYCAP SPD TO REMOTE RADIO (B2/B4)				
	QUANTITY	LENGTH		
ALPHA SECTOR	1	16.4 FT	5 m	
BETA SECTOR	1	16.4 FT	5 m	
GAMMA SECTOR	1	16.4 FT	5 m	
ALL SECTORS MUST HAVE THE SAME JUMPER LENGTHS * PREFERRED JUMPER LENGTH OF 5m (16.4') * MAXIMUM JUMPER LENGTH OF 6m (19.7')				

COAX JUMPER CABLE INFO		
REMOTE RADIO TO ANTENNA (B71/B12)		
	QUANTITY	LENGTH
ALPHA SECTOR	4	25 FT *
BETA SECTOR	4	25 FT *
GAMMA SECTOR	4	25 FT *
REMOTE RADIO TO ANTENNA (B2/B4)		
	QUANTITY	LENGTH
ALPHA SECTOR	8	25 FT *
BETA SECTOR	8	25 FT *
GAMMA SECTOR	8	25 FT *
ALL SECTORS MUST HAVE THE SAME JUMPER LENGTHS * APPROVED JUMPER LENGTHS: 25 FT. MIN. TO 70 FT. MAX. * U.S. CELLULAR PRE-ORDERED JUMPER LENGTHS.		

POWER JUMPER CABLE INFO (SHELTER)			
RAYCAP SPD TO POWER BAY RACK			
	QUANTITY	LENGTH	
B71/12 RAYCAP	6	32.8 FT	10 m
B2/B4 RAYCAP	6	32.8 FT	10 m

FIBER JUMPER CABLE INFO (SHELTER)			
RAYCAP SPD TO FIF RACK			
	QUANTITY	LENGTH	
B71/12 RAYCAP	9	32.8 FT	10 m
B2/B4 RAYCAP	0	32.8 FT	10 m

A CABLE LENGTHS

MANUFACTURER: EUPEN  
MODEL: EUCAHYBRID 114-12AWG6 (HYBRID)  
MINIMUM BENDING RADIUS: 360mm (14")  
MAXIMUM PULLING STRENGTH: 150 daN  
MAXIMUM HANGER SPACING: 1.0 m  
APPROX. WEIGHT: 2300 kg/km (1.55 LB/FT)

1-1/4" HYBRID FIBER OPTIC CABLE WITH 48V ENERGY FEEDER IN CORRUGATED ALUMINUM SHIELDING WITH UV RESISTANT PE JACKET.

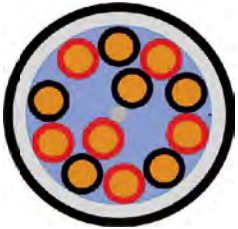
MAXIMUM CABLE LENGTH OF 410'.

MANUFACTURER: EUPEN  
MODEL: EUCAPOWER 114-12AWG6 (POWER)  
MINIMUM BENDING RADIUS: 360mm (14")  
MAXIMUM PULLING STRENGTH: 150 daN  
MAXIMUM HANGER SPACING: 1.0 m  
APPROX. WEIGHT: 2300 kg/km (1.55 LB/FT)

1-1/4" CABLE WITH 48V ENERGY FEEDER IN CORRUGATED ALUMINUM SHIELDING WITH UV RESISTANT PE JACKET.



HYBRID CABLE CROSS SECTION



POWER CABLE CROSS SECTION



HYBRID CABLE ISOMETRIC



POWER CABLE ISOMETRIC

B EUPEN HYBRID AND POWER CABLES



C JUMPER ATTACHMENT

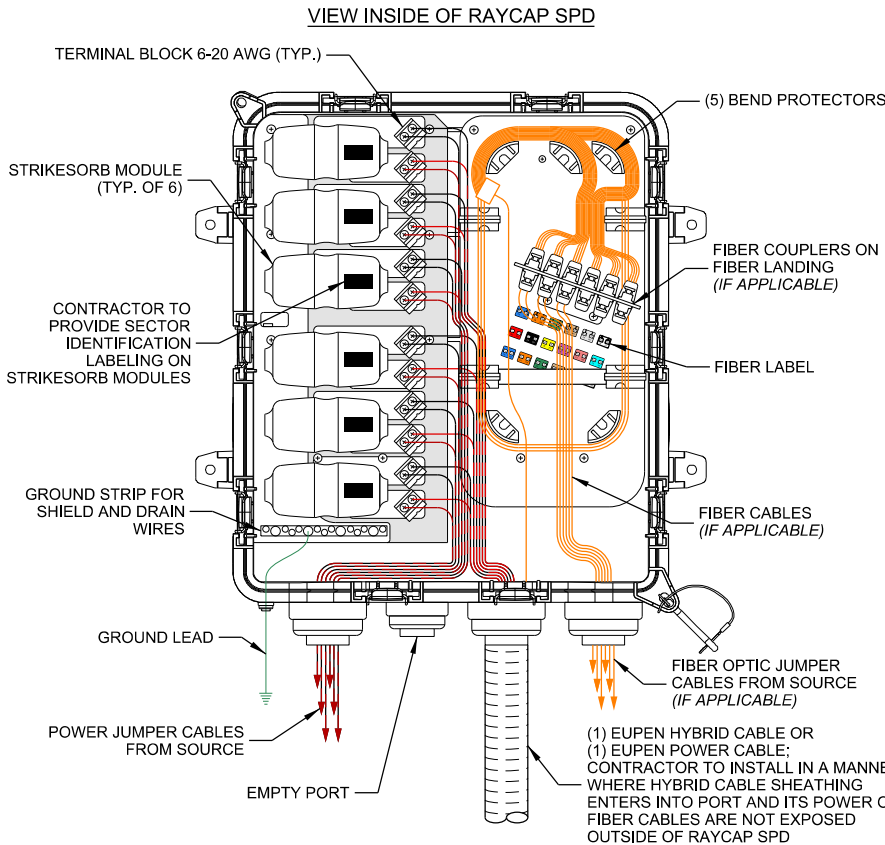
MANUFACTURER: SITE PRO 1  
MODEL: STK2-U  
UNIVERSAL TOWER STANDOFF KIT  
FITS 1-1/2" DIA. TO 3" DIA. ROUND MEMBERS

MODEL: 78SS-A  
7/8" STACKABLE SNAP-IN HANGER

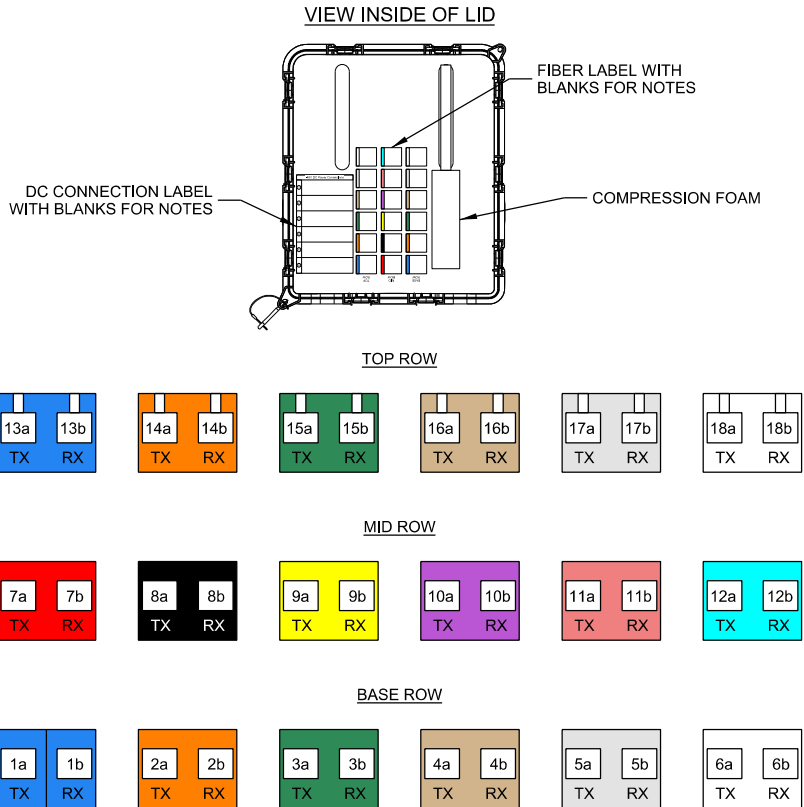
MODEL: BCU78X  
UNIVERSAL BARREL CUSHION  
ACCEPTS 0.16" TO 0.55" O.D. CABLES  
7/8" MATING HANGER

7/8" STACKABLE SNAP-IN HANGER,  
SITE PRO 1 PART # 78SS-A OR  
APPROVED EQUIVALENT

UNIVERSAL BARREL CUSHIONS,  
SITEPRO1 PART # BCU78X:  
ACCEPTS 0.16" TO 0.55" O.D.  
CABLES; MATING HANGER SIZE  
7/8"



D RAYCAP SURGE PROTECTOR DEVICE (SPD) CABLING



E FIBER LABEL

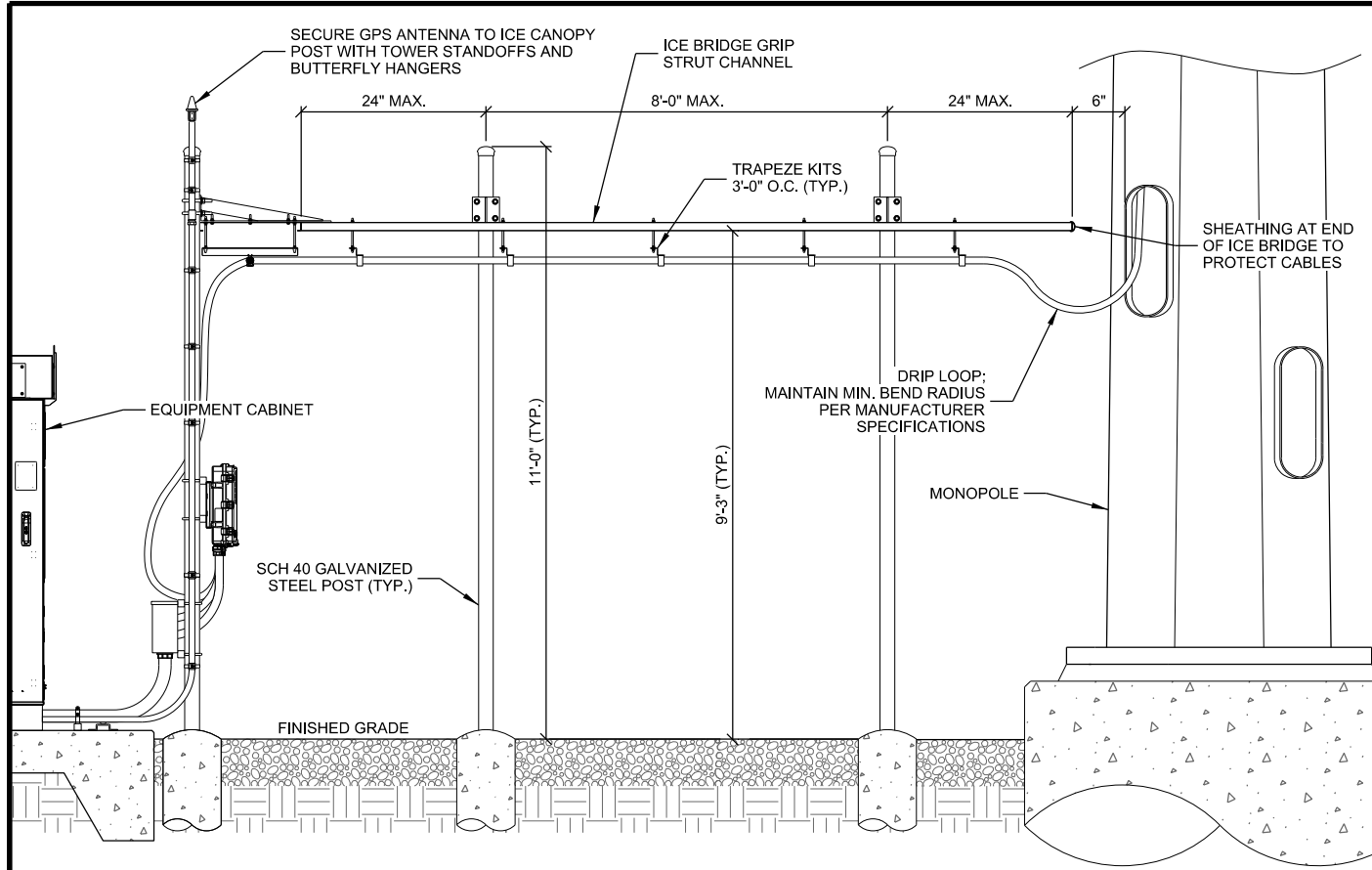
CONSULTANT:  
**Edge**  
Consulting Engineers, Inc.  
624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

CLIENT:  
**U.S. Cellular**  
U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT, NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

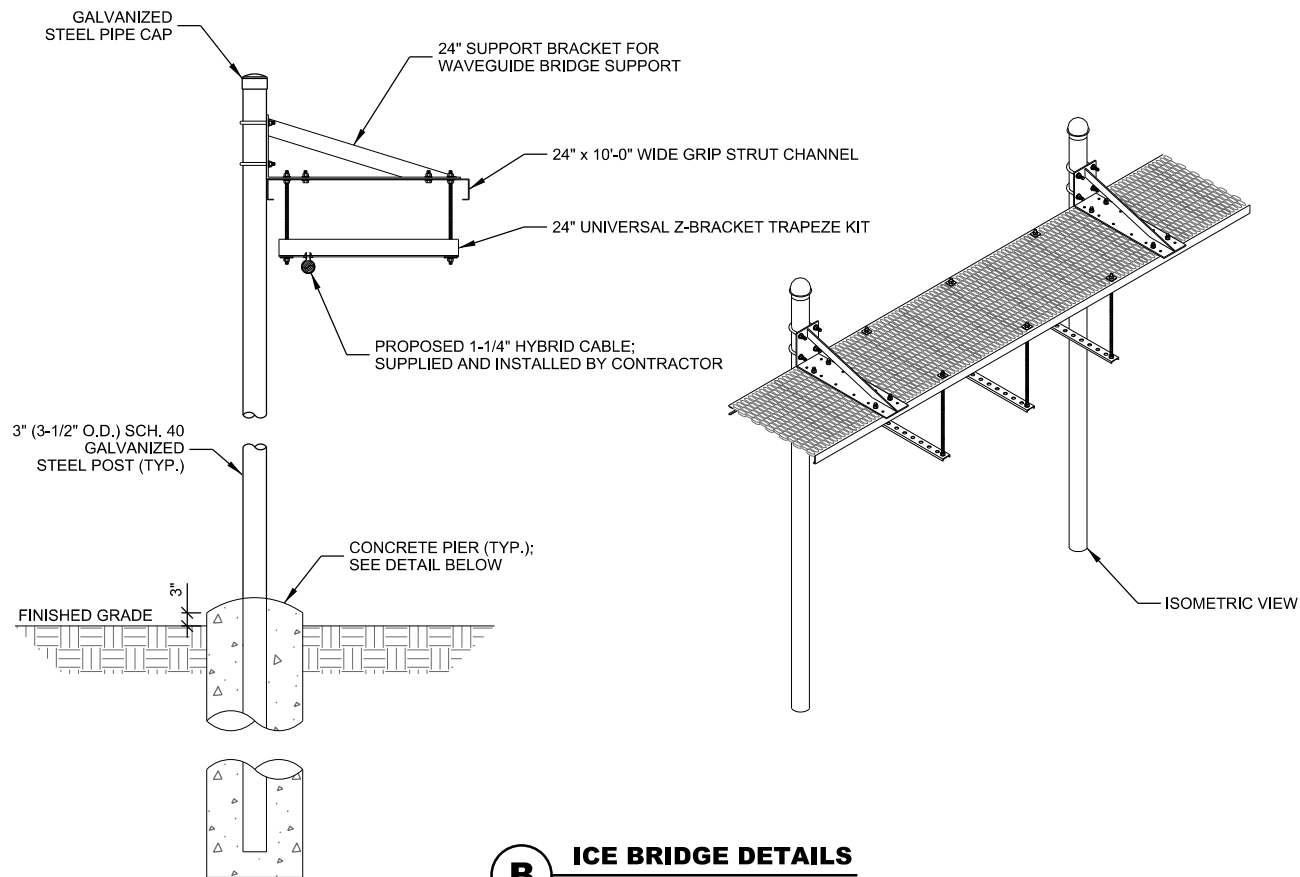
CABLE DETAILS  
FRANKLIN INDUSTRIAL PARK (#784700)  
FRANKLIN, WISCONSIN

SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. 0
CHECKED BY: DL		
PLOT DATE: 4/4/2019		
PROJECT NUMBER: 18791		
SET TYPE: PERMIT CDs		
SHEET NUMBER: T-502		

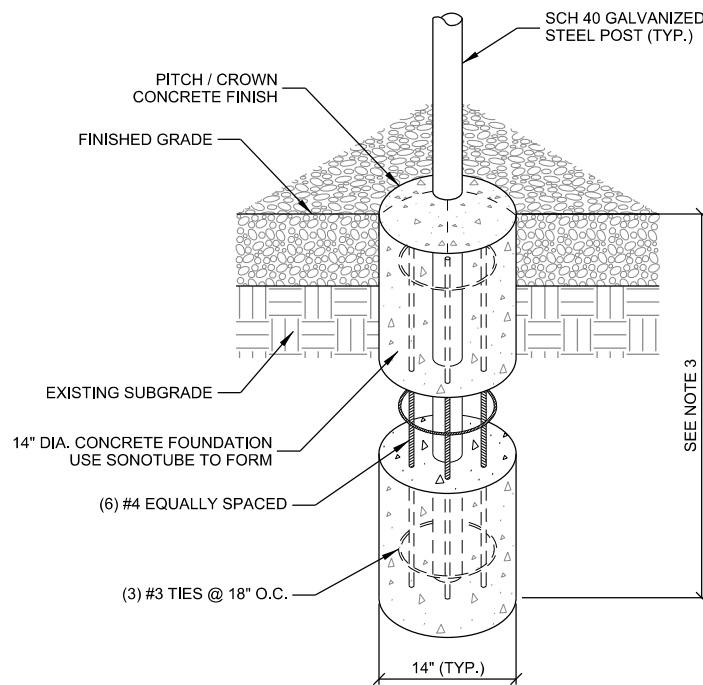




**A ICE BRIDGE INSTALLATION**



**B ICE BRIDGE DETAILS**



- NOTES:
1. MAINTAIN 3" MINIMUM REBAR COVER WITH CONCRETE IN ALL DIRECTIONS.
  2. CONCRETE MIX TO BE 4,000 PSI @ 28 DAYS.
  3. FOUNDATION DEPTH TO EXCEED LOCAL FROST DEPTH, OR 48" MINIMUM.

**C PIER FOUNDATION**

THIS SPACE INTENTIONALLY LEFT BLANK

- ICE BRIDGE NOTES : (THIS SHEET)**
1. FOR COMPONENTS AS SHOWN IN STANDARD DETAILS, MAXIMUM ALLOWABLE SPAN BETWEEN SUPPORTS ON A CONTINUOUS SINGLE SECTION OF BRIDGE CHANNEL SHALL BE 8' FOR A 10' SECTION.
  2. SPLICES IN SECTIONS OF BRIDGE CHANNEL SHALL BE INSTALLED AT SUPPORTS, WHERE POSSIBLE, OR AT MOST 2' FROM A SUPPORT.
  3. FREE ENDS OF ICE BRIDGE CHANNELS SHALL NOT EXCEED A CANTILEVER DISTANCE OF 2' FROM A SUPPORT.
  4. CUT BRIDGE CHANNEL SECTIONS SHALL HAVE RAW EDGES TREATED WITH COLD GALVANIZING SPRAY.
  5. DEVIATIONS FROM STANDARDS FOR COMPONENT INSTALLATIONS ARE PERMITTED WITH MANUFACTURER'S AND ENGINEER'S APPROVAL.
  6. DEVIATIONS FROM ICE BRIDGE FOUNDATIONS SHOWN ON SITE SPECIFIC DRAWINGS OR STANDARD DETAILS REQUIRE ENGINEERING APPROVAL.

CONSULTANT:

**Edge**  
Consulting Engineers, Inc.

624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

CLIENT:

**U.S. Cellular**

U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT, NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

**ICE BRIDGE DETAILS**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

SHEET TITLE

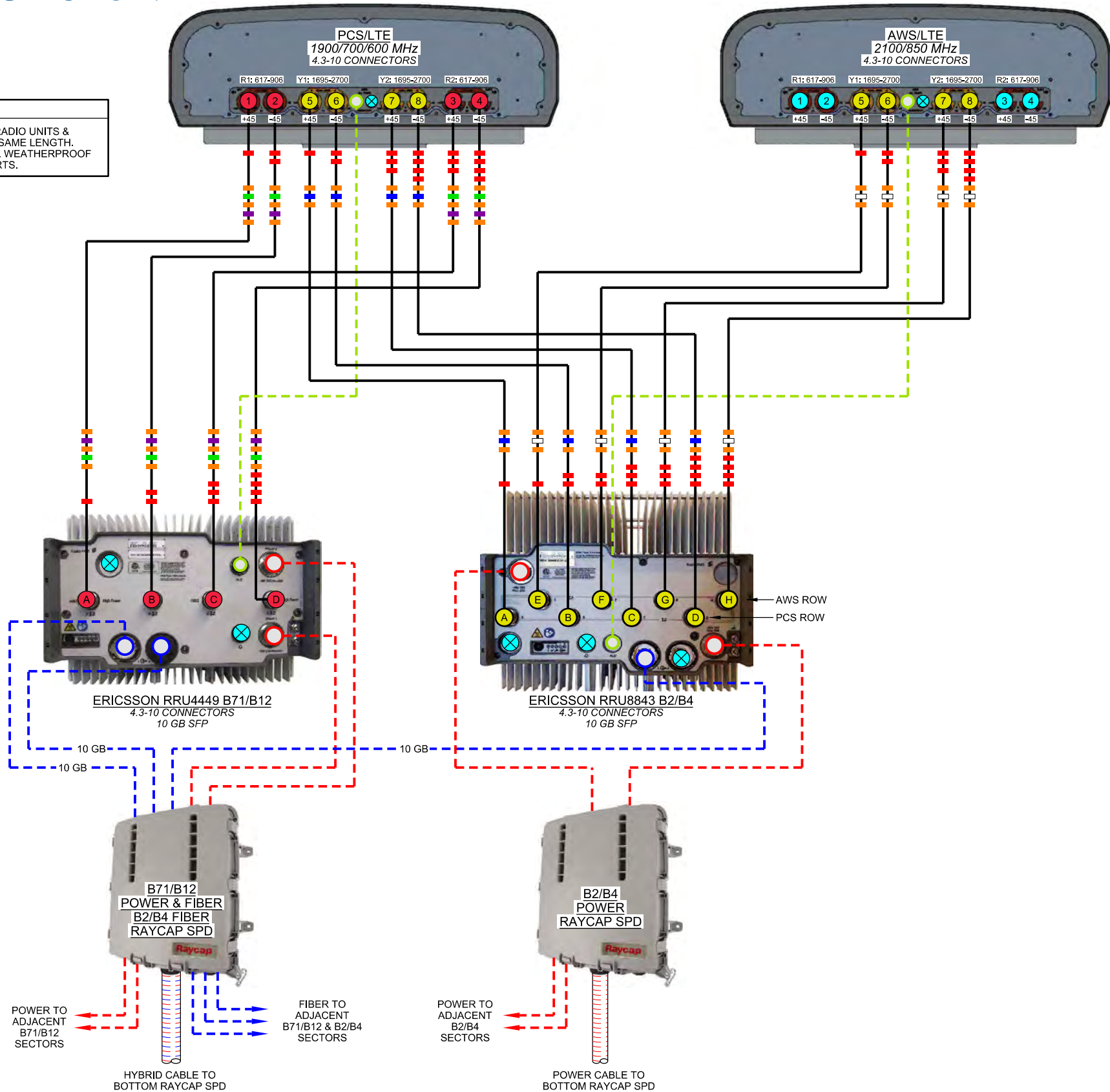
SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. C

CHECKED BY	DL
PLOT DATE	4/4/2019
PROJECT NUMBER	18791
SET TYPE	PERMIT CDs
SHEET NUMBER	<b>T-504</b>

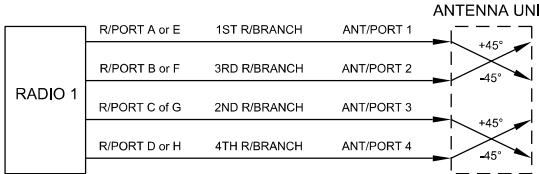




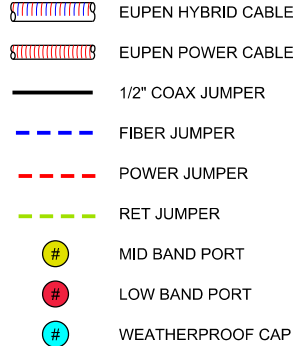
**E// B71/B12 / B2/B4**  
**PER SECTOR CONFIGURATION**



### CROSS POLE ANT. TO RADIO PORT DIAGRAM



## CABLE LEGEND



CONSULTANT:



**CLIENT:**



U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT. NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

**PLUMBING DIAGRAM**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

**SHEET TITLE:**

## SUBMITTAL

INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. 0

CHECKED BY	DL
------------	----

PLOT DATE	4/4/2019
-----------	----------

PROJECT NUMBER	18791
----------------	-------

SET TYPE	PERMIT CDs
----------	------------

SHEET  
NUMBER

**T-505**



DATE CREATED: 03/26/2019

CONTAINS U.S. CELLULAR® CONFIDENTIAL INFORMATION. NOT FOR EXTERNAL USE OR DISCLOSURE WITHOUT PROPER AUTHORIZATION

© EDGE CONSULTING ENGINEERS, INC



**EQUIPMENT:**

- (A) LTE EQUIPMENT CABINET WITH MOUNTING PLINTH;  
SEE A-002 FOR DETAILS
- (B) BATTERY BACKUP CABINET;  
SEE A-002 FOR DETAILS
- (C) RAYCAP SPD SECURED TO ICE BRIDGE;  
SEE C-102 FOR QUANTITY
- (D) 12" x 12" x 6" FIBER/POWER JUNCTION BOX SECURED TO UNISTRUT
- (E) GROUND BAR ON INSULATORS

**CONDUITS=**

- (F) 1-1/4" (1.66" O.D.) SCH. 40 PVC CONDUIT STUB-UP WITH PULL STRING TO FIBER VAULT (TYP. OF 2); STUB-UP CONDUITS IN FRONT CORNER OF COMPOUND FOR MICROWAVE DISH INSTALLATIONS
- (G) 2" (2-3/8" O.D.) SCH. 40 PVC CONDUIT STUB-UP WITH PULL STRING TO PPC
- (H) 1" (1-1/4" O.D.) SCH. 40 PVC CONDUIT STUB-UP TO WITH PULL STRING FOR ALARM CABLING TO PPC
- (I) 2-1/2" (2-7/8" O.D.) LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT FROM LTE EQUIPMENT CABINET PLINTH TO JUNCTION BOX (TYP. OF 2)
- (J) 2-1/2" (2-7/8" O.D.) LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT FROM BATTERY BACKUP CABINET TO LTE EQUIPMENT CABINET PLINTH FOR POWER
- (K) 2" (2-3/8" O.D.) LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT FROM LTE EQUIPMENT CABINET TO UNISTRUT RACK FOR MICROWAVE DISH CABLING (IF APPLICABLE)
- (L) 1" (1-1/4" O.D.) LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT FROM LTE EQUIPMENT CABINET PLINTH TO UNISTRUT RACK FOR GPS CABLING
- (M) 1-1/2" (1.9" O.D.) LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT FROM JUNCTION BOX TO RAYCAP SPD FOR POWER CABLING (TYP. OF PER RAYCAP SPD)
- (N) 1-1/4" (1.66" O.D.) LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT FROM JUNCTION BOX TO RAYCAP SPD FOR FIBER CABLING (TYP. OF PER RAYCAP SPD)
- (O) 3/4" (1" O.D.) LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT FROM LTE EQUIPMENT CABINET FOR GROUND LEAD (TYP. OF 2)
- (P) 3/4" (1" O.D.) LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT FROM BATTERY BACKUP CABINET FOR GROUND LEAD
- (Q) LIQUID-TIGHT CONDUIT FITTING (TYP.)
- (R) ROXTEC WEATHERPROOF SEAL (IF APPLICABLE);  
SIZE TO ACCEPT MICROWAVE DISH CABLING QUANTITY AND DIAMETER
- (S) 1'-0" UNISTRUT CONDUIT TIE DOWN (TYP.);  
SEE A-501 FOR DETAILS

### EQUIPMENT PAD RACK:

- (T) 2'-0" WIDE x 5'-0" LONG ICE BRIDGE;  
SEE A-501 FOR DETAILS
- (U) P-1000T GALV. UNISTRUT OR APPROVED EQUIV.;  
UNISTRUT TO BE CUT TO LENGTH TO ENSURE PROPER FASTENING TO  
POST WITHOUT EXCESS
- (V) UNISTRUT END CAP AT EACH END OF UNISTRUT;  
SITE PRO 1 #: UNICAP OR APPROVED EQUIV.;
- (W) HYBRID CABLE;  
MAINTAIN MINIMUM BEND RADIUS
- (X) HEAVY-DUTY UNIVERSAL COAX SUPPORT BRACKET;  
SEE A-501 FOR DETAILS
- (Y) GPS ANTENNA SECURED TO ICE BRIDGE POST;  
SEE A-501 FOR DETAILS
- (Z) CONCRETE PIER;  
SEE A-501 FOR DETAILS

**CONCRETE AND REINFORCING NOTES:**

1. ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS AND MOST CURRENT VERSION OF ACI STANDARDS.
2. ALL CONCRETE UNLESS SPECIFICALLY NOTED SHALL BE NORMAL WEIGHT (145 PCF) AND SHALL ACHIEVE A 28-DAY COMPRESSIVE STRENGTH (f<sub>c</sub>) OF 4,000 PSI. EXPOSED EXTERIOR CONCRETE TO BE AIR ENTRAINED WITH 6% +/- 1% AIR CONTENT. CONTRACTOR TO PERFORM CONCRETE SLUMP TEST (4" MAX SLUMP). NO WATER TO BE ADDED AFTER SLUMP HAS BEEN MEASURED.
3. ALL CONCRETE REINFORCING SHALL BE ASTM A615 GRADE 60 AND PLACED IN ACCORDANCE WITH ACI STANDARDS
4. REMOVE ALL ORGANIC MATERIAL, SOFT AND/OR UNSUITABLE SOILS WITHIN FOUNDATION FOOTPRINT. DO NOT UTILIZE THESE SOILS FOR BACKFILL.
5. CONSULT GEOTECHNICAL INVESTIGATION REPORT FOR ANTICIPATED SOIL CONDITIONS AND CONSTRUCTION CONSIDERATIONS.
6. FOUNDATION DESIGN BASED ON A PRESUMPTIVE SOIL BEARING CAPACITY OF 2000 PSF AND MAX. PLASTICITY INDEX OF 20, CONTRACTOR TO CONFIRM BEARING SOILS MEET THESE CONDITIONS BEFORE INSTALLATION.
7. SOILS NOT MEETING THE DESIGN BEARING STRENGTH SHALL BE UNDERCUT AND REPLACED WITH 3-INCH BREAKER STONE. UNDERCUT ONE FOOT ON EACH SIDE OF THE FOOTING FOR EVERY FOOT IN DEPTH. CONSULT WITH ENGINEER FOR REQUIRED UNDERCUT DEPTH.
8. CONTRACTOR TO ENSURE POSITIVE DRAINAGE FROM ALL FOUNDATIONS.

CONSULTANT:



**CLIENT:**



U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT. NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

SHEET TITLE F.

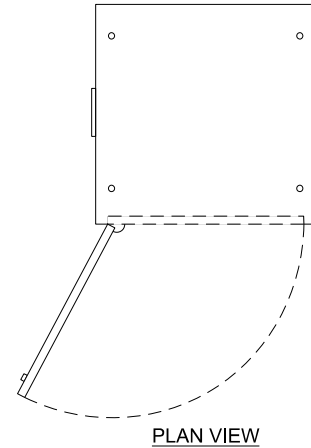
**SUBMITTAL:**

INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. 0

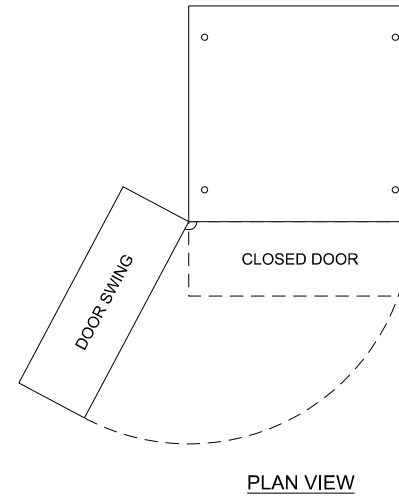
CHECKED BY	DL
PLOT DATE	4/4/2019
PROJECT NUMBER	18791
SET TYPE	PERMIT CDs
SHEET NUMBER	<b>A-001</b>

**CLEARANCE REQUIREMENTS:**  
FRONT: 47.24" (1200 mm)  
REAR: 7.87" (200 mm)  
LEFT: 3.94" (100 mm)  
RIGHT: 3.94" (100 mm)

**DESCRIPTION:** GLOBAL BASE FRAME (GBF)  
**MANUFACTURER:** ERICSSON  
**MODEL:** 5/BYB 701 01  
**DIMENSIONS:** 10.38" x 27.09" x 27.56" (H x W x D)  
**WEIGHT:** 80.5 LBS



**CLEARANCE REQUIREMENTS:**  
FRONT: 28" (700 mm)  
REAR: 8" (200 mm)  
LEFT: 39" (1000 mm)  
RIGHT: 10" (250 mm)



CONSULTANT:



**CLIENT:**



U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT. NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

**EQUIPMENT CABINET SPECIFICATIONS**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

**SHEET TITLE:**

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. 0

CHECKED  
BY

DL

PLOT  
DATE

4/2019

PROJECT  
NUMBER

8791

SET  
TYPE

PERMIT CDs

SHEET

**A-002**

I:\18700\18791\CAD\Plot\CDs\A-002.dgn

## **A** EQUIPMENT CABINET

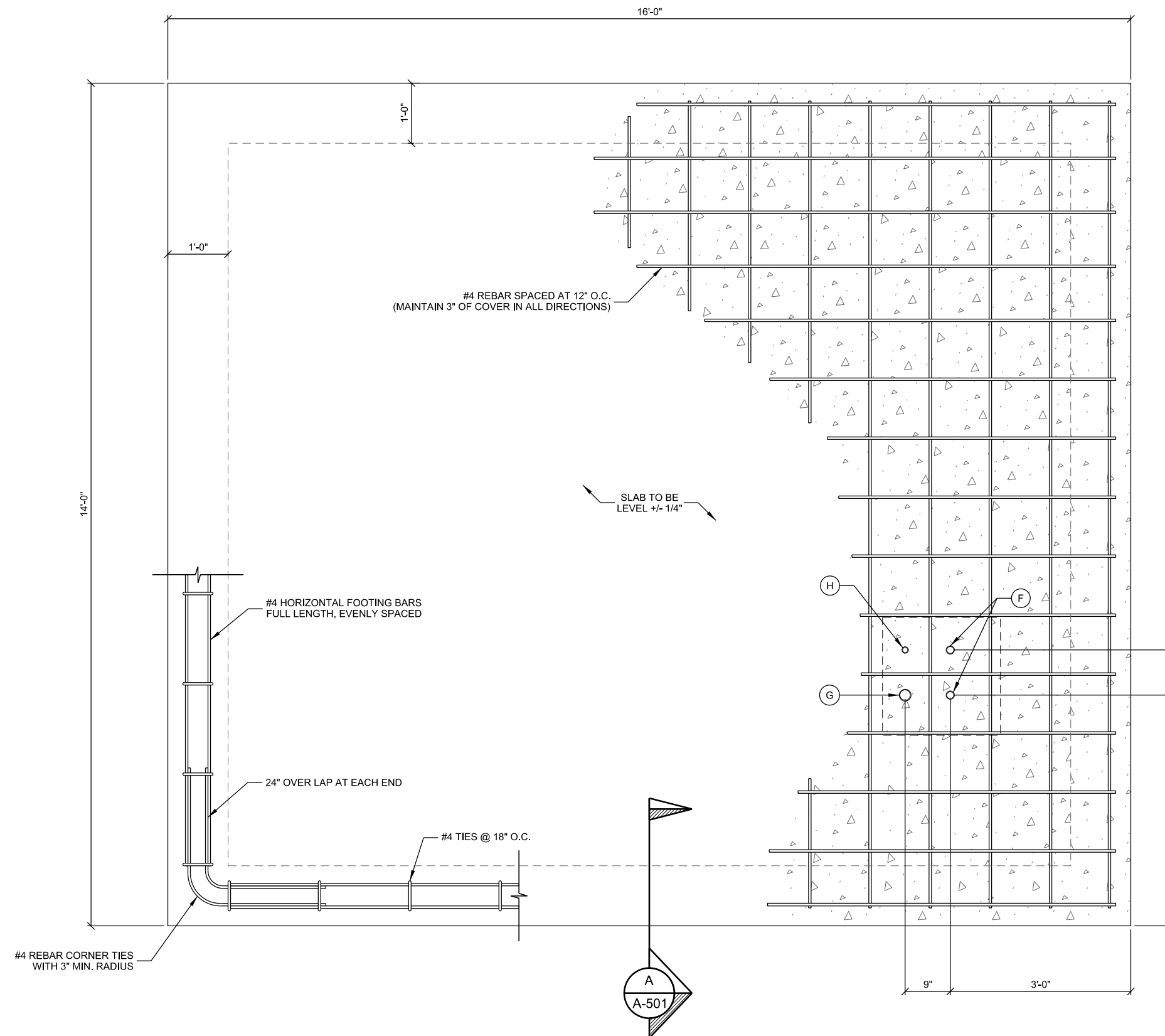
## B BATTERY BACKUP SYSTEM

NOTES:

1. CONTRACTOR TO INSTALL 1/2" THICK SKIRTBOARD RUBBER MAT BENEATH CABINET; PAD TO HAVE A 1/2" SMALLER FOOTPRINT THAN THE CABINET, PERIMETER OF PAD TO BE SEALED WITH OUTDOOR GRADE 100% SILICONE CAULK.
2. ERICSSON IS RESPONSIBLE FOR FINAL INSTALLATION OF PROPOSED BBS 6101 BATTERY SYSTEM WITH ASSOCIATED PLUMBING AND EQUIPMENT.
3. CONTRACTOR TO VERIFY EQUIPMENT REQUIREMENTS WITH ERICSSON PRIOR TO INSTALLATION.

© EDGE CONSULTING ENGINEERS, INC.

K:\187901\18791\CAD\PLT\CD&A-101.dgn



**A EQUIPMENT LAYOUT**  
SCALE: 11" x 17" - 1/2" = 1'-0"  
22" x 34" - 1" = 1'-0"

CONSULTANT:

**Edge**  
Consulting Engineers, Inc.  
624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

CLIENT:

**U.S. Cellular**  
U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT., NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

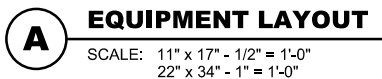
**EQUIPMENT PAD PLAN**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

SHEET TITLE

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. C

CHECKED BY:	DL
PLOT DATE:	4/4/2019
PROJECT NUMBER:	18791
SET TYPE:	PERMIT CDs
SHEET NUMBER:	<b>A-101</b>



**EQUIPMENT PAD PLAN**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

SHEET TITLE:	
SUBMITTAL:	
INT.	DATE: DESCRIPTION:
TJT	01/29/19 REV. A
TJT	02/21/19 REV. B
LMK	04/04/19 REV. 0
CHECKED BY	DL
PLOT DATE	4/4/2019
PROJECT NUMBER	18791
SET TYPE	PERMIT CDs
SHEET NUMBER	A-102

CONSULTANT:

**Edge**  
Consulting Engineers, Inc.  
624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

CLIENT:

**U.S. Cellular**  
U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT, NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

**EQUIPMENT PAD ELEVATIONS**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

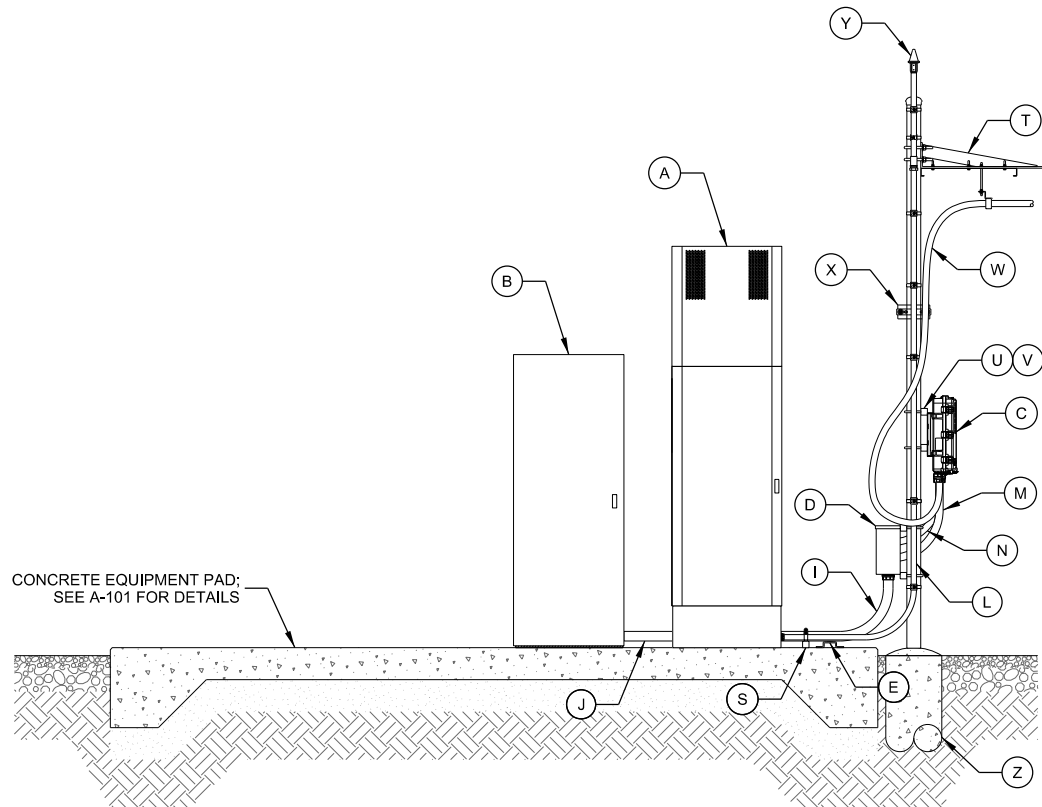
SHEET TITLE:

SUBMITTAL:

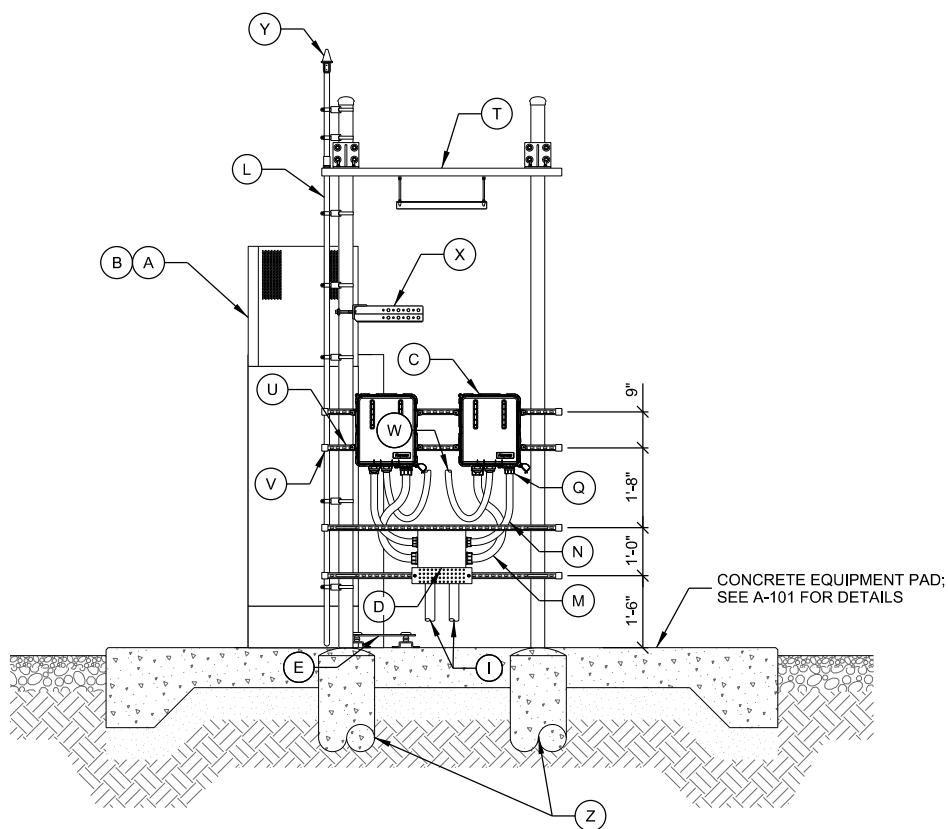
INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. 0

CHECKED BY:	DL
PLOT DATE:	4/4/2019
PROJECT NUMBER:	18791
SET TYPE:	PERMIT CDs
SHEET NUMBER:	<b>A-201</b>

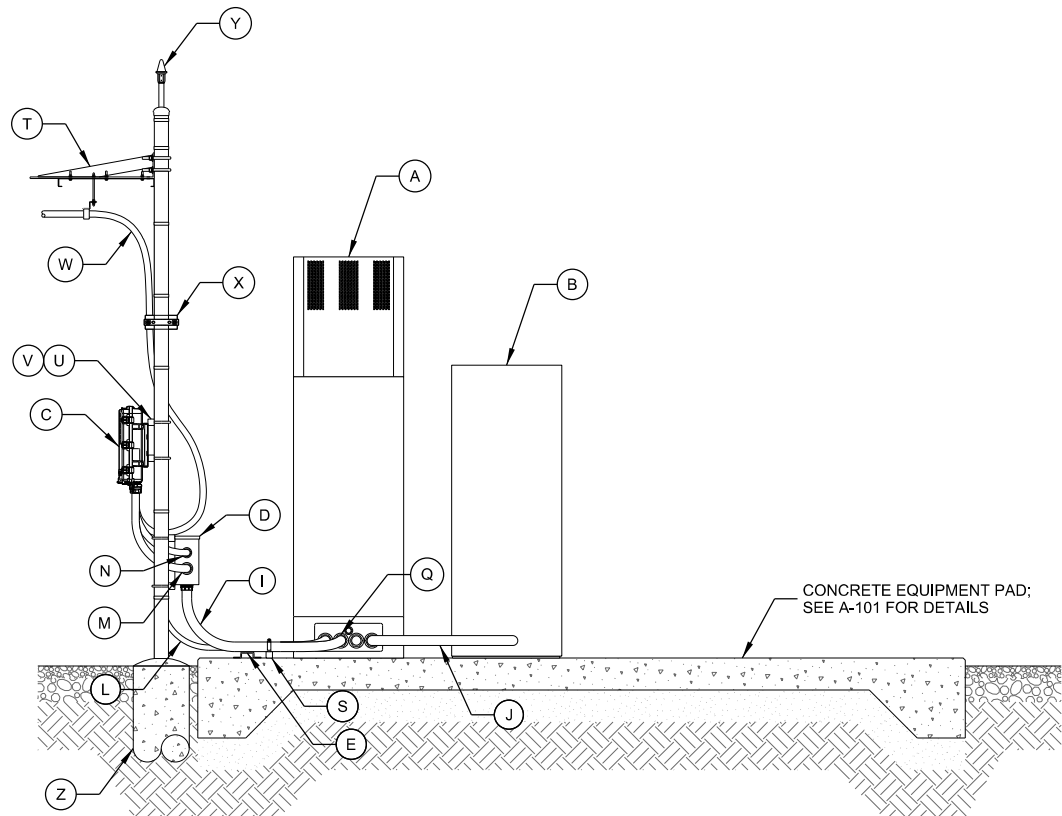
© EDGE CONSULTING ENGINEERS, INC.



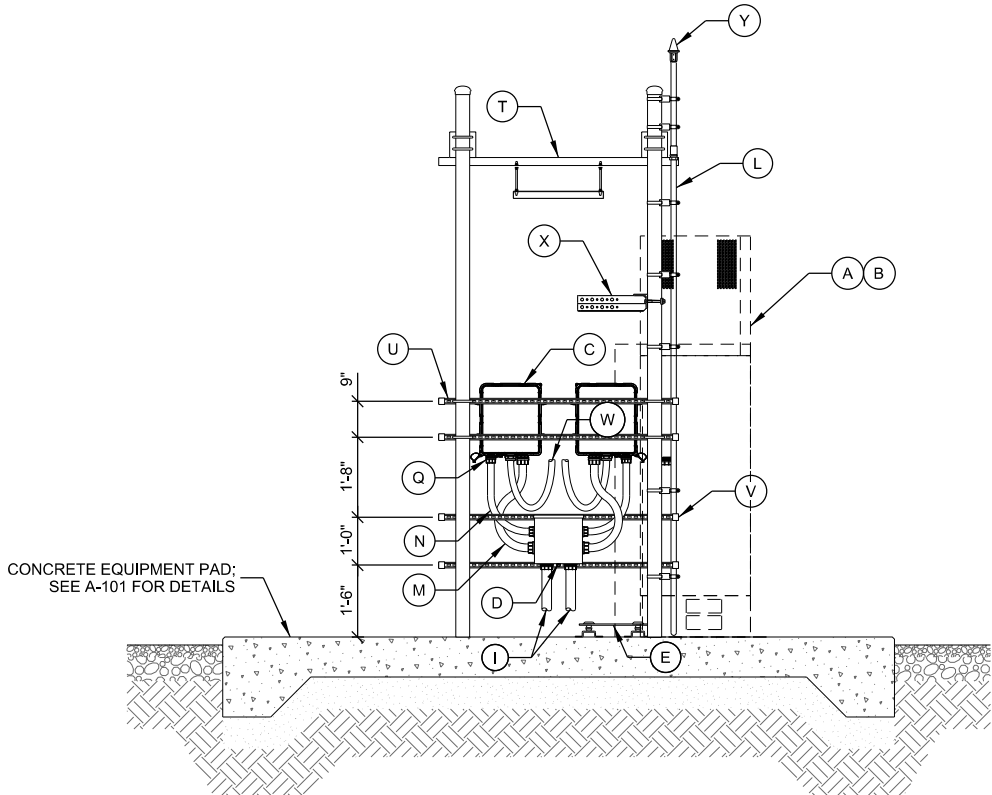
**A** **EQUIPMENT PAD ELEVATION**  
SCALE: 11" x 17" - 1/4" = 1'-0"  
22" x 34" - 1/2" = 1'-0"



**B** **EQUIPMENT PAD ELEVATION**  
SCALE: 11" x 17" - 1/4" = 1'-0"  
22" x 34" - 1/2" = 1'-0"

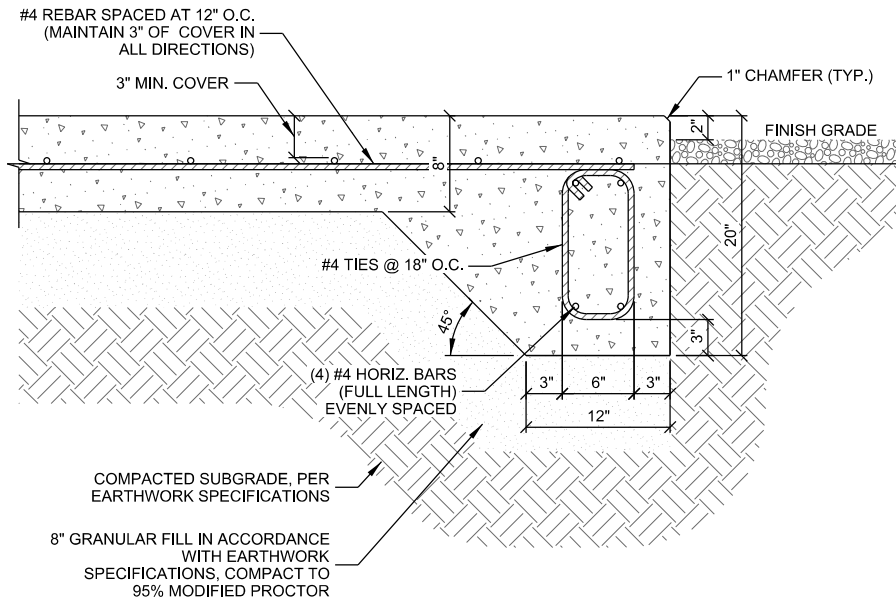


**C** **EQUIPMENT PAD ELEVATION**  
SCALE: 11" x 17" - 1/4" = 1'-0"  
22" x 34" - 1/2" = 1'-0"

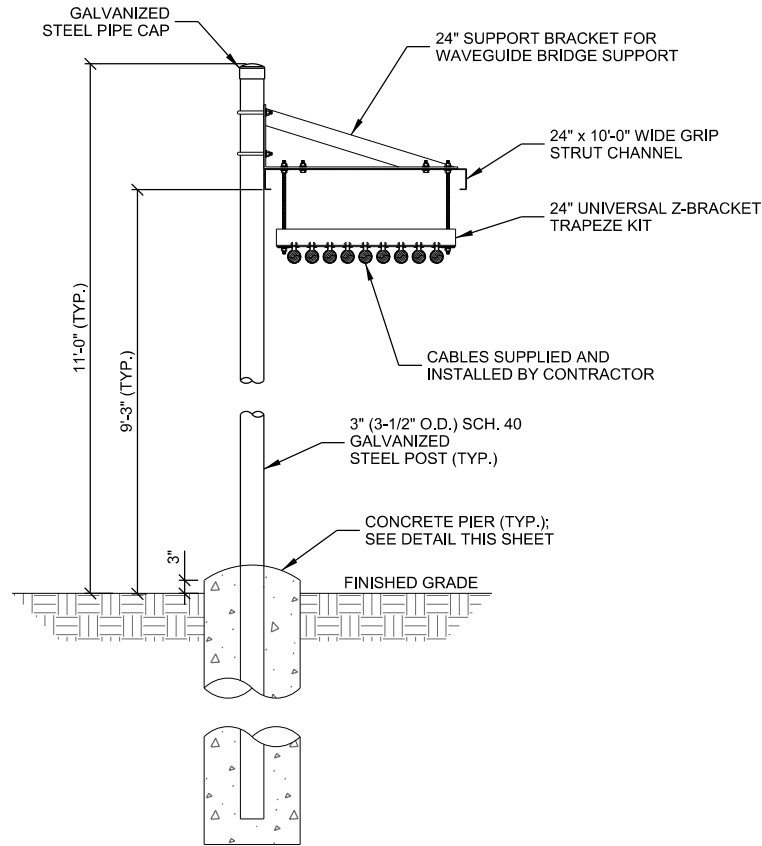


**D** **EQUIPMENT PAD ELEVATION**  
SCALE: 11" x 17" - 1/4" = 1'-0"  
22" x 34" - 1/2" = 1'-0"

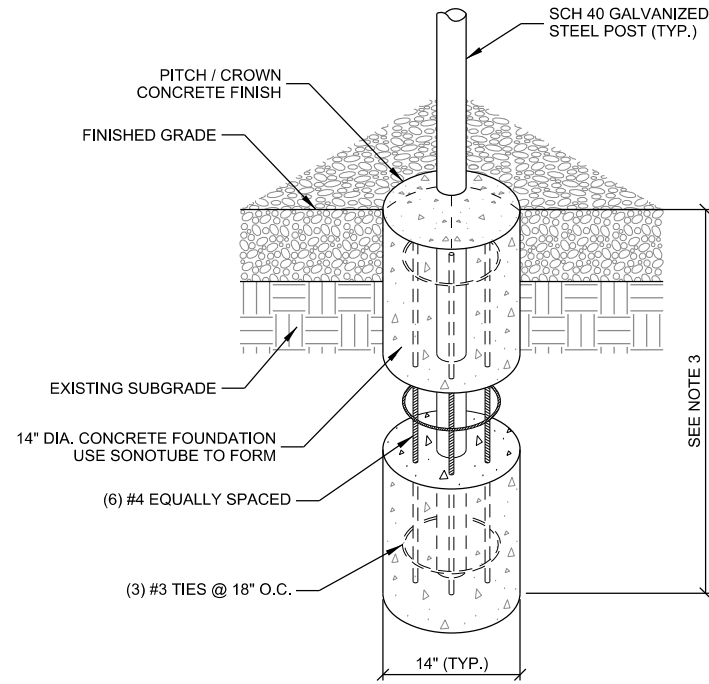




**A** TYPICAL FOUNDATION



**B** ICE BRIDGE DETAILS



- NOTES:
1. MAINTAIN 3" MINIMUM REBAR COVER WITH CONCRETE IN ALL DIRECTIONS.
  2. CONCRETE MIX TO BE 4,000 PSI @ 28 DAYS.
  3. FOUNDATION DEPTH TO EXCEED LOCAL FROST DEPTH, OR 48" MINIMUM.

**C** PIER FOUNDATION

**MANUFACTURER:** SITE PRO 1  
**MODEL:** UTL8

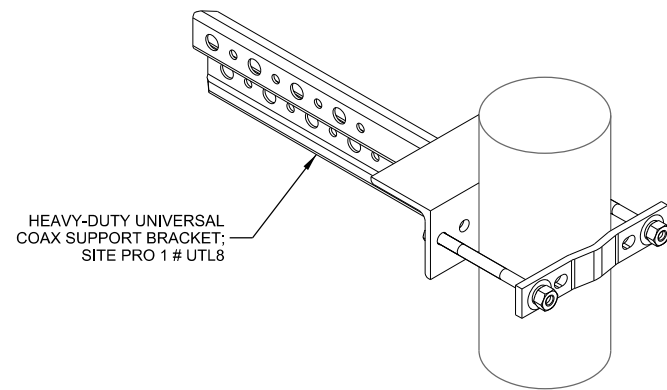
HEAVY-DUTY UNIVERSAL SUPPORT BRACKET

MOUNTS TO ROUND MEMBERS (1-1/2" O.D. TO 5-1/2" O.D.)

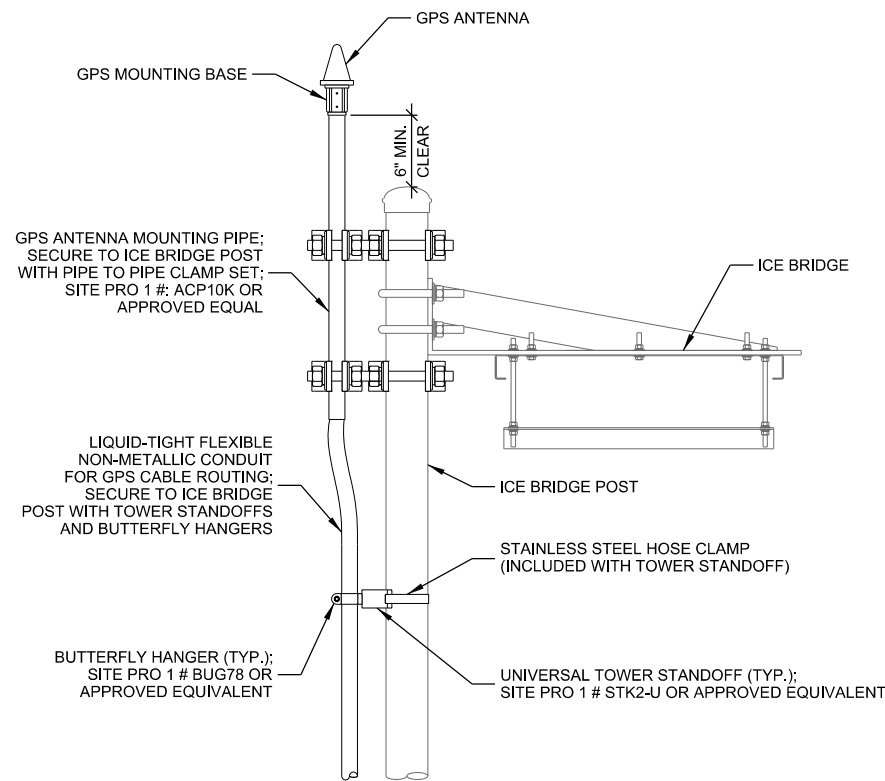
PUNCHED WITH 3/4" DIA. HOLES FOR SNAP-IN HANGERS AND 7/16" DIA. HOLES FOR HARDWARE

HOT-DIP GALVANIZED

CAN BE BOLTED DIRECTLY TO PIROD KNOCK-DOWN LEGS WITH INCLUDED HARDWARE



**D** HEAVY-DUTY UNIVERSAL COAX SUPPORT BRACKET



**E** GPS ANTENNA MOUNTING

THIS SPACE INTENTIONALLY LEFT BLANK

CONSULTANT:

**Edge**  
Consulting Engineers, Inc.

624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

CLIENT:

**U.S. Cellular**

U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT, NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

**EQUIPMENT PAD DETAILS**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

SHEET TITLE

SUBMITTAL:		
INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. C

CHECKED BY:	DL
PLOT DATE:	4/4/2019
PROJECT NUMBER:	18791
SET TYPE:	PERMIT CDs
SHEET NUMBER:	<b>A-501</b>



KEYNOTES: (THIS SHEET)

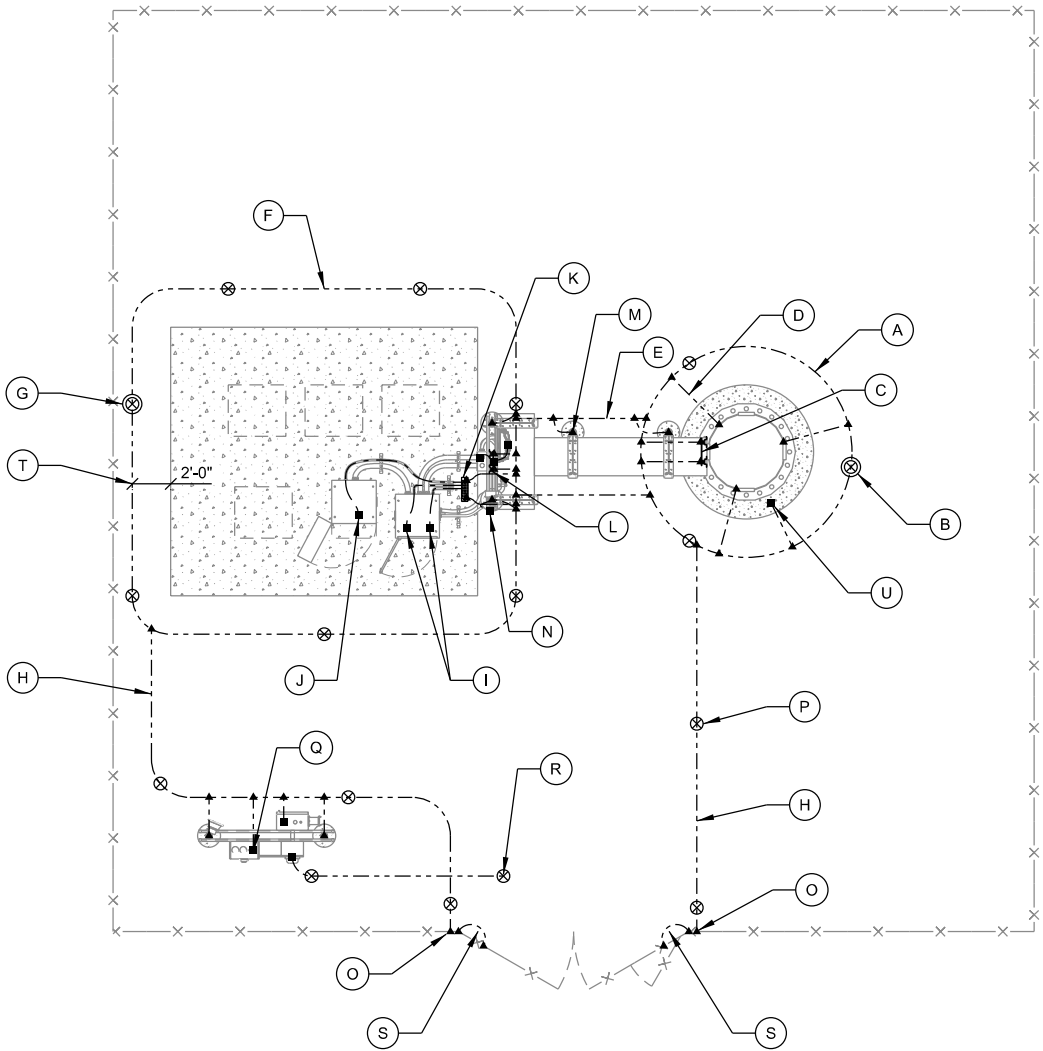
- (A) TOWER GROUND RING, #2 SOLID TINNED COPPER
- (B) TOWER GROUND RING INSPECTION WELL; SEE E-502 FOR DETAIL
- (C) TOWER GROUND BAR (TGB) WITH (2) GROUNDS FROM TGB TO TOWER GROUND RING; SEE E-501 FOR DETAIL
- (D) GROUND LEAD FROM TOWER STEEL TO TOWER GROUND RING (TYP. OF 3); SEE E-501 FOR DETAIL
- (E) GROUND LEAD FROM EQUIPMENT GROUND RING TO TOWER GROUND RING (TYP. OF 2), #2 SOLID TINNED COPPER
- (F) EQUIPMENT GROUND RING, #2 SOLID TINNED COPPER
- (G) EQUIPMENT GROUND RING INSPECTION WELL; SEE E-502 FOR DETAIL
- (H) GROUND LEAD FROM GROUND RING TO FENCE POST; SEE E-502 FOR DETAIL
- (I) LTE EQUIPMENT CABINET GROUNDING: (1) LEAD FROM MASTER GROUND BAR TO GROUND BAR INSIDE RBS CABINET AND (1) LEAD FROM MASTER GROUND BAR TO RBS PLINTH, #2 INSULATED COPPER (TYP.); ROUTE THROUGH NEW PENETRATIONS AND LIQUID-TIGHT CONDUIT FITTINGS THROUGH BACK OF MOUNTING PLINTH
- (J) (1) GROUND LEAD FROM BATTERY CABINET STEEL TO MASTER GROUND BAR, #2 INSULATED COPPER; ROUTE IN LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT BETWEEN BATTERY CABINET AND LTE CABINET AND OUT NEW PENETRATION THROUGH SIDE OF LTE CABINET PLINTH
- (K) MASTER GROUND BAR (MGB) MOUNTED HORIZONTALLY TO CONCRETE PAD ON INSULATORS; (2) GROUNDS FROM MGB TO EQUIPMENT GROUND RING; SEE E-501 FOR DETAIL
- (L) COLLECTOR GROUND BAR (CGB) MOUNTED TO UNISTRUT RACK ON INSULATORS; (2) CGB GROUNDS FROM CGB TO EQUIPMENT GROUND RING; SEE E-501 FOR JUNCTION BOX AND RAYCAP SPD GROUNDING DETAILS
- (M) GROUND LEAD FROM ICE BRIDGE POST TO TO BURIED GROUND RING (TYP.)
- (N) GROUND GPS UNIT TO ICE CANOPY POST
- (O) EXOTHERMIC CONNECTION AT FENCE POST; SEE SHEET E-502 FOR DETAIL
- (P) GROUND ROD (TYP.)
- (Q) GROUND UTILITY RACK CABINETS AND POSTS (TYP.), #2 SOLID TINNED COPPER
- (R) GROUND ELECTRIC METER TO (2) INDEPENDENT GROUND RODS, SPACED 10' O.C. WITH #2 SOLID TINNED COPPER
- (S) GATE GROUND LEAD GROUND LEADS TO GATE POST; SEE E-502 FOR DETAIL
- (T) MAINTAIN 2' SEPARATION BETWEEN GROUND RINGS AND FOUNDATIONS (TYP.)
- (U) TOWER FOUNDATION GROUND, #2 SOLID TINNED COPPER; SEE E-502 FOR DETAIL

NOTES: (THIS SHEET)

1. ALL EXTERIOR GROUNDING SHALL MEET OR EXCEED THE CURRENT NEC AND NFPA 780 CODE.
2. THE GROUNDING SYSTEM & CONDUCTORS SHALL BE INSPECTED PRIOR TO BACK FILLING WITH RESULTS APPROVED BY THE CARRIER. THE SYSTEM SHALL PROVIDE 5 OHM OR LESS RESISTANCE UPON COMPLETION.
3. HIGH COMPRESSION TYPE CONNECTORS SHALL BE USED FOR SECONDARY GROUNDING CONDUCTOR TO MAIN GROUNDING CONDUCTOR CONNECTIONS. AFTER INSPECTION CONNECTIONS SHALL BE WRAPPED WITH ELECTRICAL VINYL TAPE.
4. ALL MECHANICAL CONNECTIONS SHALL INCLUDE ANTI-OXIDANT COMPOUND BETWEEN LUG & CONNECTION POINT. SCRAPE PAINT FROM OBJECT BEING CONNECTED TO. TOUCH UP PAINT ANY EXPOSED METAL AFTER CONNECTION IS INSTALLED.
5. GROUNDING CONDUCTORS SHALL MAINTAIN, TO THE EXTENT PRACTICAL, A HORIZONTAL OR DOWNWARD DIRECTION FREE FROM UP AND DOWN POCKETS. THE RADIUS OF BEND SHALL NOT BE LESS THAN 8" AND THE ANGLE OF ANY BEND SHALL NOT BE SHARPER (LESS) THAN 90°. THE MAXIMUM HORIZONTAL AND VERTICAL SPACING BETWEEN GROUNDING CONDUCTOR (NOT IN CONDUIT) SUPPORTS SHALL NOT EXCEED 4 FT.
7. IF A GROUNDING CONDUCTOR IS INSTALLED IN FERROUS METAL CONDUITS, THE CONDUCTOR SHALL BE BONDED TO THE TOP AND BOTTOM OF THE CONDUIT.
8. ALL NON-INSULATED GROUND LEADS EXTENDING ABOVE GROUND LEVEL SHALL BE ENCASED IN 3/4" PVC & SEALED WITH SILICONE ON BOTH ENDS.
9. ALL CADWELD CONNECTIONS SHALL BE COATED WITH ZINGA TO PREVENT CORROSION.
10. GROUND RINGS & TOP OF RODS SHALL BE INSTALLED AT 30" BELOW FINISHED GRADE.
11. INSTALL 18" x 18" COPPER PLATES IN LIEU OF GROUND RODS WHEN INSTALLING OVER TOWER FOUNDATION OR WHERE DRIVING GROUND RODS IS NOT FEASIBLE. REFER TO GEOTECH REPORT FOR SOIL CONDITIONS.

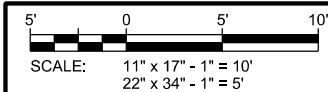
GROUNDING LEGEND: (THIS SHEET)

- ▲ EXOTHERMIC OR UL RATED IRREVERSIBLE CONNECTION
- MECHANICAL CONNECTION
- - - GROUND LEAD
- ⊗ GROUND INSPECTION WELL
- ⊗ COPPER CLAD GROUND ROD, (3/4" DIA. x 10' LONG) SPACE @ 10' O.C. MAX.
- ⊗ COPPER PLATE, (18" x 18" x .032" THK) SPACE @ 10' O.C. MAX.



NOTE:

1. THE PROVIDED GROUNDING PLAN IS NOT SITE SPECIFIC AND IS MEANT TO REPRESENT A TYPICAL GROUNDING CONFIGURATION.



CONSULTANT:

**Edge**  
Consulting Engineers, Inc.  
624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

CLIENT:

**U.S. Cellular**  
U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT, NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

**GROUNDING PLAN**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

SHEET TITLE

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. 0

CHECKED BY	DL
PLOT DATE	4/4/2019
PROJECT NUMBER	18791
SET TYPE	PERMIT CDs
SHEET NUMBER	<b>E-101</b>

KEYNOTES: (THIS SHEET)

- (A) GROUND KIT #6 STRANDED INSULATED JUMPER CONNECTION TO GROUND BAR WITH 2 HOLE LONG BARREL LUG
- (B) FOR SINGLE ANTENNA AT ONE LEVEL OMIT ANTENNA GROUND BAR CONNECT GROUND KIT JUMPER DIRECTLY TO TOWER STEEL WITH UL LISTED BONDING CLAMP
- (C) UL LISTED BONDING CLAMP CABLE TO FLAT METAL BONDING CLAMP
- (D) TOWER GROUND BAR (TGB) INSTALLED ON TOWER (SEE DETAIL TO RIGHT); FOR LATTICE TOWERS, MOUNT TGB DIAGONALLY AT 12" ABOVE ICE BRIDGE FOR EASIER HOOK-UP OF GROUNDING KIT LEADS
- (E) TGB GROUNDS #2 SOLID TINNED COPPER ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE FROM TGB TO TOWER GROUND RING (2) REQ'D
- (F) TOWER STEEL GROUNDS (IF APPLICABLE) #2 SOLID TINNED COPPER ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE FROM TOWER STEEL TO TOWER GROUND RING (3) REQ'D (USE GROUNDING TABS WHEN AVAILABLE)
- (G) COLLECTOR GROUND BAR (CGB) MOUNTED TO UNISTRUT RACK ON INSULATORS; (2) CGB #2 SOLID TINNED COPPER GROUNDS ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE FROM CGB TO EQUIPMENT GROUND RING
- (H) MASTER GROUND BAR (MGB) MOUNTED HORIZONTALLY TO CONCRETE PAD ON INSULATORS; (2) #2 SOLID TINNED COPPER GROUNDS ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE FROM MGB TO EQUIPMENT GROUND RING
- (I) RAYCAP SPD AND JUNCTION BOX TO BE BONDED TO CGB WITH #6 STRANDED GREEN INSULATED
- (J) SECURE GPS TO ICE CANOPY POST WITH UL LISTED PIPE CLAMP; BOND WITH #2 SOLID TINNED COPPER LEAD
- (K) ICE BRIDGE POST GROUND #2 SOLID TINNED COPPER ENCASED IN LIQUID-TIGHT FLEXIBLE NON-METALLIC CONDUIT TO 24" BELOW GRADE
- (L) ICE BRIDGE SECTION GROUNDS #2 STRANDED INSULATED WITH 2 HOLE LONG BARREL ON EACH END (TYP.)
- (M) ICE BRIDGE SECTION TO POST GROUNDS #2 STRANDED INSULATED WITH 2 HOLE LONG BARREL ON SECTION; ORIENT LEAD WITH HIGH SIDE TOWARDS TOWER
- (N) TOWER FOUNDATION GROUND (IF APPLICABLE); SEE E-502 FOR DETAIL

GROUNDING LEGEND: (THIS SHEET)

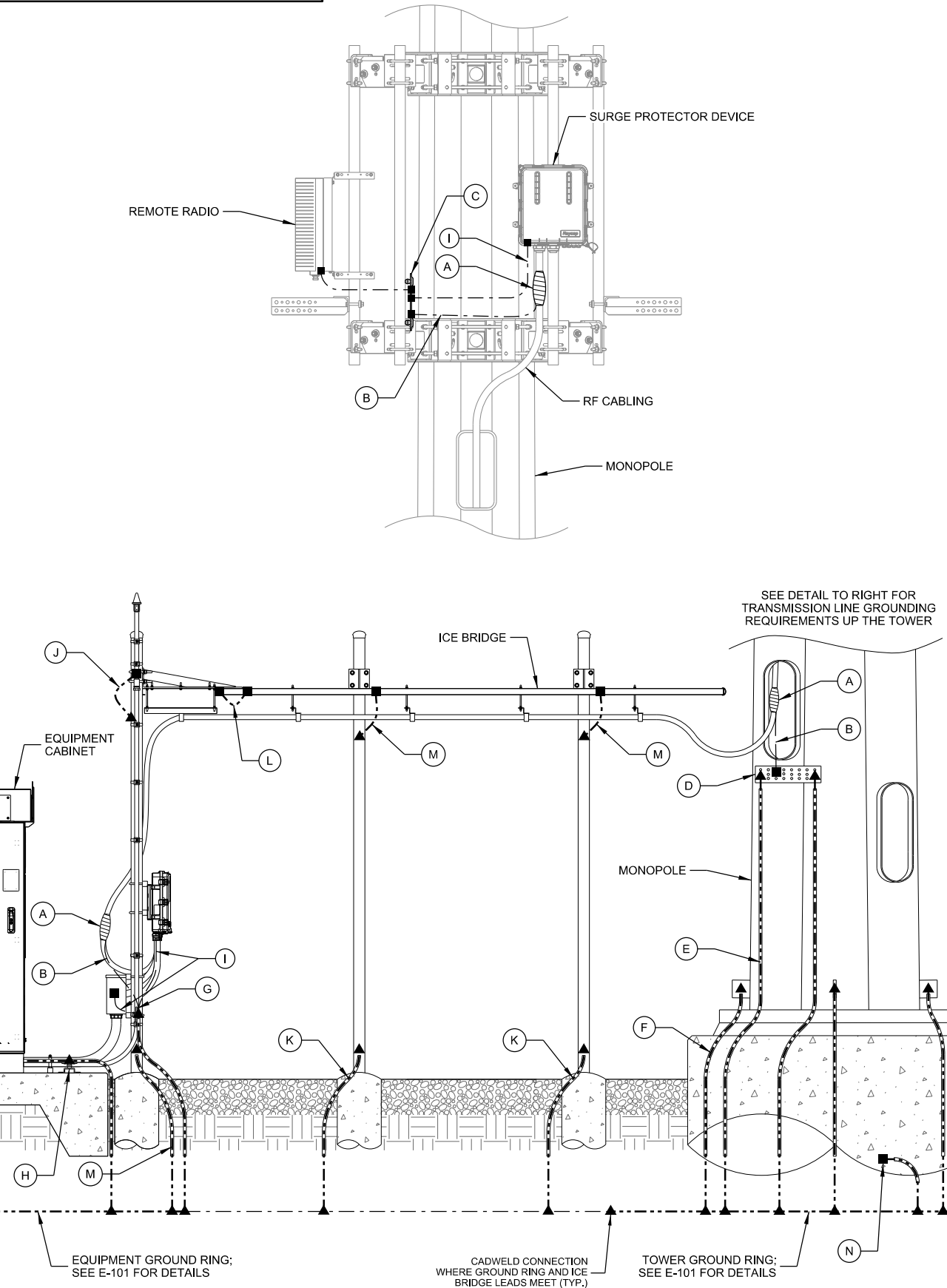
- ▲ EXOTHERMIC OR UL RATED IRREVERSIBLE CONNECTION
- MECHANICAL CONNECTION
- GROUND LEAD

NOTES: (THIS SHEET)

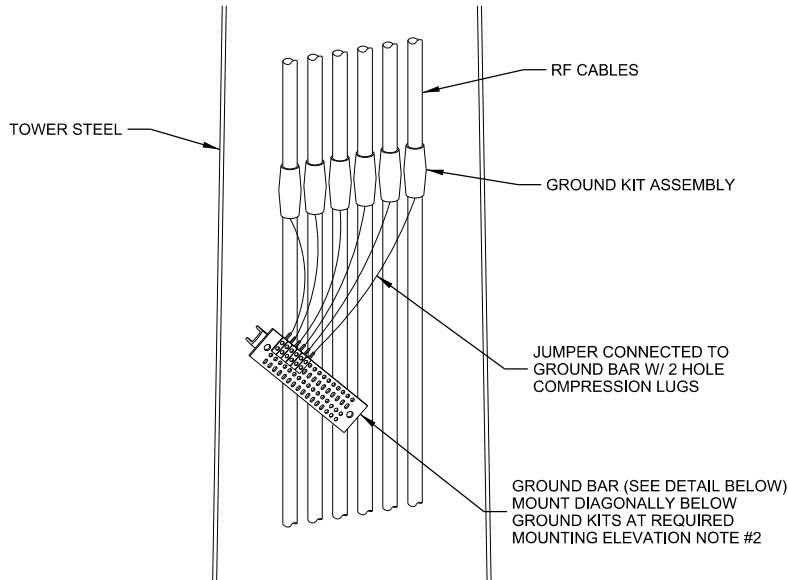
1. ALL BELOW-GRADE CONNECTIONS ARE TO BE EXOTHERMICALLY WELDED A MINIMUM OF 30" BELOW GRADE.
2. ALL LEADS EXTENDING ABOVE GRADE TO BE ENCASED IN 3/4" CONDUIT AND EXTEND A MINIMUM OF 6" ABOVE FINISHED GRADE AND 24" BELOW FINISHED GRADE.
3. COAT ALL EXOTHERMICALLY WELDED CONNECTIONS WITH ZINGA.
4. APPLY ANTI OXIDANT COMPOUND TO ALL MECHANICAL CONNECTIONS.
5. UPPER AND LOWER TOWER GROUND BARS TO BE BONDED DIRECTLY TO TOWER STEEL WITH #2 CONDUCTORS.
6. AIR TERMINAL TO EXTEND 2' ABOVE HIGHEST ANTENNA MIN. ON MAST PIPE MECHANICALLY FASTEN AIR TERMINAL TO MAST PIPE MAST PIPE TO BE MECHANICALLY CONNECTED TO TOWER STEEL

NOTE:

AIR TERMINAL TO EXTEND 2' ABOVE HIGHEST ANTENNA MIN. ON MAST PIPE MECHANICALLY FASTEN AIR TERMINAL TO MAST PIPE MAST PIPE TO BE MECHANICALLY CONNECTED TO TOWER STEEL



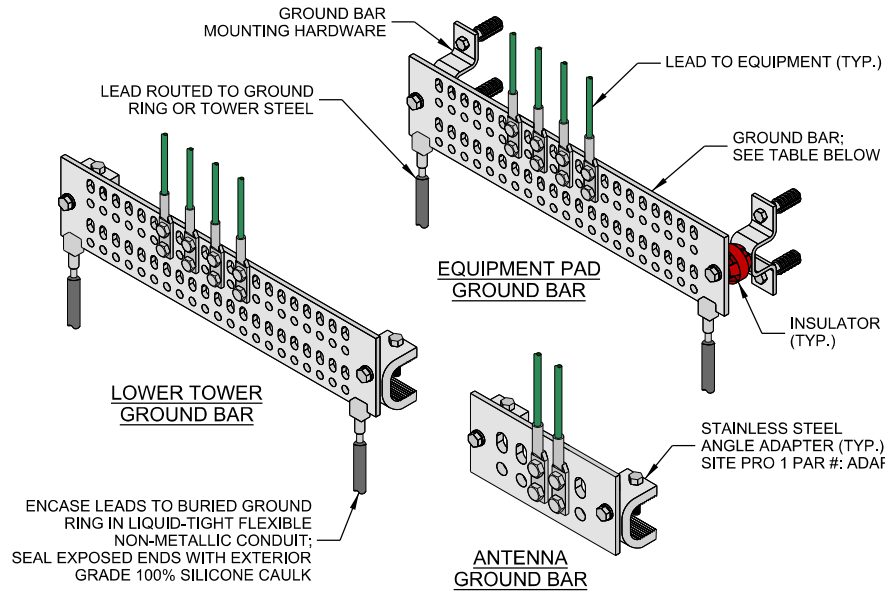
A GROUNDING DETAILS



NOTES:

1. INSTALL GROUND KITS ON EACH TRANSMISSION LINE IN THE FOLLOWING LOCATIONS:  
A. ANTENNA / DISH LEVEL  
B. AT 75 FOOT MAX INTERVALS FROM ANTENNA LEVEL TO BASE OF TOWER  
C. TOWER BASE  
D. COLLECTOR GROUND BAR / GROUND LEVEL
2. INSTALL ANTENNA GROUND BARS AT EACH ANTENNA TIER LEVEL FOR CONNECTION OF MULTIPLE ANTENNAS AT EACH LEVEL. WHEN ONLY ONE ANTENNA IS INSTALLED AT A LEVEL.

B CABLING GROUND KITS



GROUND BAR SCHEDULE:

EQUIPMENT PAD GROUND BAR	1/4" x 4" x 18" GROUND BAR WITH INSULATORS AND BRACKETS; SIZED FOR 42 SETS OF 2-HOLE LUGS SITE PRO PART #: TINMG418U-K OR EQUIVALENT
LOWER TOWER GROUND BAR	1/4" x 4" x 18" GROUND BAR; SIZED FOR 42 SETS OF 2-HOLE LUGS SITE PRO PART #: TINMG418U-K OR EQUIVALENT
ANTENNA GROUND BAR	1/4" x 2" x 6" GROUND BAR SIZED FOR 5 SETS OF 2-HOLE LUGS SITE PRO PART #: TINMG206U OR EQUIVALENT

C GROUND BAR

CONSULTANT:

**Edge**  
Consulting Engineers, Inc.  
624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

CLIENT:

**U.S. Cellular**  
U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT, NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

**GROUNDING DETAILS**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

SHEET TITLE

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. 0

CHECKED BY:

DL

PLOT DATE

4/4/2019

PROJECT NUMBER

18791

SET TYPE

PERMIT CDs

SHEET NUMBER

**E-501**

## A GROUND TRENCH

## **B** POST GROUNDING

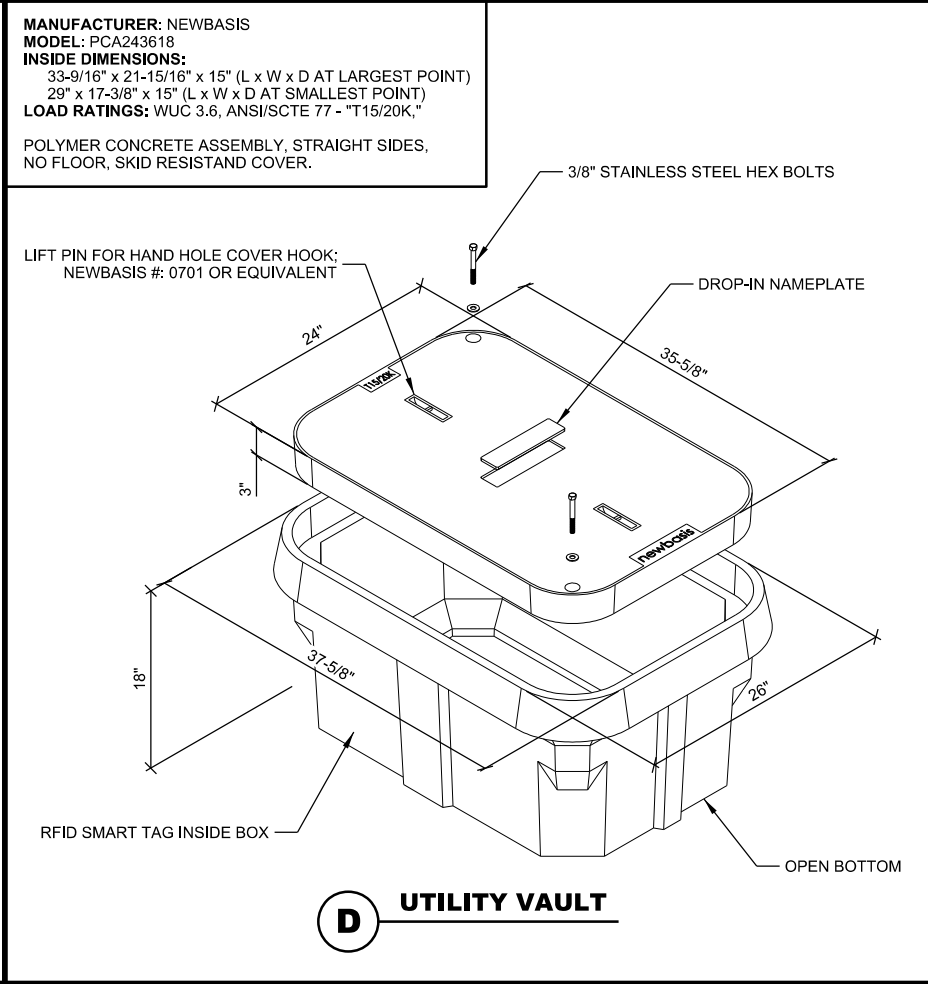
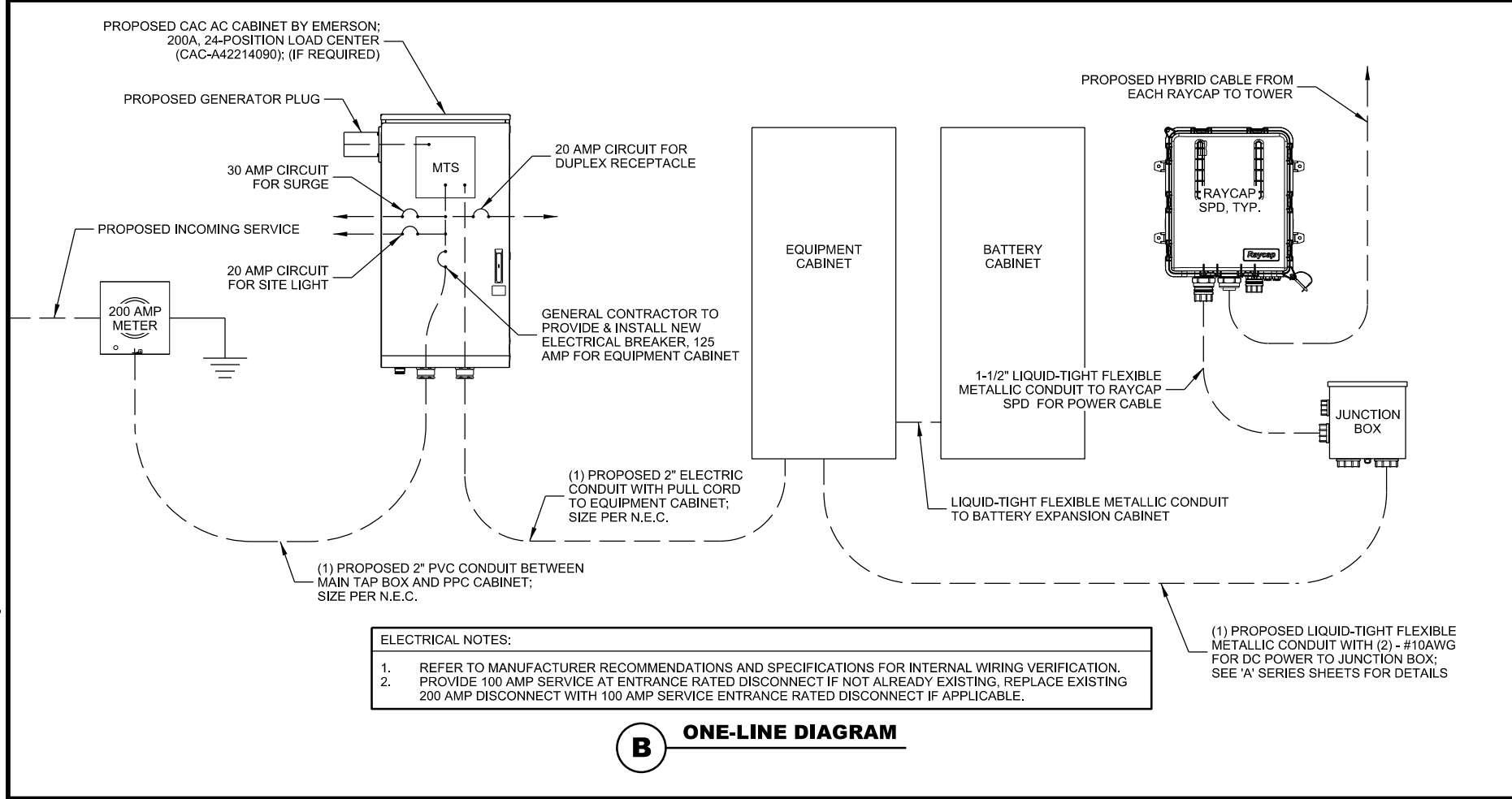
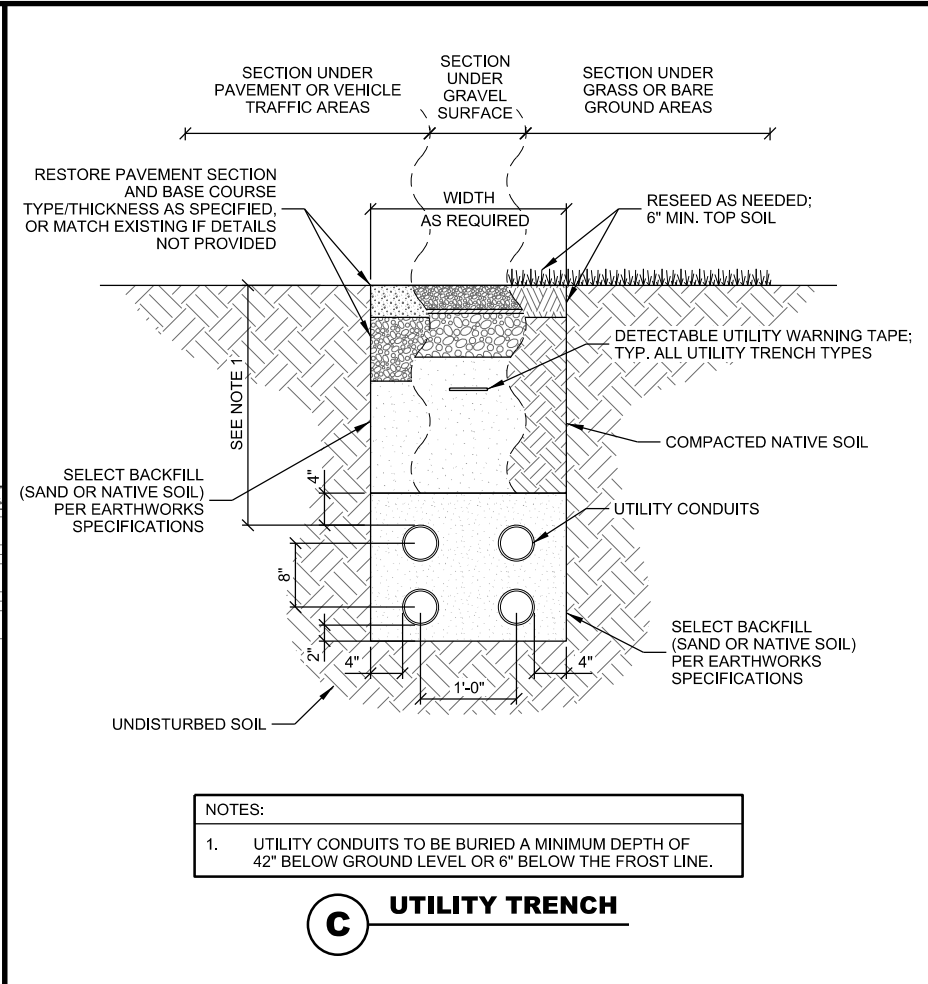
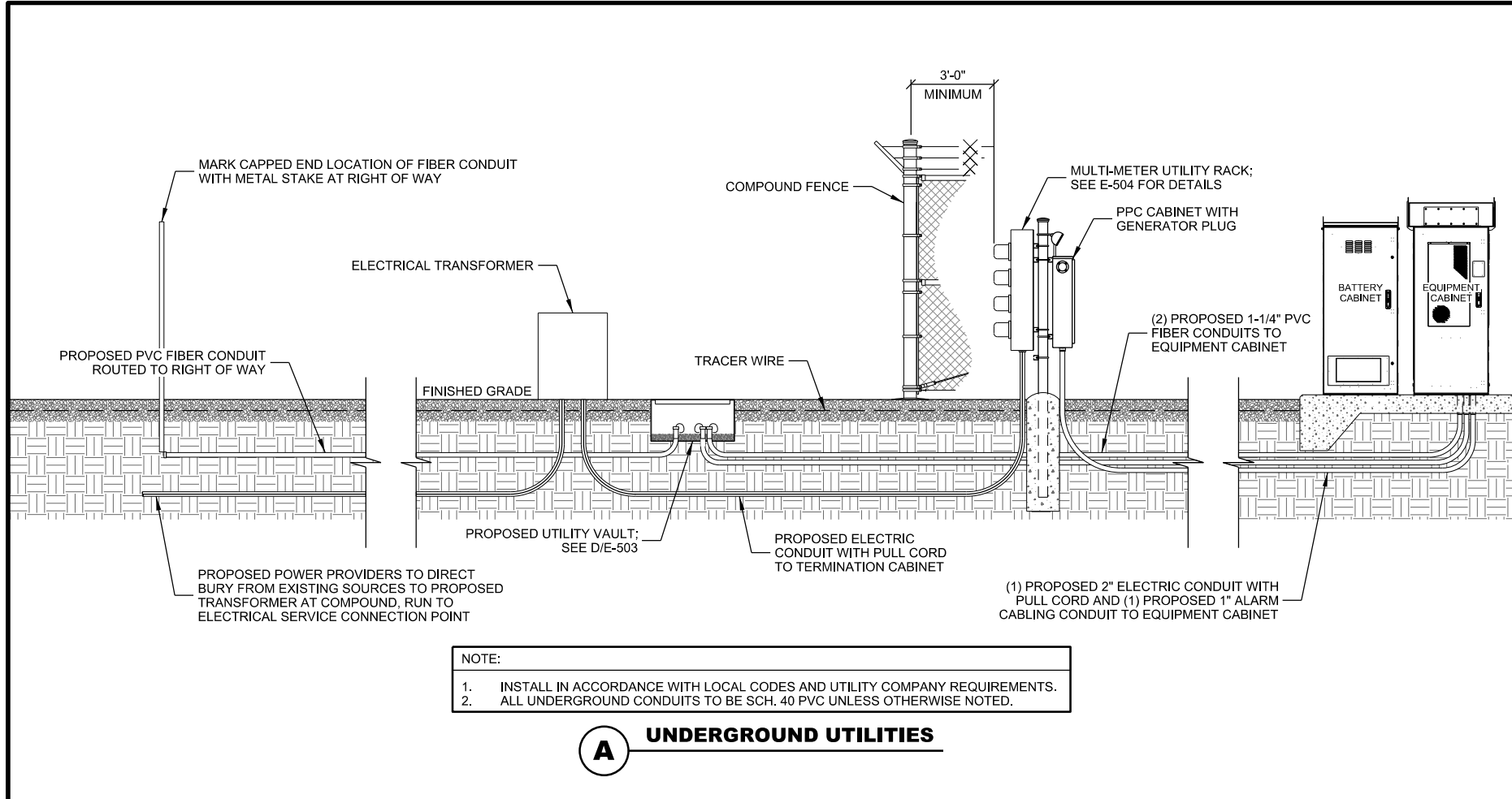
## C INSPECTION WELL

## **D FENCE GATE GROUNDING**

## **E TOWER FOUNDATION GROUNDING**

**THIS SPACE INTENTIONALLY LEFT BLANK**





CONSULTANT:

**Edge**  
Consulting Engineers, Inc.  
624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

CLIENT:

**U.S. Cellular**  
U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT, NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

**UTILITY DETAILS**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

SHEET TITLE:

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. C

CHECKED BY: DL

PLOT DATE: 4/4/2019

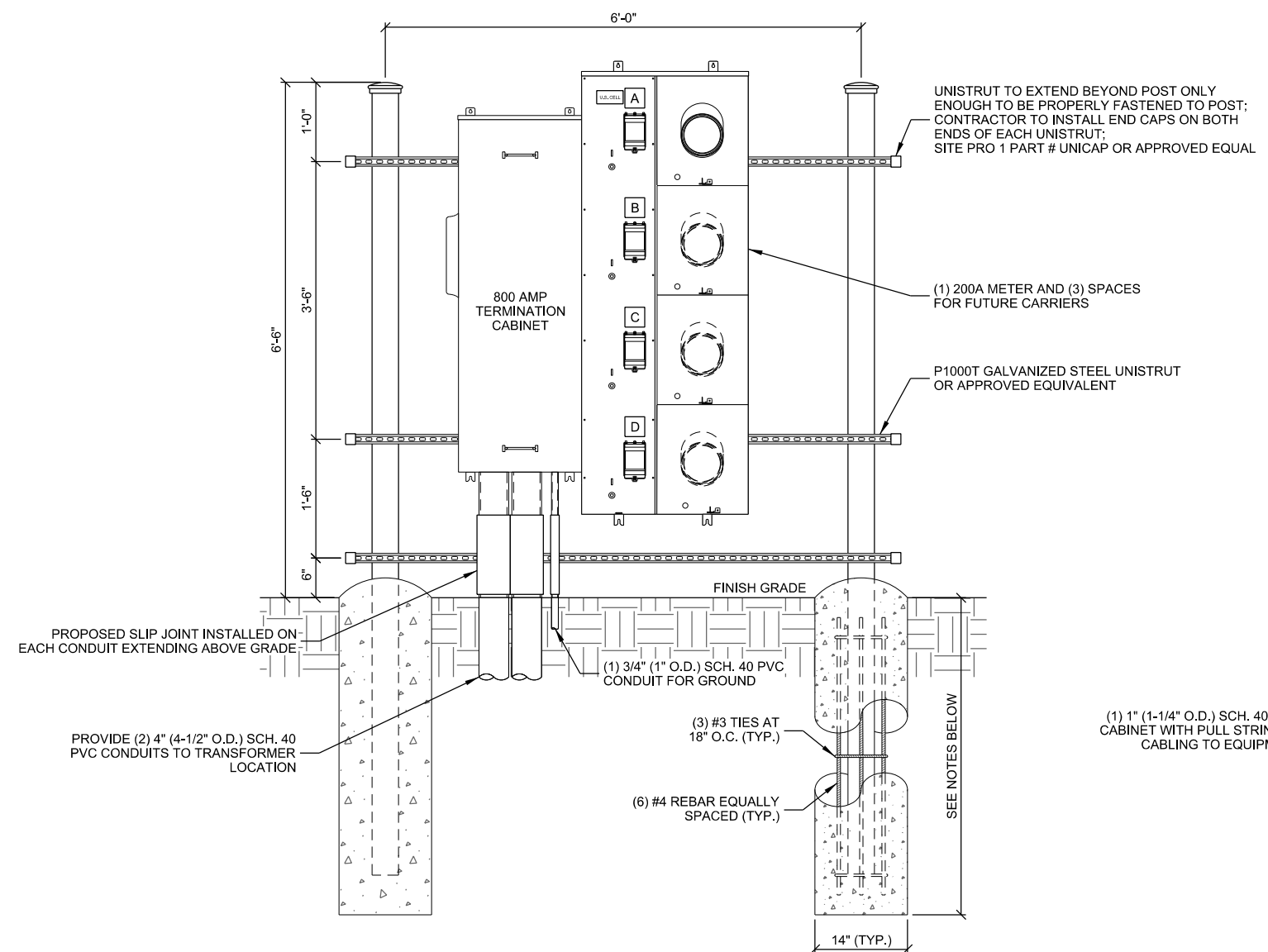
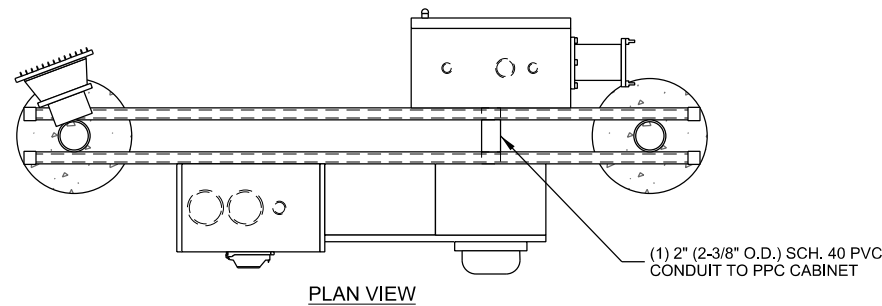
PROJECT NUMBER: 18791

SET TYPE: PERMIT CDs

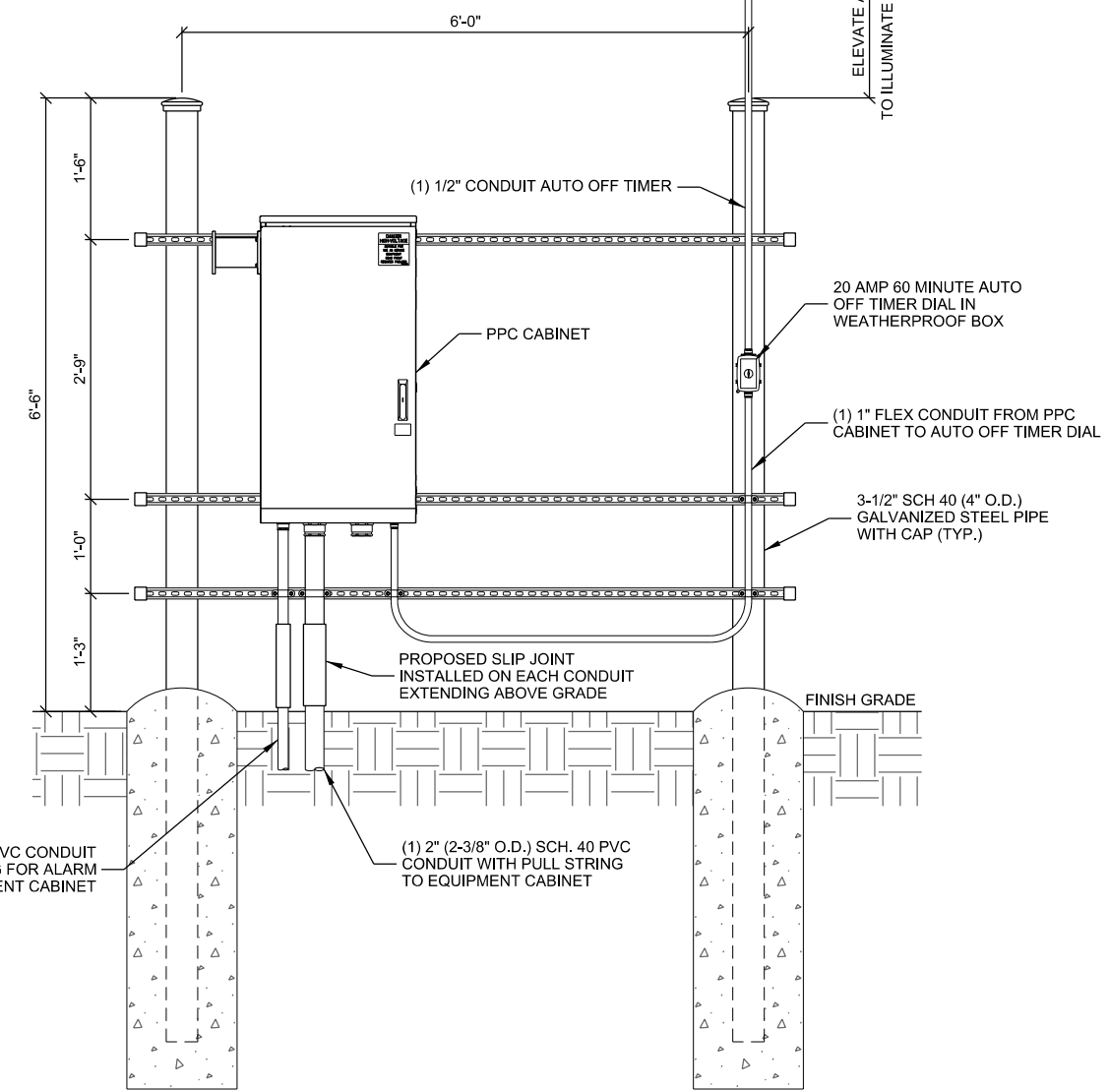
SHEET NUMBER: **E-503**

© EDGE CONSULTING ENGINEERS, INC.





FRONT - ELECTRICAL SIDE



REAR - PPC SIDE

- NOTE:
- CONTRACTOR TO INSTALL PVC CONDUITS FOR SERVICE LATERAL CONNECTION TO UTILITY.
  - CONTRACTOR TO EXTEND CONDUITS UNDERGROUND BEYOND FENCELINE TO TRANSFORMER, CAP ENDS (NO DUCT TAPE ALLOWED) AND STAKE, EQUIP WITH PULL CORD, VERIFY REQUIREMENTS W/UTILITY PROVIDER.
  - CONTRACTOR TO MARK CARRIER METER SLOT @ BREAKER OR SOCKET EXTERIOR.
  - SOD EZ METER PAK, 120/240 VAC 1 PHASE, 3 WIRE OR EQUIV, VERIFY REQUIREMENTS WITH UTILITY PROVIDER.
  - FINAL LAYOUT AND DESIGN DETERMINED BY CONTRACTOR/UTILITY, VERIFY FINAL DESIGN WITH U.S. CELLULAR.
  - CONCRETE FOR PIER TO BE A MINIMUM OF 4,000 PSI AT 28 DAYS.
  - MAINTAIN 3" MINIMUM REBAR COVER IN ALL DIRECTIONS.
  - PIER FOUNDATION DEPTH TO BE A MINIMUM OF 48"; DEPTH TO EXCEED LOCAL FROST DEPTH.

**A MULTI-METER UTILITY RACK**  
SCALE: 11" x 17" - 1/2" = 1'-0"  
22" x 34" - 1" = 1'-0"

CONSULTANT:

**Edge**  
Consulting Engineers, Inc.  
624 WATER STREET  
PRAIRIE DU SAC, WI 53578  
608.644.1449 VOICE  
608.644.1549 FAX  
www.edgeconsult.com

CLIENT:

**U.S. Cellular**  
U.S. CELLULAR - CEDAR RAPIDS  
4201 RIVER CENTER CT, NE SUITE 101  
CEDAR RAPIDS, IA 52402  
PHONE: 319.560.3944

**UTILITY RACK DETAILS**  
**FRANKLIN INDUSTRIAL PARK (#784700)**  
**FRANKLIN, WISCONSIN**

SHEET TITLE

SUBMITTAL:

INT.	DATE:	DESCRIPTION:
TJT	01/29/19	REV. A
TJT	02/21/19	REV. B
LMK	04/04/19	REV. C

CHECKED BY: DL

PLOT DATE: 4/4/2019

PROJECT NUMBER: 18791

SET TYPE: PERMIT CDs

SHEET NUMBER: **E-504**

© EDGE CONSULTING ENGINEERS, INC.

K:\187901\18791\CAD\PLT\CD\E-504.dgn

**CITY OF FRANKLIN**  
**REPORT TO THE PLAN COMMISSION**

**Meeting of June 6, 2019**

**Certified Survey Map**

---

**RECOMMENDATION:** City Development Staff recommends approval of the Certified Survey Map for Wyndham Homes, LLC, subject to the conditions as noted in the attached draft resolution.

---

<b>Project Name:</b>	Wyndham Homes, LLC
<b>Project Location:</b>	3031 West Forest Hill Avenue (Tax Key No: 832-9901-000)
<b>Property Owner:</b>	Wyndham Homes, LLC
<b>Applicant:</b>	Wyndham Homes, LLC
<b>Agent:</b>	Daniel A. Kanitz, Wyndham Homes, LLC
<b>Current Zoning:</b>	R-3, Suburban/Estate Single-Family Residence District
<b>2025 Comprehensive Plan:</b>	Residential
<b>Use of Surrounding Properties:</b>	Single-family residential to the north, south, east and west.
<b>Applicant's Action Requested:</b>	Recommendation of approval of the CSM

---

**Project Description/Analysis:**

On February 22, 2019, the applicant submitted an application for a Certified Survey Map. The property is located at 3031 West Forest Hill Avenue and has one existing residence upon it and is zoned as R-3, as are the surrounding properties. The applicant desires to split the lot one time to create two single-family residential lots, each at 125 feet in width and 108,208 square feet (2.48 acres) in size. Proposed Lot 1 has an existing single-family residence located upon it.

There is existing sanitary sewer along Forest Hill Avenue. There is no public water service available nearby and applicant will need to request the public water main be extended. If denied by the City, a well system would need to be approved through the City Engineering office.

There are deficiencies in the supplied NRPP map, which excludes a delineation of the wetlands noted in the supplied report completed by One Source Consulting, dated February 18, 2019. There are numerous conditions of approval relating to meeting the NRPP requirements of the City of Franklin UDO proposed by staff as conditions of approval in the supplied resolution.

**Staff Recommendation:**

City Development Staff recommends approval of the Certified Survey Map, subject to the conditions as noted in the attached draft resolution.

## RESOLUTION NO. 2019-\_\_\_\_\_

A RESOLUTION CONDITIONALLY APPROVING A 2 LOT CERTIFIED SURVEY MAP, BEING A PART OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 13, TOWNSHIP 5 NORTH, RANGE 21 EAST, IN THE CITY OF FRANKLIN, MILWAUKEE COUNTY, WISCONSIN  
(WYNDHAM HOMES LLC, OWNER)  
(3031 WEST FOREST HILL AVENUE)

---

WHEREAS, the City of Franklin, Wisconsin, having received an application for approval of a certified survey map, such map being a part of the Southeast 1/4 of the Southeast 1/4 of Section 13, Township 5 North, Range 21 East, in the City of Franklin, Milwaukee County, Wisconsin, more specifically, of the property located at 3031 West Forest Hill Avenue, bearing Tax Key No. 832-9901-000, Wyndham Homes LLC, applicant; said certified survey map having been reviewed by the City of Franklin Plan Commission and the Plan Commission having recommended approval thereof pursuant to certain conditions; and

WHEREAS, the Common Council having reviewed such application and City of Franklin Plan Commission recommendation, and the Common Council having determined that such proposed certified survey map is appropriate for approval pursuant to law upon certain conditions.

NOW, THEREFORE, BE IT RESOLVED, by the Mayor and Common Council of the City of Franklin, Wisconsin, that the Certified Survey Map submitted by Wyndham Homes LLC, as described above, be and the same is hereby approved, subject to the following conditions:

1. That any and all objections made and corrections required by the City of Franklin, by Milwaukee County, and by any and all reviewing agencies, shall be satisfied and made by the applicant, prior to recording.
2. That all land development and building construction permitted or resulting under this Resolution shall be subject to impact fees imposed pursuant to §92-9. of the Municipal Code or development fees imposed pursuant to §15-5.0110 of the Unified Development Ordinance, both such provisions being applicable to the development and building permitted or resulting hereunder as it occurs from time to time, as such Code and Ordinance provisions may be amended from time to time.
3. Each and any easement shown on the Certified Survey Map shall be the subject of separate written grant of easement instrument, in such form as provided within the *City of Franklin Design Standards and Construction Specifications* and such form

WYNDHAM HOMES LLC – CERTIFIED SURVEY MAP  
RESOLUTION NO. 2019-\_\_\_\_\_

Page 2

and content as may otherwise be reasonably required by the City Engineer or designee to further and secure the purpose of the easement, and all being subject to the approval of the Common Council, prior to the recording of the Certified Survey Map.

4. Wyndham Homes LLC, successors and assigns, and any developer of the Wyndham Homes LLC 2 lot certified survey map project, shall pay to the City of Franklin the amount of all development compliance, inspection and review fees incurred by the City of Franklin, including fees of consults to the City of Franklin, within 30 days of invoice for same. Any violation of this provision shall be a violation of the Unified Development Ordinance, and subject to §15-9.0502 thereof and §1-19. of the Municipal Code, the general penalties and remedies provisions, as amended from time to time.
5. The approval granted hereunder is conditional upon Wyndham Homes LLC and the 2 lot certified survey map project for the property located at 3031 West Forest Hill Avenue: (i) being in compliance with all applicable governmental laws, statutes, rules, codes, orders and ordinances; and (ii) obtaining all other governmental approvals, permits, licenses and the like, required for and applicable to the project to be developed and as presented for this approval.
6. Applicant shall submit to the Community Development Department a revised Natural Resource Protection Plan Map, and labeled as such, and meeting requirements of the UDO, showing wetland areas mentioned in the Natural Resource Protection Plan along the roadway, prior to recording of the CSM.
7. Applicant shall show all wetlands, wetland buffers, wetland setbacks on the face of the CSM as mentioned in the NRPP report dated February 18, 2019 from One Source Consulting, and in the office of the Community Development Department prior to recording of the CSM.
8. Applicant shall supply a letter from the Wisconsin Department of Natural Resources and the United States Army Corps of Engineers to the City Development Department stating if wetlands are present within the property limits of the proposed CSM and under their jurisdiction and if they are under their jurisdiction, then wetlands would need to be delineated on the face of the CSM, per the UDO requirements, prior to recording of the CSM.
9. Applicant shall apply for a Natural Resource Special Exception prior to any new or altered driveway installations which may go through any delineated wetlands prior to building permit issuance of a new single-family residence.



WYNDHAM HOMES LLC – CERTIFIED SURVEY MAP  
RESOLUTION NO. 2019-\_\_\_\_\_

Page 3

10. Applicant shall submit to the Community Development Department a revised Natural Resource Protection Plan Map showing qualified woodland areas mentioned in the Natural Resource Protection Plan along the rear of the property, or, if the woodlands present on the property do not qualify for a mature or young woodland, a statement from a certified Arborist, or equivalent, shall attest in written format how the woodlands do not qualify due to not meeting the definitions of young or mature woodlands, prior to recording of the CSM.
11. Applicant shall submit to the Community Development Department a Conservation Easement document to include any applicable Natural Resource Protection elements including, but not limited to, wetlands and woodlands which qualify per the UDO, prior to recording of the CSM.
12. Applicant shall show on the face of the CSM language that a new single-family residence may be subject to a greater front yard setback in areas where greater than required front yard setback is required per the City of Franklin Unified Development Ordinance prior to recording of the CSM.
13. [other conditions, etc.]

BE IT FURTHER RESOLVED, that the Certified Survey Map, certified by owner, Wyndham Homes LLC, be and the same is hereby rejected without final approval and without any further action of the Common Council, if any one, or more than one of the above conditions is or are not met and satisfied within 180 days from the date of adoption of this Resolution.

BE IT FINALLY RESOLVED, that upon the satisfaction of the above conditions within 180 days of the date of adoption of this Resolution, same constituting final approval, and pursuant to all applicable statutes and ordinances and lawful requirements and procedures for the recording of a certified survey map, the City Clerk is hereby directed to obtain the recording of the Certified Survey Map, certified by owner, Wyndham Homes LLC, with the Office of the Register of Deeds for Milwaukee County.

WYNDHAM HOMES LLC – CERTIFIED SURVEY MAP  
RESOLUTION NO. 2019-\_\_\_\_\_

Page 4

Introduced at a regular meeting of the Common Council of the City of Franklin this  
\_\_\_\_\_ day of \_\_\_\_\_, 2019.

Passed and adopted at a regular meeting of the Common Council of the City of  
Franklin this \_\_\_\_\_ day of \_\_\_\_\_, 2019.

APPROVED:

\_\_\_\_\_  
Stephen R. Olson, Mayor

ATTEST:

\_\_\_\_\_  
Sandra L. Wesolowski, City Clerk

AYES \_\_\_\_\_ NOES \_\_\_\_\_ ABSENT \_\_\_\_\_

## Benjamin Kohout

---

**From:** Benjamin Kohout  
**Sent:** Tuesday, May 28, 2019 10:33 AM  
**To:** Gail Olsen; Joel Dietl  
**Subject:** FW: 3031 W. Forest Hill - Wyndham Homes CSM for June 6 agenda

FYI.

**Ben Kohout, AICP**  
Principal Planner  
City of Franklin  
9229 W. Loomis Rd.  
Franklin, WI 53132  
O: (414) 425-4024  
[bkohout@franklinwi.gov](mailto:bkohout@franklinwi.gov)  
[City of Franklin Planning Website](#)



**From:** Wyndham Homes <[wyndhamhomeswi@gmail.com](mailto:wyndhamhomeswi@gmail.com)>  
**Sent:** Tuesday, May 28, 2019 10:28 AM  
**To:** Benjamin Kohout <[BKohout@franklinwi.gov](mailto:BKohout@franklinwi.gov)>  
**Subject:** 3031 W. Forest Hill

Ben  
We agree to your terms and conditions that need to be met and items that need further evaluations that will take time to complete.  
I am working with DNR for Culverts, I am working with Arborist to prepare woodland survey site field report.

12 copies dropped off Friday for June 6 Planning Commission meeting

Dan Kanitz  
Wyndham Homes

## **City of Franklin**

### **Department of City Development**

Date: April 26, 2019

To: Wyndham Homes, LLC

From: City Development Staff

RE: Wyndham Homes, LLC Certified Survey Map – Staff Comments

---

Please be advised that City Staff has reviewed the above application for the property located at 3031 West Forest Hill Avenue. Department comments are as follows for the Certified Survey Map Application submitted by Wyndham Homes, LLC and date stamped by the City of Franklin on February 22, 2019.

### **Unified Development Ordinance (UDO) Requirements**

#### **General**

1. There is a wooded area at the rear of the subject property, which includes a large wetland according to the 2005 Wisconsin Wetland Inventory. Attached, please find a map of the property identifying the boundary of the wetland according to the 2005 Wisconsin Wetland Inventory. A Natural Resource Protection Plan including a field delineation conducted by a qualified environmental consultant will be required to determine whether or not a wetland or woodland, in accordance with Division 15-4.0100 of the UDO, exist on the property.

#### **Certified Survey Map**

2. Please graphically depict all required wetland buffers and wetland setbacks per Section 15-7.0702-B of the UDO.
3. Please remember to indicate all dates of revision per Section 15-7.0702-H of the UDO.
4. Please graphically indicate the location of any conservation easements per Section 15-7.0702-P of the UDO.
5. Please submit a Natural Resource Protection Plan (NRPP) as required by Section 15-7.0702-Q, and Section 15-9.0309-D of the UDO. The NRPP shall meet the requirements of Division 17-7.0200 of the UDO.

#### **Natural Resource Protection Plan**

1. Please indicate the proposed name of the development, project, Certified Survey Map, subdivision plat, or condominium per Section 15-7.0201-A of the UDO.
2. Please indicate the location of the proposed development, project, Certified Survey Map, subdivision plat, or condominium per Section 15-7.0201-B of the UDO.



3. Please indicate the names, address and telephone number of the owner per Section 15-7.0201-C of the UDO.
4. Please include the date of the Natural Resource Plan submittal and all applicable revision dates per Section 15-7.0201-D of the UDO.
5. Please show the site boundary line of the site with dimensions using a solid line. Also, indicate the total land area encompassed by the site per Section 15-7.0201-E of the UDO.
6. Please show the location of all proposed lot lines, right-of-way lines and easements per Section 15-7.0201-F of the UDO.
7. Please show the location, ownership, widths, and names of all existing and previously platted streets, right-of-ways, parks, and other public or open spaces location within or adjacent to the subject property per Section 15-7.0201-G of the UDO.
8. Please show the location and dimensions of all easements and neighboring property boundary lines per Section 15-7.0201-H of the UDO.
9. Per Section 15-7.0201-I of the UDO, please provide the location and extent of existing natural resource features as defined by Divisions 15-4.0100 and 15-11.0100.
10. Please graphically and numerically depict those natural resource features that will be disturbed and those that will be preserved per Section 15-7.0201-J of the UDO.
11. Per Section 15-7.0201-K of the UDO, please provide a graphic illustration and notes relating those natural resource features, which are to be preserved, will actually be preserved in perpetuity using conservation easements, deed restrictions, protective covenants, etc.
12. Please provide a drawing legend containing the scale of the drawing, date of preparation, north arrow, and existing and proposed contours (two foot intervals) per Section 15-7.0201-L of the UDO.
13. Please reduce the sheet size for the Natural Resource Protection Plan to a size less than or equal to the site plan per Section 15-7.0201-M of the UDO.

## **Staff Recommendations**

### **Certified Survey Map**

14. Please indicate the owners and existing zoning of the adjacent properties.: R-3 Suburban/Estate Single-Family Residence District

### **Natural Resource Protection Plan (NRPP)**

15. The applicant shall indicate all Natural Resource Features not impacted by development in Conservation Easements. Please provide Conservation Easement Documents and Exhibits for City Staff review. Attached, please find the City's Conservation Easement template.
16. Please clarify through the assured wetland delineator, Dave Meyer, if there are other wetlands or other areas of natural resources on the property other than the referenced roadside ditch on page one (NRPP dated February 18, 2019 from One Source Consulting).

### **Other**

17. Please submit a lot coverage calculation for Lot 1 of the proposed Certified Survey Map to prove the newly created lot will be in compliance with the 15% maximum lot coverage (maximum percent of lot area) of the R-3 District.
18. It appears at one time there was a small accessory structure located along the south lot line of the proposed Lot 1. Has this accessory structure been removed? If not, the shed would need to be permitted or razed along with the existing residence, as zoning requirements do not permit a stand-alone accessory structure on R zoned properties without a residence. Contact the Building Inspections office at 414-425-0084 with this requirement.
19. Please note a new single-family residence on Lot 2 may be subject to Section 15-2.0203-B Determination of Average Front Yard Setback in Areas Where Greater than Required Front Yard Setback is Provided, of the UDO.

### **Engineering Staff Comments**

20. Please see the attached Engineering Department comments.

### **Fire Department Staff Comments**

21. The Fire Department has no concerns with the proposed lot division.

### **Police Department Staff Comments**

22. The Franklin Police Department has no concerns with reference to the application for a Certified Survey Map to divide an existing lot into two separate lots. The location is 8473 S. 47<sup>th</sup> St. Lot 1 will be 1.14 acres, and lot 2 will be .98 acres.

### **Milwaukee County Comments**

23. Please see the attached comment from the Milwaukee County Register of Deeds Office.

Planning Department  
9229 West Loomis Road  
Franklin, Wisconsin 53132  
Email: [generalplanning@franklinwi.gov](mailto:generalplanning@franklinwi.gov)

Franklin

FEB 22 2019

City Development



City of Franklin

Phone: (414) 425-4024  
Fax: (414) 427-7691  
Web Site: [www.franklinwi.gov](http://www.franklinwi.gov)

Date of Application: \_\_\_\_\_

## CERTIFIED SURVEY MAP (CSM) APPLICATION

Complete, accurate and specific information must be entered. Please Print.

### Applicant (Full Legal Name[s]):

Name: Wyndham Homes LLC  
Company: Wyndham Homes  
Mailing Address: 5665 S. 108th St.  
City / State: HALES CORNERS, WI Zip: 53130  
Phone: 414 881 2707  
Email Address: wyndhamhomeswi@gmail.com

### Applicant is Represented by: (contact person)(Full Legal Name[s])

Name: Daniel A. Kanitz  
Company: Wyndham Homes  
Mailing Address: 5665 S. 108th St.  
City / State: HALES CORNERS, WI Zip: 53130  
Phone: 414 881 2707  
Email Address: wyndhamhomeswi@gmail.com

### Project Property Information:

Property Address: 3031 W. FOREST HILL AVE  
Property Owner(s): Wyndham Homes

Tax Key Nos: 832 9901 000

Mailing Address: 5665 S. 108th St.  
City / State: HALES CORNERS WI Zip: 53130  
Email Address: wyndhamhomeswi@gmail.com

Existing Zoning: R-3 suburban/estate single family  
Existing Use: R-3 suburban/estate single family  
Proposed Use: R-3 suburban/estate single family  
CMP Land Use Identification: \_\_\_\_\_

\*The 2025 Comprehensive Master Plan Future Land Use Map is available at: <http://www.franklinwi.gov/Home/Resources/Documents/Maps.htm>

Certified Survey Maps shall be prepared as provided in § 236.34 (1m) (c) Wis. Stats. and Division 15-7.0700 of the Unified Development Ordinance.

### Certified Survey Map submittals for review must include and be accompanied by the following:

- ☒ Milwaukee County Review Fee, payable to Milwaukee County Register of Deeds: \$75
  - ☒ Two (2) original map copies for Milwaukee County review, prepared at 8-1/2" wide by 14" long on durable white paper.
- ☒ This Application form accurately completed with original signature(s). Facsimiles and copies will not be accepted.
- ☒ Application Filing Fee, payable to City of Franklin: \$1,500
- ☒ Seven (7) complete sets of Application materials, for City of Franklin review to include:
  - ☐ Project Summary: a written detailed description of the project: One (1) original and six (6) copies
  - ☐ Map Copies: One (1) original map copy and six (6) map copies prepared at 8-1/2" wide by 14" long and must be clearly legible.
- ☒ As may be required, seven (7) copies of a "Natural Resource Protection Plan and "Landscape Plan" for any landscape bufferyard easement areas.
- ☐ If applicable, three (3) copies of the Natural Resource Protection report (see Division 15-9.0309D of the UDO).
- ☐ If applicable, one copy of the Site Intensity and Capacity Calculations (see Division 15-3.0500 of the UDO).
- ☐ Email (or CD ROM) with all plans and submittal materials in Adobe PDF. (May be waived by City Planner.)

- Upon receipt of a complete submittal, staff review will be conducted within ten business days.
- All Certified Survey Map requests require Plan Commission review and Common Council approval.
- All Certified Survey Map requests shall comply with Chapter 236 of the Wisconsin State Statutes.

The applicant and property owner(s) hereby certify that: (1) all statements and other information submitted as part of this application are true and correct to the best of applicant's and property owner(s)' knowledge; (2) the applicant and property owner(s) has/have read and understand all information in this application; and (3) the applicant and property owner(s) agree that any approvals based on representations made by them in this Application and its submittal, and any subsequently issued building permits or other type of permits, may be revoked without notice if there is a breach of such representation(s) or any condition(s) of approval. By execution of this application, the property owner(s) authorize the City of Franklin and/or its agents to enter upon the subject property(ies) between the hours of 7:00 a.m. and 7:00 p.m. daily for the purpose of inspection while the application is under review. The property owner(s) grant this authorization even if the property has been posted against trespassing pursuant to Wis. Stat. §943.13.

(The applicant's signature must be from a Managing Member if the business is an LLC, or from the President or Vice President if the business is a corporation. A signed applicant's authorization letter may be provided in lieu of the applicant's signature below, and a signed property owner's authorization letter may be provided in lieu of the property owner's signature[s] below. If more than one, all of the owners of the property must sign this Application).

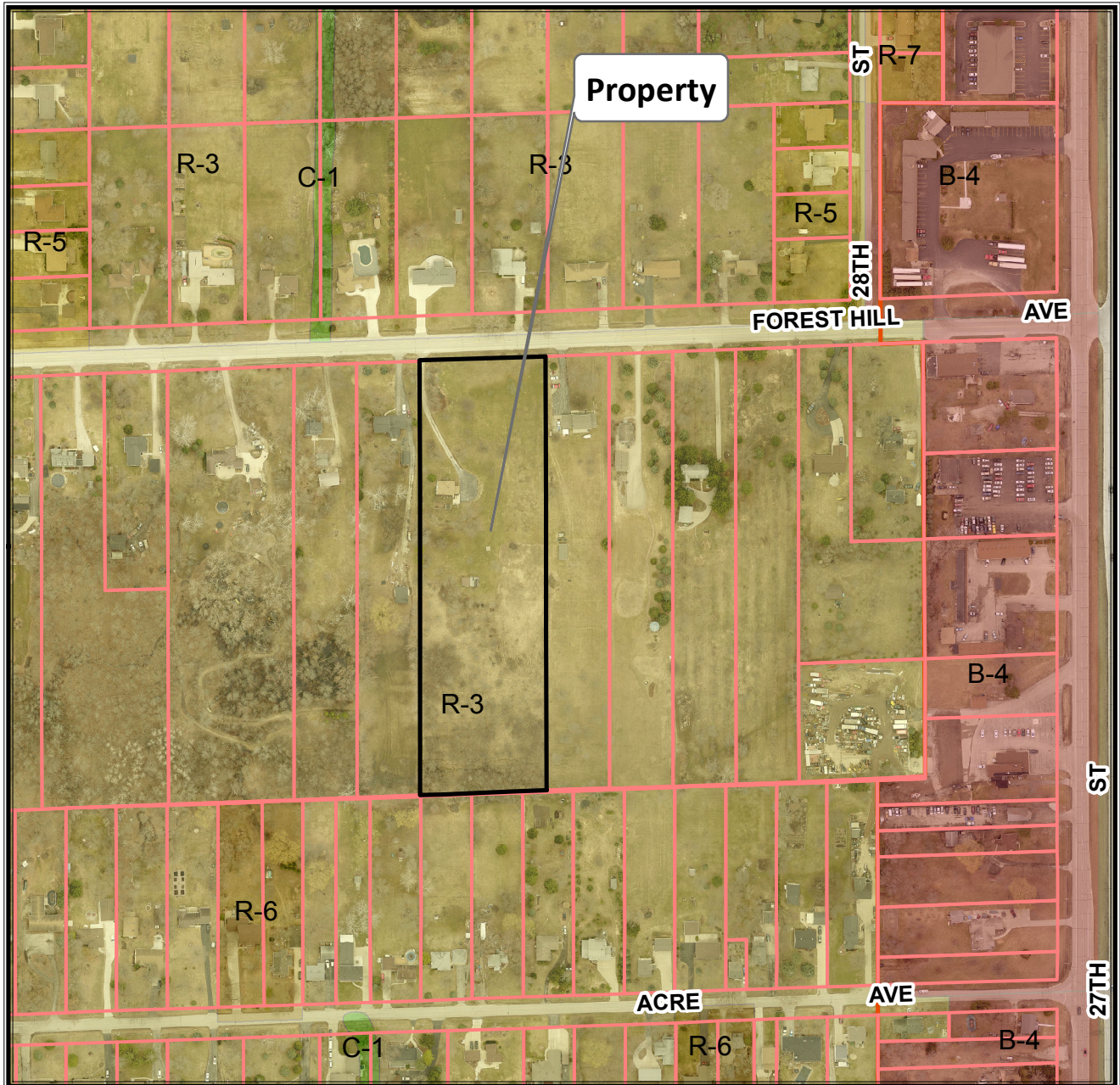
Wyndham Homes LLC  
Signature - Property Owner: Daniel A. Kanitz member wyndhamhomes LLC  
Name & Title (PRINT): Daniel A. Kanitz Date: 2-20-2019  
Signature - Property Owner: DANIEL A. KANITZ  
Name & Title (PRINT): DANIEL A. KANITZ Date: 2-20-2019

Daniel A. Kanitz  
Signature - Applicant: DANIEL A. KANITZ  
Name & Title (PRINT): DANIEL A. KANITZ Date: 2-20-2019  
Signature - Applicant's Representative: \_\_\_\_\_  
Name & Title (PRINT): \_\_\_\_\_ Date: \_\_\_\_\_





3031 W. Forest Hill Ave.  
TKN 832 9901 000



**Planning Department**  
**(414) 425-4024**

0 190 380 760 Feet

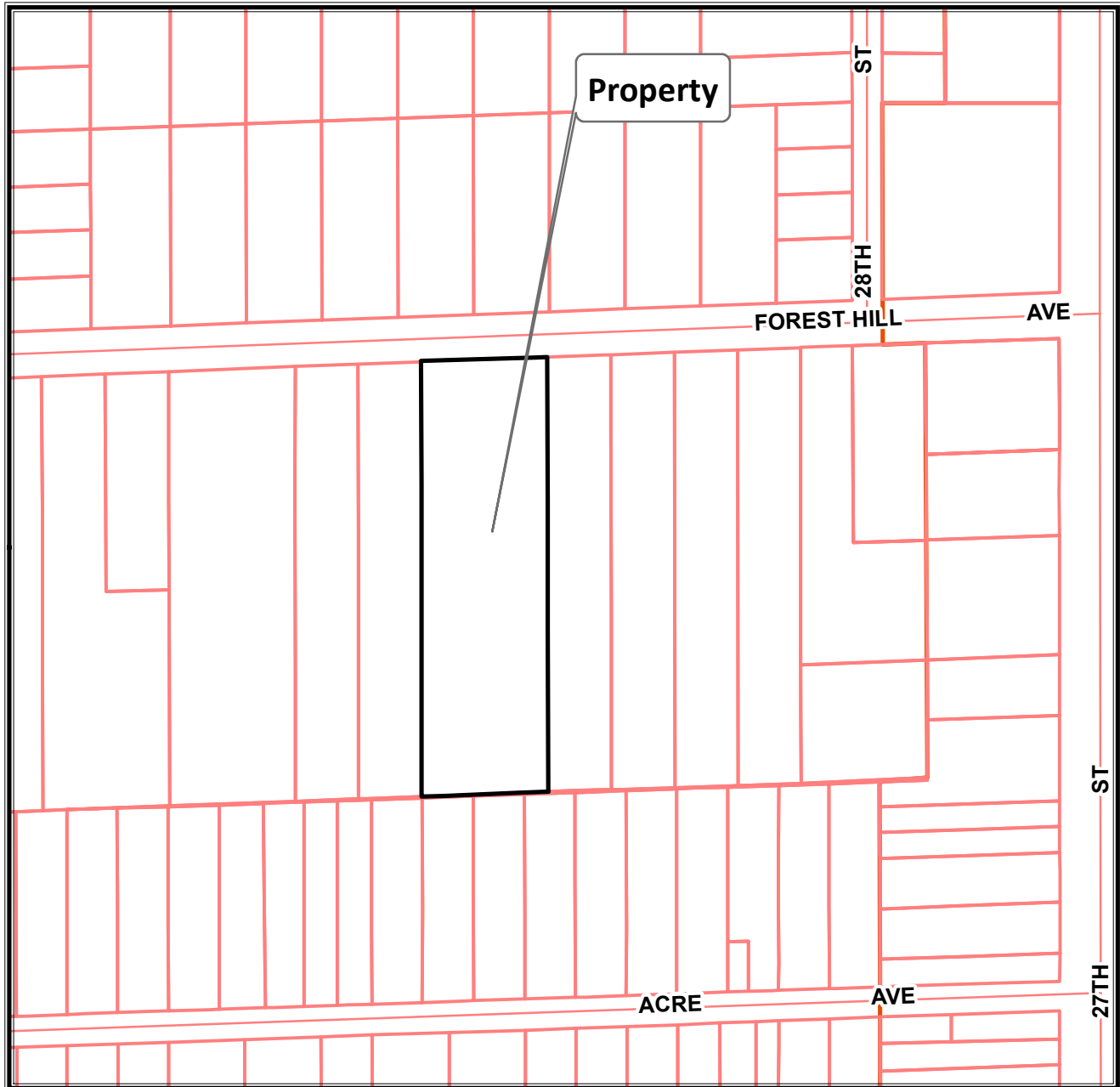
*This map shows the approximate relative location of property boundaries but was not prepared by a professional land surveyor. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering, or surveying purposes.*



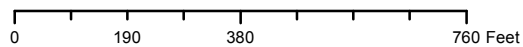




3031 W. Forest Hill Ave.  
TKN 832 9901 000



**Planning Department**  
**(414) 425-4024**



*This map shows the approximate relative location of property boundaries but was not prepared by a professional land surveyor. This map is provided for informational purposes only and may not be sufficient or appropriate for legal, engineering, or surveying purposes.*





Construction Minded | Civil Engineers | Land Surveyors

19435 W. CAPITOL DRIVE . SUITE L05 . BROOKFIELD, WI . 53045

PHONE: (262) 781-9005 [www.onesourceconsult.com](http://www.onesourceconsult.com)

## City of Franklin - Natural Resource Protection Plan for 3031 W. Forest Hill Ave.

February 18, 2019

Wyndham Homes is proposing two single family residential homes at 3031 W. Forest Hill Avenue in the City of Franklin. The development is located on a 4.96 acre parcel on the south side of W. Forest Hill Avenue and west of S. 27<sup>th</sup> Street (SW 1/4 of the SE 1/4 of Section 13, T5N R21 E). A study area was developed and extends not less than 50 feet beyond the planned disturbance limits associated with the construction of two single family homes with associated driveways and site grading.

There is one wetland within the study area that is associated with the roadside ditch running along the south side of W. Forest Hill Avenue across the width of the property. The wetlands were field delineated by Dave Meyer, a WDNR assured delineator. No other natural resources were identified within the study area by Dave Meyer, Wetland and Waterway Consulting.



Photograph 1 (Sept 2018): Looking north from W. Forest Hill Ave.



Photograph 1 (Sept 2018): Looking north from W. Forest Hill Ave.

#### NATURAL RESOURCE PROTECTION PLAN

A wetland buffer of 30' and a wetland setback of 50' will be maintained to preserve the wetland ditch as shown on the Plat of Survey. The total area of wetland setback area is 0.29 acres.

A wetland impact of 60 square feet for installation of each driveway culvert as required by the City of Franklin for access to the properties is anticipated. The total wetland impact will not exceed 120 square feet. This impact will occur within the study area, but outside of the parcel boundary within the W. Forest Hill Avenue right-of-way.

A wetland buffer impact of 1,500 square feet for the installation of each driveway is anticipated. The total wetland buffer impact will not exceed 3,000 square feet.

The natural resources will be protected with an increased front setback of 50 feet. No other permanent protection measures are proposed since the wetland is located within the City of Franklin's right-of-way for W. Forest Hill Avenue.

#### MITIGATION

For this residential development, the applicant will apply for a special exception for wetland disturbance and wetland buffer disturbance with no proposed mitigation for the wetland ditch impacts.

#### SITE INTENSITY SUMMARY

In accordance with Section 15-3.0504 the "Site Intensity and Capacity for Residential Uses", the Maximum Number of Permitted Development Units for the parcel is 13 residential dwelling units. There are 0.29 acres of natural resource features which have been designated for protection.

#### ATTACHMENTS:

- Natural Resource Protection Plan Checklist
- Plat of Survey with Natural Resource Features
- Wetland Delineation Report Dated February 2, 2019

This natural resource protection plan has been prepared thru the collaborative efforts of Dave Meyer, Wetland and Waterway Consulting; Craig Donze, One Source Consulting and Metropolitan Survey Service.

**NATURAL RESOURCE PROTECTION PLAN CHECKLIST**  
**for 3031 W. Forest Hill Avenue**

Staff Use	Complete or NA	Natural Resources that must be Identified, Measured, Graphically Depicted	Ordinance #
	None	Steep Slopes, measured & graphically Indicated	15-4.0102-A
	None	Woodlands and Forests, as defined, measured & graphically indicated	15-4.0102-B
	None	Lakes and Ponds, measured & graphically Indicated	15-4.0102-C
	None	Streams, measured & graphically Indicated	15-4.0102-D
	None	Shore Buffers, measured & graphically Indicated	15-4.0102-E
	None	Floodplain(s), Floodway(s) & Floodland(s), measured & graphically Indicated	15-4.0102-F
	None	Drainageways (as defined in the City of Franklin Unified Development Ordinance), measured & graphically indicated	15-4.0102-G
	Yes	Wetlands and Shoreland Wetlands, measured & graphically Indicated	15-4.0102-H
	Yes	Project Name	15-7.0201-A
	Yes	Location (physical address and/or Section - 1/4 Section information)	15-7.0201-B
	Yes	Scale, North Arrow, Contours (2' interval)	15-7.0702-L
	Yes	Names, Addresses, Telephone #s of Owners, Subdividers, Lessee & Developer	15-7.0201-C
	Yes	Date and all applicable revision dates	15-7.0201-D
	Yes	Site Boundary	15-7.0201-E
	Yes	Lot Lines, Right-of-Way lines and Easements	15-7.0201-F
	Yes	Existing Streets	15-7.0201-G
	None	Easements along property boundaries adjacent to the site	15-7.0201-H
	Yes	Location and extent of existing Natural Resource features	15-7.0202-I
	Yes	Disturbed and Preserved Nat. Resource Features (shown graphically and in numerical sequence on plan)	15-7.0702-J
	Yes	Method of Natural Resource Preservation (Conservation Easement)	15-7.0702-K
	Yes	Site Intensity Calculations	15-7.0702-N
	Yes	Mitigation Plan (See attached pages)	15-4.0103
	Yes	Name of Person Performing Wetland Delineation Date of Wetland Delineation	
	Yes	50 Wetland Building Setback Lines, identified & dimensioned	
	None	75 Shoreland Buffer Areas, identified & dimensioned	

Craig Donze, PE PLS

Signature of the person preparing this checklist

**Staff Notes**

**Reviewer's Initials**

--	--



PLAT OF SURVEY

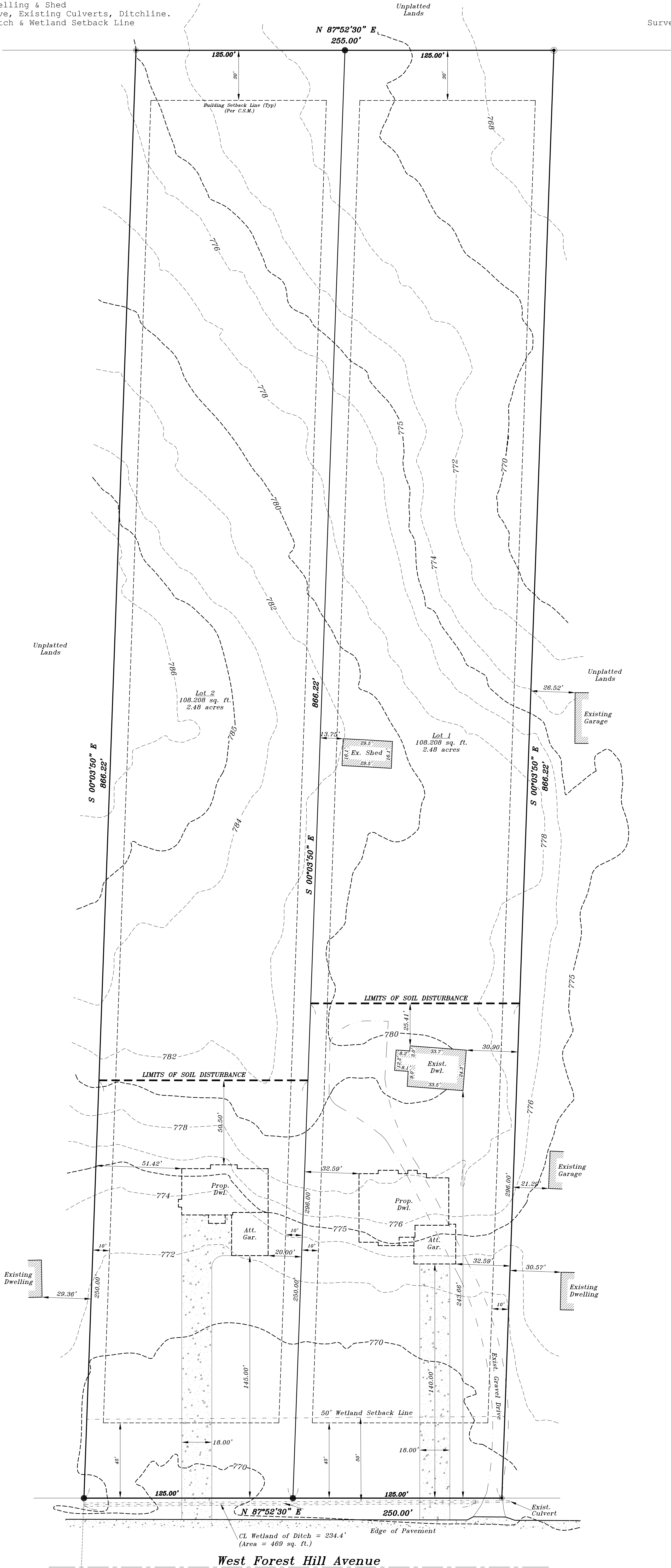
LOCATION: West Forest Hill Avenue, Franklin, Wisconsin

LEGAL DESCRIPTION:

CERTIFIED SURVEY MAP NO. \_\_\_\_\_, being a part of the Southwest 1/4 of the Southeast 1/4 of Section 13, Township 5 North, Range 21 East, in the City of Franklin, Milwaukee County, Wisconsin.

December 18, 2018 (Drawing Only)  
January 30, 2018 Added Existing Dwelling & Shed  
February 12, 2019 Added Gravel Drive, Existing Culverts, Ditchline.  
February 13, 2019 Added Area of Ditch & Wetland Setback Line

Survey No. NRPP Report - Wyndham



Note:  
Certified Survey Map from  
which Subject Property is  
Derived has not been Recorded  
with Milwaukee County



Proposed finished yard, 1st floor  
or top of foundation grade shown  
on this drawing is a suggested  
grade and should be verified by  
the owner, builder or municipality

METROPOLITAN SURVEY SERVICE, INC.

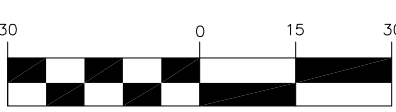
PROFESSIONAL LAND SURVEYORS AND CIVIL ENGINEERS  
9415 West Forest Home Avenue, Suite 202  
Hales Corners, Wisconsin 53130  
PH. (414) 529-5380 FAX (414) 529-9787  
email address: survey@metropolitansurvey.com

● — Denotes Iron Pipe Found  
○ — Denotes Iron Pipe Set  
000.0 — Denotes Proposed Grade

—x—x—x— Denotes Proposed Silt Screen

West Forest Hill Avenue

GRAPHIC SCALE



( IN FEET )  
1 inch = 30 ft.

I HEREBY CERTIFY THAT I HAVE SURVEYED THE ABOVE DESCRIBED PROPERTY AND THAT  
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 AND ROADWAYS AND VISIBLE ENCROACHMENT, 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 THE DATE HEREOF.

SIGNED

*Dennis C. Sauer*  
Dennis C. Sauer  
Professional Land Surveyor S-2421

## **DIVISION 15-3.0500     SITE INTENSITY AND CAPACITY CALCULATIONS**

### **SECTION 15-3.0501             NATURAL RESOURCE PROTECTION AND SITE INTENSITY AND CAPACITY CALCULATIONS FOR RESIDENTIAL AND NONRESIDENTIAL USES REQUIRED**

- A.     **Recognition of Natural Resource Features.** This Ordinance recognizes that landforms, parcel size and shape, and natural resource features vary from site to site and that development regulations must take into account these variations. The maximum density or intensity of use allowed in any zoning district is controlled by the various district standards set forth for each of the various zoning districts of this Ordinance.
- B.     **When Natural Resource Protection and Site Intensity and Capacity Calculations Are Required.** Natural resource protection is required for all development and the site intensity and capacity calculations set forth in this Division shall be made for each parcel of land to be used or built upon in the City of Franklin including all new Certified Survey Maps, Preliminary Plats, condominiums, multiple-family residential developments, all nonresidential development, and as may be required elsewhere in this Ordinance except as excluded under the provisions of Section 15-3.0501C. of the Unified Development Ordinance.
- C.     **Exclusions (When Natural Resource Protection and Site Intensity and Capacity Calculations Are Not Required).** Natural resource protection shall not be required and the site intensity and capacity calculations set forth in this Division shall not be required for the construction of single-family and two-family residential development located on non-divisible existing lots of record within existing platted Subdivisions (with an approved Final Plat), Certified Survey Maps, and Condominiums existing on August 1, 1998, the effective date of this Ordinance or for which a natural resource protection plan and site intensity capacity calculations were filed at the time of division after August 1, 1998. A Natural Resource Protection Plan shall not be required with an application for certified survey map approval where a single property zoned I-1 Institutional District is divided as a result of a public work of improvement for street extension purposes, with related public sanitary sewer and water work for which special assessment was made, into two or more parcels through the property fee acquisition by the City for the extension of the public street. The foregoing exclusions from Natural Resource Protection Plan submission requirements for certified survey map applications shall only be available upon the conditions that in lieu of the Plan submission requirement, the certified survey map application shall be accompanied by the “best available information” as to the existence of any natural resource features, such as existing topographical maps, wetland inventories, and other such inventories as may be available; and that a Natural Resource Protection Plan must be submitted upon any further development of any portion of the mapped property. A Natural Resource Protection Plan shall also not be required with an application for certified survey map approval where lots are being created from a larger surrounding parcel, with the larger in area in relation to the lots created remnant parcel being vacant, or already having being developed by the existence of a principal structure and not being the subject of current further development application, and with the only natural resources within the map area being upon the remnant parcel and being more than 500 feet away from the lots being created. The foregoing exclusion from Natural Resource Protection Plan submission requirement for certified survey map applications shall only be available upon the conditions that i) in lieu of the Natural Resource Protection Plan submission requirement, the Certified Survey Map application shall show upon its face the existence of any natural resource features, as identified in §15-4.0102, located on

the parcels of the Certified Survey Map based upon the “best available” information; (ii) that a Natural Resource Protection Plan must be submitted upon any further development of the “remnant” parcel; and iii) the following note shall be placed upon the face of such Certified Survey Map: “The Natural Resource Features identified herein are not based upon field surveys. In the event of further land division or development of a parcel herein with any such Natural Resource Feature, a complete NRPP with field surveys is required for said parcel” For the purposes of this section, the Zoning Administrator shall not require that the “best available” information be a “first source” of information, as identified in §15-4.0102A., B., C., D., and G. Notwithstanding any other provision of this Ordinance, natural resource protection and any such related Natural Resource Protection Plan, shall not be required and the site intensity and capacity calculations set forth in this Division shall not be required for any accessory use structure or accessory use development or for an addition or modification to an existing principal structure development which does not increase the existing developed structure and impervious surface area upon the parcel by more than 50% or 2,500 square feet, whichever is smaller, where natural resource feature(s) are not within 100 feet of the area to be disturbed by the new development, upon a parcel supporting an existing principal structure with an existing principal use; determination as to whether natural resource features are within 100 feet of the area to be disturbed, the boundaries of which shall be clearly identified within application materials, shall be made by the City Engineer or designee; however, if any resources identified by the Southeastern Wisconsin Regional Planning Commission in PR 176 or in PR 42, as may be amended from time to time, as Primary or Secondary Environmental Corridor and/or Isolated Natural Resources Area, are located on the site by the City Engineer or designee, but are outside of 100 feet of the area to be disturbed, a written plan shall be provided by the applicant detailing the protective measures that will be implemented to prevent such natural resource feature(s) adverse impacts, which shall be subject to approval by the Plan Commission and shall be installed as may be provided on site as detailed within the plan as a condition of application approval.

**SECTION 15-3.0502****CALCULATION OF BASE SITE AREA**

The **base site area** shall be calculated as indicated in Table 15-3.0502 for each parcel of land to be used or built upon in the City of Franklin as referenced in Section 15-3.0501 of this Ordinance.

**Table 15-3.0502**

**WORKSHEET FOR THE CALCULATION OF BASE SITE AREA  
FOR BOTH RESIDENTIAL AND NONRESIDENTIAL DEVELOPMENT**

<b>STEP 1:</b>	Indicate the total gross site area (in acres) as determined by an actual on-site boundary survey of the property.	4.96 acres
<b>STEP 2:</b>	Subtract ( - ) land which constitutes any existing dedicated public street rights-of-way, land located within the ultimate road rights-of-way of existing roads, the rights-of-way of major utilities, and any dedicated public park and/or school site area.	- 0.00 acres
<b>STEP 3:</b>	Subtract ( - ) land which, as a part of a previously approved development or land division, was reserved for open space.	- 0.00 acres
<b>STEP 4:</b>	In the case of " <i>Site Intensity and Capacity Calculations</i> " for a proposed residential use, subtract ( - ) the land proposed for nonresidential uses; <i>or</i> In the case of " <i>Site Intensity and Capacity Calculations</i> " for a proposed nonresidential use, subtract ( - ) the land proposed for residential uses.	- 0.00 acres
<b>STEP 5:</b>	Equals "Base Site Area"	= 4.96 acres

**SECTION 15-3.0503****CALCULATION OF THE AREA OF NATURAL RESOURCES TO BE PROTECTED**

All land area with those natural resource features as described in Division 15-4.0100 of this Ordinance and as listed in Table 15-3.0503 and lying within the **base site area** (as defined in Section 15-3.0502), shall be measured relative to each natural resource feature present. The actual land area encompassed by each type of resource is then entered into the column of Table 15-3.0503 titled "Acres of Land in Resource Feature." The acreage of each natural resource feature shall be multiplied by its respective **natural resource protection standard** (to be selected from Table 15-4.0100 of this Ordinance for applicable agricultural, residential, or nonresidential zoning district) to determine the amount of resource protection land or area required to be kept in open space in order to protect the resource or feature. The sum total of all resource protection land on the site equals the **total resource protection land**. The **total resource protection land** shall be calculated as indicated in Table 15-3.0503.



Table 15-3.0503

**WORKSHEET FOR THE CALCULATION OF RESOURCE PROTECTION LAND**

Natural Resource Feature	Protection Standard Based Upon Zoning District Type (circle applicable standard from Table 15-4.0100 for the type of zoning district in which the parcel is located)			Acres of Land in Resource Feature	
	Agricultural District	Residential District	Non- Residential District.		
Steep Slopes: 10-19%	0.00	0.60	0.40	X 0.00 =	0.00
20-30%	0.65	0.75	0.70	X 0.00 =	0.00
+ 30%	0.90	0.85	0.80	X 0.00 =	0.00
Woodlands & Forests:					
Mature	0.70	0.70	0.70	X 0.00 =	0.00
Young	0.50	0.50	0.50	X 0.00 =	0.00
Lakes & Ponds	1	1	1	X 0.00 =	0.00
Streams	1	1	1	X 0.00 =	0.00
Shore Buffer	1	1	1	X 0.00 =	0.00
Floodplains	1	1	1	X 0.00 =	0.00
Wetland Buffers	1	1	1	X 0.29 =	0.29
Wetlands & Shoreland Wetlands	1	1	1	X 0.00 =	0.00
TOTAL RESOURCE PROTECTION LAND (Total of Acres of Land in Resource Feature to be Protected)					0.29

*Note: In conducting the calculations in Table 15-3.0503, if two or more natural resource features are present on the same area of land, only the most restrictive resource protection standard shall be used. For example, if floodplain and young woodlands occupy the same space on a parcel of land, the resource protection standard would be 1.0 which represents the higher of the two standards.*

**SECTION 15-3.0504****CALCULATION OF SITE INTENSITY AND CAPACITY  
FOR RESIDENTIAL USES**

In order to determine the maximum number of dwelling units which may be permitted on a parcel of land zoned in a residential zoning district, the site intensity and capacity calculations set forth in Table 15-3.0504 shall be performed.

**Table 15-3.0504**

**WORKSHEET FOR THE CALCULATION OF SITE INTENSITY AND  
CAPACITY FOR RESIDENTIAL DEVELOPMENT**

<b>STEP 1:</b>	<p><b>CALCULATE MINIMAL REQUIRED ON-SITE OPEN SPACE</b> Take</p> <p><i>Base Site Area</i> (from Step 5 in Table 15-3.0502): 4.96 Acres</p> <p>Multiple by Minimum <i>Open Space Ratio (OSR)</i> (see specific residential zoning district OSR standard): X 0.00</p> <p>Equals <b>MINIMUM REQUIRED ON-SITE OPEN SPACE</b> = 0.00 acres</p>	
<b>STEP 2:</b>	<p><b>CALCULATE NET BUILDABLE SITE AREA:</b></p> <p>Take <i>Base Site Area</i> (from Step 5 in Table 15-3.0502): 4.96 Acres</p> <p>Subtract <i>Total Resource Protection Land</i> from Table 15-3.0503) or <i>Minimum Required On-Site Open Space</i> (from Step 1 above), whichever is greater: - <u>0.29 Acres</u></p> <p>Equals <b>NET BUILDABLE SITE AREA</b> = 4.67 acres</p>	
<b>STEP 3:</b>	<p><b>CALCULATE MAXIMUM NET DENSITY YIELD OF SITE:</b> Take</p> <p><i>Net Buildable Site Area</i> (from Step 2 above): 4.67 Acres</p> <p>Multiple by Maximum <i>Net Density (ND)</i> (see specific residential zoning district ND standard): X 2.972</p> <p>Equals <b>MAXIMUM NET DENSITY YIELD OF SITE</b> = 13 D.U.s</p>	
<b>STEP 4:</b>	<p><b>CALCULATE MAXIMUM GROSS DENSITY YIELD OF SITE:</b> Take</p> <p><i>Base Site Area</i> (from Step 5 of Table 15-3.0502): 4.96 Acres</p> <p>Multiple by Maximum <i>Gross Density (GD)</i> (see specific residential zoning district GD standard): X 2.972</p> <p>Equals <b>MAXIMUM GROSS DENSITY YIELD OF SITE</b> = 14 D.U.s</p>	
<b>STEP 5:</b>	<p><b>DETERMINE MAXIMUM PERMITTED D.U.s OF SITE:</b></p> <p>Take the <i>lowest</i> of Maximum Net Density Yield of Site (from Step 3 above) or Maximum Gross Density Yield of Site (from Step 4 above):</p>	<b>13 D.U.s</b>



## Wetland & Waterway Consulting, LLC

Dave Meyer

S83 W23915 Artesian Avenue • Big Bend, WI 53103

262-719-4286 • Fax 262-364-2197

E-Mail • [dave@wetlandwi.com](mailto:dave@wetlandwi.com)

2-2-19

Mr. Dan Kanitz  
Wyndham Homes  
5665 S. 108<sup>th</sup> Street  
Hales Corners, WI 53130

Dear Mr. Kanitz:

Wetland & Waterway Consulting (WWC) has conducted a wetland delineation on property located in Sec. 13, T5N, R21E, City of Franklin, Milwaukee County. The delineation was conducted on 9-28-18 at your request. This site is under consideration for future development; therefore, location of the presence or absence of wetlands prior to construction is necessary.

### Investigator

Dave Meyer, lead delineator, is an independent environmental consultant providing wetland delineations, environmental permitting services, site assessments, and planning advice. He obtained a master's degree in Natural Resources Management from Southern Illinois University-Carbondale in 1977. Mr. Meyer has held technical and administrative positions in wetland and water resources specialties with the Wisconsin Department of Natural Resources and the U.S. Army Corps of Engineers. He has satisfactorily completed the Reg IV Wetland Delineation training offered by the U.S. Army Corps of Engineers, the Advanced Wetland Delineation training conducted by the University of Wisconsin-LaCrosse in 2002 and 2007, the USACOE/WIDNR 1987 Wetland Delineation Manual Midwest Region Supplement Training in 2009, the USACOE/WIDNR 1987 Wetland Delineation Manual Northcentral/Northeast Region Supplement Training in 2010, the Basic Hydric Soil ID training conducted by the University of Wisconsin-LaCrosse in 2011, the Wetland Training Institute's Advanced Hydrology for Jurisdictional Determinations in 2016, and the SEWRPC Environmental Corridor Delineation Workshops in 2004 and 2015. Mr. Meyer is recognized by the Wisconsin Department of Natural Resources as an Assured Delineator.

### Methods

The site visit was conducted according to the guidelines identified in the U.S. Army Corps of Engineers' 1987 manual and the Midwest Regional Supplement. The plot size used was a 30 foot radius circle for trees, shrub/saplings, and woody vines, and a 5 foot radius circle for herbaceous vegetation.

Six data points were located in the subject parcel. Data was collected on the vegetation, soils, and hydrology at each point. The field investigation followed the technical approach described in the USACOE 1987 Manual. Refer to the map attached to the end of this report for locations of these points.

Roadside ditches and other drainage ditches internal to the site were identified if they displayed hydric vegetation. Flags were placed in the middle of the ditches at their beginning and ending points for the surveyor to locate. If the ditch was very long or had unusual bends or turns in it, additional flags were placed within the central parts of the ditch to assist in its location.

Resources utilized in the investigation included the NRCS county soil survey, Wisconsin Wetland Inventory mapping, topo mapping, aerial photos, and county plat mapping. Significant literature consulted includes:

Curtis, John. 1971. *The Vegetation of Wisconsin*. University of Wisconsin Press, Madison, Wisconsin. 173 pp.

Eggers, Steve and Donald Reed. 2011. *Wetland Plants and Plant Communities of Minnesota and Wisconsin – 3rd Edition*. St. Paul District, U.S. Army Corps of Engineers, St. Paul, MN 478 pp.

Peterson, Roger and Margaret McKenny. 1968. *A Field Guide to Wildflowers of Northeastern and Northcentral North America*. Houghton Mifflin Company, Boston, Mass. 420 pp.

Swink, Floyd and Gerould Wilhelm. 1994. *Plants of the Chicago Region*. The Morton Arboretum, Lisle, Illinois. 921 pp.

### Results and Discussion

\* This approximately 4.96 acre site is situated on the south side of W. Forest Hill Avenue just west of South 27<sup>th</sup> Street. The site consists of a single family home and outbuilding, mowed and maintained lawn, and upland wooded areas. The site slopes from W. Forest Hill Avenue up to the south at an approximate 5% grade. The house and outbuilding occupy the highest elevation of the parcel where the slope flattens out into a level area. The site then continues downslope to the south at an approximate 10% grade. The northern portion of the property is occupied by the residence and mowed lawn. The southern portion of the site is occupied by a stand of upland hardwood trees and shrubs.

\* This site has not been previously delineated.

\* The soil types mapped within the project boundaries are Blount silt loam (BIA) and Ozaukee silt loam (OzaB, OzaB2, OzaC2).

\* The roadside ditch on the south side of W Forest Hill Avenue, for the entire distance of the parcel, supports hydric vegetation and is dominated by Kentucky bluegrass, riverbank grape, red osier dogwood, calico aster, wood sedge, box elder, and American elm. It is an average of 24 inches wide and did not have any water in it at the time of the delineation. The side slopes are dominated by tall fescue, English plantain, Kentucky bluegrass, Queen Anne's lace, and dandelion.

\* The Wisconsin Wetland Inventory map does not show any wetland on the property.

\* The vegetative, soil, and hydrology characteristics at each data point are described on the individual data sheets. Collectively, data point #'s 1 and 2 in the mowed lawn are dominated by tall fescue and Kentucky bluegrass in the herbaceous stratum and apple and pear trees in the tree stratum. Neither soil nor the required hydrology indicators are present. Data point #'s 3, 4, 5, and 6 are located in the wooded area on the south end of the site. Dominant vegetation in the tree stratum is box elder, American elm, common buckthorn, black walnut, and white ash; staghorn sumac, gray dogwood, cockspur hawthorn, prickly ash, and common buckthorn in the sapling/shrub stratum; and Canada goldenrod, daisy fleabane, Kentucky bluegrass, giant goldenrod, white avens, and redtop grass in the herbaceous stratum. Neither soil nor the required hydrology indicators are present at any of these data points.



No wetlands were discovered as a result of the delineation conducted on this parcel with the exception of the roadside ditch.

### Precipitation Data

Precipitation data from the websites of the USDA Natural Resource Conservation Service, the National Oceanic and Atmospheric Administration (NOAA), and Racine WETS station WI6922 was examined. This antecedent data was reviewed and considered while making determinations concerning the presence and/or absence of wetlands during the field investigation.

Because the antecedent precipitation was normal, direct observation of saturated soils, and even the possibility of standing water, was potentially anticipated, although not expected. Other primary indicators as well as the secondary indicators were also searched for.

Note that when a site is delineated in the second half of the month, the current month and the previous 2 months are taken into consideration.

Condition Value Dry = 1 Normal = 2 Wet = 3

	Month	Normal	3 yrs. In 10 less than	3 yrs. In 10 more than	Observed precip.	Condition dry, wet, normal	Condition value	Month weight value	Product of previous two columns
<b>current month</b>	September	3.70	1.75	4.52	4.51	normal	2	3	6
<b>1st prior month</b>	August	4.08	2.76	4.88	5.46	wet	3	2	6
<b>2nd prior month</b>	July	3.57	2.58	4.22	2.40	dry	1	1	1
								<b>sum</b>	13
		<b>If sum is</b>							
		6 - 9	drier than normal						
		10 - 14	normal						
		15 - 18	wetter than normal						

### **Conclusion**

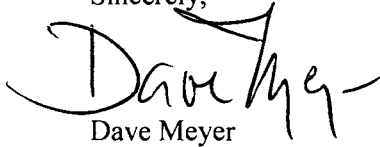
Antecedent precipitation was normal.

### Conclusion

No wetlands are present on this site with the exception of the roadside ditch described above. Because this delineation was conducted by Mr. Meyer, an Assured Delineator, obtaining a concurrence letter from the Wisconsin Department of Natural Resources is not necessary. Concurrence with the finding of no wetlands on this parcel by the U.S. Army Corps of Engineers, however, must be obtained before

undertaking any alterations or modifications of this property. Activities affecting wetlands or surface waters may require permits from the U.S. Army Corps of Engineers, the Wisconsin Department of Natural Resources, and local municipal authorities. The client must obtain authorization from all proper regulatory authorities before altering, modifying, or using the property. If the required authorizations are not obtained, Wetland & Waterway Consulting, LLC shall not be liable or responsible for any resulting damages.

Sincerely,

A handwritten signature in black ink that reads "Dave Meyer". The signature is fluid and cursive, with a long horizontal stroke at the end.

Dave Meyer

Attachments

1. Data points
2. Soil Survey and Wisconsin Wetland Inventory map
3. USGS topo map
4. Location map
5. Site photographs
6. Data point location map

# WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: W. Forest Hill Ave. City/County: Franklin Sampling Date: 9-28-19  
 Applicant/Owner: \_\_\_\_\_ State: WI Sampling Point: #161  
 Investigator(s): Meyer Section, Township, Range: Sec. 13 T. 51 N. R. 2 E  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex  
 Slope (%): ~3 Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Ozaukee silt loam OzaB NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes SP No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation Y, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No ✓  
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>✓</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>✓</u>
Hydric Soil Present?	Yes _____ No <u>✓</u>	
Wetland Hydrology Present?	Yes _____ No <u>✓</u>	
Remarks: <u>DP located in mowed lawn</u>		

## VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
				<b>Prevalence index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B)  Prevalence Index = B/A = _____
_____ = Total Cover				
<b>Sapling/Shrub Stratum (Plot size: _____)</b> 1. _____ 2. _____ 3. _____ 4. _____ 5. _____ _____ = Total Cover				
<b>Herb Stratum (Plot size: _____)</b> 1. <u>Festuca arundinacea</u> <u>25</u> <u>✓</u> <u>FACW</u> 2. <u>Trifolium pratense</u> <u>15</u> <u>✓</u> <u>FACW</u> 3. <u>Ragwort</u> <u>20</u> <u>✓</u> <u>FAC</u> 4. _____ 5. _____ 6. _____ 7. _____ 8. _____ 9. _____ 10. _____ _____ = Total Cover				
<b>Woody Vine Stratum (Plot size: _____)</b> 1. _____ 2. _____ _____ = Total Cover				
<b>Remarks: (Include photo numbers here or on a separate sheet.)</b>    				

## SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-17	10YR 3/2	100					silt/loam	
17-24	10YR 2/1	98	10YR 4/4	2	C	M	silt/loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

## Hydric Soil Indicators:

- ☐ Histosol (A1)  
☐ Histic Epipedon (A2)  
☐ Black Histic (A3)  
☐ Hydrogen Sulfide (A4)  
☐ Stratified Layers (A5)  
☐ 2 cm Muck (A10)  
☐ Depleted Below Dark Surface (A11)  
☐ Thick Dark Surface (A12)  
☐ Sandy Mucky Mineral (S1)  
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)  
☐ Sandy Redox (S5)  
☐ Stripped Matrix (S6)  
☐ Loamy Mucky Mineral (F1)  
☐ Loamy Gleyed Matrix (F2)  
☐ Depleted Matrix (F3)  
☐ Redox Dark Surface (F6)  
☐ Depleted Dark Surface (F7)  
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ Coast Prairie Redox (A16)  
☐ Dark Surface (S7)  
☐ Iron-Manganese Masses (F12)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒

Remarks:

## HYDROLOGY

## Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)  
☐ High Water Table (A2)  
☐ Saturation (A3)  
☐ Water Marks (B1)  
☐ Sediment Deposits (B2)  
☐ Drift Deposits (B3)  
☐ Algal Mat or Crust (B4)  
☐ Iron Deposits (B5)  
☐ Inundation Visible on Aerial Imagery (B7)  
☐ Sparsely Vegetated Concave Surface (B8)

- ☐ Water-Stained Leaves (B9)  
☐ Aquatic Fauna (B13)  
☐ True Aquatic Plants (B14)  
☐ Hydrogen Sulfide Odor (C1)  
☐ Oxidized Rhizospheres on Living Roots (C3)  
☐ Presence of Reduced Iron (C4)  
☐ Recent Iron Reduction in Tilled Soils (C6)  
☐ Thin Muck Surface (C7)  
☐ Gauge or Well Data (D9)  
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)  
☐ Drainage Patterns (B10)  
☐ Dry-Season Water Table (C2)  
☐ Crayfish Burrows (C8)  
☐ Saturation Visible on Aerial Imagery (C9)  
☐ Stunted or Stressed Plants (D1)  
☐ Geomorphic Position (D2)  
☐ FAC-Neutral Test (D5)

## Field Observations:

Surface Water Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_Water Table Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_Saturation Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_

(Includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



# WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: W. Forest Hill Ave. City/County: Franklin Sampling Date: 9-28-19  
 Applicant/Owner: Meyer State: WI Sampling Point: #26P  
 Investigator(s): Meyer Section, Township, Range: Sec. 13 T 54 N R 21 E  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex  
 Slope (%): 5 Lat: 43° 06' N Long: 89° 31' W Datum: None  
 Soil Map Unit Name: Blount silt loam BTA NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes Spur No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation Y, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes \_\_\_\_\_ No \_\_\_\_\_  
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>_____</u> No <u>_____</u>	Is the Sampled Area within a Wetland?	Yes <u>_____</u> No <u>_____</u>
Hydric Soil Present?	Yes <u>_____</u> No <u>_____</u>		
Wetland Hydrology Present?	Yes <u>_____</u> No <u>_____</u>		
Remarks: <u>DP located in mowed lawn</u>			

## VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>4</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>25</u> (A/B)
1. <u>Malus pumila</u>	<u>15</u>	<u>✓</u>	<u>UPL</u>	
2. <u>Pyrus communis</u>	<u>15</u>	<u>✓</u>	<u>UPL</u>	
3. _____	<u>30</u>			
4. _____				
5. _____				
<u>30</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. _____				
2. _____				
3. _____				
4. _____				
5. _____				
_____ = Total Cover				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 <sup>1</sup> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Glechome hederacea</u>	<u>70</u>	<u>✓</u>	<u>FACW</u>	
2. <u>Poa pratensis</u>	<u>20</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Trifolium pratense</u>	<u>5</u>		<u>FACU</u>	
4. <u>Taraxacum officinale</u>	<u>5</u>		<u>FACU</u>	
5. _____				
6. _____				
7. _____				
8. _____				
9. _____				
10. _____				
<u>100</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>_____</u> No <u>_____</u>
1. _____				
2. _____				
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

Sampling Point: 2

## HYDROLOGY

Midwest Region – Version 2.0

# WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: W. Forest Hill Ave. City/County: Franklin Sampling Date: 9-28-19  
 Applicant/Owner: Meyer State: WI Sampling Point: #34P  
 Investigator(s): Meyer Section, Township, Range: Sec. 13 T. 51 N. R. 21 E  
 Landform (hillslope, terrace, etc.): hill slope Local relief (concave, convex, none): convex  
 Slope (%): ~10 Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Drakee silt/loam O2aC2 NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes Yes No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes Yes No \_\_\_\_\_  
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>Yes</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>Yes</u>
Hydric Soil Present?	Yes _____ No <u>Yes</u>	
Wetland Hydrology Present?	Yes _____ No <u>Yes</u>	
Remarks:		

## VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Acer negundo</u>	<u>5</u>	<u>Yes</u>	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>6</u> (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>50</u> (A/B)
4. _____	_____	_____	_____	
5. _____	<u>5</u>	_____	_____	
<u>5</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. <u>Cornus racemosa</u>	<u>20</u>	<u>Yes</u>	<u>FAC</u>	Total % Cover of: _____ Multiply by: _____
2. <u>Rhus typhina</u>	<u>5</u>	<u>Yes</u>	<u>UPL</u>	OBL species _____ x 1 = _____
3. _____	_____	_____	_____	FACW species <u>45</u> x 2 = <u>90</u>
4. _____	_____	_____	_____	FAC species <u>65</u> x 3 = <u>195</u>
5. _____	_____	_____	_____	FACU species <u>90</u> x 4 = <u>360</u>
6. _____	<u>25</u>	_____	_____	UPL species <u>5</u> x 5 = <u>25</u>
<u>25</u> = Total Cover				Column Totals: <u>205</u> (A) <u>670</u> (B)
				Prevalence Index = B/A = <u>3.27</u>
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators:
1. <u>Solidago canadensis</u>	<u>40</u>	<u>Yes</u>	<u>FACW</u>	1 - Rapid Test for Hydrophytic Vegetation
2. <u>Fragaria virginiana</u>	<u>15</u>	_____	<u>FACW</u>	2 - Dominance Test is >50%
3. <u>Erigeron annuus</u>	<u>35</u>	<u>Yes</u>	<u>FACW</u>	3 - Prevalence Index is ≤3.0 <sup>1</sup>
4. <u>Euthamia americana</u>	<u>15</u>	_____	<u>FACW</u>	4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet)
5. <u>Synphytochloa novae-angliae</u>	<u>10</u>	_____	<u>FACW</u>	Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
6. <u>Podagratus</u>	<u>40</u>	<u>Yes</u>	<u>FAC</u>	
7. <u>Solidago gigantea</u>	<u>20</u>	_____	<u>FACW</u>	
<u>175</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes _____ No <u>Yes</u>
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

## SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-9	10YR 3/2	100					silt/loam	
9-24	10YR 3/4	100					clay	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

## Hydric Soil Indicators:

- ☐ Histosol (A1)  
☐ Histic Epipedon (A2)  
☐ Black Histic (A3)  
☐ Hydrogen Sulfide (A4)  
☐ Stratified Layers (A5)  
☐ 2 cm Muck (A10)  
☐ Depleted Below Dark Surface (A11)  
☐ Thick Dark Surface (A12)  
☐ Sandy Mucky Mineral (S1)  
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)  
☐ Sandy Redox (S5)  
☐ Stripped Matrix (S6)  
☐ Loamy Mucky Mineral (F1)  
☐ Loamy Gleyed Matrix (F2)  
☐ Depleted Matrix (F3)  
☐ Redox Dark Surface (F6)  
☐ Depleted Dark Surface (F7)  
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ Coast Prairie Redox (A16)  
☐ Dark Surface (S7)  
☐ Iron-Manganese Masses (F12)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (Inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒

Remarks:

## HYDROLOGY

## Wetland Hydrology Indicators:

## Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)  
☐ High Water Table (A2)  
☐ Saturation (A3)  
☐ Water Marks (B1)  
☐ Sediment Deposits (B2)  
☐ Drift Deposits (B3)  
☐ Algal Mat or Crust (B4)  
☐ Iron Deposits (B5)  
☐ Inundation Visible on Aerial Imagery (B7)  
☐ Sparsely Vegetated Concave Surface (B8)

- ☐ Water-Stained Leaves (B9)  
☐ Aquatic Fauna (B13)  
☐ True Aquatic Plants (B14)  
☐ Hydrogen Sulfide Odor (C1)  
☐ Oxidized Rhizospheres on Living Roots (C3)  
☐ Presence of Reduced Iron (C4)  
☐ Recent Iron Reduction in Tilled Soils (C6)  
☐ Thin Muck Surface (C7)  
☐ Gauge or Well Data (D9)  
☐ Other (Explain in Remarks)

## Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)  
☐ Drainage Patterns (B10)  
☐ Dry-Season Water Table (C2)  
☐ Crayfish Burrows (C8)  
☐ Saturation Visible on Aerial Imagery (C9)  
☐ Stunted or Stressed Plants (D1)  
☐ Geomorphic Position (D2)  
☐ FAC-Neutral Test (D5)

## Field Observations:

Surface Water Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_Water Table Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_Saturation Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_

(includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



# WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: W. Forest Hill Ave. City/County: Franklin Sampling Date: 9-28-19  
 Applicant/Owner: Meyer State: WI Sampling Point: #46P  
 Investigator(s): Meyer Section, Township, Range: Sec. 13 T 51 N R 21 E  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex  
 Slope (%): 5 Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Ozaukee silt loam O2aB2 NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes Sp No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No \_\_\_\_\_  
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>✓</u> No _____	Is the Sampled Area within a Wetland?	Yes _____ No <u>✓</u>
Hydric Soil Present?	Yes _____ No <u>✓</u>		
Wetland Hydrology Present?	Yes _____ No <u>✓</u>		
Remarks:			

## VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>6</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
1. <u>Alnus americana</u>	<u>10</u>	<u>✓</u>	<u>FACW</u>	
2. <u>Rhamnus cathartica</u>	<u>5</u>	<u>✓</u>	<u>FAC</u>	
3. _____	<u>15</u>			
<u>15</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. <u>Alnus americana</u>	<u>5</u>	<u>✓</u>	<u>FACW</u>	
2. <u>Crataegus crus-galli</u>	<u>25</u>	<u>✓</u>	<u>FAC</u>	
3. <u>Fraxinus pennsylvanica</u>	<u>5</u>	<u>✓</u>	<u>FACW</u>	
4. <u>Cornus racemosa</u>	<u>45</u>	<u>✓</u>	<u>FAC</u>	
5. <u>Lonicerabella</u>	<u>5</u>	<u>✓</u>	<u>FACW</u>	
<u>65</u> = Total Cover				
Herb Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 <sup>1</sup> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Solidago canadensis</u>	<u>15</u>	<u>✓</u>	<u>FACW</u>	
2. <u>Solidago gigantea</u>	<u>30</u>	<u>✓</u>	<u>FACW</u>	
3. <u>Carex blanda</u>	<u>10</u>	<u>✓</u>	<u>FAC</u>	
4. <u>Poa pratensis</u>	<u>45</u>	<u>✓</u>	<u>FAC</u>	
5. <u>Plantago major</u>	<u>10</u>	<u>✓</u>	<u>FAC</u>	
<u>110</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes <u>✓</u> No _____
1. _____				
2. _____				
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				

## SOIL

Sampling Point: 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-7	10YR 3/2	100					silt/loam	
7-16	10YR 3/3	98	10YR 4/6	2	C	M	silt/loam	
16-24	10YR 4/4	98	10YR 4/6	2	C	M	clay/loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

## Hydric Soil Indicators:

- ☐ Histosol (A1)  
☐ Histic Epipedon (A2)  
☐ Black Histic (A3)  
☐ Hydrogen Sulfide (A4)  
☐ Stratified Layers (A5)  
☐ 2 cm Muck (A10)  
☐ Depleted Below Dark Surface (A11)  
☐ Thick Dark Surface (A12)  
☐ Sandy Mucky Mineral (S1)  
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)  
☐ Sandy Redox (S5)  
☐ Stripped Matrix (S6)  
☐ Loamy Mucky Mineral (F1)  
☐ Loamy Gleyed Matrix (F2)  
☐ Depleted Matrix (F3)  
☐ Redox Dark Surface (F6)  
☐ Depleted Dark Surface (F7)  
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ Coast Prairie Redox (A16)  
☐ Dark Surface (S7)  
☐ Iron-Manganese Masses (F12)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (Inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒

## Remarks:

## HYDROLOGY

## Wetland Hydrology Indicators:

## Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)  
☐ High Water Table (A2)  
☐ Saturation (A3)  
☐ Water Marks (B1)  
☐ Sediment Deposits (B2)  
☐ Drift Deposits (B3)  
☐ Algal Mat or Crust (B4)  
☐ Iron Deposits (B5)  
☐ Inundation Visible on Aerial Imagery (B7)  
☐ Sparsely Vegetated Concave Surface (B8)

- ☐ Water-Stained Leaves (B9)  
☐ Aquatic Fauna (B13)  
☐ True Aquatic Plants (B14)  
☐ Hydrogen Sulfide Odor (C1)  
☐ Oxidized Rhizospheres on Living Roots (C3)  
☐ Presence of Reduced Iron (C4)  
☐ Recent Iron Reduction in Tilled Soils (C6)  
☐ Thin Muck Surface (C7)  
☐ Gauge or Well Data (D9)  
☐ Other (Explain in Remarks)

## Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)  
☐ Drainage Patterns (B10)  
☐ Dry-Season Water Table (C2)  
☐ Crayfish Burrows (C8)  
☐ Saturation Visible on Aerial Imagery (C9)  
☐ Stunted or Stressed Plants (D1)  
☒ Geomorphic Position (D2)  
☐ FAC-Neutral Test (D5)

## Field Observations:

Surface Water Present? Yes \_\_\_\_\_ No ☒ Depth (Inches): \_\_\_\_\_Water Table Present? Yes \_\_\_\_\_ No ☒ Depth (Inches): \_\_\_\_\_Saturation Present? Yes \_\_\_\_\_ No ☒ Depth (Inches): \_\_\_\_\_

(Includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

## Remarks:

# WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: W. Forest Hill Ave. City/County: Franklin Sampling Date: 9-28-19  
 Applicant/Owner: Meyer State: WI Sampling Point: #548  
 Investigator(s): Meyer Section, Township, Range: Sec. 13 T 541 R 21 E  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex  
 Slope (%): 5 Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Ozaukee silt loam Oza B2 NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes Sp No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes / No \_\_\_\_\_  
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____ No <u>/</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>/</u>
Hydric Soil Present?	Yes _____ No <u>/</u>	
Wetland Hydrology Present?	Yes _____ No <u>/</u>	
Remarks:		

## VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>5</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>40</u> (A/B)
1. <u>Ulmus americana</u>	<u>30</u>	<u>/</u>	<u>FACW</u>	
2. <u>Fraxinus americana</u>	<u>15</u>		<u>FACW</u>	
3. <u>Malus pumila</u>	<u>10</u>		<u>UPL</u>	
4. <u>Juglans nigra</u>	<u>25</u>	<u>/</u>	<u>FACW</u>	
5. <u>Rhamnus catherartica</u>	<u>5</u>		<u>FAC</u>	
	<u>85</u> = Total Cover			
Shrub/Strat (Plot size: _____)				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
1. <u>Conicera x bella</u>	<u>10</u>		<u>FACW</u>	
2. <u>Ulmus americana</u>	<u>10</u>		<u>FACW</u>	
3. <u>Rhamnus catherartica</u>	<u>5</u>		<u>FAC</u>	
4. <u>Xanthoxylum americanum</u>	<u>25</u>	<u>/</u>	<u>UPL</u>	
5. <u>Rubus occidentalis</u>	<u>25</u>		<u>UPL</u>	
6. <u>Cornus racemosa</u>	<u>35</u>		<u>FAC</u>	
	<u>105</u> = Total Cover			
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is ≤3.0 <sup>1</sup> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Carex blanda</u>	<u>5</u>		<u>FAC</u>	
2. _____				
3. _____				
4. <u>Symphotrichum novae-angliae</u>	<u>2</u>		<u>FACW</u>	
5. _____				
6. <u>Solidago canadensis</u>	<u>60</u>	<u>/</u>	<u>FACW</u>	
7. _____				
8. <u>Symphotrichum lateriflorum</u>	<u>5</u>		<u>FACW</u>	
9. _____				
10. <u>Symphotrichum sagittifolium</u>	<u>10</u>		<u>UPL</u>	
	<u>82</u> = Total Cover			
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No <u>/</u>
1. _____				
2. _____				

Remarks: (Include photo numbers here or on a separate sheet.)

## SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-8	10YR 2/2	100					silt/loam	
8-16	10YR 3/3	98	10YR 4/6	2	C	M	silt/loam	
16-24	2.5Y 4/3	95	10YR 4/6	5	C	M	silt/loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

## Hydric Soil Indicators:

- ☐ Histosol (A1)  
☐ Histic Epipedon (A2)  
☐ Black Histic (A3)  
☐ Hydrogen Sulfide (A4)  
☐ Stratified Layers (A5)  
☐ 2 cm Muck (A10)  
☐ Depleted Below Dark Surface (A11)  
☐ Thick Dark Surface (A12)  
☐ Sandy Mucky Mineral (S1)  
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)  
☐ Sandy Redox (S5)  
☐ Stripped Matrix (S6)  
☐ Loamy Mucky Mineral (F1)  
☐ Loamy Gleyed Matrix (F2)  
☐ Depleted Matrix (F3)  
☐ Redox Dark Surface (F6)  
☐ Depleted Dark Surface (F7)  
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ Coast Prairie Redox (A16)  
☐ Dark Surface (S7)  
☐ Iron-Manganese Masses (F12)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

## Restrictive Layer (If observed):

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒

Remarks:

## HYDROLOGY

## Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)  
☐ High Water Table (A2)  
☐ Saturation (A3)  
☐ Water Marks (B1)  
☐ Sediment Deposits (B2)  
☐ Drift Deposits (B3)  
☐ Algal Mat or Crust (B4)  
☐ Iron Deposits (B5)  
☐ Inundation Visible on Aerial Imagery (B7)  
☐ Sparsely Vegetated Concave Surface (B8)

- ☐ Water-Stained Leaves (B9)  
☐ Aquatic Fauna (B13)  
☐ True Aquatic Plants (B14)  
☐ Hydrogen Sulfide Odor (C1)  
☐ Oxidized Rhizospheres on Living Roots (C3)  
☐ Presence of Reduced Iron (C4)  
☐ Recent Iron Reduction in Tilled Soils (C6)  
☐ Thin Muck Surface (C7)  
☐ Gauge or Well Data (D9)  
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)  
☐ Drainage Patterns (B10)  
☐ Dry-Season Water Table (C2)  
☐ Crayfish Burrows (C8)  
☐ Saturation Visible on Aerial Imagery (C9)  
☐ Stunted or Stressed Plants (D1)  
☐ Geomorphic Position (D2)  
☐ FAC-Neutral Test (D5)

## Field Observations:

Surface Water Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_Water Table Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_Saturation Present? Yes \_\_\_\_\_ No ☒ Depth (inches): \_\_\_\_\_

(includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



# WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site: W. Forest Hill Ave. City/County: Franklin Sampling Date: 9-28-19  
 Applicant/Owner: Meyer State: WI Sampling Point: #64P  
 Investigator(s): Meyer Section, Township, Range: Sec. 13 T 54 N R 21 E  
 Landform (hillslope, terrace, etc.): hillslope Local relief (concave, convex, none): convex  
 Slope (%): 3 Lat: \_\_\_\_\_ Long: \_\_\_\_\_ Datum: \_\_\_\_\_  
 Soil Map Unit Name: Ozaukee silt loam Ozark NWI classification: None  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes Yes No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes Yes No \_\_\_\_\_  
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

## SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>Yes</u> No <u>No</u>	Is the Sampled Area within a Wetland?	Yes _____ No <u>Yes</u>
Hydric Soil Present?	Yes _____ No <u>Yes</u>		
Wetland Hydrology Present?	Yes _____ No <u>Yes</u>		
Remarks:			

## VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>4</u> (A) Total Number of Dominant Species Across All Strata: <u>6</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>67</u> (A/B)
1. <u>Fraxinus americana</u>	<u>25</u>	<u>Yes</u>	<u>FACW</u>	
2. _____	_____	_____	_____	
3. <u>Juglans nigra</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>	
4. _____	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
5. <u>Ulmus americana</u>	<u>10</u>	_____	<u>FACW</u>	
6. _____	_____	_____	_____	
_____	<u>65</u>	= Total Cover		
<b>Shrub/Strat (Plot size: _____)</b>				<b>Hydrophytic Vegetation Indicators:</b> 1 - Rapid Test for Hydrophytic Vegetation <u>Yes</u> 2 - Dominance Test is >50% <u>Yes</u> 3 - Prevalence Index is ≤3.0 <sup>1</sup> _____ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation <sup>1</sup> (Explain) _____ <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Chaetochloa chrysanthi</u>	<u>10</u>	<u>Yes</u>	<u>FAC</u>	
2. <u>Rhamnus cathartica</u>	<u>25</u>	<u>Yes</u>	<u>FAC</u>	
3. <u>Ulmus americana</u>	<u>5</u>	_____	<u>FACW</u>	
4. _____	_____	_____	_____	<b>Hydrophytic Vegetation Present?</b> Yes <u>Yes</u> No _____
5. _____	_____	_____	_____	
6. _____	<u>40</u>	= Total Cover		
7. _____	_____	_____	_____	
<b>Herb Stratum (Plot size: _____)</b>				<b>Remarks: (Include photo numbers here or on a separate sheet.)</b>
1. <u>Fragaria virginiana</u>	<u>10</u>	_____	<u>FACW</u>	
2. <u>Rhamnus cathartica</u>	<u>15</u>	_____	<u>FAC</u>	
3. <u>Solidago gigantea</u>	<u>5</u>	_____	<u>FACW</u>	
4. <u>Geum canadense</u>	<u>50</u>	<u>Yes</u>	<u>FAC</u>	<b>Woody Vine Stratum (Plot size: _____)</b>
5. <u>Agrostis gigantea</u>	<u>30</u>	<u>Yes</u>	<u>FACW</u>	
6. _____	_____	_____	_____	
7. _____	<u>110</u>	= Total Cover		
8. _____	_____	_____	_____	<b>Remarks: (Include photo numbers here or on a separate sheet.)</b>
9. _____	_____	_____	_____	
10. _____	_____	_____	_____	
11. _____	_____	_____	_____	

## SOIL

Sampling Point: 6

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features		Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	Color (moist)	%	Color (moist)	%				
0-15	10YR 3/2	100					silt/loam	
15-24	10YR 3/4	100					clay/loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

## Hydric Soil Indicators:

- ☐ Histic (A1)  
☐ Histic Epipedon (A2)  
☐ Black Histic (A3)  
☐ Hydrogen Sulfide (A4)  
☐ Stratified Layers (A5)  
☐ 2 cm Muck (A10)  
☐ Depleted Below Dark Surface (A11)  
☐ Thick Dark Surface (A12)  
☐ Sandy Mucky Mineral (S1)  
☐ 5 cm Mucky Peat or Peat (S3)

- ☐ Sandy Gleyed Matrix (S4)  
☐ Sandy Redox (S5)  
☐ Stripped Matrix (S6)  
☐ Loamy Mucky Mineral (F1)  
☐ Loamy Gleyed Matrix (F2)  
☐ Depleted Matrix (F3)  
☐ Redox Dark Surface (F6)  
☐ Depleted Dark Surface (F7)  
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils<sup>3</sup>:

- ☐ Coast Prairie Redox (A16)  
☐ Dark Surface (S7)  
☐ Iron-Manganese Masses (F12)  
☐ Very Shallow Dark Surface (TF12)  
☐ Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

## Restrictive Layer (if observed):

Type: \_\_\_\_\_

Depth (Inches): \_\_\_\_\_

Hydric Soil Present? Yes \_\_\_\_\_ No ☒

Remarks:

## HYDROLOGY

## Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)  
☐ High Water Table (A2)  
☐ Saturation (A3)  
☐ Water Marks (B1)  
☐ Sediment Deposits (B2)  
☐ Drift Deposits (B3)  
☐ Algal Mat or Crust (B4)  
☐ Iron Deposits (B5)  
☐ Inundation Visible on Aerial Imagery (B7)  
☐ Sparsely Vegetated Concave Surface (B8)

- ☐ Water-Stained Leaves (B9)  
☐ Aquatic Fauna (B13)  
☐ True Aquatic Plants (B14)  
☐ Hydrogen Sulfide Odor (C1)  
☐ Oxidized Rhizospheres on Living Roots (C3)  
☐ Presence of Reduced Iron (C4)  
☐ Recent Iron Reduction in Tilled Soils (C6)  
☐ Thin Muck Surface (C7)  
☐ Gauge or Well Data (D9)  
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)  
☐ Drainage Patterns (B10)  
☐ Dry-Season Water Table (C2)  
☐ Crayfish Burrows (C8)  
☐ Saturation Visible on Aerial Imagery (C9)  
☐ Stunted or Stressed Plants (D1)  
☐ Geomorphic Position (D2)  
☐ FAC-Neutral Test (D5)

## Field Observations:

Surface Water Present? Yes \_\_\_\_\_ No ☒ Depth (Inches): \_\_\_\_\_Water Table Present? Yes \_\_\_\_\_ No ☒ Depth (Inches): \_\_\_\_\_Saturation Present? Yes \_\_\_\_\_ No ☒ Depth (Inches): \_\_\_\_\_

(includes capillary fringe)

Wetland Hydrology Present? Yes \_\_\_\_\_ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:



# Surface Water Data Viewer Map



NAD\_1983\_HARN\_Wisconsin\_TM

1: 1,980

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: <http://dnr.wi.gov/legal/>

## Legend

- ◆ Wetland Identifications and Confirmations
- Wetland Class Points
  - ▲ Dammed pond
  - ▲ Excavated pond
  - ▲ Filled excavated pond
  - ▲ Filled/draind wetland
  - Wetland too small to delineate
- /// Filled Points
- Wetland Class Areas
  - Wetland
  - Upland
- /// Filled Areas
- Wetland Class Points
  - ▲ Dammed pond
  - ▲ Excavated pond
  - ▲ Filled excavated pond
  - ▲ Filled/draind wetland
  - Wetland too small to delineate
- /// Filled Points
- Wetland Class Areas
  - Wetland
  - Upland
- /// Filled Areas
- NRCS Wisconsin Soils
  - Soil Mapping Unit
- Water
  - Rivers and Streams
  - Intermittent Streams
  - Lakes and Open water
- Index to EN\_Image\_Basemap\_Leaf\_Off

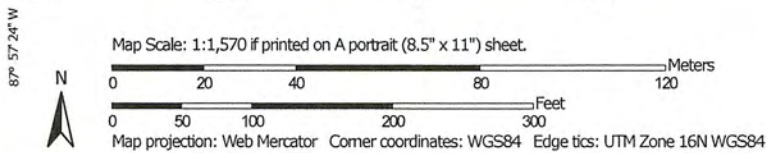
## Notes



# Soil Map—Milwaukee and Waukesha Counties, Wisconsin



Soil Map may not be valid at this scale.



Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey

9/28/2018  
Page 1 of 3



## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BIA	Blount silt loam, 1 to 3 percent slopes	1.3	25.4%
OzaB	Ozaukee silt loam, 2 to 6 percent slopes	0.3	5.7%
OzaB2	Ozaukee silt loam, 2 to 6 percent slopes, eroded	2.1	40.9%
OzaC2	Ozaukee silt loam, 6 to 12 percent slopes, eroded	1.5	28.0%
Totals for Area of Interest		5.2	100.0%

## Report—Hydric Soil List - All Components

Hydric Soil List - All Components--WI602-Milwaukee and Waukesha Counties, Wisconsin					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
BIA: Blount silt loam, 1 to 3 percent slopes	Blount	90	Moraines	No	—
	Ashkum soils		Depressions	Yes	2,3
OzaB: Ozaukee silt loam, 2 to 6 percent slopes	Ozaukee	88-100	Ground moraines,end moraines	No	—
	Pewamo-Drained	0-7	Depressions on ground moraines, drainage ways on ground moraines	Yes	2
	Ashkum-Drained	0-7	End moraines,ground moraines	Yes	2
	Urban land	0-5	Ground moraines	No	—
OzaB2: Ozaukee silt loam, 2 to 6 percent slopes, eroded	Ozaukee-Eroded	88-100	Ground moraines,end moraines	No	—
	Ashkum-Drained	0-7	End moraines,ground moraines	Yes	2
	Pewamo-Drained	0-7	Drainageways on ground moraines, depressions on ground moraines	Yes	2
	Urban land	0-5	Ground moraines	No	—
OzaC2: Ozaukee silt loam, 6 to 12 percent slopes, eroded	Ozaukee-Eroded	88-100	End moraines,ground moraines	No	—
	Blount-Lake Michigan lobe	0-7	Ground moraines,end moraines	No	—
	Urban land	0-5	Ground moraines	No	—
	Ozaukee-Severely eroded	0-5	Ground moraines,end moraines	No	—

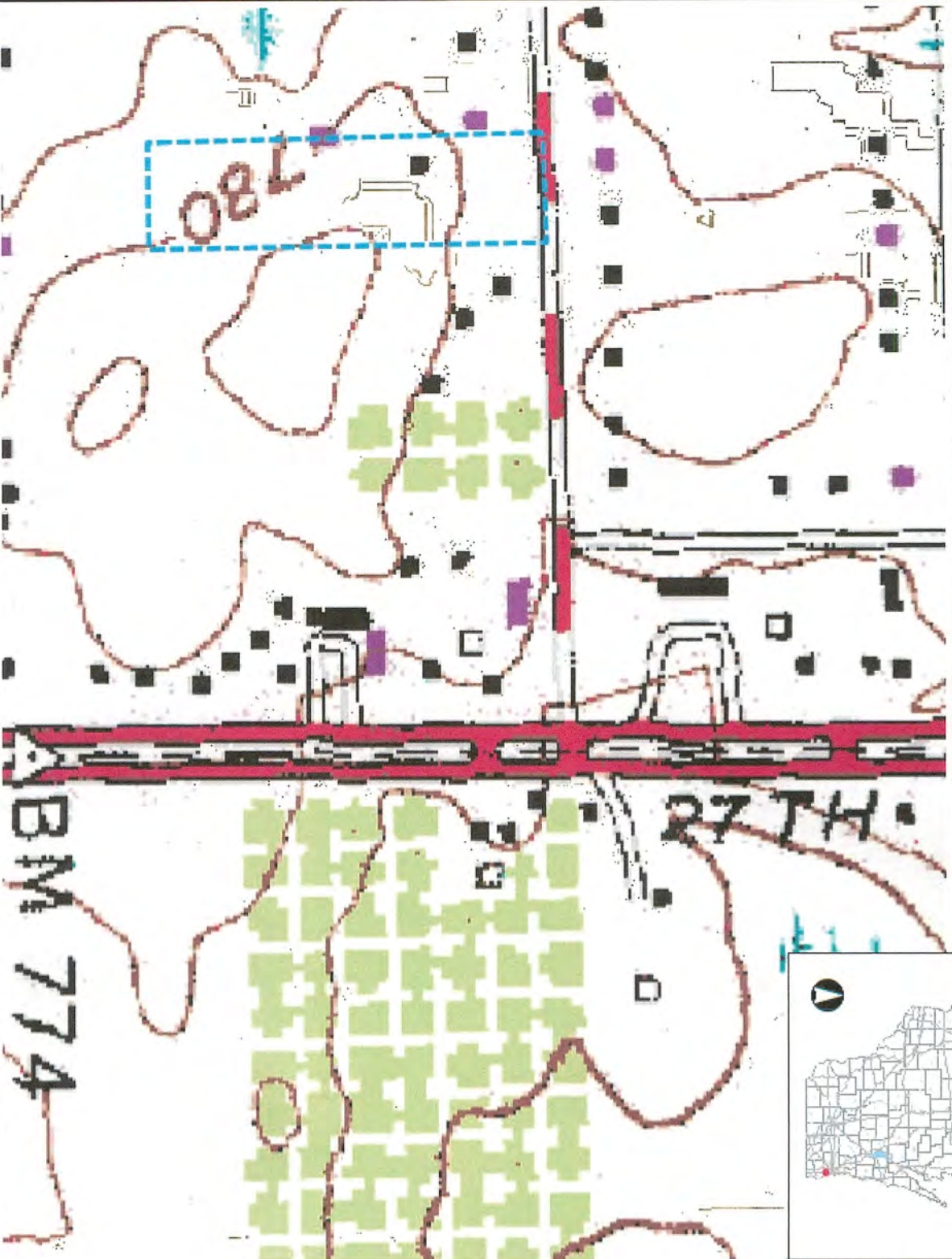
### Data Source Information

Soil Survey Area: Milwaukee and Waukesha Counties, Wisconsin  
 Survey Area Data: Version 14, Sep 12, 2018





# Surface Water Data Viewer Map



- Legend**
- Rivers and Streams
  - Intermittent Streams
  - Lakes and Open water
  - 24K USGS Quad Index - Level 7 - 16
  - Index to EN\_Image\_Basemap\_Leaf\_Off

0.1 0 0.06 0.1 Miles

NAD\_1983\_HARN\_Wisconsin\_TM

1: 3,960

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: <http://dnr.wi.gov/legal/>

Notes

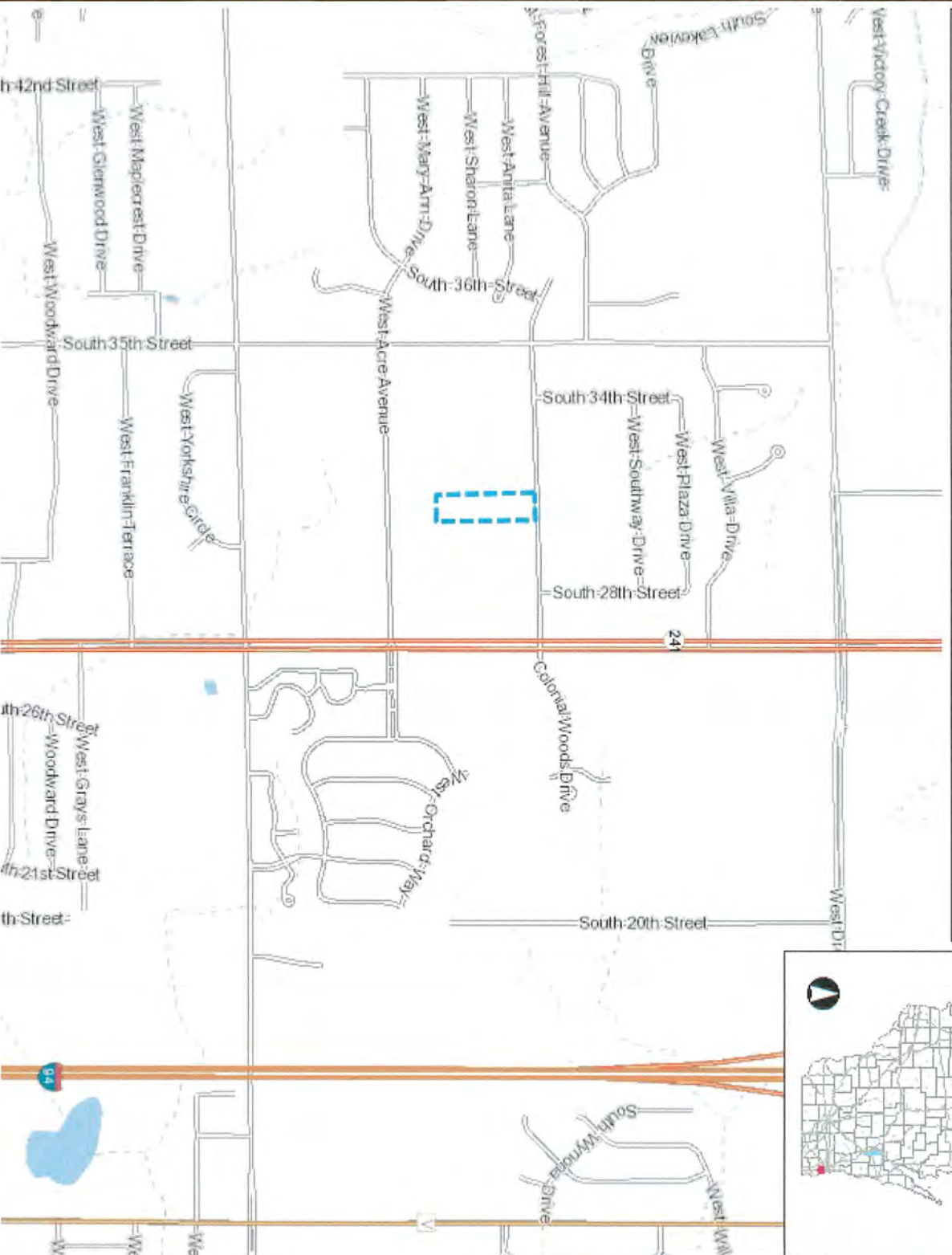




# Surface Water Data Viewer Map



- Legend**
- Municipality
  - State Boundaries
  - County Boundaries
  - Major Roads
    - Interstate Highway
    - State Highway
    - US Highway
  - County and Local Roads
    - County HWY
    - Local Road
  - Railroads
  - Tribal Lands
  - Rivers and Streams
  - Intermittent Streams
  - Lakes and Open water



0.5 0 0.25 0.5 Miles

NAD\_1983\_HARN\_Wisconsin\_TM

1: 15,840

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made regarding accuracy, applicability for a particular use, completeness, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: <http://dnr.wi.gov/legal/>

## Notes



## PHOTOGRAPHS

Photo A.....Standing in vicinity of DP #2 viewing south (upslope) toward house.

Photo B.....Typical view of site conditions at DP #'s 3, 4, 5, and 6.



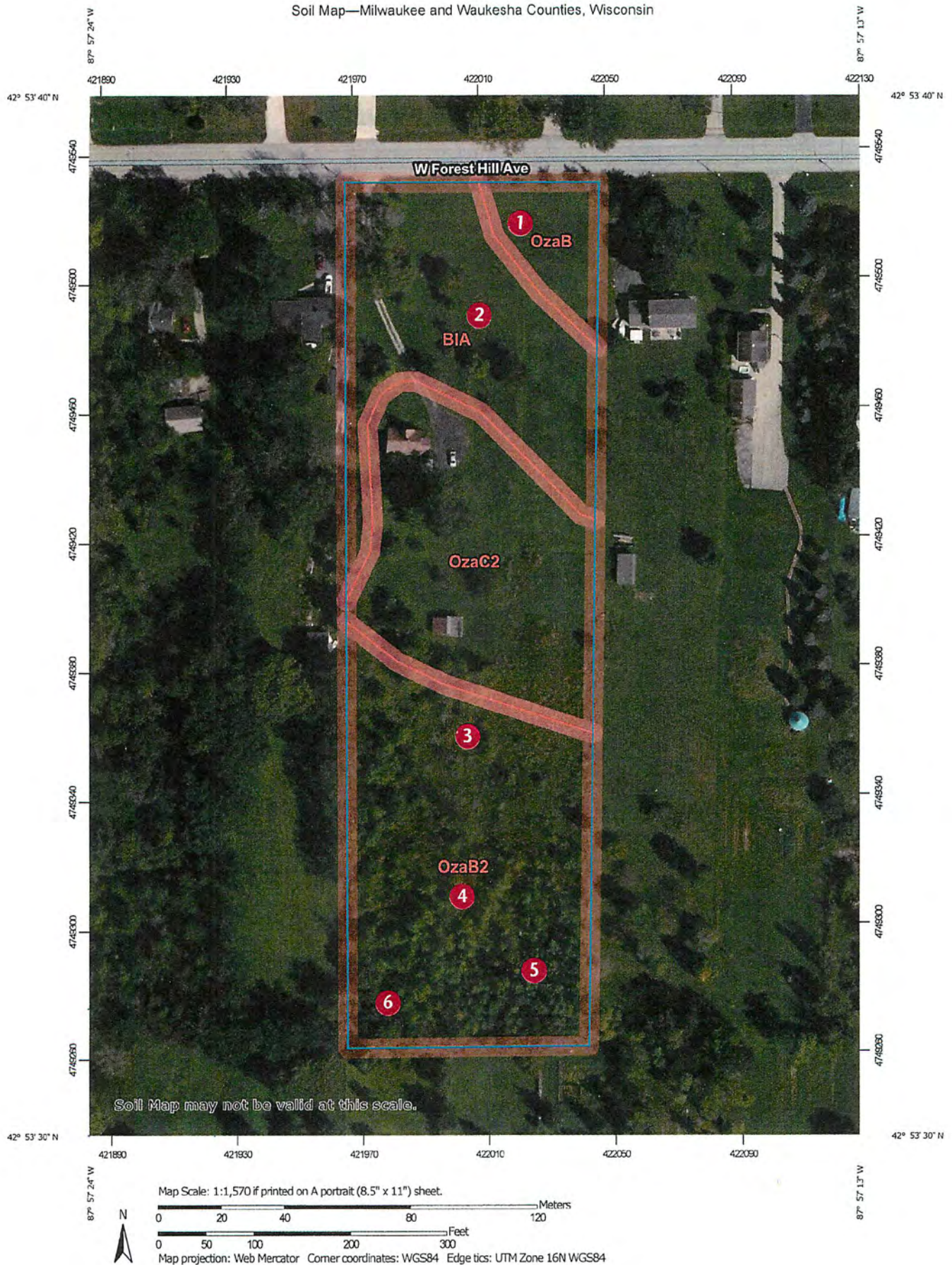








# Soil Map—Milwaukee and Waukesha Counties, Wisconsin





2/20/2019

Proposed Project Summary for 3031 W. Forest Hill Ave., Franklin, Wi. 53132.

This is a older residential neighborhood located on the east side of the city of Franklin. The zoning is R-3 suburban/estate single-family.

It is our intention to split the existing 5 acre parcel into two 2.50 acre lots that meet the R-3 district development standards. Dividing the lot in half directly down the middle will maintain the continuity of the existing lots on Forest Hill ave.

The new homes will have set backs that average the existing homes on Forest Hill Av. On lot 1 we are planning on building a 1800 sq. ft. ranch home with 3 car attached garage. On lot 2 we are planning on building a 2 story home with a 2 ½ car attached garage.

The back half of both lots is scattered young trees and heavy brush that is approx.300 ft deep by 125 ft. wide on each lot. The front of the lots are currently grass with several 4 fruit trees on lot 1. There is also some wild bushes and growth along the street side of the property that adds a rural appearance to the property. It is our intention to maintain the existing rural appearance. Grass is currently groomed to normal residential standards on the front half of the property. This look will be maintained before and during the construction of the new homes.

Our goal is to build to new homes that are in proportion to the existing homes in the area, placed on these two magnificent country look lots.

Lot owners Daniel A. Kanitz member Wyndham Homes and Dara Atljia Member Wyndham Homes.

**Franklin**  
**MAY 24 2019**  
**City Development**



Dan Kanitz &lt;wyndhamhomeswi@gmail.com&gt;

**RE: [Non-DoD Source] 3031 NRPP (UNCLASSIFIED)**

1 message

**Kopka, Marie H CIV USARMY CEMVP (USA)** <Marie.H.Kopka@usace.army.mil>  
To: "wyndhamhomeswi@gmail.com" <wyndhamhomeswi@gmail.com>

Tue, May 7, 2019 at 11:43 AM

CLASSIFICATION: UNCLASSIFIED

Good morning Mr. Kanitz,

Thank you for contacting the Corps of Engineers regarding your proposed project two install two culverts in associated with residential driveways at 3031 W. Forest Hill Avenue in the City of Franklin.

I know you have been working with Matt Groshek of our office regarding your proposed project and he had recommended that you to submit a jurisdictional determination request. In reviewing the One Source Consulting Natural Resource Protection Plan dated February 18, 2019, it appears that your project may qualify under our Minor Discharges General Permit which does not require the submittal of a permit application nor a Corps jurisdictional determination.

A copy of the Minor Discharges General Permit can be found here: [https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/RGP/MinorDischarges\\_RGP.pdf?ver=2018-02-22-093528-840](https://www.mvp.usace.army.mil/Portals/57/docs/regulatory/RGP/MinorDischarges_RGP.pdf?ver=2018-02-22-093528-840). Please read through the permit to make sure your project would meet the terms and conditions.

At this point, you have two options. You could proceed with the project without further coordination with the Corps OR you can request a General Permit confirmation letter. If you request the latter, please let me know and we will log in the project and I'll assign to a Project Manager.

Thank you for your time,  
Marie

Marie H. Kopka, Lead Project Manager  
U.S. Army Corps of Engineers  
St. Paul District, Regulatory Branch  
Brookfield Field Office  
250 N. Sunnyslope Road, Suite 296  
Brookfield, Wisconsin 53005  
Office: 651-290-5733 | Marie.H.Kopka@usace.army.mil

-----Original Message-----

From: Groshek, Matthew M CIV USARMY CEMVP (USA)  
Sent: Tuesday, May 7, 2019 10:56 AM  
To: Kopka, Marie H CIV USARMY CEMVP (USA) <Marie.H.Kopka@usace.army.mil>  
Subject: FW: [Non-DoD Source] 3031 NRPP

Franklin

MAY 24 2019

City Development

-----Original Message-----

From: Wyndham Homes [mailto:wyndhamhomeswi@gmail.com]  
Sent: Tuesday, May 7, 2019 9:40 AM  
To: Groshek, Matthew M CIV USARMY CEMVP (USA) <Matthew.M.Groshek@usace.army.mil>  
Subject: [Non-DoD Source] 3031 NRPP

hopefully this will open

City of Franklin Planning  
Benjamin Kohout





CERTIFIED SURVEY MAP NO. \_\_\_\_\_

Being a part of the Northeast 1/4 and Northwest 1/4 of the Southeast 1/4 of Section 13, Township 5 North, Range 21 East, in the City of Franklin, Milwaukee County, Wisconsin.

SURVEYOR'S CERTIFICATE

STATE OF WISCONSIN)  
MILWAUKEE COUNTY) SS

I, Dennis C. Sauer, Professional Land Surveyor, do hereby certify: That I have surveyed, divided and mapped, a part of the Northeast 1/4 and Northwest 1/4 of the Southeast 1/4 of Section 13, Township 5 North, Range 21 East, in the City of Franklin, Milwaukee County, Wisconsin; bounded and described as follows: Commencing at the Northeast corner of the Southeast 1/4 of Section 13, Town 5 North, Range 21 East; thence S 87°52'30" W, 1093.00 feet; thence S 00°03'50" E, 45.28 feet to the South line of West Forest Hill Avenue and the point of beginning; thence continuing S 00°03'50" E, 862.22 feet to a point; thence S 87°52'30" W, 250.00 feet to a point; thence N 00°03'50" W, 862.22 feet to the South line of said West Forest Hill Avenue; thence N 87°52'30" E, along said South line 250.00 feet to the point of beginning. Said lands contain 215,414 square feet (4.95 acres).

That I have made such survey, land division and map by the direction of Wyndham Homes, LLC, owner of said land.

That such map is a correct representation of all the exterior boundaries of the land surveyed and the land division thereof made.

That I have fully complied with the provisions of Chapter 236.34 of the Wisconsin State Statutes and the Unified Development Ordinance - Division 15, of the City of Franklin Municipal Code in surveying, dividing and mapping the same.

NOVEMBER 7, 2018

Date

REV. 3/20/19



Dennis C. Sauer

Professional Land Surveyor S-2421



PREPARED FOR:

Daniel Kanitz  
Wyndham Homes, LLC  
5665 South 108<sup>th</sup> Street  
Hales Corners, WI 53130

PREPARED BY:

Metropolitan Survey Service  
9415 West Forest Home Avenue  
Hales Corners, WI 53130



CERTIFIED SURVEY MAP NO. \_\_\_\_\_

Being a part of the Northeast 1/4 and Northwest 1/4 of the Southeast 1/4 of Section 13, Township 5 North, Range 21 East, in the City of Franklin, Milwaukee County, Wisconsin.

OWNER'S CERTIFICATE

Wyndham Homes, LLC, as owner, do hereby certify that we have caused the land described on this map to be surveyed, divided, mapped and dedicated as represented on this map in accordance with the requirements of Chapter 236.34 of the Wisconsin State Statutes and Unified Development Ordinance - Division 15, of the City of Franklin Municipal Code.

WITNESS the hand and seal of said owner this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Daniel Kanitz, Owner

STATE OF WISCONSIN)  
Milwaukee COUNTY) SS

PERSONALLY came before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, Daniel Kanitz, to me known to be the persons who executed the foregoing instrument and acknowledged the same.

\_\_\_\_\_  
Notary Public  
State of Wisconsin  
My Commission Expires: \_\_\_\_\_

COMMON COUNCIL APPROVAL

APPROVED and accepted by the Common Council of the City of Franklin, Resolution No. \_\_\_\_\_, on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Stephen Olson, Mayor  
City of Franklin

\_\_\_\_\_  
Sandra L. Wesolowski, Clerk  
City of Franklin



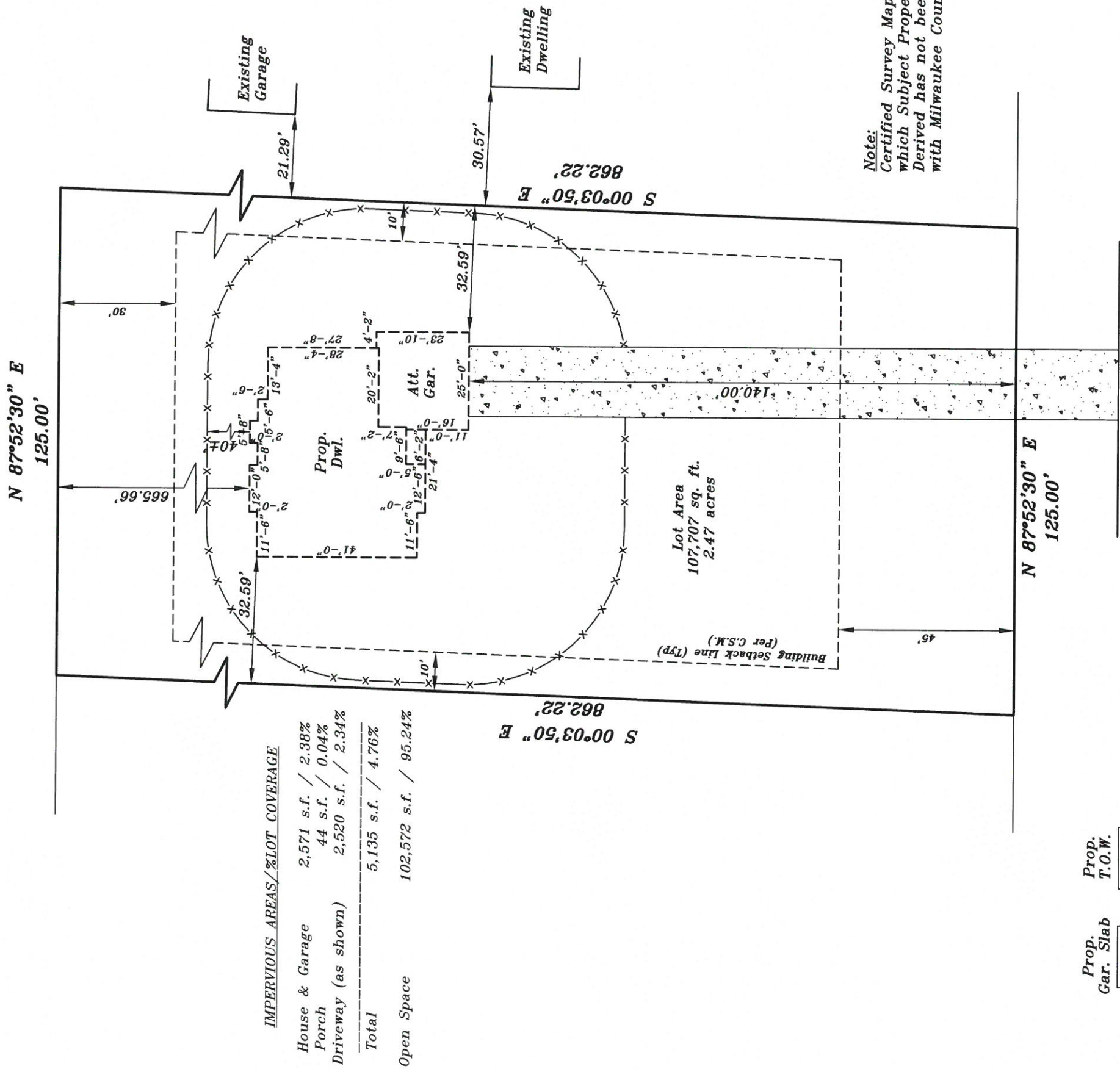
**LOCATION:** West Forest Home Avenue, Franklin, Wisconsin

**LEGAL DESCRIPTION:**

Lot 1 in **CERTIFIED SURVEY MAP NO.** , being a part of the Southwest 1/4 of the Southeast 1/4 of Section 13, Township 5 North, Range 21 East, in the City of Franklin, Milwaukee County, Wisconsin.

December 6, 2018 (Drawing Only)  
May 7, 2019 Impervious Calculat

Survey No. 110276



***Note:***  
***Certified Survey Map from***  
***which Subject Property is***  
***Derived has not been Recorded***  
***with Milwaukee County***

Prop. Gar. Slab	000.0
Prop. T.O.W.	000.0

	Prop.	Fin.	Yd.	Gr.
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				
41				
42				
43				
44				
45				
46				
47				
48				
49				
50				
51				
52				
53				
54				
55				
56				
57				
58				
59				
60				
61				
62				
63				
64				
65				
66				
67				
68				
69				
70				
71				
72				
73				
74				
75				
76				
77				
78				
79				
80				
81				
82				
83				
84				
85				
86				
87				
88				
89				
90				
91				
92				
93				
94				
95				
96				
97				
98				
99				
100				

(Per Gr. Plan)

*Proposed finished yard, 1st floor or top of foundation grade shown on this drawing is a suggested grade and should be verified by the owner, builder or municipality*

**METROPOLITAN SURVEY SERVICE, INC.**

**PROFESSIONAL LAND SURVEYORS AND CIVIL ENGINEERS**  
**9415 West Forest Home Avenue, Suite 202**  
**Hales Corners, Wisconsin 53130**

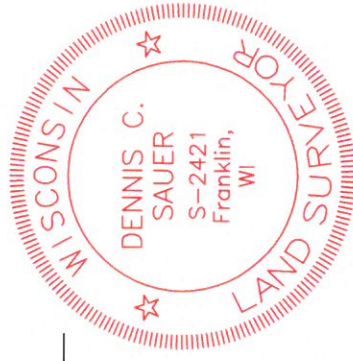
**PH. (414) 529-5380** **FAX (414) 529-9787**  
**email address: [survey@metropolitansurvey.com](mailto:survey@metropolitansurvey.com)**

◎ — Denotes Iron Pipe Found  
 ○ — Denotes Iron Pipe Set

**000.0** — Denotes Proposed Grade

—x—x—x—Denotes Proposed Silt Screen

West Forest Hill Avenue  
(66' R.O.W.)



GRAPHIC SCALE /



( IN FEET )

 $1 \text{ inch} = 30 \text{ ft.}$ 

**I HEREBY CERTIFY THAT I HAVE SURVEYED THE ABOVE DESCRIBED PROPERTY AND THAT 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 AND ROADWAYS AND VISIBLE ENCROACHMENT, 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 THE DATE HEREOF.**

**SIGNED**

**Dennis C. Saver**

Professional Land Surveyor S-2421



PLAT OF SURVEY

LOCATION: West Forest Home Avenue, Franklin, Wisconsin

LEGAL DESCRIPTION:

Lot 2 in CERTIFIED SURVEY MAP NO. , being a part of the Southwest 1/4 of the Southeast 1/4 of Section 13, Township 5 North, Range 21 East, in the City of Franklin, Milwaukee County, Wisconsin.

December 6, 2018 (Drawing Only)  
May 7, 2019 Impervious Calculations Added

Survey No. 110277

N 87°52'30" E  
125.00'

IMPERVIOUS AREAS/%LOT COVERAGE

House & Garage	2,007 s.f. / 1.86%
Porch	50 s.f. / 0.04%
Driveway (as shown)	3,296 s.f. / 3.06%
Total	5,353 s.f. / 4.96%
Open Space	102,354 s.f. / 95.04%

Lot Area  
107,707 sq. ft.  
2.47 acres

Existing  
Dwelling

29.36'

S 00°03'50" E  
862.22'

Building Setback Line (Typ)  
(Per C.S.M.)

145.00'

S 00°03'50" E  
862.22'

Note:  
Certified Survey Map from  
which Subject Property is  
Derived has not been Recorded  
with Milwaukee County

Prop. Gar. Slab  
000.0

Prop. T.O.W.  
000.0

Prop. Yd. Gr.  
000.0

(Per Gr. Plan)

Proposed finished yard, 1st floor  
or top of foundation grade shown  
on this drawing is a suggested  
grade and should be verified by  
the owner, builder or municipality

METROPOLITAN SURVEY SERVICE, INC.

PROFESSIONAL LAND SURVEYORS AND CIVIL ENGINEERS

9415 West Forest Home Avenue, Suite 202  
Hales Corners, Wisconsin 53130  
PH. (414) 529-5380 FAX (414) 529-9787  
email address: [survey@metropolitansurvey.com](mailto:survey@metropolitansurvey.com)

⊙ — Denotes Iron Pipe Found  
○ — Denotes Iron Pipe Set

000.0 — Denotes Proposed Grade

—x—x—x— Denotes Proposed Silt Screen

West Forest Hill Avenue

(66' R.O.W.)

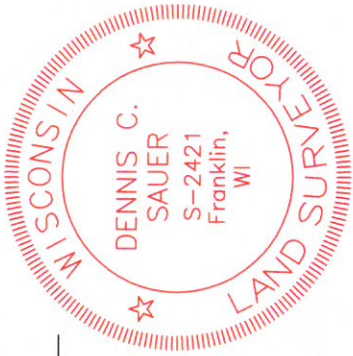


GRAPHIC SCALE



( IN FEET )

1 inch = 30 ft.



I HEREBY CERTIFY THAT I HAVE SURVEYED THE ABOVE DESCRIBED PROPERTY AND THAT 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 AND ROADWAYS AND VISIBLE ENCROACHMENT, 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 THE DATE HEREOF.

*Dennis C. Sauer*  
Dennis C. Sauer  
Professional Land Surveyor S-2421

SIGNED