

NORTHFIELD TOWNSHIP BOARD AGENDA

NOTICE OF SPECIAL MEETING

June 28, 2016 - - 6:00 PM
8350 Main Street, 2nd Floor

CALL TO ORDER
PLEDGE/INVOCATION
ROLL CALL
ADOPT BALANCE OF AGENDA
CALL TO THE PUBLIC
BOARD MEMBER COMMENTS

AGENDA ITEMS

1. Closed Session:

- a. To consider the personnel evaluation of a public officer, employee, staff member, or individual agent, pursuant to MCL 15.268(8)(a)
- b. To consider the purchase or lease of real property up to the time an option to purchase or lease that real property is obtained, pursuant to MCL 15.268(8)(d) +

2. Possible action as a result of Closed Session +

2nd CALL TO THE PUBLIC
BOARD MEMBER COMMENTS
ADJOURNMENT

* Denotes previous backup; + denotes no backup in package

This notice is posted in compliance with PA 267 of 1976 as amended (Open Meetings Act) MCLA 41.72A (2) (3) and the Americans with Disabilities Act. (ADA) individuals with disabilities requiring auxiliary aids or services should contact the Northfield Township Office, (734-449-2880) seven days in advance.

Northfield Township

Public Safety Director Evaluation

Name: _____	Date: _____
-------------	-------------

Ratings:

5	OUTSTANDING
4	GOOD
3	AVERAGE
2	MODERATE
1	POOR
DK	DON'T KNOW

	1. Organizational Management	Scores
1.	Plans and organizes the implementation of policies adopted by the Board.	
Comments: _____		
2.	Plans and organizes responses to public requests and complaints in a timely, courteous manner.	
Comments: _____		
3.	Plans and organizes the implementation of the Board's goals.	
Comments: _____		
4.	Establishes and maintains a township organizational structure that delegates authority and determines accountability among department heads and their staff.	
Comments: _____		
5.	Determines the skills and job positions necessary to carry out Township business in the most efficient and cost effective way possible and hires qualified people to fill these positions.	
Comments: _____		

Township Manager Evaluation

2. Fiscal Management

Scores

1.	Plans and organizes the preparation of an annual budget in a readable, well-documented manner; crafts and refines budget policy; engages department heads in budget preparation; and educates the Board on specific budget issues that affect such policy.	
Comments:		

2.	Maintains necessary controls to administer adopted budget within approved revenues and expenditures per budget resolution policy.	
Comments:		

3.	Keeps Board informed of budget concerns.	
Comments:		

4.	Anticipates future financial needs of the Township, both for capital projects and operations, and plans to meet those needs.	
Comments:		

3. Program Development and Delivery

Scores

1.	Systematically completes special projects.	
Comments:		

2.	Keeps Board and staff apprized of project development, either verbally or in writing.	
Comments:		

3.	Encourages input from citizens, boards and commissions, and staff for program development.	
Comments:		

4. Intermediate/Long Range Planning

Scores

1.	Knowledgeable of new technologies, systems, and methods in relation to Township services.	
Comments:		

Township Manager Evaluation

2.	Knowledgeable of State and Federal legislation affecting the Township, and makes plans accordingly.	
----	---	--

Comments:

3.	Anticipates future growth, trends, and needs of the Township, and plans and organizes for them.	
----	---	--

Comments:

5. Relations with Township Board

Scores

1.	Is available to all Board members and addresses their questions and concerns in a timely manner .	
----	---	--

Comments:

2.	Assists Board in developing policies.	
----	---------------------------------------	--

Comments:

3.	Prepares materials for presentation in a concise, clear, and comprehensive manner.	
----	--	--

Comments:

6. Relationship with employees

Scores

1.	Communicates emerging issues, staff concerns, and current plans and activities of staff to the Board in a timely manner, either verbally or in writing.	
----	---	--

Comments:

2.	Maintains contact and professional interaction with all levels of the Township organization.	
----	--	--

Comments:

3.	Establishes and maintains systems and programs for employee involvement in decision making to further the "team".	
----	---	--

Comments:

Township Manager Evaluation

7. Relationship to the Public

Scores

1.	Ensures that attitude and feeling of helpfulness, courteousness, sensitivity, and fairness exists in employees coming in contact with the public.	
Comments:		
2.	Establishes and maintains an image of the Township to the community that represents service, vitality, and professionalism.	
Comments:		
3.	Establishes and maintains a liaison with public and private non-governmental agencies, organizations, and groups involved in activities and services relating to the Township.	
Comments:		
4.	Handles inquiries from the news media in a professional manner.	
Comments:		
5.	Maintains timely, appropriate, and courteous responses to citizen requests and concerns.	
Comments:		

8. Intergovernmental Relations

Scores

1.	Maintains communication with local governmental units with which the Township is involved or interfaces.	
Comments:		
2.	Involved in regional activities and leadership that will indirectly benefit the township, and promotes intergovernmental cooperation.	
Comments:		
3.	Deals effectively with other township, village, city, county, and state managers.	
Comments:		

Township Manager Evaluation

9. Overall Professionalism

Scores

1.	Continuing Education: Seeks professional improvement by attending pertinent seminars and conferences.	
Comments:		

2.	Up To Date: Stays informed of information and technology affecting the Township	
Comments:		

3.	Self Motivated: Demonstrates initiative and resourcefulness.	
Comments:		

4.	Positivity: Maintains a positive attitude towards the Township and position.	
Comments:		

5.	Ethical: Expects high ethical standard for him/herself and staff.	
Comments:		

6.	Pro-Active: Addresses issues before they become problems.	
Comments:		

7.	Problem Solver: Creatively and aggressively pursues solutions to issues.	
Comments:		

8.	Leadership: Motivates staff to do their best.	
Comments:		

9.	Sensitivity: Aware of impacts that his/her decisions have on others.	
Comments:		

Township Manager Evaluation

10.	Good Judgment: Decisions made are logical and address health, safety, and welfare of citizens.	
Comments:		

11.	Communication: Able to effectively communicate with the public, both verbally and in writing.	
Comments:		

Additional Comments:

Public Safety Director Self-Evaluation:

Public Safety Director Comments:

Board Member Signature

Date

Public Safety Director Signature

Date

NORTHFIELD TOWNSHIP BOARD WORKSHOP AGENDA

June 28, 2016 - - 7:00 PM

8350 Main Street, 2nd Floor

CALL TO ORDER
PLEDGE/INVOCATION
ROLL CALL
ADOPT BALANCE OF AGENDA
CALL TO THE PUBLIC
BOARD MEMBER COMMENTS
CORRESPONDENCE AND ANNOUNCEMENTS

AGENDA ITEMS:

1. Hiring of Part-time Police Officer Corey Johnston
2. Resignation of Police Officer Michael Buxton
3. Verizon Cell Tower
4. Living Water Conditional Use
5. Inspector Contract
6. Resolution 16-544: to set Public Hearing for Arvin Sango Tax Abatement (IFT Application)
7. Resolution 16-545: Change to Polling Location for Precincts 1 & 3
8. Budget Amendments
 - a. Resolution 16-546: Amendments to 2016 budget
 - b. Resolution 16-547: Amendments to 2017 budget

DISCUSSION ITEMS:

1. Financing of Van Curler Property
2. Review of Soil Boring Results and Environmental Analysis for Van Curler Property
3. Fire Department Capital Improvement Plan (CIP)
4. Property Acquisition from Tax Sale

2nd CALL TO THE PUBLIC
BOARD MEMBER COMMENTS
ADJOURNMENT

* Denotes previous backup; + denotes no backup in package

This notice is posted in compliance with PA 267 of 1976 as amended (Open Meetings Act) MCLA 41.72A (2) (3) and the Americans with Disabilities Act. (ADA) individuals with disabilities requiring auxiliary aids or services should contact the Northfield Township Office, (734-449-2880) seven days in advance.



William E. Wagner, Jr.
Director of Public
Safety/Fire Chief

Northfield Township Public Safety

8350 Main Street, Whitmore Lake, MI 48189
Fire: 734-449-2385 • Fax: 734-449-2521
Police: 734-449-9911 • Fax: 734-449-0511
www.twp.northfield.mi.us



Timothy Greene
Lieutenant
Police Operations

NORTHFIELD TOWNSHIP POLICE DEPARTMENT AGENDA ITEM FOR THE BOARD OF TRUSTEES MEETING OF JUNE 28, 2016

TO: The Northfield Township Board of Trustees
FROM: Lieutenant Timothy Greene

PERSONNEL ISSUE

I request your acceptance of the letter of resignation, submitted June 8, 2016, of Part-Time Police Officer Michael Buxton, effective June 18, 2016.

In addition, we request the approval to promote Reserve Officer Corey Johnston to the position of Part-Time Probationary Police Officer contingent upon the successful completion of all Departmental and State (M.C.O.L.E.S.) requirements. Reserve Officer Johnston became a Reserve for Northfield Township Police Department on October 28, 2016. Since joining the Department he has performed his duties in a competent professional manner. Reserve Officer Johnston has strong ties to the community, he grew up in Whitmore Lake and attended Whitmore Lake Schools. He and his family currently reside in the Township. The officer has exhibited and expressed a sincere desire to pursue a career in law enforcement and serve the citizens of Northfield Township.

BACKGROUND DATA
AND
IMPACT ASSESSMENT TO SUPPORT
SPECIAL USE APPROVAL

Submitted By:

Verizon Wireless
c/o Robert Przybylo

Prepared By:

C&W Consultants, Inc.
1126 N. Main St.
Rochester, MI 48307

May 20, 2016
Revised June 6, 2016

BACKGROUND DATA
AND
IMPACT ASSESSMENT TO SUPPORT
SPECIAL USE APPROVAL

Submitted By:

Verizon Wireless
c/o Robert Przybylo

Prepared By:

C&W Consultants, Inc.
1126 N. Main St.
Rochester, MI 48307

May 20, 2016
Revised June 6, 2016

JONATHAN R. CRANE P.C.
ATTORNEYS & COUNSELORS
1126 N. MAIN ST.
ROCHESTER, MI 48307

JONATHAN R. CRANE
BENJAMIN S. HERRICK

TELEPHONE: (248) 650-8000
FACSIMILE: (248) 650-9239
EMAIL: JRCPC@SBCGLOBAL.NET

June 6, 2016

Sally Hodges
McKenna and Associates
235 E. Main Street
Northville, MI 48167

Via Email: shodges@mcha.com

Re: Verizon Wireless #144 – N. Territorial & Spencer (Fire Station)
Our File No. JC3666-13

Dear Ms. Hodges:

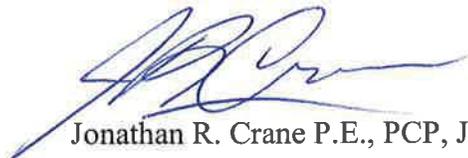
Enclosed pursuant to your request are electronic copies of:

- RJP Letter addressing concerns of coverage, adjacent sites and other matters
- VZW Existing Condition Coverage Map
- VZW Coverage Map with Collocation on Cross Roads Tower
- VZW Coverage Map with AT&T
- VZW Coverage Map with Proposed N. Territorial & Spencer Site
- Wetlands Map of Area
- Revised Site Plan with Sheets 1-5 (Sheet 5 is extensive Fire Station planting)

We trust that this additional information further assists you in this most interesting project.

Very truly yours,

JONATHAN R. CRANE P.C.



Jonathan R. Crane P.E., PCP, J.D.

Attachments

cc: Robert Przybylo (w/attach; via electronic only)

RJP CONSULTING

June 1, 2016

Planning Commission
Northfield Township
8350 North Main Street
Whitmore Lake, MI 48189

RE: Verizon Wireless Additional Justification for Tower with additional Propagation Maps

To Whom It May Concern:

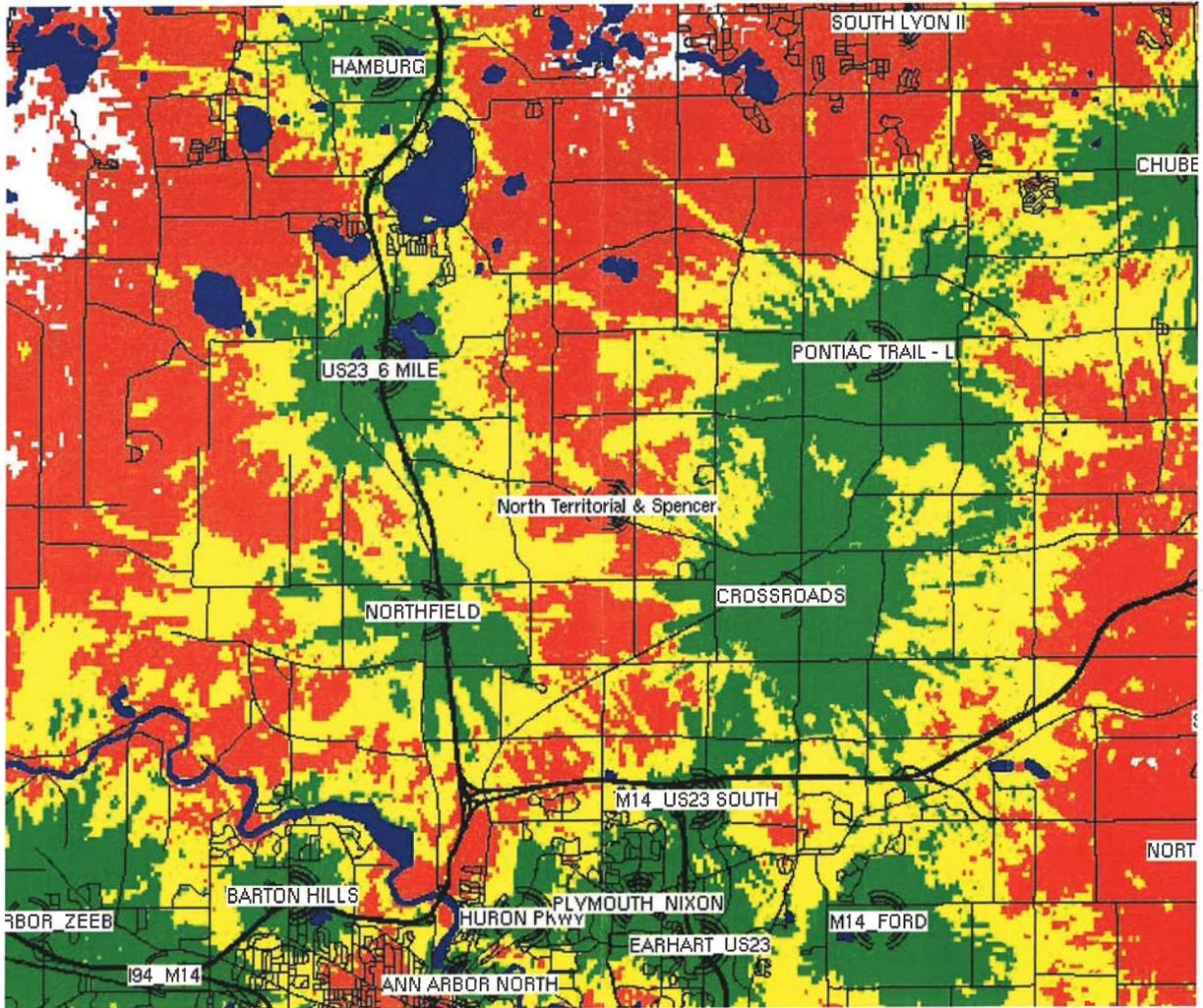
1. Clarify 2016 New Build Site in Northfield Township: This site is called VzW 1096 Crossroads and is a collocation on an existing Washtenaw County 195' Self Support tower. It is currently under construction.
2. Does additional height from 120' to 150' change the needs of future sites in the township? The answer is no. The increased height provides better coverage but not enough to offset any proposed future sites. The primary purpose of the additional height is to provide the township and other carriers the ability to collocate on the tower at a useful height. At 120', the tower would be the minimum height necessary for Verizon Wireless but would not be theoretically tall enough to provide adequate collocation to other carriers.
3. Justification for height increase from 120' to 150': The primary purpose of the additional height is to provide the township and other carriers the ability to collocate on the tower at a useful height. At 120', the tower would be the minimum height necessary for Verizon Wireless but would not be theoretically tall enough to provide adequate collocation to other carriers.
4. Additional propagation maps to show ATT and ATC towers less than two miles away cannot be used: As you can see from the revised propagation maps attached, The ATC tower (190' monopole with 180' available) is too far south and west to provide coverage and meet our network objectives of improving service along North Territorial Road and the surrounding area. 180' was used as the antenna mount height. The ATT tower is too far south to meet the same coverage and network objectives. The 350' self-support tower has a 300' rad center available and that is what we used for this analysis. Using this tower would barely improve coverage along North Territorial Road (it would be spotty at best) and provide no improvement for any area north of North Territorial.

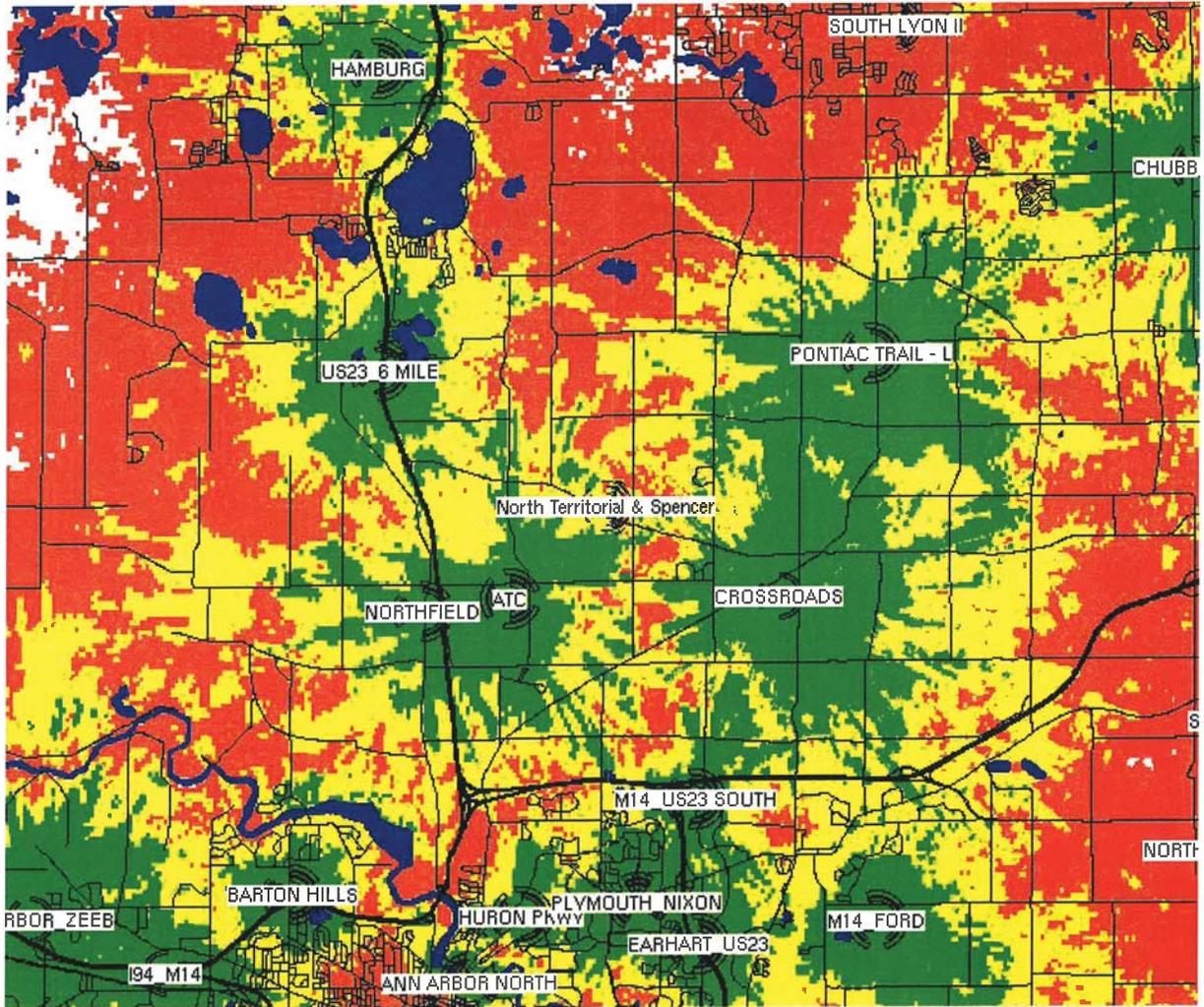
Please call me at (248) 613-4399 if you have any questions.

Sincerely,

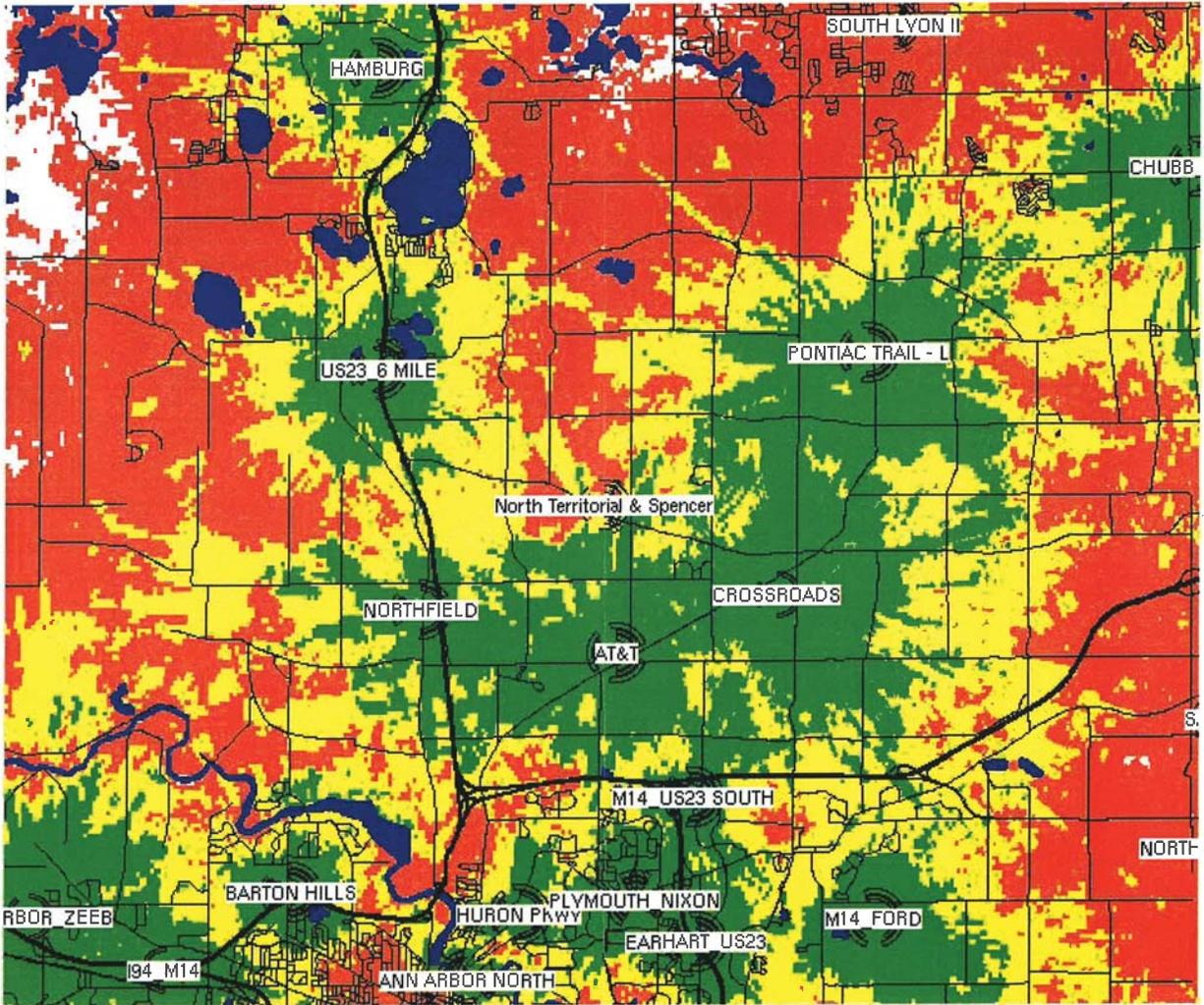


Bob Przybylo
RJP Consulting, Inc. o/b/o Verizon Wireless

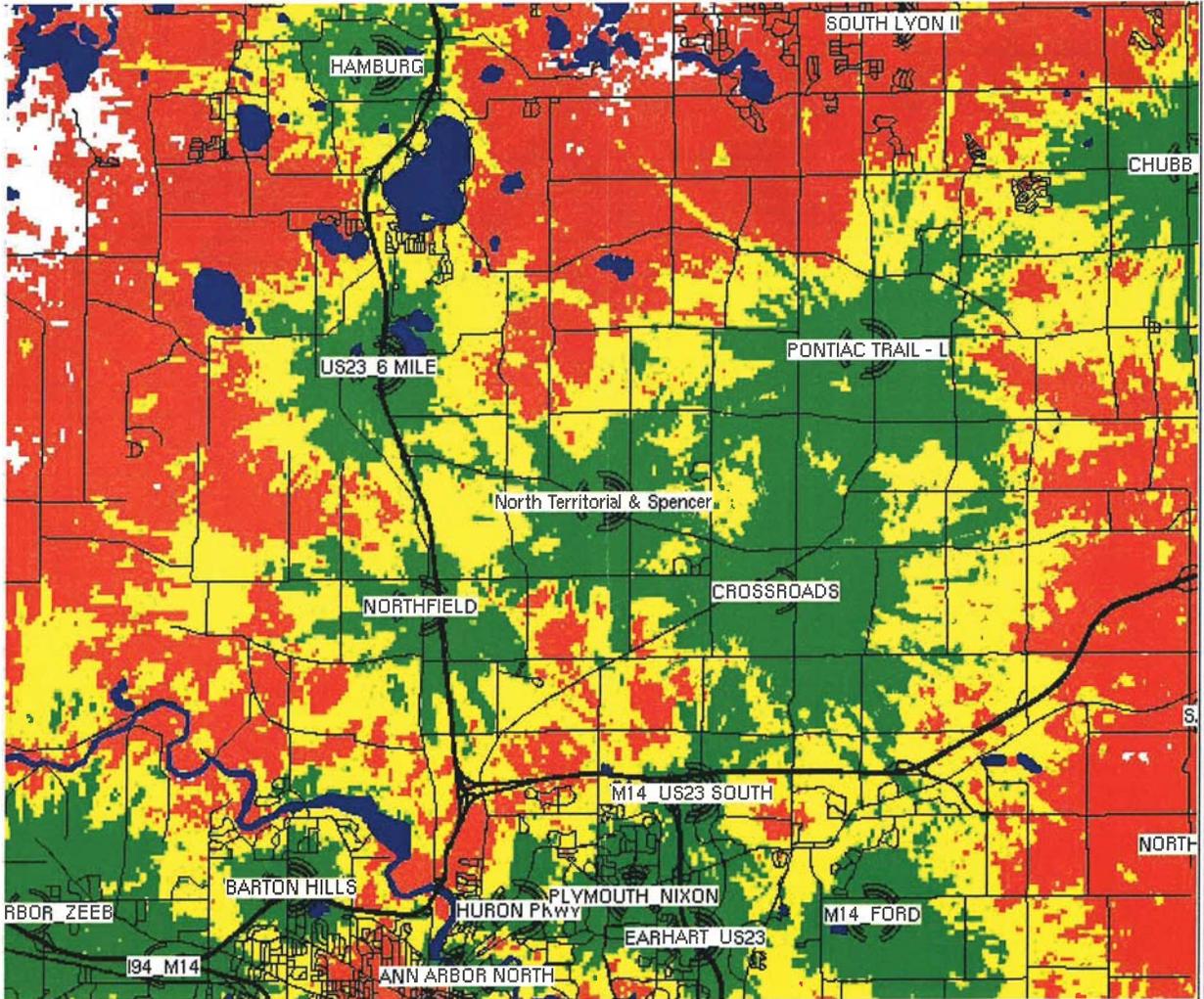




② Existing Conditions
 with Crossroads Town
 - Locating On Existing
 ATC Town - An
 Additional Coverage
 To a Class to "M145544
 S11"



① Existing Conditions
 with Cross Roads Turn
 - location on AT&T Str.
 leaves poor coverage
 North of 1st Territorial
 Too Close to Crossroads
 and Northfield Sites



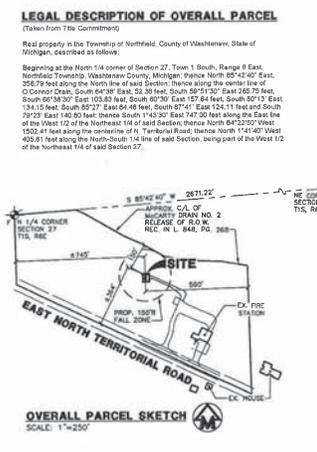
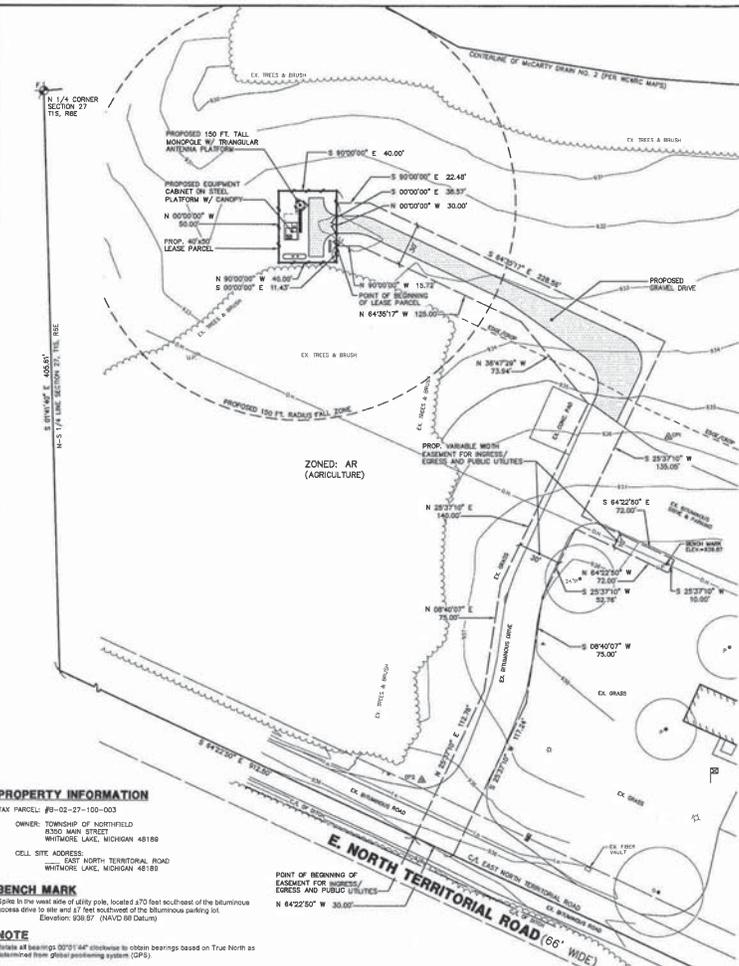
- Proposed Coverage with N Territorial and Spencer Site
- Control location between 4 existing sites



P:\Users\jw\Documents\94044-144\94044-144.dwg, 8/1/2018 11:24 AM, David E. Finner, New
 Copyright © 2018 Midwestern Consulting, L.L.C. All rights reserved. No part of this drawing may be used or reproduced in any form or by any means, or stored in a database or retrieval system, without prior permission of Midwestern Consulting, L.L.C.

JOB No. 94044-144 DATE PLOTTED SHEET 1 OF 1 DRAWN BY CHECKED BY DATE PLOTTED	1	verizon SITE #144 - "N TERRITORIAL SPENCER" NORTHFIELD TOWNSHIP, WASHTENAW COUNTY, MICHIGAN WETLAND AND AERIAL OVERLAY VIEW	APPLICANT/ENGINEER Midwestern Consulting, L.L.C. 20000 W. WASHINGTON AVE., SUITE 100 ZEEB, MICHIGAN 49759 PHONE: (268) 895-5000
			MIDWESTERN Midwestern Consulting, L.L.C. 20000 W. WASHINGTON AVE., SUITE 100 ZEEB, MICHIGAN 49759 PHONE: (268) 895-5000

Midwestern Consulting, LLC
 1000 Main Street
 Whitmore Lake, Michigan 48189
 Phone: (517) 351-1111
 Fax: (517) 351-1112
 www.midwesternconsulting.com



LEGEND

- 0.15 --- EXIST. CONTOUR
- 0.30 --- PROP. CONTOUR
- +33.0 EXIST. SPOT ELEVATION
- 33.00 PROP. SPOT ELEVATION
- UP EXIST. UTILITY POLE
- OH EXIST. OVERHEAD UTILITY LINE
- OP EXIST. LIGHT POLE
- LO EXIST. FIBER OPTIC LINE
- TP EXIST. TELEPHONE RISER
- OT EXIST. TOWER
- CO C/A OF DITCH
- MA MAISON
- SH SHED
- GT GRASS TREE
- PT PINE TREE
- FL FLAG POLE
- PC FENCE
- SC SECTION CORNER
- FM FOUND MONUMENT
- CP CONTROL PT.

LEGAL DESCRIPTION OF OVERALL PARCEL
 (Taken from T18 Comment)

Real property in the Township of Northfield, County of Washtenaw, State of Michigan, described as follows:

Beginning at the North 1/4 corner of Section 27, Town 1 South, Range 8 East, Northfield Township, Washtenaw County, Michigan; thence North 80°42'40" East, 256.79 feet along the north line of said Section; thence along the center line of C-Connor Drain, South 64°28' East, 2.38 feet, South 88°15'30" East, 25.75 feet, South 60°28'30" East, 103.83 feet, South 80°30" East, 107.84 feet, South 50°13' East, 134.12 feet, South 52°27' East, 66.48 feet, South 87°41' East, 124.11 feet and South 79°23' East, 140.80 feet; thence South 1°43'30" East, 747.20 feet along the East line of the West 1/2 of the Northeast 1/4 of said Section; thence North 64°22'50" West, 1552.41 feet along the centerline of N. Territorial Road; thence North 1°41'40" West, 405.81 feet along the North-South 1/4 line of said Section, being part of the West 1/2 of the Northeast 1/4 of said Section.

thence North 28°37'10" E 110.78 feet,
 thence N 08°40'07" E 75.00 feet,
 thence N 23°17'11" E 140.20 feet,
 thence N 38°47'38" W 79.84 feet,
 thence N 64°50'17" E 175.00 feet,
 thence N 80°00'07" W 15.72 feet,
 thence N 00°00'07" W 30.00 feet,
 thence S 80°00'07" E 22.45 feet,
 thence S 64°38'17" E 228.56 feet,
 thence S 23°17'11" W 100.00 feet,
 thence N 64°22'50" W 72.00 feet,
 thence S 23°17'11" W 62.78 feet,
 thence S 08°40'07" W 75.00 feet,
 thence S 23°17'11" W 117.24 feet to the centerline of East North Territorial Road;

thence along said centerline N 64°22'50" W 30.00 to the POINT OF BEGINNING, being a part of the Northeast 1/4 of Section 27, T18, R8E, Northfield Township, Washtenaw County, Michigan; and containing 3.000 ac. ±, R. C. 245 acres, more or less, subject to assessments and obligations of record, if any.

PROPERTY INFORMATION
 TAX PARCEL: 09-02-27-100-003
 OWNER: TOWNSHIP OF NORTHFIELD
 8350 MAIN STREET
 WHITMORE LAKE, MICHIGAN 48189
 CELL SITE ADDRESS: EAST NORTH TERRITORIAL ROAD
 WHITMORE LAKE, MICHIGAN 48189

BENCH MARK
 Spikes in the west side of utility pole, located 270 feet southeast of the blumhouse access drive to site and 57 feet southwest of the blumhouse parking lot.
 Elevation: 939.87 (NAVD 88 Datum)

NOTE
 Rotate all bearings 0°00'16" clockwise to obtain bearings based on True North as determined from Global Positioning System (GPS).

APPLICANT/ENGINEER:
 JAMES A. FISHER
 REGISTERED PROFESSIONAL ENGINEER
 NO. 24260

STATE OF MICHIGAN
 REGISTERED PROFESSIONAL ENGINEER
 JAMES A. FISHER
 NO. 24260

APPLICANT/ENGINEER:
 MIDWESTERN CONSULTING, LLC
 1000 MAIN STREET
 WHITMORE LAKE, MICHIGAN 48189
 PHONE: (517) 351-1111

SITE #144 - "N" TERRITORIAL & SPENCER"
 NORTHFIELD TOWNSHIP, WASHTENAW COUNTY, MICHIGAN
 SITE SURVEY, GENERAL INFORMATION

1

94044-144

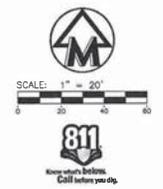
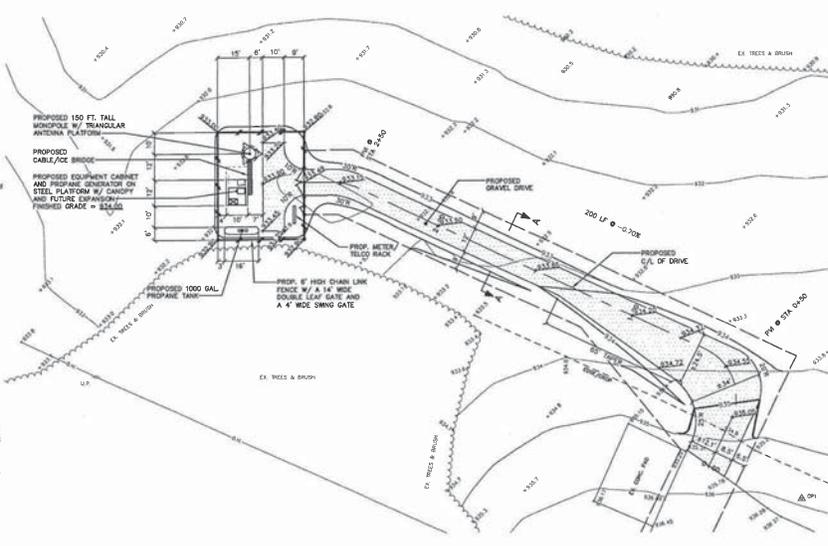
GENERAL NOTES:

- All site work construction shall be in accordance with the current standards and specifications of the Northfield Township, where applicable.
- The proposed equipment cabinet is to be a computerized, unattended, wireless exchange structure. No water service, sanitary facilities or gas service is needed. Telephone and electrical services will be from an existing utility pole or the adjacent to the site.
- The proposed equipment cabinet is to have a security system monitored 24 hours per day. The cabinet will also be constructed with bullet resistant materials.
- There are no low voltage (120V), LED lights proposed as part of this project. The lights are mounted to the canopy support posts, under the canopy with one near to the cabinet and one near to the generator. Lights shall be connected to a technician operated cutoff switch with a timer with a two-hour maximum off duration.
- There are no signs proposed for this project except for:
 - Emergency contact information purposes and FCC "call sign" placed on equipment cabinet door.
 - FCC registration number located on fence gate.
- The cellular antenna and equipment cabinet will be approved by the Federal Communications Commission (FCC) and will not impact any frequency sensitive devices whatsoever. Buyer warrants no adverse radio interference with adjacent land uses.
- There are no toxic materials used by Lessee on the site. Lessee has no need for outdoor storage or garbage disposal and pick-up.
- Maintenance personnel using van type sprayer vehicles enter and exit the site approximately 2 to 4 times per month. No loading or unloading area is needed by them.
- All areas disturbed by the construction of the tower and cabinet and driveway shall be restored in kind. Contractor to provide soil erosion control measures as needed or as directed by owner or government agency having jurisdiction.
- All areas inside of and to 1'-0" outside of the fenced area shall be covered with 3" of crushed limestone placed over "Typical" landscape fabric.
- Ingress and egress by Lessee's personnel to the site shall be via an existing paved road and proposed gravel drive from East North Territorial Road.
- The proposed drive shall consist of 3" of MDOT Class 23A crushed limestone aggregate over 12" of 1/2" crushed concrete or slag over compacted subgrade. The subgrade shall be stripped free of all topsoil and organic material prior to placing aggregate base. Where poor subgrade soils are encountered, a woven geotextile fabric (36 mil 500K or approved equal) shall be placed to treat it to a minimum of 2 ft. sides and longer than the drive which is to be constructed over the poor soils.
- This site plan is based on the survey of the existing conditions conducted by Midwestern Consulting, LLC on 05-15-2015.
- Electrical wiring, connections and grounding of same shall comply with all applicable local, state and federal statutes, regulations and standards.
- All signal and remote control conductors shall comply with current Township requirements.
- The antenna and tower shall have such color as to minimize off-site visibility.
- All proposed landscape material is guaranteed to be replaced as needed.
- Any noise from the tower, equipment cabinet or generator shall be documented to ensure that the noise level is not in excess of that typical for residential areas.
- The applicant will provide evidence that the radio and radiation emissions will be compliant with current FCC standards.

Maintenance Plan for Proposed Verizon Wireless Tower Site

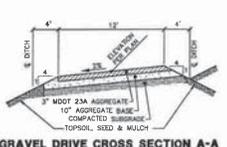
Verizon Wireless maintains all of their sites through its Operation Department. The Operations technician visits the Verizon Wireless sites at least once a month. The Verizon Wireless Operation technician will review the site at each visit and make arrangements to report and repair any and all issues with the site. The technician has a standard procedure that is followed when visiting a site. The technician will look for issues with all matters such as the fence, road, cabinet, etc. Anything that needs to be repaired is the responsibility of the Operations Department and they will make sure that the site is maintained to Verizon Wireless and Township Specifications.

Any dead or diseased trees originally planted by Verizon Wireless shall be replaced within 6 months or in the most appropriate planting season.

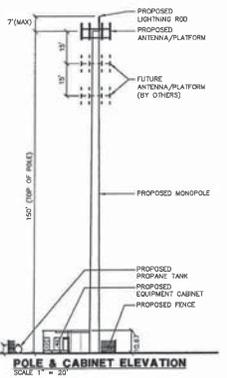


LEGEND

	EXIST. CONTOUR
	PROP. CONTOUR
	EXIST. SPOT ELEVATION
	PROP. SPOT ELEVATION
	EXIST. UTILITY POLE
	UTILITY WIRE
	EXIST. OVERHEAD UTILITY LINE
	EXIST. LIGHT POLE
	EXIST. FIBER OPTIC LINE
	TELEPHONE RISER
	C/U, D/F DITCH
	POST FENCE
	SECTION CORNER
	FOUND MONUMENT
	CONTROL PT.



GRAVEL DRIVE CROSS SECTION A-A
NOT TO SCALE



POLE & CABINET ELEVATION
SCALE 1" = 20'

MIDWESTERN

APPLICANT/LESSEE:
VERIZON WIRELESS
1000 W. TERRITORIAL & SPENCER
NORTHFIELD TOWNSHIP, MICHIGAN 48757
PHONE: (248) 894-2000

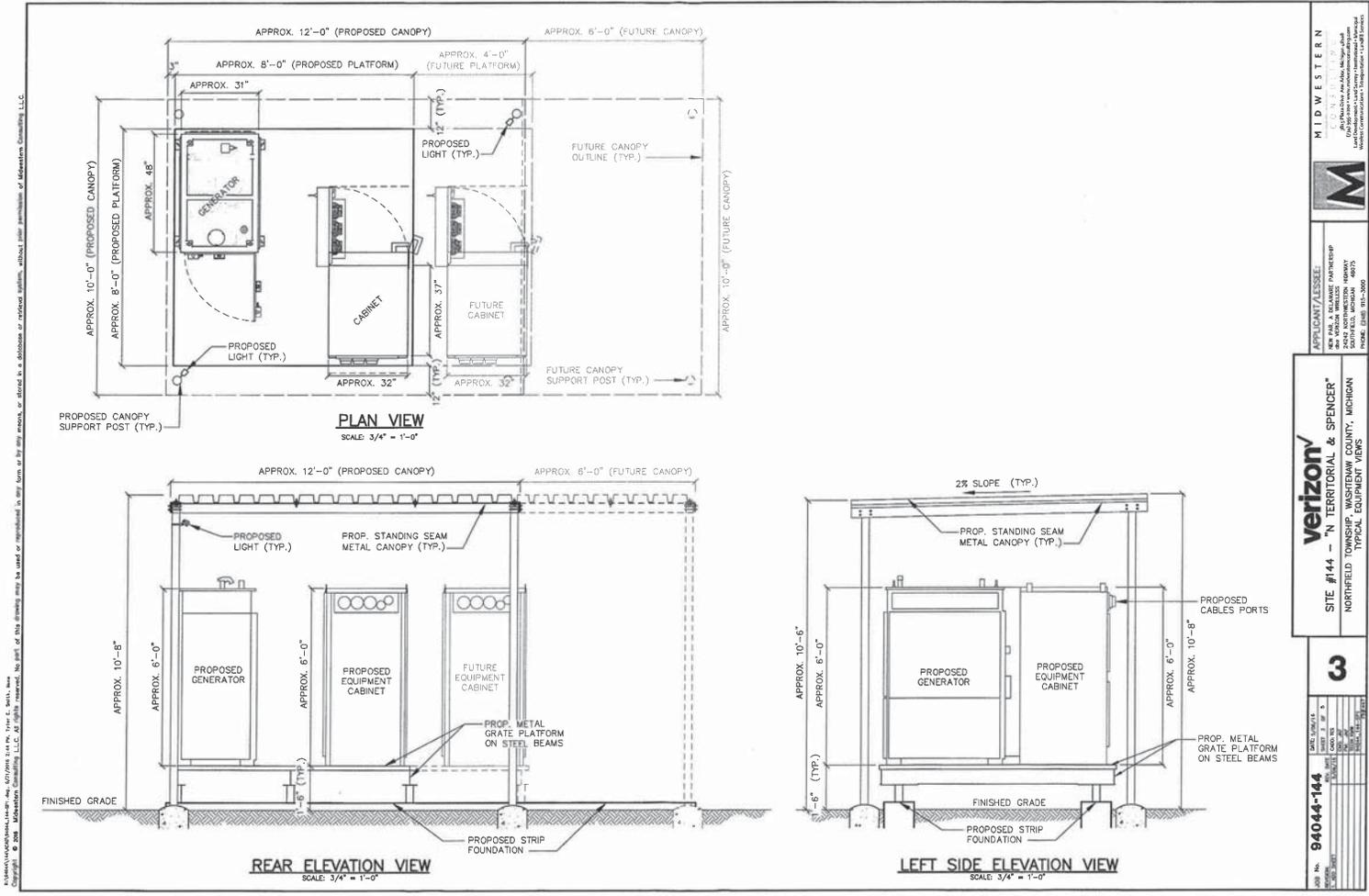
811
Know what's Below. Call before you dig.

verizon
SITE #144 - N TERRITORIAL & SPENCER
NORTHFIELD TOWNSHIP, WASHINGTON COUNTY, MICHIGAN
SITE PLAN DETAIL

2

94044-144

DATE PLOTTED: 05/15/2015 10:58 AM
TEXT: 2 OF 3
SCALE: 1" = 20'



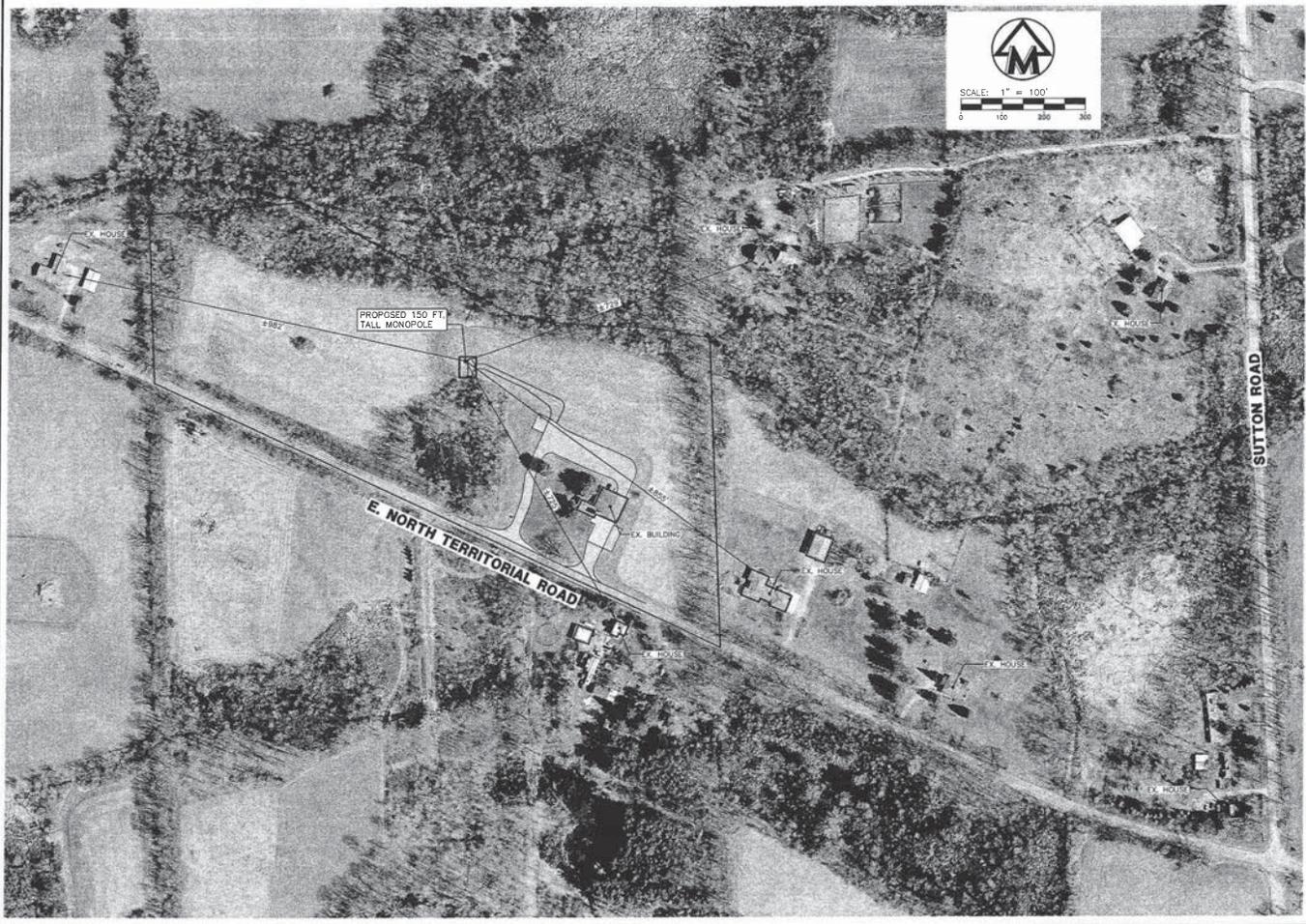
M:\Projects\94044-144\94044-144.dwg, 10/27/2016 1:14 PM, User: E. Smith, User
 Copyright © 2016 Midwestern Consulting LLC. All rights reserved. No part of this drawing may be used or reproduced in any form or by any means, or stored in a database or retrieval system, without prior permission of Midwestern Consulting LLC.

94044-144
 SHEET NO. 3
 DATE PLOTTED: 10/27/2016 1:14 PM
 USER: E. SMITH

verizon
 SITE #144 - 'N TERRITORIAL & SPENCER'
 NORTHFIELD TOWNSHIP, WASHTENAW COUNTY, MICHIGAN
 TYPICAL EQUIPMENT VIEWS

MIDWESTERN
 CONSULTING
 PARTNERSHIP
 2000 W. MICHIGAN AVE. SUITE 100
 ANN ARBOR, MI 48106
 PHONE: (810) 912-3000

© 2018 Midwestern Consulting L.L.C. All rights reserved. No part of this drawing may be used or reproduced in any form or by any process, without prior permission of Midwestern Consulting L.L.C.



JOB NO.	94044-144
DATE	08/15/18
SCALE	1" = 100'
SHEET NO.	1 OF 3
DATE	08/15/18
BY	[Signature]
CHECKED	[Signature]
DATE	08/15/18
PROJECT	Verizon Tower Installation

verizon
SITE #144 - "N TERRITORIAL & SPENCER"
 NORTHFIELD TOWNSHIP, WASHINGTON COUNTY, MICHIGAN
 AERIAL VIEW

APPLICANT/LESSEE:
 Verizon Wireless Partnership
 10000 W. LEXINGTON AVENUE
 SUITE 1000, WASHINGTON 48090
 PHONE: (248) 916-5000



MIDWESTERN
 CONSULTING L.L.C.
 10000 W. LEXINGTON AVENUE
 SUITE 1000, WASHINGTON 48090
 PHONE: (248) 916-5000

PLANTING SCHEDULE

Total	Code	Scientific Name	Common Name	Root	Size	Spacing	Notes
13	JC	Juniperus chinensis 'Keteleeri'	Chinese Juniper	BBB	6' H	20' o.c./As Shown	Full
11	JCN	Juniperus chinensis 'Hetzl's Columnar'	Hetzl's Columnar Juniper	BBB	6' H	20' o.c./As Shown	Full
5	PA	Picea abies	Norway Spruce	BBB	6' H	20' o.c./As Shown	Full
6	PG	Picea glauca	White Spruce	BBB	6' H	20' o.c./As Shown	Full

LANDSCAPING NOTES:

- All plantings and their installation shall meet the landscape requirements and standards of Northfield Township.
- American Association of Nurserymen standards, guidelines and specifications shall apply to all plant material used.
- If required, all seeding shall be fast grow hydro-seed. Mowing and maintenance on a regular basis shall be by contract.
- All plantings shall be warranted for one year.
- Planting mixture to consist of one part existing soil and one part sandy loam loess.
- Planting pit width shall be a total minimum of 24" wider than the earth ball.
- All nylon and rot proof ropes and rot proof burlap must be removed before planting. All wire baskets must be cut (not loosened or removed) in at least 10 places before backfilling. Piled down the top 1/2 of all non-rot proof burlap.
- Move and handle trees and tree ball with care. Do not move or lift the tree by the trunk.
- Trees must be planted plumb.
- Water thoroughly during backfilling, removing air pockets, then water again immediately after planting.
- Tree saucers must be level and hold water. Saucer rim must be 3" high from the center as a minimum.
- Prune tops of all trees selectively after planting. Pruning must be done by an experienced plants man or foreman according to generally accepted nurseryman's standards. Approximately 20% of the crown is to be removed from each tree, depending upon the shape, location, condition, and number of branches in the crown.

MAINTENANCE

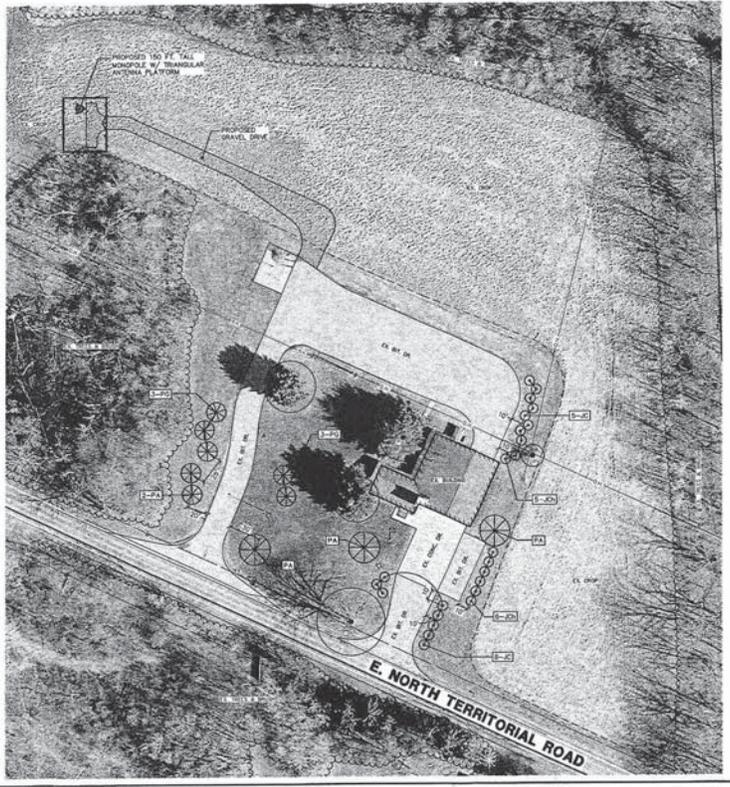
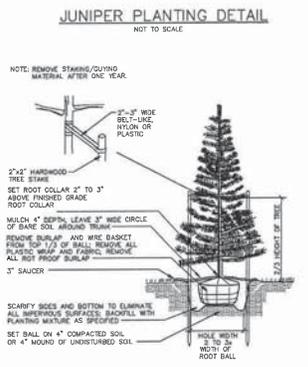
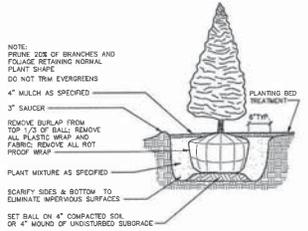
- Begin maintenance of plant material immediately after planting and continue until termination of guarantee period. During this period, the Contractor shall make a minimum of one maintenance visit every four weeks during the growing season, and as many more as necessary to keep the plantings in a thriving condition.
- Maintenance shall include measures necessary to establish and maintain plants in a vigorous and healthy growing condition. Include the following:
 - Water trees and shrubs at least twice each month from May 15 to September 30th, or as directed by the Owner.
 - Keep planting beds and tree saucers free from weeds to the satisfaction of the Owner. Grass and weeds shall not be allowed to reach a height of 3 inches before being completely removed, including root growth. Note that treatment of mulch with pre-emergent weed killer is required in this specification.
 - Spraying shall encompass:
 - downfall with effort for scale insects;
 - insecticides for leaf eating insects;
 - fungicide mixture for firelight control.
 These shall be applied in accordance with the manufacturer's recommendations and in proper strength and number of applications for the particular insect or disease. The Contractor must provide the Owner a representative written record of applications and dates.
 - Fertilization shall be per MDOIT standard specifications for construction. Provide fertilizer in the first and second waterings of the second growing season with nitrogen enriched solution providing 8.3 lbs available per 1000 gallons of water. Provide the Owner or Owner's representative a written record of applications and dates.
 - Keep trees erect. Ratio trees that settle below grade to the established elevation. Keep tree wrap and wire in neat condition. Remove at completion of guarantee period.
 - Prune dead or broken branches from all deciduous trees and shrubs.
 - Fill to the original grade level areas that have settled around trees and shrubs.
 - Winter protection shall include late fall spraying of all evergreen trees and evergreen shrubs with Folagard, VSB-Pro, or approved equal, at the manufacturer's recommended rate to prevent winter desiccation and late fall watering if required by a dry season.
- Notify the Owner's representative at least two work days prior to each maintenance trip and send a written record of what maintenance was performed within two days after each maintenance trip.

LEGEND

- U.P. EXIST. UTILITY POLE
- U.W. EXIST. OVERHEAD UTILITY LINE
- O.L. EXIST. LIGHT POLE
- O.P. EXIST. FIBER OPTIC LINE
- T.H. TELEPHONE HOOK
- E.H. EXIST. HYDRANT
- M. MAILBOX
- P. POST
- D. DAK TREE
- T. TREE
- P. EXIST. FLAG POLE



SCALE: 1" = 40'



MIDWESTERN

APPLICANT/ENGINEER: MIDWESTERN LANDSCAPE ARCHITECTURE, INC. 1000 W. WASHINGTON ST. SUITE 1000, ANN ARBOR, MI 48106-1000. PHONE: (734) 961-3000

verizon

SITE #144 - 'N' TERRITORIAL & SPENCER' NORTHFIELD TOWNSHIP, WASHTENAW COUNTY, MICHIGAN LANDSCAPE PLAN

5

DATE: 10/15/2014
DRAWN BY: J. B. BROWN
CHECKED BY: J. B. BROWN
SCALE: AS SHOWN

BACKGROUND DATA
AND
IMPACT ASSESSMENT TO SUPPORT
SPECIAL USE APPROVAL

Submitted By:

Verizon Wireless
c/o Robert Przybylo

Prepared By:

C&W Consultants, Inc.
1126 N. Main St.
Rochester, MI 48307

May 20, 2016

C&W CONSULTANTS, INC.
1126 N. MAIN ST.
ROCHESTER, MI 48307

JONATHAN R. CRANE

TELEPHONE: (248) 650-8000
FACSIMILE: (248) 650-9239
EMAIL: JRCPC@SBCGLOBAL.NET

May 20, 2016

Planning Commission
Township of Northfield
8350 Main Street
Whitmore Lake, MI 48189

Re: Development Impact Report
Verizon Wireless Project 144 – E. North Territorial
Our File No. JC3666-13

Dear Planning Commission Members:

Verizon Wireless is pleased to submit this report regarding the proposed multi-carrier monopole that comes before you for a Special Use Approval. Since the initial Planning Commission meeting and public hearing, several minor improvements have been incorporated into the E. North Territorial Road project. These changes include:

- Relocation of monopole westerly to take advantage of the existing tree lines.
- Add ground landscaping to further add screening
- Increase monopole height to 150', enhancing coverage
- Developed additional support information

This Special Land Use approval is intended to provide improved wireless communications services at the SE quadrant of the Township. In addition, it is located on a large parcel that is part of Northfield Township Fire Station No. 2. In coordination with this location, the monopole may be used by the Fire Department for future communication needs.

Thank you for your considerations.



Very truly yours,

C&W CONSULTANTS, INC.


Jonathan R. Crane P.E.

TABLE OF CONTENTS

Detailed Description of Use

Record Owner of Real Estate

Name, Address and Phone Number of Applicant

Interest of Applicant

Inventory of Existing Towers

Legal Description and Parcel Tax Number

Setback from Nearest Residential Homes

Separation Distance To Other Towers

Landscape Plan

Method of Fencing

Notarized Statement of Tower Availability for Collocation

Backhaul Network Entities

Suitability of Existing Towers and Tall Structures

Any Potential Impacts on Wetlands, Floodplains, Wildlife Preserves, Endangered Species, Historic Sites

Name and Address of Communication Tower Supplier

Technical Analysis Justifying Height

~~X~~Total Radiation Output from All Antennae

Maintenance Plan

Written Statement From Zoning Administrator Regarding Existing Condition of Property and Compliance

No Wastewater or Hazardous Waste

Description Of Project

This Special Use Application is made to permit the construction of a multi-carrier 150' tall monopole adjacent to the Northfield Township Fire Station No. 2 located at the NW corner of E. North Territorial Road and Sutton Road. In addition to the monopole, electric radio/telephone equipment will be located in cabinets at the fenced tower base.

The monopole is proposed to provide structural integrity for several carriers.

Record Owner of Real Estate

The site is located at the Northfield Township Fire Station No. 2. The record owner is:

Northfield Township
8350 Main Street
Whitmore Lake, MI 48189

Name of Applicant

RJP Consulting, Inc.
336 Suffield Avenue
Birmingham, MI 48009
248-613-4399

On Behalf Of:

Verizon Wireless
24242 Northwestern Highway
Southfield, MI 48075

Interest Of Applicant

Proposed Leasehold Interest

Inventory Of Existing Sites

Verizon Wireless Currently Uses Sites:

No. 226459 US 23 @ 6 Mile
No. 226513 US 23
No. 226682 Pontiac Trail Road
No. 226628 M151 @ US 23
Proposed Site Under Contract at Pontiac Trail & Dixboro

Unoccupied Towers Include:

American Tower Site & ATT Site (both south of this location)

Both sites are too close to existing sites and do not match the service grid utilized by Verizon Wireless.

Existing sites are shown on the attached drawing (Exhibit 1).

Legal Description And Tax Parcel No.

The site Tax Parcel No. is 8-02-27-100-003

Legal Description and Lease Description are included with Site Plan (Exhibit 2).

Setback From Nearest Residential Home

See Sheet 4 of Site Plan (Exhibit 3).

Estimated Distances:

N - 500'
S - 800'
E - 600'
W - 1400'

Separation From Other Towers

Tower locations are shown on the previous location map (Exhibit 1). Note that the proposed E. North Territorial Road site is central to the existing wireless network.

The site is approximately 1.7 miles from an American Tower project and 1.9 miles from an existing AT&T tower.

Apparently, another AT&T tower site was approved by the Planning Commission but never constructed. The Applicant believes these approvals have lapsed and are no longer in effect. Further information regarding this project should be confirmed with AT&T.

Landscape Plan

See detailed Site Plan attached with the project (Exhibit 2).

Method of Fencing

The site is proposed to be fenced with a 6' high chain link type fence as detailed on Site Plan Sheet 2. The fencing is to be screening (Exhibit 2 – Page 2).

Notarized Statement That Tower Is Available For Collocation

Site Plan Detail (Pole and Cabinet) show two future collocation opportunities.

The requested Notarized Statement of Collocation Opportunities is included (Exhibit 4).

Backhaul Network Entities

Backhaul (landline) network entities have not yet been identified. Backhaul is traditionally provided by a number of providers including: AT&T, Fibercon, Fiber Tech, Zayo, and ACD.Net.

The determination regarding the backhaul providers will be established at a later date after approval of this plan.

Suitability of Existing Towers

Existing adjacent towers are not positioned to properly serve the Community within the Verizon Wireless Network. Their locations South of the search area would diminish wireless coverage in the areas boarding the US 23/6 Mile and Pontiac Trail sites

Structure height and location is outlined in the attached correspondence from Michael Avery, Verizon Wireless Radio Frequency Engineer (Exhibit 5).

Potential Impacts On Wetlands, Floodplains, Wildlife Presence Endangered Species and Historic Sites

The site elevation is 936.5' and above any nearby 100 year flood elevations.

The Wetlands Map is attached and indicates no wetlands on or adjacent to the development area (Exhibit 6).

Several wetland areas are noted on the Federal Wetland Boundary Inventory Map attached (Exhibit 6). The new monopole does not impact these wetlands.

The site has no known Wildlife and Endangered Species.

No Historic Sites are identified within the immediate zone of influence regarding this site.

Name Of Tower Supplies And Their Addresses

The tower supplier at this time has not yet been finalized since bids are currently being accepted.

Three possible suppliers are:

Nello Corporation	Sabre Industries	Valmont Industries
105 E. Jefferson	7101 Southbridge Ave.	1545 Pidco
South Bend, IN 46601	Sioux City, IA 51102	Plymouth, IN 46563

All contractors will provide properly engineered monopole structures meeting all local, State and Federal codes. The poles will be constructed to Verizon Wireless specifications that generally exceed government standards.

Complete structural details for both the monopole and its foundation will be provided with the Building Permit Application.

Technical Analysis Justifying The Height

Please see previous letter by Michael Avery, Verizon Wireless Radio Frequency Engineer (Exhibit 5).

Total radiation output from all antennae – Please see Michael Avery letter (Exhibit 7).

Maintenance Plan

Detail on Site Plan Sheet 2 states: (Exhibit 2)

Maintenance Plan For Proposed Verizon Wireless Tower Site

Verizon Wireless maintains all of their sites through its Operation Department. The Operations technician visits the Verizon Wireless sites at least once a month. The Verizon Wireless Operation technician will review the site at each visit and make arrangements to report and repair any and all issues with the site. The technician has a standard procedure that is followed when visiting a site. The technician will look for issue with all matters such as the fence, road, cabinet, etc. Anything that needs to be maintained is the responsibility of the Operations Department and they will make sure that the site is maintained to Verizon Wireless and Township specifications.

Any dead or diseased trees originally planted by Verizon Wireless shall be replaced within 6 months or in the next appropriate planting season.

Statement From Zoning Administrator Regarding Existing Conditions of Project Site And Compliance With Ordinance

NOT REQUIRED

Site is owned, developed and maintained by the Township and believed to be in full zoning and development compliance.

Site Wastewater, Hazardous Wastes, Storm Runoff

Site development has no water connections and creates absolutely no hazardous waste, garbage, wastewater nor other demands on the Community.

This size development is traditionally exempted from Washtenaw County Storm Water Detention Requirements.

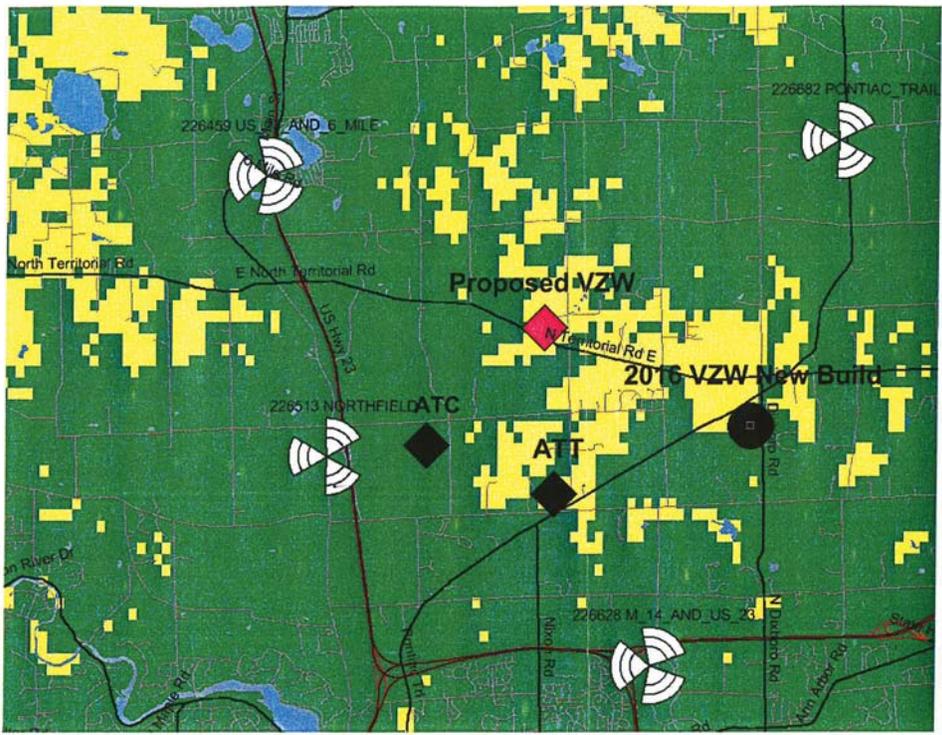
The site is served with electricity, telephone and fiber services.

Addendum:

- Aerial Boundary Parcel Map – Exhibit 8
- Public Hearing Sign Posting Photo – Exhibit 9
- Public Hearing Notice – Exhibit 10
- Initial Staff Review Report – Exhibit 11
- Application For Planning Approval – Exhibit 12
- Proposed Special Land Use Findings of Fact – Exhibit 13

EXHIBIT 1

Adjacent Tower Sites



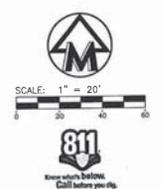
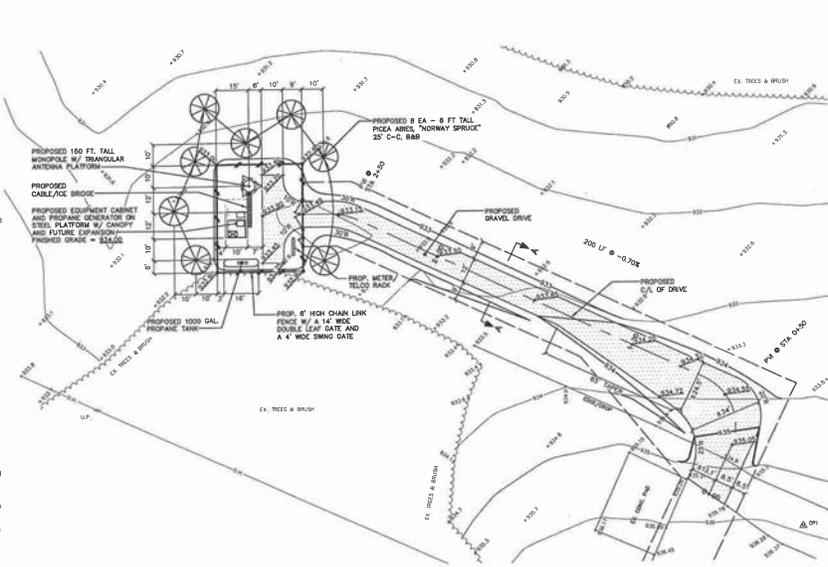
GENERAL NOTES:

- All site work construction shall be in accordance with the current standards and specifications of the Northfield Township, where applicable.
- The proposed equipment cabinet to be a completed, unvented, weathered exchange structure. No vented service, sanitary facilities or gas service is needed. Telephone and electrical services will be from an existing utility pole or line adjacent to the site.
- The proposed equipment cabinet to be to have a security system monitored 24 hours per day. The cabinet will also be constructed with bullet resistant materials.
- There are two, low voltage (120V), LED lights proposed as part of this project. The lights are mounted to the canopy support posts, under the canopy with one next to the cabinet and one next to the generator. Lights shall be connected to a technician operated on/off switch with a timer with a two-hour maximum illumination.
- There are no signs proposed for this project except for:
 - Emergency contact information purposes and FCC "call" sign placed on equipment cabinet door.
 - FCC registration number located on fence gate.
- The cellular antenna and equipment cabinet will be approved by the Federal Communications Commission (FCC) and will not transmit any frequency sensitive devices whatsoever. Buyer warrants no adverse radio interference with adjacent land uses.
- There are no toxic materials used by Lessee on the site. Lessee has no need for outdoor storage or garbage disposal and pick-up.
- Maintenance personnel using van type service vehicles enter and exit the site approximately 2 to 4 times per month. No loading or unloading area is needed by them.
- All areas disturbed by the construction of the tower and cabinet and driveway shall be restored in kind. Contractor is to provide soil erosion control measures as needed or as directed by owner or government agency having jurisdiction.
- All areas made of and to 1'0" outside of the fenced area shall be covered with 2" of crushed limestone placed over "Tiger" landscape fabric.
- Ingress and egress by Lessee's personnel to the site shall be via an existing paved road and proposed gravel drive from East North Township Road.
- The proposed drive shall consist of 2" of MDOT Class 23A crushed limestone aggregate over 1/2" 1'0" crushed concrete or slag over compacted subgrade. The subgrade shall be stripped free of all topsoil and organic material prior to placing aggregate base. Where poor subgrade soils are encountered, a woven geotextile fabric (W/100 2000' or approved equal) shall be placed so that it is a minimum of 2' 0" wider and longer than the drive which is to be constructed over the poor soils.
- This site plan is based on the survey of the existing conditions conducted by Midwestern Consulting, LLC on 05-15-2015.
- Electrical wiring, connections and grounding of same shall comply with all applicable local, state and federal statutes, regulations and standards.
- All signal and remote control conductors shall comply with current Township requirements.
- The antenna and tower shall have such colors as to minimize off-site visibility.
- All proposed landscape material is guaranteed to be replaced as needed.
- Any noise from the tower, equipment cabinet or generator shall be documented to ensure that the noise level is not in excess of that typical for residential areas.
- The applicant will provide evidence that the audio and radiation emissions will be compliant with current FCC standards.

Maintenance Plan for Proposed Verizon Wireless Tower Site

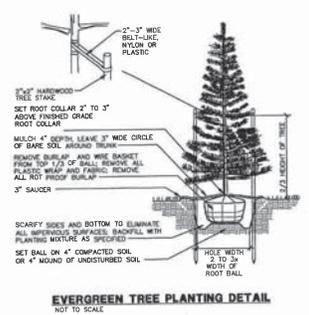
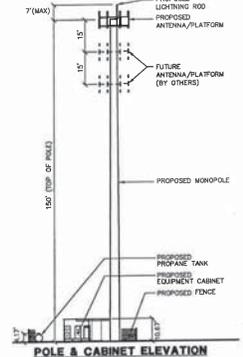
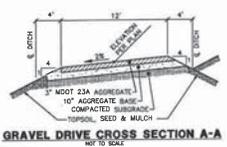
Verizon Wireless maintains all of their sites through its Operation Department. The Operations technician visits the Verizon Wireless sites at least once a month. The Verizon Wireless Operation technician will review the site each visit and make arrangements to repair and replace any and all issues with the site. The technician has a standard procedure that is followed when visiting a site. The technician will look for issues with all matters such as the fence, roof, cables, etc. Anything that needs to be maintained is the responsibility of the Operations Department and they will make sure that the site is maintained to Verizon Wireless and Township Specifications.

Any dead or diseased trees originally planted by Verizon Wireless shall be replaced within 6 months or in the next appropriate planting season.



LEGEND

---	EXIST. CONTOUR
---	PROP. CONTOUR
+	EXIST. SPOT ELEVATION
+	PROP. SPOT ELEVATION
---	EXIST. UTILITY POLE
---	QTY WIRE
---	EXIST. OVERHEAD UTILITY LINE
---	EXIST. LIGHT POLE
---	EXIST. FIBER OPTIC LINE
---	TELEPHONE RISE
---	C/A OF DITCH
---	POST
---	FENCE
---	SECTION CORNER
---	FOUND MONUMENT
---	CONTROL PT.



© 2015 Midwestern Consulting, LLC. All rights reserved. No part of this document may be used or reproduced in any form or by any means, or stored in a database or retrieval system, without prior permission of Midwestern Consulting, LLC.

MIDWESTERN

verizon

SITE #144 - "N" TERRITORIAL & SPENCER"

NORTHFIELD TOWNSHIP, WASHINGTON COUNTY, MICHIGAN

SITE PLAN DETAIL

2

94044-144

DATE: 05/15/2015

SCALE: 1" = 20'

PROJECT: VERIZON WIRELESS TOWER SITE

CLIENT: VERIZON WIRELESS

DESIGNER: MIDWESTERN CONSULTING, LLC

DATE: 05/15/2015

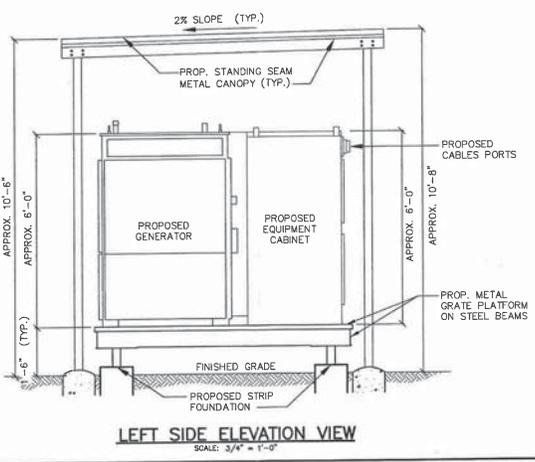
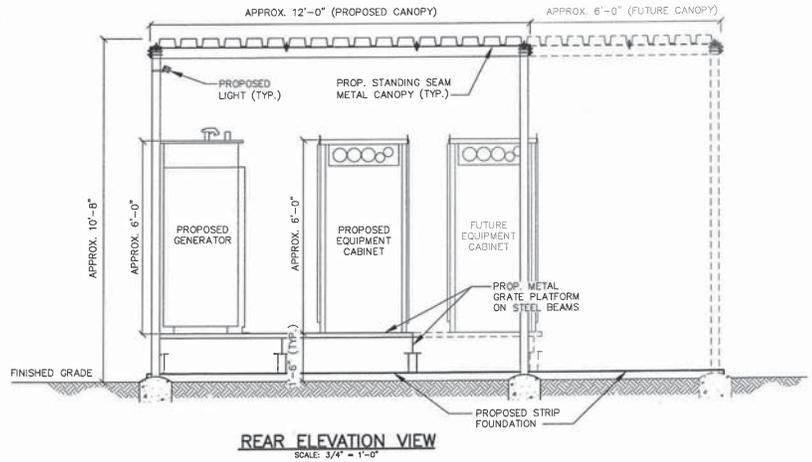
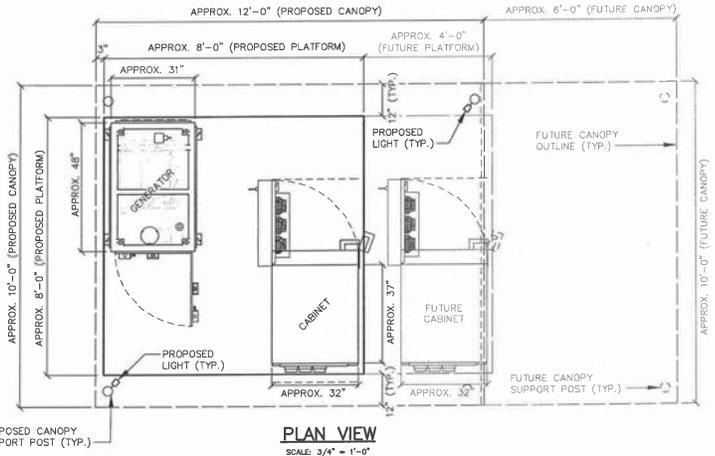
PROJECT: VERIZON WIRELESS TOWER SITE

CLIENT: VERIZON WIRELESS

DESIGNER: MIDWESTERN CONSULTING, LLC

DATE: 05/15/2015

© 2008 Midwestern Consulting, LLC. All rights reserved. No part of this drawing may be used or reproduced in any form or by any means, or stored in a database or retrieval system, without prior permission of Midwestern Consulting, LLC.



Midwestern
 APPLICANT/LESSEE:
 THE TOWN OF NORTHFIELD
 2000 S. WASHINGTON AVE.
 NORTHFIELD, MICHIGAN 48757
 PHONE: (248) 615-3000

verizon
 SITE #144 - "N" TERRITORIAL & SPENCER"
 NORTHFIELD TOWNSHIP, WASHTENAW COUNTY, MICHIGAN
 TYPICAL EQUIPMENT VIEWS

3
 JOB No. **94044-144**
 SHEET NO. 1 OF 1
 DATE: 08/11/2011
 DRAWN BY: J. COOK
 CHECKED BY: J. COOK
 PROJECT: VERIZON

© 2018 Midwestern Consulting, L.L.C. All rights reserved. No part of this drawing may be used or reproduced in any form or by any means, or stored in a database or retrieval system, without prior permission of Midwestern Consulting, L.L.C.

EXHIBIT 3
Distance To Adjacent Residential Homes



SHEET NO. 94044-144 SHEET 4 OF 4 DATE: 11/15/2018 DRAWN BY: J. SPENCER CHECKED BY: J. SPENCER PROJECT NO.: 94044-144	4	verizon SITE #144 - "N TERRITORIAL & SPENCER" NORTHFIELD TOWNSHIP, WASHTENAW COUNTY, MICHIGAN AERIAL VIEW	APPLICANT/ENGINEER: MIDWESTERN CONSULTING, L.L.C. 200 W. WYOMING STREET, SUITE 100 NORTHFIELD, MICHIGAN 48857 PHONE: (517) 835-3000

EXHIBIT 4

**Notarized Statement of
Collocation Opportunities**

VERIZON WIRELESS LETTERHEAD

May 17, 2016

Planning Commission
Township of Northfield
8350 Main Street
Whitmore Lake, MI 48189

Re: Collocation Opportunities

Dear Planning Commission Members:

This letter is written to confirm that Verizon Wireless has a policy encouraging the shared use of all towers in its network. We regularly collocate both inbound (on our towers) and outbound (locate on other towers). In conformance with this continued program, please accept this notarized letter stating that the proposed 150' monopole in Northfield Township is being designed to permit collocation and will be available for other carriers to collocate.

If you have any questions please call.

Very truly yours,

By: _____
Douglas Weber
Its: Principal Engineer-R/E Regulatory

STATE OF MICHIGAN)
COUNTY OF OAKLAND)

I, _____, a Notary Public for said County and State, do hereby certify that Douglas Weber personally came before me this day and acknowledged that he is a Principal Engineer – R/E Regulatory for New Par, a Delaware partnership d/b/a Verizon Wireless, By: Verizon Wireless (VAW) LLC, its managing partner, and that he is authorized to execute the aforementioned letter on behalf of said partnership and limited liability company.

Notary Public

EXHIBIT 5

Radio Frequency Letter



May 16, 2016

Regarding the structure height for proposed Verizon Wireless tower "North Territorial & Spencer".

Wireless communication structure heights are chosen based upon several conditions and criteria. At Verizon Wireless, we strive to ensure that we have ample height to broadcast our signals in the most effective and efficient manner. This limits the number of towers in a given area (it is more efficient to use one tower at 150' than it is to use two towers at 75' to cover the same area). We also have to ensure that there is enough room on the structure for additional co-locating antenna arrays. If a tower is built using a height that is just adequate for one carrier, then additional carriers may be forced into searching for a new location that offers greater height instead of locating their equipment on the existing structure.

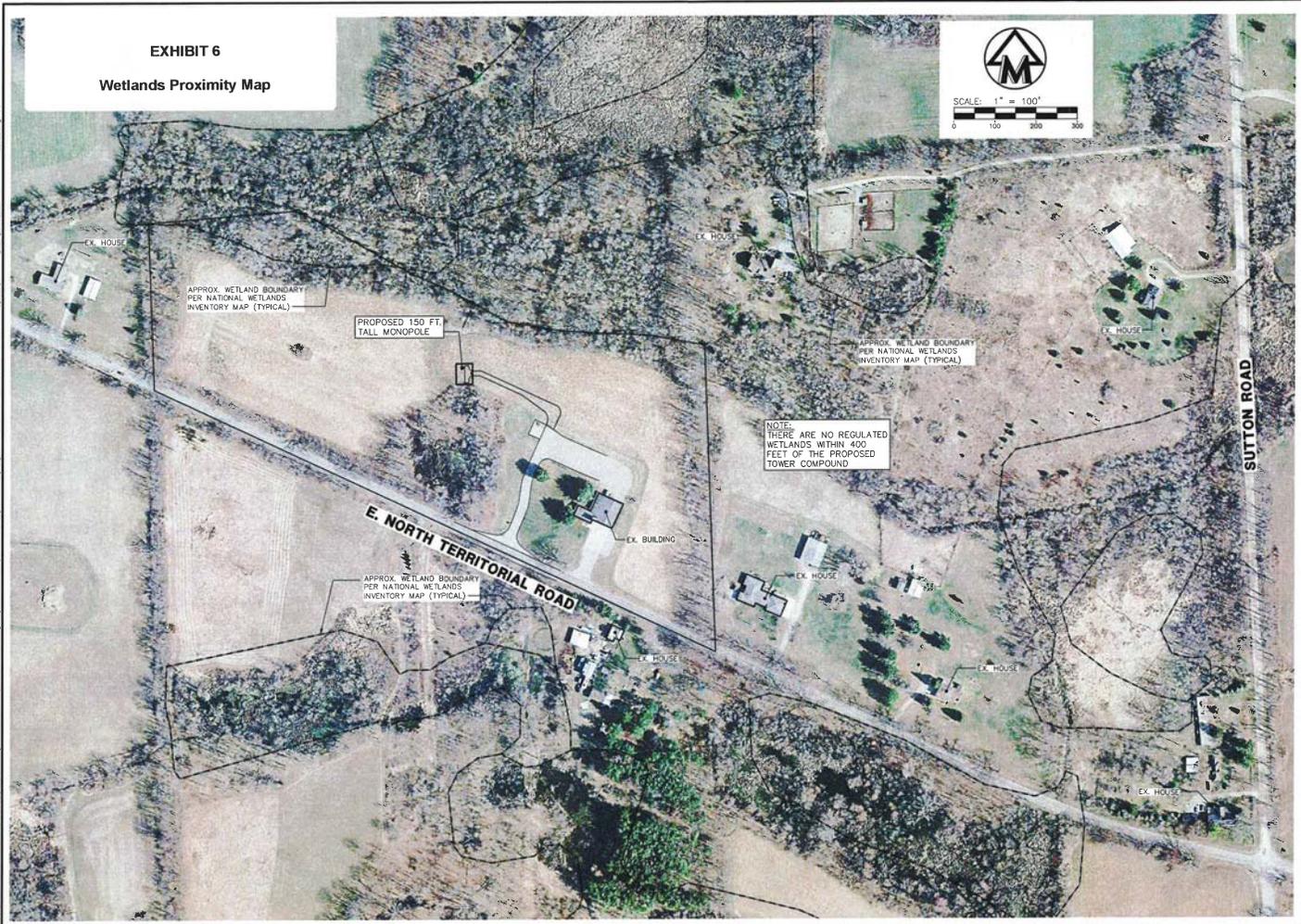
The tower proposed was evaluated at 120' and it was found to be inadequate in height as it does not meet the guidelines in the above criteria. We are proposing an additional 30' in height to maximize the coverage benefits of this location and to ensure that it is a desirable location for other wireless service providers.

Very truly yours,

A handwritten signature in black ink that reads "Michael Avery". The signature is written in a cursive style with a large, looping "y" at the end.

Michael Avery
Radio Frequency Engineer
Verizon Wireless

EXHIBIT 6
 Wetlands Proximity Map



	94044-144	DATE REVISED: 11/11/2014 SHEET: 1 OF 1 PROJECT: 94044-144
	verizon verizon.com	SITE #144 - "N TERRITORIAL SPENCER" NORTHFIELD TOWNSHIP, WASHTENAW COUNTY, MICHIGAN WETLAND AND BENTON CREEK VIEW
MIDWESTERN 	APPLICANT/ENGINEER: THE MICHIGAN LAND USE PARTNERSHIP AN AFFILIATE OF THE MICHIGAN WETLANDS SOCIETY, 200 N. WASHINGTON AVENUE ANN ARBOR, MI 48106 PHONE: (810) 915-3000	PROJECT: WETLANDS INVENTORY MAP DATE: 11/11/2014

EXHIBIT 7

Radio Frequency Emissions Letter



May 16, 2016

Regarding the RFE (Radio Frequency Emissions) for the "North Territorial & Spencer" Verizon Wireless structure.

^{ERD}
Total ~~Effective Radiated Power~~ for LTE signals is expressed in units of Watts/MHz as this takes into account the bandwidth of each transmitting signal. At each of the six antennas on the proposed structure, the output power is determined by the antenna type and input power to the antenna. A low power signal is fed into the antenna. The antenna in turn amplifies and beam shapes the signal. The total input power per antenna is 40W on the 700MHz band, and 60W on the 1900/2100 MHz bands. Each antenna is capable of broadcasting both the 700MHz signal and the high-band signals. The bandwidth of the 700MHz transmission is 10MHz. The 2100MHz transmission is 20MHz, and the 1900MHz transmission is 5MHz.

Taking into account the antenna amplification, or gain, and the bandwidth of each transmitting signal, we arrive at the following values:

700MHz:	88.4 W/MHz (legal limit is 1000)
1900MHz:	236.4 W/MHz (legal limit is 1637)
1900MHz:	751.5 W/MHz (legal limit is 1640)

Very truly yours,

A handwritten signature in black ink that reads "Michael Avery". The signature is written in a cursive style with a large, looping "y" at the end.

Michael Avery
Radio Frequency Engineer
Verizon Wireless

EXHIBIT 9

Public Hearing Sign Posting Photo

CONDITIONAL USE PERMIT PUBLIC HEARING SITE PLAN REVIEW

To Permit a Wireless Cellular Telephone Monopole **120' MONOPOLE**

- Hearing Date: May 4, 2016 - 7pm • Location: Northfield Twp. Office - 8350 N. Main St., Whitmore Lake

SITE TAX PARCEL: B-02-27-100-003 SITE ADDRESS: 2727 EAST TERRITORIAL RD., NORTHFIELD MI.

FOR ADDITIONAL INFORMATION:

SITE PLAN

PUBLIC NOTICE

Robert Przybylo Northfield Twp. Building Dept.
248-613-4399

8350 N. Main St.
Whitmore Lake, MI 48319
734-449-2880

APPLICANT:

New Par / Verizon Wireless
2424 Northwestern Hwy.
Southfield, MI 48075



POSTED BY JONATHAN R. CRANE, ATTORNEY, ROCHESTER, MICHIGAN

CONDITIONAL USE PERMIT
PUBLIC HEARING
SITE PLAN VIEW
120 MONROPOLE

1. A SET OF REVISIONS TO THE SITE PLAN FOR THE PROPOSED DEVELOPMENT OF A 120 MONROPOLE AT THE INTERSECTION OF MONROPOLE AND W. 120 MONROPOLE, IN THE CITY OF MONROPOLE, ILLINOIS, IS BEING SUBMITTED TO THE BOARD OF ZONING ADJUSTMENTS FOR REVIEW AND APPROVAL.

2. THE PROPOSED DEVELOPMENT IS BEING SUBMITTED TO THE BOARD OF ZONING ADJUSTMENTS FOR REVIEW AND APPROVAL AS A CONDITIONAL USE PERMIT.

3. THE BOARD OF ZONING ADJUSTMENTS IS REQUESTING THAT YOU ATTEND THE PUBLIC HEARING TO REVIEW THE PROPOSED DEVELOPMENT AND PROVIDE YOUR COMMENTS TO THE BOARD OF ZONING ADJUSTMENTS.

4. THE PUBLIC HEARING WILL BE HELD ON MONDAY, FEBRUARY 15, 2010, AT 7:00 PM, IN THE BOARD OF ZONING ADJUSTMENTS MEETING ROOM, 120 MONROPOLE, MONROPOLE, ILLINOIS.

5. IF YOU HAVE ANY QUESTIONS OR NEED MORE INFORMATION, PLEASE CONTACT THE CITY ENGINEER AT (815) 431-1200.

6. THE BOARD OF ZONING ADJUSTMENTS WILL HOLD A PUBLIC HEARING ON THE PROPOSED DEVELOPMENT ON MONDAY, FEBRUARY 15, 2010, AT 7:00 PM, IN THE BOARD OF ZONING ADJUSTMENTS MEETING ROOM, 120 MONROPOLE, MONROPOLE, ILLINOIS.

7. THE BOARD OF ZONING ADJUSTMENTS WILL HOLD A PUBLIC HEARING ON THE PROPOSED DEVELOPMENT ON MONDAY, FEBRUARY 15, 2010, AT 7:00 PM, IN THE BOARD OF ZONING ADJUSTMENTS MEETING ROOM, 120 MONROPOLE, MONROPOLE, ILLINOIS.

8. THE BOARD OF ZONING ADJUSTMENTS WILL HOLD A PUBLIC HEARING ON THE PROPOSED DEVELOPMENT ON MONDAY, FEBRUARY 15, 2010, AT 7:00 PM, IN THE BOARD OF ZONING ADJUSTMENTS MEETING ROOM, 120 MONROPOLE, MONROPOLE, ILLINOIS.

9. THE BOARD OF ZONING ADJUSTMENTS WILL HOLD A PUBLIC HEARING ON THE PROPOSED DEVELOPMENT ON MONDAY, FEBRUARY 15, 2010, AT 7:00 PM, IN THE BOARD OF ZONING ADJUSTMENTS MEETING ROOM, 120 MONROPOLE, MONROPOLE, ILLINOIS.

10. THE BOARD OF ZONING ADJUSTMENTS WILL HOLD A PUBLIC HEARING ON THE PROPOSED DEVELOPMENT ON MONDAY, FEBRUARY 15, 2010, AT 7:00 PM, IN THE BOARD OF ZONING ADJUSTMENTS MEETING ROOM, 120 MONROPOLE, MONROPOLE, ILLINOIS.

clothes shoes



April 28, 2016

Planning Commission
Northfield Township
8350 Main Street
Whitmore Lake, MI 48189-0576

Subject: Verizon Monopole/2727 East North Territorial Road; Conditional Use Review #1; Application received by Township on 3/18/2016.

Dear Commissioners:

We have reviewed the proposed conditional use application submitted by RJP Consulting on behalf of Verizon Wireless, for the construction of a new 120-foot tall wireless monopole structure at the Township-owned Fire Station#2, 2727 E. North Territorial Road. Along with a monopole, the applicant proposes an equipment shelter at the base of the tower, to be enclosed with chain link fence around a 2,000 sq. ft. lease area. The plan includes landscaping around the outside of the fence and a 30-foot-wide access and utility easement leading from N. Territorial Rd. to the lease site. The site is zoned AR (Agricultural) District.



Under the Michigan Zoning Enabling Act (MZEA), a new wireless communication facility can be reviewed as a conditional land use, subject to the information and requirements of the Zoning Ordinance. The MZEA also imposes time limits on the local review process. Wireless communication facilities are permitted in the AR District subject to conditional use approval per Section 36-838 of the Township Zoning Ordinance. The required public hearing is scheduled for May 4, 2016.

CONDITIONAL USE COMMENTS

Conditional use approval of wireless communication facilities is subject to both the specific standards listed in Section 36-720 of the Zoning Ordinance, and the general discretionary standards in Section 36-838 applicable to all conditional uses. Beginning with the specific requirements, our comments are provided below:

- A. **Application Requirements Specific to Wireless Communications Facilities [Section 36-720 (c)(2)].** Most of the information required by this section has been provided, including contact information for the applicant; map showing location of all existing towers in the Township; scaled site plan with details; legal description of overall parcel and lease area; setbacks from nearest residential structures; separation distance from other towers; landscape plan; fencing; notarized statement regarding collocation; backhaul provider; suitability of existing towers or alternative technology; name of tower manufacturer; radiation output; and maintenance plan. The following items remain to be addressed:
1. The applicant's letter dated 3/16/2016 says that a map showing future tower locations, structures and antenna proposed or anticipated cannot be provided since it is proprietary. The applicant states that in general, new sites may be needed in the northwest, northcentral and southeast parts of the Township. Compliance with this requirement must be addressed to the satisfaction of the Planning Commission.
 2. Sub-section m. requires an environmental impact statement. According to the application, a phase one environmental review has been completed and indicates no perceived impacts; a copy of that report must be submitted for Township review.
 3. A narrative must be provided with the radiation output data that verifies whether the anticipated output is consistent with current FCC emission regulations.
 4. The boundaries of the lease area must be clarified and dimensioned on the site plan. We recommend that the proposed evergreen trees outside the fence be included within the lease area.
- B. **Section 36-720 (c)(4). Specific Factors Related to Wireless Communication Facilities.** The Planning Commission may waive or reduce any of the following requirements if it determines that doing so better serves the goals of the section:
1. ***Height of proposed tower.*** Section 36-720 (d)(5) limits heights of towers and structures to no more than 180 feet. At 120 ft. tall with an additional 7 ft. lightning rod, the proposed monopole complies.
 2. ***Proximity of tower to residential structures and residential district boundaries.*** The proposed facility is on an AR Agriculture-zoned parcel - the Township-owned fire station. The AR district also permits single family residential dwellings on lots of 5 acres and larger. The closest residential dwellings are to the south and east, at 536 ft. and 595 ft. away.
 3. ***Nature of uses on adjacent and nearby properties.*** The land to the west and north is wooded and some is farmed. To the east is a single family residence and the fire station building; to the south (across N. Territorial Rd.) is vacant/farmland and a single family dwelling with accessory structures.
 4. ***Surrounding topography.*** The surroundings are relatively flat. McCarty Drain No. 2 is to the north.
 5. ***Surrounding tree coverage and foliage.*** The proposed tower location is well screened by wooded land to the west and north. However, the N. Territorial Rd. frontage of the fire station is lawn and wide open to accommodate public safety vehicles and visibility. The house south of N. Territorial Rd. will have its view of the proposed tower partially buffered by the fire station building; the house to the east will have its view somewhat buffered by a tree/brush line (mostly deciduous). Both dwellings would benefit from additional screening; we recommend evergreen trees be planted

between the tower and the road frontage on both sides of the west fire station driveway and along the tree line to the east as transition strips. Relocation of the tower site west to be behind the woods could also improve its screening.

along Sutton

6. **Design of the tower, with particular reference to design characteristics that have the effect of reducing or eliminating visual obtrusiveness.** The applicant states that the proposed monopole is a less obtrusive design than a lattice tower. The galvanized metal color is intended to “blend in with the sky”. There are no other features incorporated that would reduce visual obtrusiveness.
7. **Proposed ingress and egress.** The tower site will be accessed from the fire station driveway with a gravel drive extension at the northwest corner of the existing pavement.
8. **Availability of suitable existing towers, others structures or alternative technology.** Propagation maps have been submitted, illustrating existing coverage without the facility and projected coverage that can be obtained with the new tower. Per the applicant, there is a lack of service on the stretch of N. Territorial Road that will be covered by the new facility.

Section 36-720(d)(1) sub-section a., requires that no tower may be located within 2 miles of another commercial communication tower. The tower location map shows that the proposed new tower would be within 1.7 and 1.9 miles of two other commercial towers. Also, in late 2014, AT&T was approved to build a tower at 6741 Sutton Rd. That tower has not been constructed, but it would also be within 2 miles of the site, approximately 0.5 miles away. Per Section 36-839, “An approved conditional use permit, including all attached conditions, shall run with the land in the approval and shall be binding on all successors and assigns.” It is our understanding that the AT&T tower’s site plan approval has expired and would have to be obtained again, but arguably, the conditional use approval could still be valid. The status of the Sutton Road tower site should be determined. If the Sutton Rd. site is still approved, it must be included on the map of facilities and considered in the evaluation of site alternatives.

The Planning Commission may waive the Ordinance’s separation distance requirements, if it determines that “the proposed tower is of exceptional design so as to create a positive architectural and/or environmental feature which is compatible with the character of the surrounding area and community”. The proposed tower is a standard monopole, and does not appear to be an exceptional positive architectural and/or environmental feature. While it is not uncommon for towers to be located at a public safety facility like a police or fire station, we recommend the Commission review this matter and give the applicant direction regarding alternative designs, such as a “tree” or mounting upon or incorporating into another compatible structure that could be substituted for the standard monopole.

Further, not enough information has been about the two closest tower locations identified by the applicant - How many carriers are already on those towers? Is there a possibility of collocation on those towers? If not, why? Can any adaptation be made to those towers to accommodate the applicant’s antenna without the need for a new facility?

9. **The design of the proposed structure will accommodate collocation of additional users.** The new monopole is designed to allow for two additional co-locators in the future, however the applicant must submit an affidavit stating they will permit and not unreasonably obstruct collocation.

oh

- C. **Section 36-720 (c)(5) Availability of Existing Towers or Other Structures or Alternate Technology.** This section requires that the applicant provide evidence to demonstrate no existing towers or alternative technology can be utilized to accommodate the proposed antenna. As described in comment B.8 above, additional information is required to justify the need for a new facility. While the applicant states that none of the existing towers will meet Verizon's coverage needs, it is not clear if modifying one or more of the existing towers in the vicinity, or if construction of the Sutton Rd. site (that the applicant did not include in its analysis) would create the applicant's desired coverage.
- D. **Section 36-720 (d). General Regulations** for all wireless communication towers:
1. **Location of towers or structures.**
 - a. ***No single tower shall be located within two miles of another commercial communication tower. This requirement may be waived if the Planning Commission determines that the tower is of an exceptional design so as to create a positive architectural and/or environmental feature which is compatible with the character of the surrounding area and community. Additional communications apparatus can, however, be located on an existing tower or other structure capable of accommodating such apparatus.*** See Comment B.8., above.
 - b. ***No tower shall be located closer than 1,000 feet from the boundary of any residential district, including any PUD district incorporating residential uses.*** All of the surrounding land is zoned AR Agriculture. The closest residential dwelling is 536 feet from the proposed tower. We estimate that 4 houses are located within 1,000 feet of the proposed tower.
 - c. ***A tower shall have a minimum setback from all property boundaries equal to the height of the tower.*** Setbacks are greater in all directions than the required 127 ft.
 - d. ***Guys and accessory buildings must satisfy the minimum zoning district regulations.*** No guy wires are proposed since the structure is a monopole. The proposed equipment shelter complies with AR district setback regulations; the height of the equipment shelter and all accessories must be dimensioned.
 - e. ***For purposes of measurement, any required tower setback and/or separation distance shall be calculated and applied to facilities located adjacent to municipal and county jurisdictional boundaries.*** Not applicable.
 2. **Access.**
Unobstructed access constructed in accordance with all provisions of this chapter shall be provided to the tower and apparatus building to ensure service by police, fire, and emergency vehicles. Access to the tower lease area is unobstructed, across the paved fire station drive and a short gravel driveway.
 3. **Structural design and installation.**
 - a. ***The plans for the tower construction shall be certified by a registered structural engineer, and the applicant shall submit verification that the installation is in compliance with all applicable codes. All towers or structures must meet all applicable standards of the Federal Aviation Administration and the Federal Communications Commission.*** The applicant's letter states they will comply with all applicable FAA and FCC standards. A letter from an

engineer at the tower manufacturing company verifies the structural stability of the monopole proposed.

- b. **All towers or structures must meet or exceed current standards and regulations of the FAA, the FCC, and other agency of the state or federal government with the authority to regulate towers, structures, and antennae. If such standards and regulations are changed, then the owners of the towers, structures, and antennae governed by this section shall bring such towers, structures, and antennae into compliance with such revised standards and regulations within six months of the effective date of such standards and regulations, unless a different compliance schedule is mandated by the controlling state or federal agency. Failure to bring towers, structures, and antennae into compliance with such revised standards and regulations shall constitute grounds for the removal of the tower or antenna at the owner's expense.** The applicant agrees to comply with all applicable governmental, health and industry safety standards and FAA and FCC regulations and standards.
- c. **To ensure the structural integrity of towers or structures, the owner of a tower shall ensure that it is maintained in compliance with standards contained in the state construction code and the applicable standards for towers or structures that are published by the Electronic Industries Association, as amended. If, upon inspection, the township concludes that a tower fails to comply with such codes and standards and constitutes a danger to persons or property, then upon notice being provided to the owner of the tower, the owner shall have 30 days to bring such tower into compliance with such standards. Failure to bring such tower into compliance within said 30 days shall constitute grounds for the removal of the tower or antenna at the owner's expense.** The applicant agrees to comply with all applicable governmental, health and industry safety standards and FAA and FCC rules.
- d. **Antennae and metal towers or structures shall be grounded for protection against a direct strike by lightning. The electrical wiring and connections on all towers and structures shall comply with all applicable local, state, and federal statutes, regulations, and standards.** The top of the monopole includes a 7 ft. tall lightning rod. Information regarding grounding and compliance with the above listed regulations must be provided with the site plan.
- e. **Towers or structures with antennae shall be designed to withstand a uniform wind loading as prescribed in the state construction code.** The tower engineer's statement addresses this.
- f. **Towers and structures shall be subject to any state and/or federal regulations concerning nonionizing electromagnetic radiation. If more restrictive state and/or federal regulations are adopted in the future, the operator of the tower shall bring the antennae into conformance with such standards within 60 days of its adoption, or the conditional use permit shall be subject to revocation by the township board. The operator of the tower shall bear the costs for testing and verification of compliance.** The applicant agrees to comply with all applicable governmental, health and industry safety standards.
- g. **All signals and remote control conductors of low energy extending substantially horizontally above the ground between a tower or antennae and a structure, or between towers, shall be at least eight feet above the ground at all points, unless buried underground.** The applicant must provide a written statement that they will comply with the Township's requirements for signal and remote control conductors.

lots, natural growth around the property perimeter may provide sufficient buffer, in which case the planning commission may waive the landscaping requirements of this subsection. The site plan shows 6 ft. chain link fence with 3 strands of barbed wire around the equipment area. Barbed wire is permitted only around farmland. Although the site is in the AR district, a wireless communication facility does not constitute a "farmland" use. The barbed wire must be removed.

A landscape buffer of 6 ft. tall Colorado spruce planted 20 feet on center is proposed outside the fencing. Installation of the proposed monopole will not cause the removal of any existing mature vegetation. A landscape maintenance plan must be added to the site plan and note that "dead or diseased plants will be replaced within 6 months or in the next appropriate planting season, whichever comes first."

8. **Employees.** *No employees shall be located on the site on a permanent basis to service or maintain the antennae. Occasional or temporary repair and service activities are excluded from this restriction.* The facility will be unmanned, with periodic visits by maintenance personnel.
9. **Site plan required.** *The applicant shall submit a preliminary and final site plan in accordance with article XXVIII of this chapter, and including details of tower lighting required and approved by the Federal Aviation Administration.* The applicant has submitted a preliminary site plan which ~~X~~ must be revised as described in this review prior to site plan approval. No light detail is required.
10. **Franchises.** *Owners and/or operators of towers, structures, or antennae shall certify that all franchises required by law for the construction and/or operation of a wireless communication system have been obtained and shall file a copy of all required franchises with the township prior to final site plan approval.* The applicant must provide a written statement that they will comply with any franchising requirements.
11. **Engineering certification.** *Any information of an engineering nature that the applicant submits, whether civil, mechanical, or structural, shall be certified by a licensed professional engineer.* The 2-sheet plan set is signed and stamped by a licensed engineer.
12. **Non-essential services.** *Towers, structures, and antennae shall be regulated and permitted pursuant to this section and shall not be regulated or permitted as essential services, public utilities, or private utilities.* The application complies.
13. **Cessation of operation.** *The township shall condition approval of any new tower subject to the removal of said tower, including all structural components of the tower above and below ground, within 180 days of cessation of operation. The township reserves the right to request evidence of ongoing operation at any time after construction of an approved tower. Any antenna or tower, whether approved under this section or existing at the time of adoption of the ordinance from which this chapter is derived, that is not operated for a continuous period of 180 days shall be deemed abandoned. Failure to remove an abandoned antenna or tower within 60 days of receipt of a notice from the township requesting such removal shall be grounds for the township to remove the tower or the antenna at the tower and/or property owner's expense. If there are two or more users of a single tower, this provision shall not take effect until all users cease using the tower.* Written agreement to comply with removal requirements must be submitted to the Township.

14. **Division of property prohibited.** *The division of property for the purpose of locating a facility is prohibited unless all requirements of the township ordinances are met.* The site is Township-owned and no division is proposed.
 15. **Facility not to be used for advertising.** *The facility shall not be used for advertising purposes and shall contain no signs or lighting except to identify the provider and emergency telephone numbers and as may be required by the FAA.* No advertising is proposed.
 16. **Security.** *In order to ensure removal of the wireless communication structure, in the event of abandonment or cessation of operation, the planning commission may require that security be posted at the time a building permit is obtained for uses as specified in the conditional use permit in an amount sufficient to guarantee that the applicant shall perform the terms and conditions of the conditional use permit.* The applicant must provide the necessary financial guarantee.
- E. **Section 36-838. General Conditional Use Approval Requirements.** In addition to complying with the specific requirements for wireless facilities enumerated above, for conditional use approval to be granted, the Planning Commission and Township Board must find that the proposed use satisfies the following general criteria:
1. ***Will be harmonious with and in accordance with the general objectives, intent and purpose of this article.*** The proposed tower is located in an agriculturally zoned and master planned district and is not close to any concentration of uses. Per the applicant, the proposed tower is similar in appearance or perception to other large structures like wind turbines and high voltage transmission lines that are commonly found in agricultural areas. A properly designed tower that provides for public safety communication might be found harmonious. However, the standards and objectives of the Zoning Ordinance that are designed to avoid a concentration of towers (when collocation can be achieved) and thereby minimize the visual impact and clutter of these facilities, have not been met. Revisions to the facility design, acceptable confirmation that the applicant can't collocate on an existing tower(s) or use other means to provide service, and other options that are consistent with the intent and purposes of the Ordinance must be addressed to the Commission's satisfaction.
 2. ***Will be designed, constructed, operated, maintained and managed so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity.*** The general vicinity is master planned AG, Agricultural for farming and single family residences on lots 5 acres and larger. The tower and associated ground-mounted equipment will be within a fenced area and accessed from the fire station's paved driveway. The fence and much of the equipment inside the enclosure will be screened with evergreen trees, and the land to the north and west is wooded, reducing the visual impact of the facility. The primary impact to the surroundings will be the view of the tall structure from road and the south and east; installation of additional landscape screening, and/or relocation of the tower to be better screened by existing trees is recommended, as discussed in this review.

The facility will be unmanned and will be visited by maintenance personnel only, 2 to 4 times per month. The short drive and T-turn area inside the fence are noted as gravel surface; given the infrequent traffic to the enclosure, we believe the Commission could find this surface sufficient. A maintenance statement on the site plan assures that site problems will be corrected in accordance with Township requirements and a letter addresses weed control, and removal of snow and debris.

As a condition of site plan approval, a landscape maintenance plan with replacement guarantee will be required.

- 3. Will be compatible with the natural environment and existing and future uses in the vicinity.** The north and west sides of the tower's lease area are generally screened from view off-site by existing trees and brush, but the installation will be very noticeable from N. Territorial Rd. In order to improve its compatibility with the vicinity, we recommend that (subject to Township Board approval) clusters of large evergreen trees and/or other dense vegetation should be planted between the tower and N. Territorial Rd. and as a transition strip on the east side of the fire station lot, at or near the lot line. Relocation of the facility to the west, so that the wooded area is to its south may also improve the tower's compatibility with existing and future uses.

The fence around the lease area will be screened with evergreen trees planted 20 feet on center. The fire station is a necessary public safety facility; the surroundings are generally intended to be very low density residential and agricultural uses. The environmental impact statement must be submitted to confirm the lack of negative environmental impacts.

- 4. Will be compatible with the Township land use development plan.** The Township Master Plan designates the site for low density single family development, farms and farm structures, scenic corridors, landscape features such as fields and similar. The Plan does not anticipate a concentration of population here and the Zoning Ordinance mirrors the Master Plan by requiring, under ordinary conditions, tower separations of 2 miles or more. However, the site is near a minor arterial road carrying higher volumes of traffic through the Township and is part of the existing and planned Township fire station where communication facilities could be found compatible.

The proposed tower location, less than 2 miles from 2 existing towers and approximately 0.5 miles from a potential tower site, may not be compatible with the Master Plan's vision. This standard can be met if the tower is redesigned to be a positive feature that blends in with the surrounding rural residential environment and natural features. Further, sufficient evidence has not been submitted that would allow the Commission to determine that collocation and other more compatible alternatives are not feasible.

- 5. Will be or can be served adequately by essential public facilities and services.** Access is to N. Territorial Road, a paved minor arterial road, via the fire station's existing paved driveway and a gravel drive. The only utilities required are electricity and fiber optic service, both of which are available. Fire protection is on-site.

- 6. Will not be hazardous or disturbing to existing or future neighboring uses.** The proposed tower is a monopole which is less intrusive than a "lattice" tower design. Since the tower is less than 200 feet in height, the FCC does not require lights, and the Zoning Ordinance prohibits other tower illumination. The tower and equipment cabinet generate no noise, although in the event of a power outage, the generator will run and create noise. Noise mitigation must be documented so that the sound will not be in excess of that typical for residential areas. Per the plans, the 120 ft. monopole has a 127 ft. fall zone, well clear of any other structures, including the fire station which is the closest building. The applicant must provide evidence that the radio and radiation emissions will be compliant with FCC standards. In the event all other requirements are satisfied, we do not anticipate the use being hazardous or disturbing to the existing or future neighboring uses.

7. Will not create excessive additional requirements at public cost for public facilities and services.

No water or sanitary sewer connections are needed, and as noted above, power and fiber optic service are available. No additional infrastructure or public services are required. Per the applicant, there will be no public funds required for this project.

RECOMMENDATION

Based upon the information submitted, we find that the application for Verizon Wireless does not yet comply with several of the Zoning Ordinance requirements for conditional use approval. The deficiencies noted in our comments above, including some site design details, documentation regarding compliance with governmental regulations, the issue regarding inadequate separation distance of the proposed tower from other existing towers, compatible tower design, and other items must be addressed to the satisfaction of the Planning Commission. The major issues that must be resolved before making a recommendation, are presentation of sufficient evidence by the applicant that the 2 - 3 other towers/sites will not work, and proposing an "exceptional architectural and/or environmental design" that would justify the Commission allowing this new tower to be constructed less than 2 miles from those other towers.

Prior to the Planning Commission acting on the application, we recommend the following items and information be addressed with a revised and dated site plan:

Conditional Use:

1. If the Commission determines the applicant's general statement that future facilities will be needed in the northwest, northcentral and southeast parts of the Township is not sufficient, a map shall be provided;
2. Submit the environmental impact statement;
3. Explain radiation output data with documentation demonstrating compliance with FCC rules;
4. Clarify the boundaries of the lease area on the site plan, and include the evergreen trees;
5. Improve screening/buffering of the view of the tower from off-site by planting additional trees between the tower and the road frontage and along the tree line to the east, by relocating the tower to be better screened by existing trees, and/or by other means acceptable to the Planning Commission.
6. Confirm that the approval previously granted for monopole at 6741 Sutton Road has expired, or include that approved tower location as part of this application;
7. Submit additional written evidence regarding the other towers within 2 miles pertaining to their height, number of carriers/antenna in place, etc. to confirm whether or not collocation opportunity(s) that would accommodate the proposed antenna are available on any of them (including Sutton Rd. site if applicable), per Section 36-720 (c)(5);
8. Satisfaction of the requirement for the tower to be designed as a positive, exceptional architectural and/or environmental feature;
9. Affidavit agreeing to permit and not unreasonably obstruct collocation on the tower; and
10. Site plan approval.

Site Plan:

1. Provide details of, and dimension the height of the equipment shelter and all accessories;
2. Comply with the Township's requirements for grounding, wiring and signal and remote control conductors.
3. Agreement to provide annual report of total radiation output with information as determined by the Township engineer;
4. The antenna shall be painted or otherwise treated to match the tower and this noted on the plan;

5. Provide detailed landscape maintenance plan including replacement guarantee for landscaping;
6. Remove barbed wire from fence;
7. Replace the gravel surface with pavement unless the Commission determines that based on the infrequent traffic to the enclosure and nature of the use that gravel is acceptable;
8. Generator noise controls specified so as to be compatible with the vicinity;
9. Utilities and infrastructure to be reviewed during site plan review; and
10. Provide the Township with necessary assurances, agreements, documents and financial guarantees (as noted in Section D above).

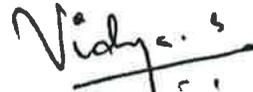
Under the MZEA's "shot clock", after an initial 14-day period, the Township has 90 days to take action on a new tower. In this case, if the Township does not take action by June 29th, the application may be considered approved. Therefore, if the above issues cannot be satisfactorily addressed by the Commission's May 18th meeting, the Planning Commission may need to recommend denial to the Township Board.

Respectfully submitted,

McKENNA ASSOCIATES



Sara J. Hodges, AICP
Senior Vice President



Vidya Krishnan
Senior Planner

cc: Howard Fink, Township Manager

New ParA Delaware Partnership DBA Verizon Wireless, 24242 Northwestern Hwy., Southfield, MI 48075

RJP CONSULTING

EXHIBIT 12

Application for Planning Approval

March 16, 2016

Planning Commission
Northfield Township
8350 North Main Street
Whitmore Lake, MI 48189

RE: Verizon Wireless Application for Conditional Use Permit and Site Plan Review at 2727 East North Territorial Road

Dear Planning Commission:

Enclosed with this correspondence are the following:

1. Completed and Signed Application for Conditional Use Permit and Site Plan Review
2. Signed and Sealed Site Plan
3. Radio Frequency Propagation Maps demonstrating gap/need for coverage
4. Map of Existing Township Towers
5. Fall Zone/Civil Engineer Letter
6. Letter from Applicant in compliance with Section 60.23
7. Letter Stating Total Radiation Output

In addition to the foregoing attachments, set forth below is a description of the criteria of Section 60.23 of the Northfield Township Ordinance ("Ordinance") and a response as to how Verizon Wireless has met each of these respective requirements under the Ordinance. We respectfully ask that Verizon's Application be considered by the Planning Commission at the first available date.

INTRODUCTION

As reflected in Verizon's responses below, it is necessary for Verizon to erect a 120' monopole (with 7' maximum lighting rod on top) and accompanying equipment ("Proposed Facility") at the property located at 2727 East North Territorial Road ("Site"), so it can remediate an existing gap in network coverage in the area surrounding the Site and improve its network reliability.

Verizon Wireless desires to provide Northfield Township with dependable wireless service. It is essential that Verizon Wireless be allowed to develop their network in such a way that enables them to provide adequate coverage to their existing and future customers in and through this area. Verizon Wireless has a Radio Frequency License from the FCC for the State of Michigan. The FCC requires its licensees to provide adequate and reliable service in the licensed area as specified in Title 47, Part 24.103 of the Code of Federal Regulations. In order to fulfill this requirement for their FCC license, Verizon Wireless needs to provide continuous, uninterrupted wireless communication service in the area that is the subject of this Application. Without the proposed site, Verizon Wireless will suffer several hardships: 1.) disruption of the network design; 2.) compromising needed coverage; and 3.) Verizon Wireless' inability to provide adequate and reliable coverage to the public, among others. The Proposed Facility will allow Verizon Wireless to provide the quality of service required by the FCC and demanded by the public.

The Proposed Facility will be designed and constructed to meet applicable governmental, health and industry safety standards. Specifically, Verizon Wireless will comply with all FCC and FAA rules governing construction requirements, technical standards, lighting, interference protection, power and height limitations and radio frequency standards.

ORDINANCE ANALYSIS

In addition to the materials attached hereto, Section 60.23 of the Ordinance requests the Applicant to respond, in pertinent part, to the following:

- C.2.
- a: Applicant information provided on the CUP application as well as a separate letter.
 - b: Provided and attached.
 - c: Please see attached site plan.
 - d: Please see attached site plan.
 - e: Please see attached Map of Existing Township Towers
 - f: Please see attached site plan.
 - g: Please see attached site plan.
 - h: Please see attached letter.
 - i: AT&T provides fiber backhaul.
 - j: The Proposed Facility is necessary to provide continuous, uninterrupted wireless communication service for Verizon customers in the area that is the subject of this Application. A Radio Frequency Engineer from Verizon has provided the accompanying RF Propagation Maps, attached hereto, which demonstrate that the Proposed Facility must be at least 120 feet in order to provide seamless coverage within the network plan. There are no existing towers in the area that can provide suitable coverage to meet our objectives.
 - k: Verizon is unable to provide a map as it is proprietary information. Verizon can say that in the next few years it is forecasting a need for new sites in the northwest area, north central area, and southeast area of the township.
 - l: Verizon has completed a Phase One environmental assessment and a NEPA review per FCC guidelines and there is no impact on wetlands, flood plains, wilderness areas, wildlife preserves, endangered species, and historical sites.
 - m: Please see attached Fall Zone/Civil Engineer Letter.
 - n: A Radio Frequency Engineer from Verizon has provided the accompanying RF Propagation Maps, attached hereto, which demonstrate that the Proposed Facility must be at least 120 feet in order to provide seamless coverage within the network plan.
 - o: Please see attached Letter Stating Total Radiation Output.
 - p: Please see attached letter.
- D1.
- a: The existing towers in the township are just too far away from the area that Verizon is trying to improve the network in. If Verizon were to use any of the existing towers, it would leave a gap in coverage along North Territorial that would require Verizon to build a new tower anyway. By building this Proposed Facility, Verizon is eliminating a gap in coverage and providing continuous uninterrupted service in this particular area of the township as well as providing collocation opportunities for future use by carriers thus eliminating the need for multiple towers in a particular area.
 - b: The Proposed Facility complies with this requirement.
 - c: The Proposed Facility complies with this requirement.
 - d: The Proposed Facility complies with this requirement.
 - e: Not applicable.

CONDITIONAL USE STANDARDS

Will be harmonious, and in accordance, with objectives and regulations within the Zoning Ordinance:

The Proposed Facility is in an agricultural field and permitted within the AR District as a conditional use. It will have no adverse impact with regard to the surrounding area. Indeed, towers such as the Proposed Facility are consistent with such Districts. It is not uncommon to find much larger structures, such as High Voltage Transmission Lines or Wind Turbines in many agricultural areas.

Will be compatible with the natural environment and existing and future land uses in the vicinity:

The Proposed Facility meets this requirement in that it is located a significant distance from North Territorial Road, at the rear of the subject Property and over 500' from any residential structures. In addition, the Proposed Facility will use a low impact "monopole" design. Such designs are less visually obtrusive than traditional "lattice" type towers. The monopole will be constructed of galvanized metal, which is standard in the industry and designed to blend in with the sky.

That the proposed use will be served adequately by essential public facilities and disposal, or that the persons or agencies responsible for the establishment of the proposed use shall be able to provide adequately any such service:

The Proposed Facility will only require commercial power and fiber optic service. Both utilities are available along North Territorial Road and will be brought to the facility by Verizon. It will not require the use of water or sewer.

That the proposed use will not be detrimental, hazardous, or disturbing to the existing or future neighboring uses, persons, property, or the public welfare:

The Proposed Facility is consistent with the AR District where it is located. The Proposed Facility will use a low impact "monopole" design. Such designs are less visually obtrusive than traditional "lattice" type towers. The monopole will be constructed of galvanized metal, which is standard in the industry and designed to blend in with the sky. Enabling Verizon to remediate gaps in wireless coverage and providing reliable and adequate coverage to the area will foster the public health, safety and welfare.

That the proposal will not create additional requirements at public cost for public facilities and services that will be detrimental to the economic welfare of the community:

The Proposed Facility will only require commercial power and fiber optic service. Both utilities are available along North Territorial Road and will be brought to the facility by Verizon. It will not require the use of water or sewer. There will be no public funds required for this project.

Will be compatible with the Township's adopted general development plan:

The Proposed Facility is consistent with the AR District where it is located and permitted within the AR District as a conditional use. The Proposed Facility will use a low impact "monopole" design. Providing reliable and seamless coverage in the area subject to this Application will serve the public interest and convenience through providing wireless and internet services as well as enhancing and serving the emergency communications network.

OTHER LEGAL CONSIDERATIONS

A. Applicable Federal Law

The Telecommunications Act of 1996, 47 USC §§151-614 (2001) (effective Feb. 8, 1996) ("TCA") provides certain limitations on the powers of local zoning authorities with respect to the regulation, placement and construction of wireless service facilities. Specifically, the TCA provides that any regulation by the Township with respect to decisions involving wireless telecommunication towers "shall not prohibit or have the effect of prohibiting the provision of personal wireless services. 47 USC 332(c)(7)(B)(i)(I), emphasis added. The TCA further provides that "any decision by a State or local government or instrumentality thereof to deny a request to place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence." 47 USC 332(c)(7)(B)(iii), emphasis added.

It is Verizon's position that it's Application for a Conditional Use Permit to construct the Proposed Facility, as demonstrated herein, meets and/or exceeds all of the review standards set forth in the Ordinance. Therefore, Verizon respectfully requests that its requested Conditional Use Permit be approved by the Planning Commission.

CONCLUSION

In conclusion, Verizon respectfully requests that the foregoing materials be considered by the Planning Commission and that the Proposed Facility be approved and granted a Conditional Use Permit in accordance with Section 60.23 of the Ordinance. Without the Proposed Facility, Verizon will be unable to remediate the gap in network coverage which is demonstrated through the RF Maps attached hereto and as otherwise set forth in this Application and through testimony Verizon will provide at public hearings.

On behalf of Verizon Wireless, we thank you in advance for your timely attention to this Application and look forward to working with the Township throughout the zoning approval process.

Sincerely,

A handwritten signature in black ink, appearing to read "Bob Przybylo". The signature is stylized and cursive.

Bob Przybylo
RJP Consulting, Inc. o/b/o Verizon Wireless

Northfield Township

Conditional Use Application Form

Applicant		Owner	
Name	<u>NEW PAR A DELAWARE PARTNERSHIP DBA</u>	Name	<u>NORTHFIELD TOWNSHIP</u>
Address	<u>2727 NORTHWESTERN HWY SOUTHFIELD, MI 48075</u>	Address	<u>8350 N. MAW ST. WHITLAND LAKE, MI 48189</u>
Phone	<u>248-613-4399</u>	Phone	<u>734-449-2880</u>

If applicant is NOT the property owner, then a statement from the owner MUST be attached, authorizing the application.

Statement has been attached, applicant is not owner (TWP MANAGER TO SIGN)
 Applicant is owner

Parcel ID number B-02-27-100-003
 Address 2727 EAST NORTH TERRITORIAL ROAD

Zoning District AR
 Development Name V2W 144 NORTH TERRITORIAL & SPENCER
 Proposed Use UNMANNED WIRELESS COMMUNICATION FACILITY
 General Location 2727 E. NORTH TERRITORIAL

Applicants Interest in Property LESSOR

Conditional Use is sought under Section 60.23 of the Northfield Township Zoning Ordinance.

An application for a conditional use permit shall contain the following information:

- Proof of ownership
- Legal Description
- Scaled and accurate survey drawing, with existing building, drives and other improvements
- A detailed description of the proposed use
- A site plan, meeting the requirements of a preliminary site plan, as set forth in Section 64.03, herein.
- Fee of ~~\$600.00 for CUP / \$500.00 for PSP~~ = \$1,100.00 as established by Northfield Township Board, must accompany application. Fee = \$1550.00

I have read the attached provisions of the Northfield Zoning Ordinance in regards to Article 63.0, Conditional Use and understand a public hearing will be established within sixty-five (65) days of the filing date.

Date 3/16/16 Applicant Bob [Signature] also UNMANNED WIRELESS

Application # _____

NORTHFIELD TOWNSHIP

SITE PLAN REVIEW APPLICATION

PROJECT NAME: V2W 144 NORTH TOWNSHIP of SPENCER

PROJECT ADDRESS: 2727 E. NORTH TOWNSHIPAL

Applicant Information:

Name: NEW PACE A DELAWARE PARTNERSHIP DBA VERIZON WIRELESS

Address: 27272 NORTHWESTERN HWY, SOUTHFIELD, MI 48075

Phone: 248-613-4399

Email:

Owner Information:

Name: NORTHFIELD TOWNSHIP

Address: 8350 N. MAW ST., WHITMORE LAKE 48189

Phone:

Email:

If the applicant is not the property owner, then a statement from the owner **MUST** be attached authorizing the application.

Proof of ownership OR Statement if applicant is not owner is attached. TWP MANAGER TO REVIEW

If applicant is not the owner, describe applicant's interest in the property
LESSOR

PROPERTY DESCRIPTION

Legal Description: Attached On Site Plan

Parcel ID(s): B-02-27-100-003

Description of Proposed Use: UNMANNED WIRELESS COMMUNICATION FACILITY

Total Acreage of Site: 18 ACRES

Total Floor Area: LEASE AREA: 2,000 SQ FT.

Existing:

Proposed: 2,000 SQ FT.

Height of Structure(s) (in stories & feet):

120' monopoles

Sanitary Facilities: Sewer Septic

Water: Municipal Private Well

N/A

Zoning Classification(s):

RC AR LR SR1 SR2 MR VC LC GC ES HC GI LI Other _____

SITE PLAN REVIEW OPTIONS

Administrative Site Plan Review:

- Expansion or reduction of an existing, conforming structure less than 2,000 sq. ft. / 5% of floor area
- Additional parking, loading / unloading spaces and landscape improvements

Site Plan Review:

- New Construction
- Building Addition

Development Plan Review:

- Planned Unit Development
- Planned Residential Development
- Site Condominium Plan

Amendment to Approved Site Plan or Development Plan:

- Site Plan
- Development Plan

Site or Development Plan Review in conjunction with: Rezoning Request Special Land Use Request

Application # _____

AUTHORIZED SIGNATURE

I hereby state that all of the above statements and all of the accompanying information are true and correct.

Applicant's Signature: Bob By 030 Verizon Wireless Date: 3/16/16

FOR OFFICE USE ONLY

Application Received Date: _____

Planning Commission Received Date: _____

Planning Commission Action: Approved Date: _____ Denied Date: _____

Expiration Date: _____

Fee Received: Cash Check # _____

RJP CONSULTING

March 15, 2016

Planning Commission
Northfield Township
8350 North Main Street
Whitmore Lake, MI 48189

RE: Verizon Wireless Network Propagation Maps

To Whom It May Concern:

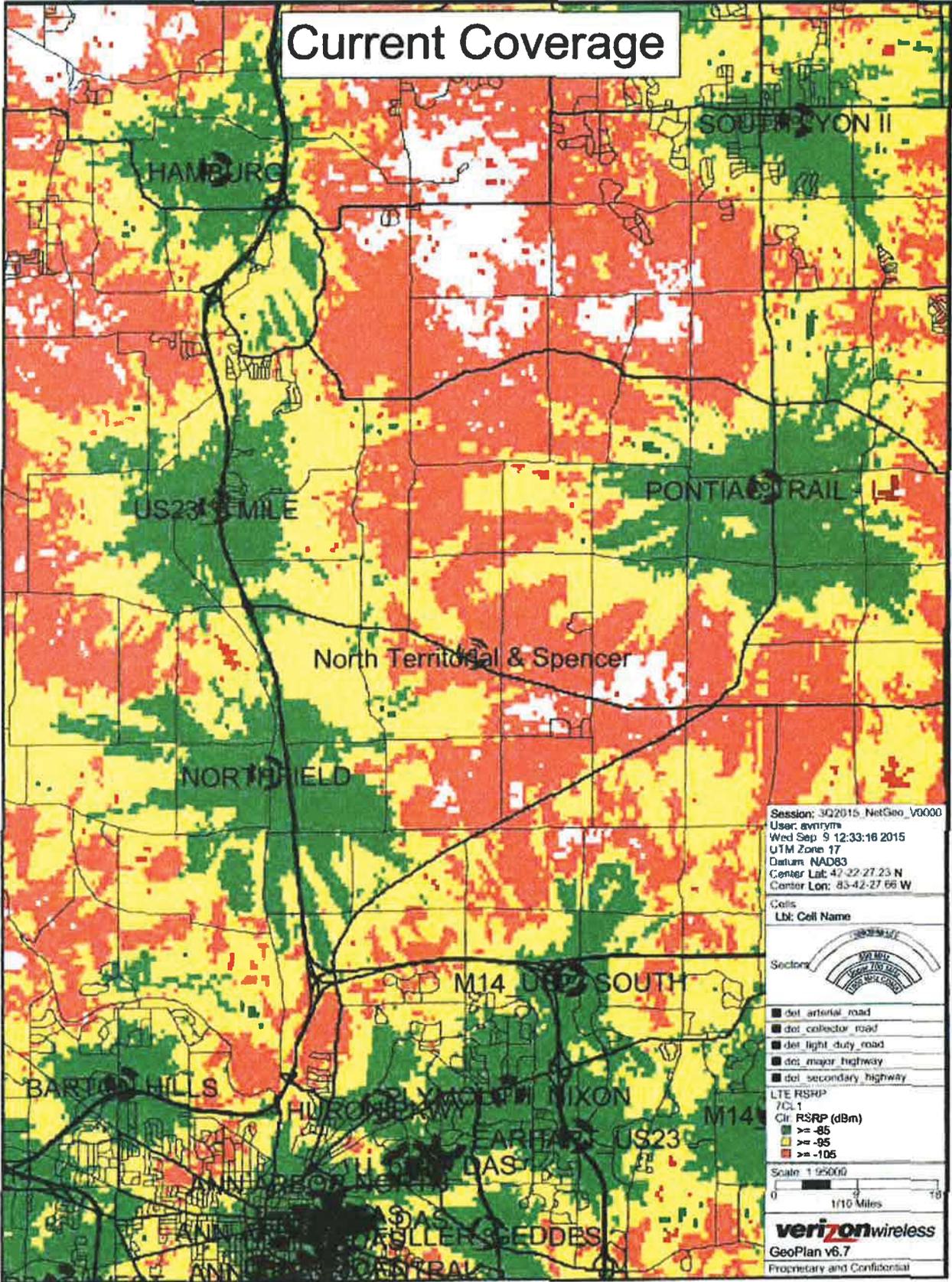
Please see the attached maps. The first map shows the existing network coverage. The second map shows the network coverage with the proposed site. As you can see, the proposed site dramatically improves coverage in the area. Please note the maps show the network coverage as required by Verizon Wireless standards including in-car, in-building, and outside for both voice calls and data usage. Please call me at (248) 613-4399 if you have any questions.

Sincerely,

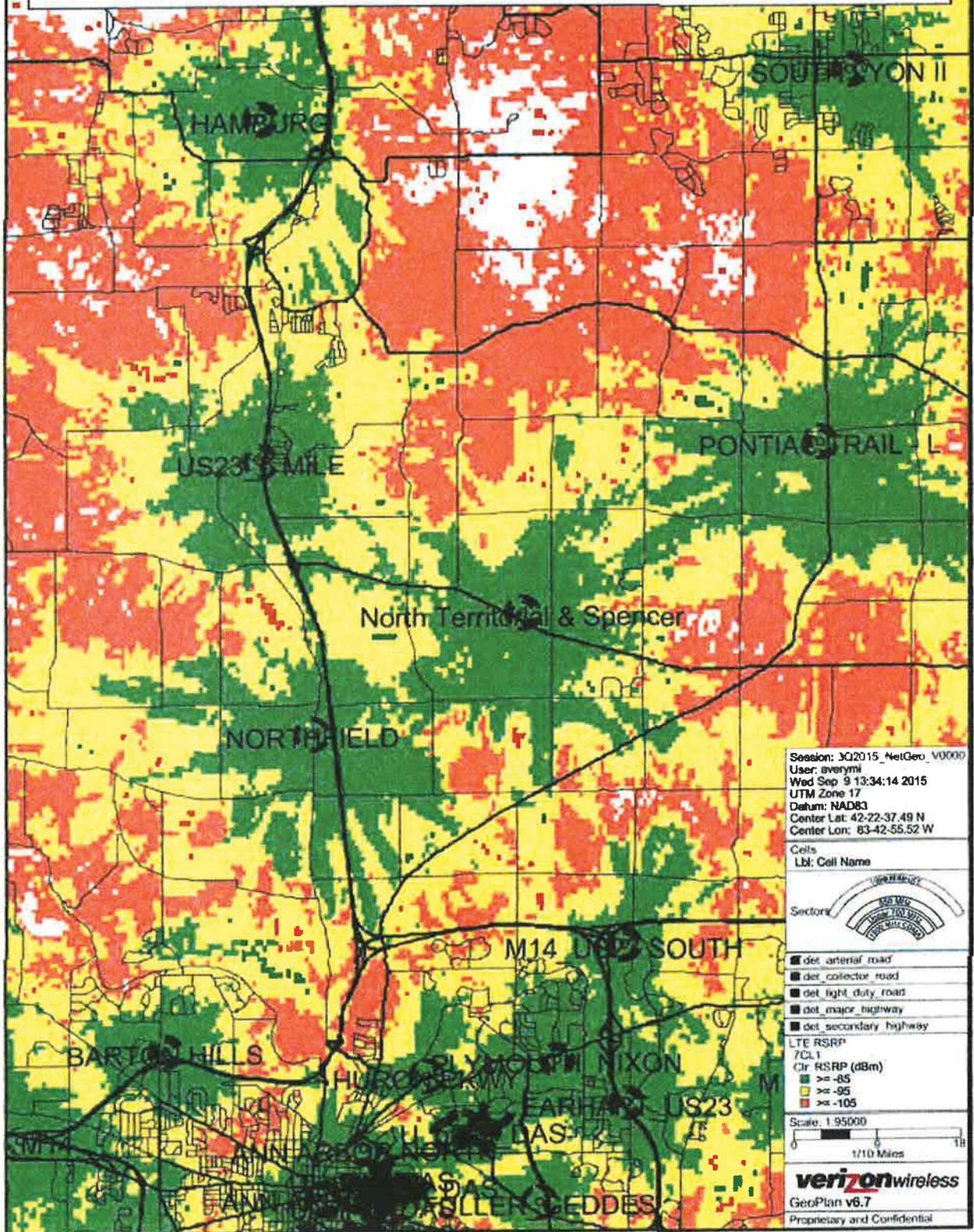


Bob Przybylo
RJP Consulting, Inc. o/b/o Verizon Wireless

Current Coverage



Coverage with North Territorial & Spencer



RJP CONSULTING

March 15, 2016

Planning Commission
Northfield Township
8350 North Main Street
Whitmore Lake, MI 48189

RE: Verizon Wireless Existing Towers

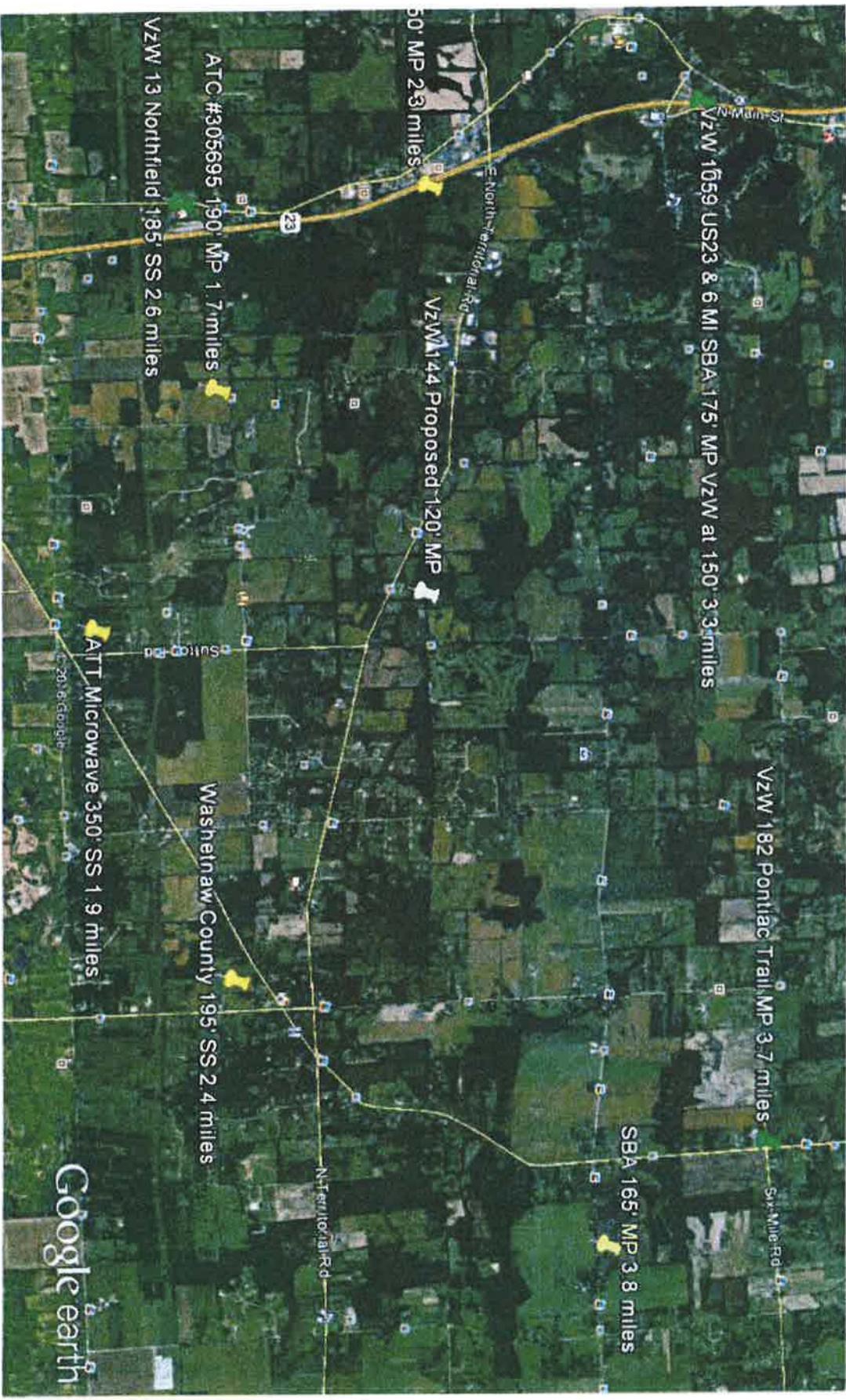
To Whom It May Concern:

Please see the attached map. It shows all of the existing towers within and near the township as well as type and height. These are depicted by the yellow push pins. The green push pins are existing Verizon Wireless sites in the area and the white push pin is the proposed site. Please call me at (248) 613-4399 if you have any questions.

Sincerely,



Bob Przybylo
RJP Consulting, Inc. o/b/o Verizon Wireless



Google earth



2015-05-20

February 22, 2016

Mr. Andrew Konyha
Verizon Wireless

RE: Proposed 120' Sabre Monopole for N Territorial Spencer, MI

Dear Mr. Konyha,

Upon receipt of order, we propose to design and supply the above referenced Sabre monopole for a Basic Wind Speed of 90 mph with no ice and 40 mph with 1" radial ice, Structure Class II, Exposure Category C and Topographic Category 1 in accordance with the Telecommunications Industry Association Standard ANSI/TIA-222-G, "Structural Standard for Antenna Supporting Structures and Antennas".

When designed according to this standard, the wind pressures and steel strength capacities include several safety factors, resulting in an overall minimum safety factor of 25%. Therefore, it is highly unlikely that the monopole will fail structurally in a wind event where the design wind speed is exceeded within the range of the built-in safety factors.

Should the wind speed increase beyond the capacity of the built-in safety factors, to the point of failure of one or more structural elements, the most likely location of the failure would be within the upper portion of the monopole shaft. Assuming that the wind pressure profile is similar to that used to design the monopole, the monopole will buckle at the location of the highest combined stress ratio within the upper portion of the monopole shaft. This is likely to result in the portion of the monopole above "folding over" onto the portion below, essentially collapsing on itself. ***Please note that this letter only applies to the above referenced monopole designed and manufactured by Sabre Towers & Poles.*** In the unlikely event of total separation, this will result in collapse within a radius of 60 feet.

Sincerely,

Robert E. Beacom, P.E., S.E.
Senior Design Engineer



Network



Verizon Wireless
24242 Northwestern Hwy.
Southfield, MI 48075

February 22, 2016

Planning Commission
Northfield Township
8350 N. Main Street
Whitmore Lake, MI 48189

RE: Verizon Wireless Conditional Use/Site Plan Review Application

To Whom It May Concern:

Please accept this letter as notification that the proposed tower will be designed to accommodate two additional carriers with an equal loading of that proposed by Verizon Wireless.

The contact person for this site is Doug Weber, 248-915-3560, douglas.weber@verizonwireless.com, 24242 Northwestern Hwy, Southfield, MI 48075.

Verizon Wireless has prepared the following maintenance plan for the proposed wireless communication facility.

- Weed control -- apply anti-emergent weed control in May, treat weeds as required through growing season
- Snow removal - local service provider to be on call when needed
- Debris removal -- local service provider to be on call when needed

Please call me at (248) 915-3560 if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Doug Weber".

Doug Weber
Real Estate Manager

STATE OF MICHIGAN)
) SS
COUNTY OF OAKLAND)

On this 22nd day of February, 2018 before me personally appeared Doug Weber, Real Estate Manager for Verizon Wireless to me known to be the person described above and who executed the foregoing instrument, and acknowledged that it was executed as said person's free act and deed.

Notary Public: Jubawa Madisgen Gwans
Print Name: Jubawa Madisgen Gwans
Oakland County, MI
My Commission Expires: 5/10/20

RJP CONSULTING

March 15, 2016

Planning Commission
Northfield Township
8350 North Main Street
Whitmore Lake, MI 48189

RE: Verizon Wireless Total Radiation Output from Radio and Antenna System

700MHz LTE (60W radio output)

- $133\text{W/MHz} \times 10\text{MHz} = 1330\text{W ERP}$

2100MHz LTE (60W radio output)

- $188\text{W/MHz} \times 20\text{MHz} = 3760\text{W ERP}$

1900MHz LTE (60W radio output)

- $751\text{W/MHz} \times 5\text{MHz} = 3755\text{W ERP}$

Please call me at (248) 613-4399 if you have any questions.

Sincerely,



Bob Przybylo
RJP Consulting, Inc. o/b/o Verizon Wireless

ULS License
PCS Broadband License - KNLG663 - New Par

Call Sign	KNLG663	Radio Service	CW - PCS Broadband
Status	Active	Auth Type	Regular

Market

Market	BTA145 - Flint, MI	Channel Block	D
Submarket	0	Associated Frequencies (MHz)	001865.00000000- 001870.00000000 001945.00000000- 001950.00000000

Dates

Grant	06/01/2007	Expiration	04/28/2017
Effective	02/03/2011	Cancellation	

Buildout Deadlines

1st	04/28/2002	2nd	
-----	------------	-----	--

Notification Dates

1st	04/24/2002	2nd	
-----	------------	-----	--

Licensee

FRN	0003010816	Type	General Partnership
-----	------------	------	---------------------

Licensee

New Par 1120 Sanctuary Pkwy, #150 GASA5REG Alpharetta, GA 30009-7630 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
---	---

Contact

Verizon Wireless Licensing - Manager 1120 Sanctuary Pkwy, #150 GASA5REG Alpharetta, GA 30009-7630 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
---	---

Ownership and Qualifications

Radio Service Type Mobile

Regulatory Status Common Carrier Interconnected Yes

Alien Ownership

Is the applicant a foreign government or the representative of any foreign government? No

Is the applicant an alien or the representative of an alien? No

Is the applicant a corporation organized under the laws of any foreign government? No

Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country? No

Is the applicant directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof, or by any corporation organized under the laws of a foreign country? Yes

The Alien Ruling question is not answered.

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

Demographics

Race

Ethnicity

Gender

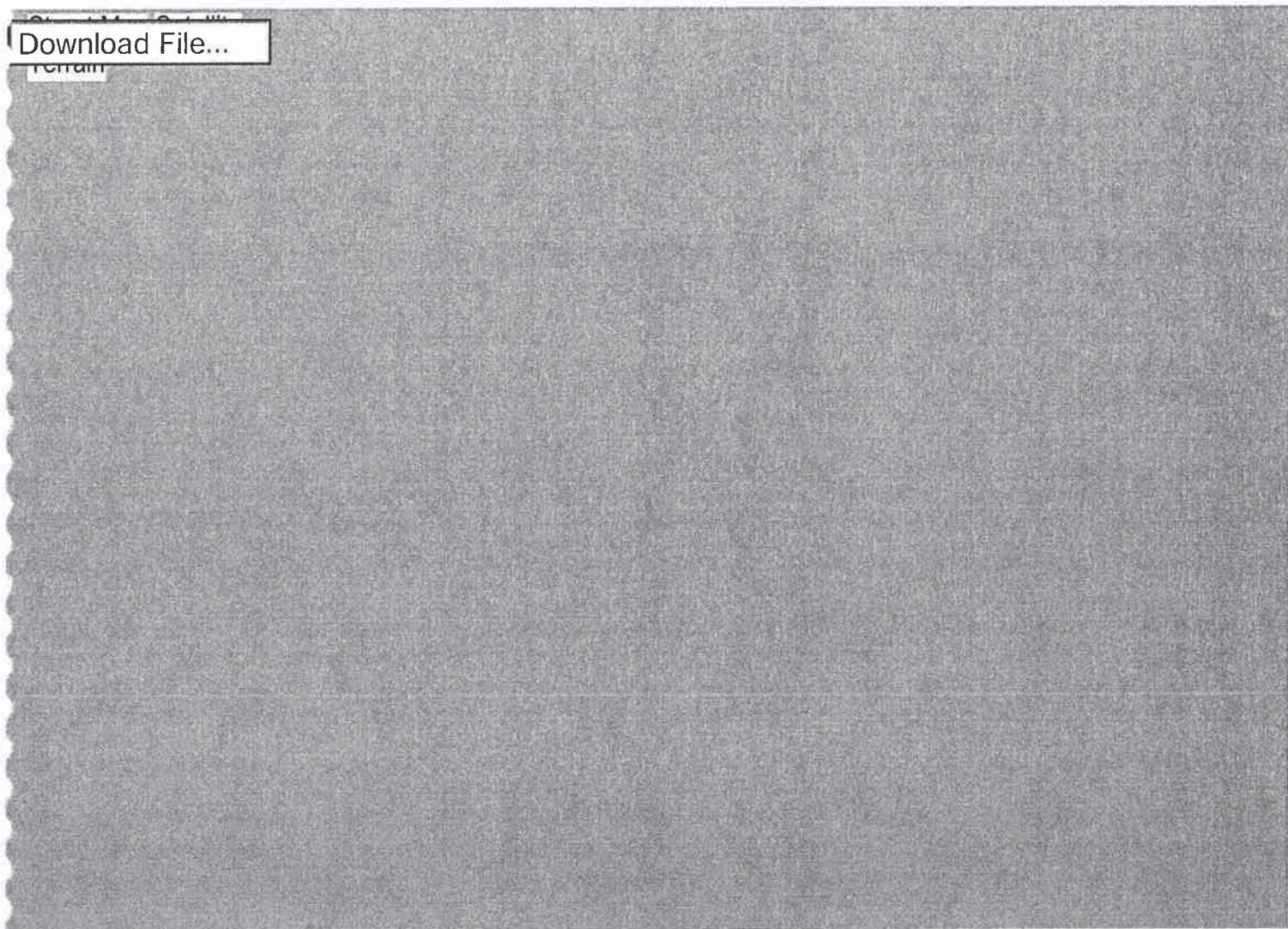
ULS License

PCS Broadband License - KNLG663 - New Par Map

Call Sign	KNLG663	Radio Service	CW - PCS Broadband
Market	BTA145 - Flint, MI	Channel Block	D
Submarket	0	Associated Frequencies (MHz)	001865.00000000- 001870.00000000 001945.00000000- 001950.00000000

Auction 11 - BB PCS DEF

License Geography



License Spectrum Range:

EXHIBIT 13

Proposed Special Land Use Findings of Fact

Proposed Standards And Findings To Support The Conditional Use Approval

- (1) Will be harmonious with and in accordance with the general objectives, intent and purposes of this chapter;**

The new 150' monopole is designed to provide complete 21st Century wireless services in accordance with local, State and Federal guidelines. The location is intended to minimize disruption and impact on homesites. The design, location and installation fully meet criteria established under Section 36-720 "Wireless Communication Structures" contained in the Northfield Township Ordinance Chapter 36 – Zoning.

- (2) Will be designed, constructed, operated and managed so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity;**

The galvanized monopole is designed to blend with the area general Agricultural/Residential land uses. In addition, it provides communication mounting opportunities for the adjacent Northfield Township Fire Station No. 2.

- (3) Will be compatible with the natural environment and existing and future land uses in the vicinity;**

The 10,000 s.f. development will have minimal impact upon surrounding area development patterns.

- (4) Will be compatible with the township land use development plan;**

The Township Development Plan identifies this parcel as government use (Fire Station). A communication tower is generally an accepted secondary complimentary addendum to such use.

- (5) Will be served adequately by essential public facilities and services, such as highways, streets, police, and fire protection, drainage structures, refuse disposal or that the persons or agencies responsible for the establishment of the proposed use shall be able to provide adequately any such service;**

The low intensity use will not create any additional burdens upon local facilities including roads, drainage, emergency services and refuse disposal.

The proposed monopole is served by communications cables and electricity.

(6) Will not be hazardous or disturbing to existing or future neighboring uses;

The monopole and wireless facility will have no adverse impacts on either existing or future neighboring land uses. The site creates no noise, vibrations, smoke, emissions or other environmentally unfriendly impacts.

(7) Will not create excessive additional requirements at public cost for public facilities and services

(Ord. of 7-22-2013, § 63.07)

The site development will not require the addition and expense of any new public facilities and services.

**NORTHFIELD TOWNSHIP PLANNING COMMISSION
NOTICE OF REGULAR MEETING
June 15, 2016 at 7:00 p.m.
Second Floor, Public Safety Building
8350 Main Street, Whitmore Lake, MI 48189**

AGENDA

1. **CALL TO ORDER**
2. **PLEDGE OF ALLEGIANCE**
3. **ROLL CALL**
4. **APPROVAL OF AGENDA**
5. **CALL TO THE PUBLIC**
6. **CORRESPONDENCE**
7. **REPORTS**
 - A. **Board of Trustees Report**
 - B. **ZBA**
 - C. **Staff Report**
 - D. **Planning Consultant Report**
8. **PUBLIC HEARINGS:**
 - A. **Case #JPC160003** – Recommend to approve, approve with conditions, or deny the request of Living Water Lutheran Church of Whitmore Lake, 200 Barker Road, Whitmore Lake, MI 48189, parcel number B-02-06-105-025 for a Conditional Use to allow an approximately 7,200 sq. ft. Church under Section 36-391 (23). The parcel is zoned GC – General Commercial. (attachment 1)
9. **OLD BUSINESS:**
 - A. **Case #JPC160001** – Recommend to approve, approve with conditions, or deny the request of Northfield Township, 2727 East North Territorial Road, Whitmore Lake, MI 48189 (Township Fire Station #2) for a Conditional Use Permit to allow a Wireless Communication Facility (Cellular Telephone Tower) for New Par dba Verizon Wireless. Verizon Wireless proposes to construct a new 120' Monopole (with 7' maximum lighting rod on top). The parcel number is B-02-27-100-003 and is zoned AR – Agriculture (attachment 2) (attachment 2)
10. **NEW BUSINESS:**
 - A. **Case #JPC160003** – Recommend to approve, approve with conditions, or deny the request of Living Water Lutheran Church of Whitmore Lake, 200 Barker Road, Whitmore Lake, MI 48189, parcel number B-02-06-105-025 for a Conditional Use to allow an approximately 7,200 sq. ft. Church under Section 36-391 (23). The parcel is zoned GC – General Commercial. (attachment 1)
 - B. **Discussion on 2016 Goals & Objectives:** Lakeside Community Park, Main Street, Business Oriented Zonings and what can the Planning Commission do to make it more attractive to prospective businesses. Including Main Street Concepts.
11. **MINUTES:** May 18, 2016 Regular Meeting
12. **POLICY REVIEW AND DISCUSSION**
13. **CALL TO THE PUBLIC**
14. **COMMENTS FROM THE COMMISSIONERS**
15. **ANNOUNCEMENT:** Special Meeting June 29, 2016
16. **ADJOURNMENT**

This notice is posted in compliance with PA 267 Of 1976 as amended (open meetings act) MCLA 41.7 2A (2) (3) and the Americans with Disabilities Act. (ADA) Individuals with disabilities requiring auxiliary aids or services should contact the Northfield Township Office, (734) 449-5000 seven days in advance.

8350 Main Street, Whitmore Lake, MI 48189-0576
www.twp.northfield.mi.us

Telephone: (734) 449-5000

Fax: (734) 449 -0123

Website:

NORTHFIELD TOWNSHIP PLANNING COMMISSION

NOTICE OF PUBLIC HEARING

The Northfield Township Planning Commission will hold a public hearing at the request of Living Water Lutheran Church of Whitmore Lake, 200 Barker Road, Whitmore Lake, MI 48189, parcel number B-02-06-105-025 for a Conditional Use to allow an approximately 7,200 sq. ft. Church under Section 36-391 (23). The parcel is zoned GC – General Commercial.

The public hearing will be held on **Wednesday, June 15, 2016** at 7:00 p.m. on the second floor for the Northfield Township Public Safety Building, 8350 Main Street, Whitmore Lake, MI 48189. The application is on file at the Northfield Township Building/Zoning Department, 8350 Main Street, Whitmore Lake, MI 48189, and may be reviewed Monday through Friday, 8:00 a.m. to 4:30 p.m. Written comments may be submitted to the Building/Zoning Department at the Township Hall (8350 Main St.) before 12:00 p.m. on the day of the meeting.

This notice is in compliance with PA 267 of 1976 as amended (Open Meetings Act) MCLA 41.7, 2A (2) (3) and the Americans with Disabilities Act (ADA). Individuals with disabilities requiring auxiliary aids or services should contact the Northfield Township Offices at 743-449-2880 seven days in advance.

Angela Westover – Northfield Township Clerk

Publish: Sunday, May 29, 2016

Newspaper: legalads@mlive.com

Northfield Township

Conditional Use Application Form

Applicant

Name Living Water Lutheran Church of Whitmore Lake
Address 9876 Main St.
Whitmore Lake, MI 48189
Phone 734-426-4006

Owner

Name Whitewood Enterprises, Inc.
Address 3400 Apache Trail
Pinckney, MI 48169
Phone 734-449-8617

If applicant is NOT the property owner, then a statement from the owner MUST be attached, authorizing the application.

- Statement has been attached, applicant is not owner
 Applicant is owner

Parcel ID number B-02-06-105-025
Address 200 Barker Road
Whitmore Lake, MI 48189
Zoning District General Commercial (GC)
Development Name Living Water Church of Whitmore Lake
Proposed Use Church
General Location 200 Barker Road, Whitmore Lake

Applicants Interest in Property purchasing property

Conditional Use is sought under Section 36-391(23)
of the Northfield Township Zoning Ordinance.

An application for a conditional use permit shall contain the following information:

- Proof of ownership
- Legal Description
- Scaled and accurate survey drawing, with existing building, drives and other improvements
- A detailed description of the proposed use
- A site plan, meeting the requirements of a preliminary site plan, as set forth in Section 64.03, herein.
- Fee of \$600.00 for CUP / \$500.00 for PSP = \$1,100.00 as established by Northfield Township Board, must accompany application.

I have read the attached provisions of the Northfield Zoning Ordinance in regards to Article 63.0, Conditional Use and understand a public hearing will be established within sixty-five (65) days of the filing date.

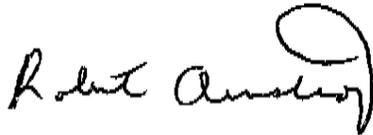
Date 5/13/2016 Applicant Frank K. Murdock, President, Living Water

Northfield Township Planning Commission
8350 Main St.
Whitmore Lake, MI

To Whom it May Concern:

Whitewood Enterprises, Inc. hereby consents to zoning changes proposed by Living Water Lutheran Church for the property at 200 Barker Rd., provided that no current permitted or conditional uses are eliminated as a result of the zoning change. Any expansion of permitted or conditional uses is approved.

Whitewood Enterprises, Inc.

A handwritten signature in black ink, appearing to read "Robert Armstrong". The signature is written in a cursive style with a large, looping initial "R".

By Robert Armstrong
President

Washtenaw County Parcel Summary

This data is received from local cities, villages, and townships. For additional information or verification, please contact your local city, village or township assessor or the Washtenaw County Department of Equalization at (734)222-6662.

Information herein deemed reliable but **not** guaranteed.

Parcel Identification

Parcel Number:	B -02-06-105-025
City, Village, or Township:	TOWNSHIP OF NORTHFIELD
Parcel Status:	ACTIVE
Property Address Street Number, Name & Direction	200 BARKER RD
Property City, State, Zip Code	WHITMORE LAKE MI, 48189
School District Number & Name	81140 WHITMORE LAKE PUBLIC SCHO
Property Classification	201 COMMERCIAL

Taxpayer Identification -- Year 2016

Taxpayer Name 1:	WHITEWOOD ENTERPRISES INC (2016)
Taxpayer Name 2:	
Taxpayer Mailing Address:	3400 APACHE TRAIL
Taxpayer City, State, Zip Code:	PINCKNEY, MI, 48169

Assessment

Year	State Equalized Value	Taxable Value	Principal Residence Exemption %
2015	\$176,300.00	\$150,185.00	0
2014	\$167,700.00	\$147,820.00	0

Sales

Sale Date:	04/02/2001	Sale Price:	\$0.00
Liber-Page:	L4005 P761	Last Update:	

Washtenaw County Legal Description

This data is received from local cities, villages, and townships. For additional information or verification, please contact your local city, village or township assessor, the Washtenaw County Clerk/Register of

Deeds at (734)222-6710 or the Washtenaw County Department of Equalization at (734)222-6662.

Parcel Identification	
Parcel Number:	B -02-06-105-025
Property Address Street Number, Name & Direction	200 BARKER RD
City, Village, or Township:	TOWNSHIP OF NORTHFIELD
Legal Description:	TRANS 3/31/95 ASSR REQUEST **FROM 0206105010 02/09/95 NO 6-5B-2B COM AT E 1/4 COR SEC 6, TH S 88-37-43 W 491.33 FT, TH N 38-56-47 W 75.70 FT TO N'LY R/W BARKER RD & POB, THS 88-37-43 W 200.00 FT, TH N 01-22-17 W 30.03 FT, TH ALNG C/L OF HORSHOE LAKE OUTLET DRAIN N 38-39-29 W 199.90 FT, TH N 49-42-06 W 100.91 FT, TH N 34-36-53 W 175.65 FT, TH 230.67 FT ALNG ARC-CURV-RT RAD=3669.72 FT CH=N 00-04-10 W 230.63 FT, TH S 38-56-47 E 799.49 FT TO POB. PT OF NE 1/4 SEC 6 T1S-R6E. 2.20 AC.

Washtenaw County Sales History

This data is received from local cities, villages, and townships. For additional information or verification, please contact your local city, village or township assessor, the Washtenaw County Clerk/Register of Deeds at (734)222-6710 or the Washtenaw County Department of Equalization at (734)222-6662.

Parcel Identification			
Parcel Number:	B -02-06-105-025		
Property Address Street Number, Name & Direction	200 BARKER RD		
City, Village, or Township:	TOWNSHIP OF NORTHFIELD		
Liber-Page:	Sale Date	Instrument	Sale Price
L4005 P761	04/02/2001	QUIT CLAIM DEED	\$0.00
L3963 P610	08/04/2000	WARRANTY DEED	\$90,000.00

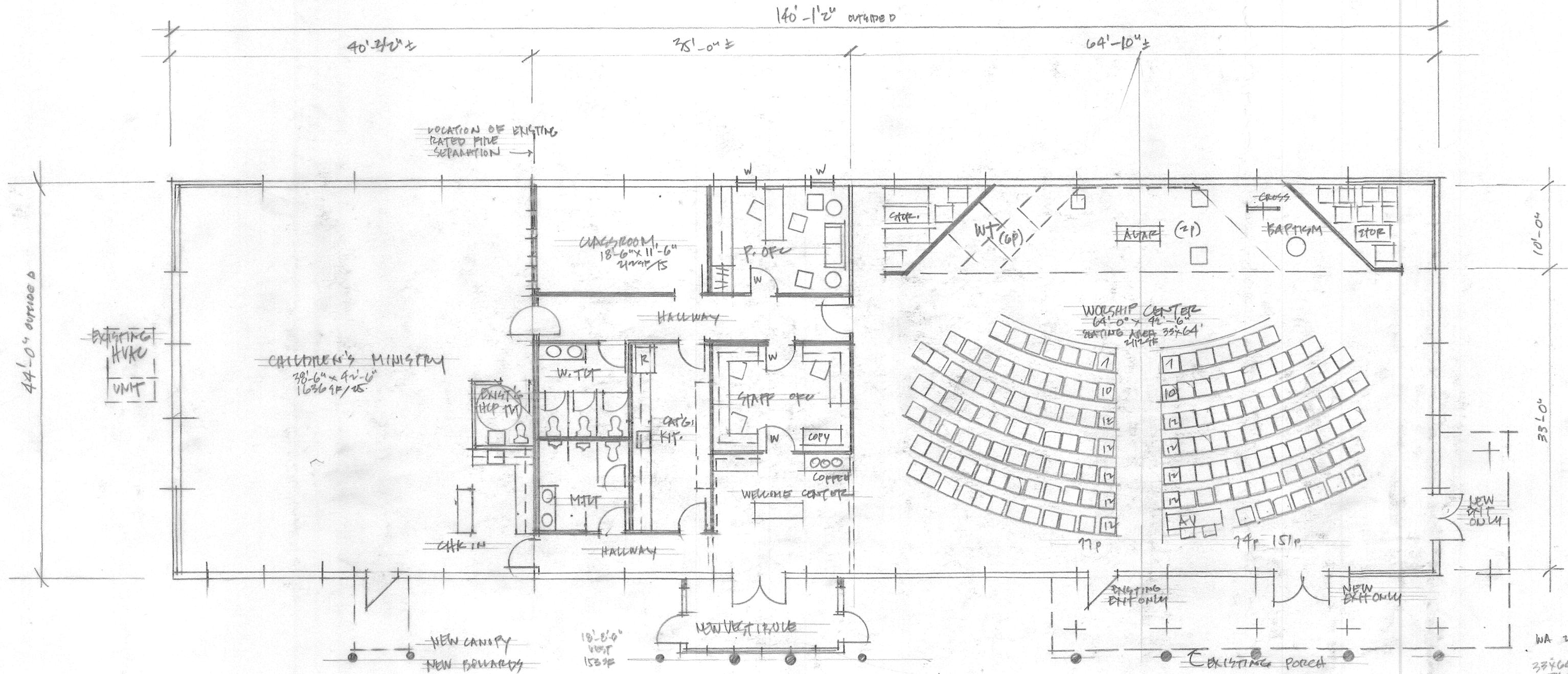
Description of the Proposed Use of 200 Barker Road, Whitmore Lake, MI

- Harmonious and in accordance with the objectives and regulations within the Zoning Ordinance.
 - Promoting and protecting the public health, safety and general welfare
 - Since 2004 when Living Water began, it has been active in the community, promoting improvement in the general welfare by partnering with the Whitmore Lake Public Schools and Northfield Human Services with programs like Backpacks for Kids, Rake and Run, Turkeys for Thanksgiving and the Christmas Giving Tree. These programs will continue and be expanded by moving into a permanent facility for Living Water’s base of operations.
 - Maintaining the rural, natural and scenic qualities of the township
 - Very little will change in terms of the outside structures and features on the existing property. Additional parking will be provided by installing a permeable matting in the grass area (e.g. [GrassProtecta®](#)) north of the existing parking lot so the existing drainage and landscape will not change.
 - Provide adequate light, air, privacy, convenience of access to property and lessening and avoiding congestion on the public highways and streets.
 - No substantial changes will be made the exterior of the existing structures. A small vestibule entry will be added to improve the egress and foot-traffic into the main building as well as insulate against the weather.
 - The existing traffic flow will be maintained with a fire lane only on the east side against the railroad right-of-way and a fire lane on the west side between diagonal parking and the roof overhang.
 - Regulating the concentration of buildings in relation to the surrounding land.
 - No changes as a result of using the property as a church – the same concentration of buildings.
- Compatible with the natural environment and existing and future land uses in the vicinity.
 - Provide for the conservation of the natural resources in the township including air, water, soil and natural features.
 - Drainage and landscape features will be maintain as existing on the property. The Horseshoe Lake drainage stream and retention basin will be maintained.
- Will be served adequately by essential public facilities and disposal or that Living Water will be able to provide adequately any such service.
 - There will be 4 toilets and two urinals added with 4 additional sinks in two public bathrooms and a catering kitchen area. The existing ADA compliant toilet will be maintained.
 - As part of a second phase to be completed within the next two years, a septic tank, toilet, bathroom sink and kitchen sink is planned to be installed, along with heating and air conditioning, in the unattached garage in order for it to be used as a youth center. The septic tank system will include an indicator to signal when it is to be pumped out using a service to be contracted by Living Water.
- Will not be detrimental, hazardous or disturbing to the existing or future neighboring uses, persons, property or the public welfare.
 - Protecting against fire, explosion, noxious fumes, heat, dust, smoke, glare, noise, vibration, radioactivity and other nuisances and hazards.
 - Per the 2015 International Fire Code, Section 903.2.1.3 for Group A-3 assembly usage, the designed occupant load for the large worship space, 2,112 sq. ft. without fixed seating, is 151 and will be posted and controlled below that level (Section 1004.1.2). When the attendance for a particular service exceeds 120 for 7 weeks in a row, Living Water will add an additional service in order to maintain the occupancy load below the posted maximum. Living Water will have

Description of the Proposed Use of 200 Barker Road, Whitmore Lake, MI

posted evacuation routes in every room and hallway throughout the building identifying assembly areas where people are to gather and be counted. Living Water will also run an unannounced fire drill at least annually during a service in order to demonstrate and measure how long it takes to evacuate the building in case of a fire. The names of all members and visitors will be recorded at each service and used to account for all occupants after evacuation to the outside assembly areas at the time of a fire or fire drill.

- In addition a dry fire sprinkler system will be installed with an appropriate connection for a pumper fire truck outside the building so that, should a fire occur, it can be extinguished quickly without the fire department having to enter a burning building. Later, as local development and growth in the community continue, and when a municipal water system is installed, Living Water will connect their existing sprinkler system to that municipal source.
 - The main building is currently very well insulated from sound so that traffic noise from US 23 and the train traffic is barely audible. Likewise, the music and sound from the Living Water worship services, as a result, will not disturb any of the neighboring businesses during services on Sunday mornings.
- Will not create additional requirements at public cost for public facilities and services that will be detrimental to the economic welfare of the community.
 - Protecting existing public investment in infrastructure.
 - Although there will be an increase in traffic flow into and out of the church, the peak time will be Sunday morning which will not disturb the overall traffic flow into and out of the village along Barker Road during that time. In fact, the church should provide neighboring businesses, should they be open during that time, with additional business due to their proximity to the church.
- Will be compatible with the Township’s adopted general development plan.
 - This use by Living Water Church is consistent with the recommendations made by the Township Planner and most recently adopted unanimously by the Township Board on April 12, 2016.



40'-3 1/2" ±

35'-0" ±

140'-1 1/2" OUTSIDE D

64'-10" ±

LOCATION OF EXISTING RATED FIRE SEPARATION →

CLASSROOM 18'-6" x 11'-6" 21/27/15

P. OFF

CROSS

WT (GP)

AV (2P)

BAPTISM

STOP

WORSHIP CENTER 64'-0" x 42'-6" SEATING AREA 33' x 64' 21/27/15

CHILDREN'S MINISTRY 38'-6" x 42'-6" 163/6 9/15

W. TOI

STAFF OFF

COPY

COPPER

WELCOMES CENTER

EXISTING HVAC UNIT

EXISTING HVAC UNIT

NEW EXIT ONLY

EXISTING EXIT ONLY

NEW EXIT ONLY

NEW CANOPY NEW BOWARDS

18'-0" VEST 153 SF

NEW VESTIBULE

EXISTING PORTAL

WA 2720 SF
 33' x 64' = 2112 SF
 - 15% CIRC 21 x 56
 = 1572 SF / 10 = 157 MAX

EXT AREA 0160 SF
 INT AREA 5900 SF
 NEW VEST 153 SF 2.5%

UN - SCHEME A - 1/8" = 1'-0"

REV 5/6/16

Expected Week in the Life of Living Water Lutheran Church of Whitmore Lake at 200 Barker Road

Sunday

- 8:30 a.m. Pastor and staff (up to 6 people) arrive, unlock church and prepare for Education Hour and Worship
- 9:00 a.m. Education Hour begins with approximately 20 adults in Pastor's Bible Class and up to 20 children in either Sunday School or in the Nursery during the same time.
- 10:15 a.m. Family Worship begins with up to 150 people (adults and children) worshipping together in the worship center. Nursery will contain two adults as staff and up to 10 babies and toddlers.
- 11:30 a.m. Worship ends, people remain for fellowship time.
- 12:00 p.m. Monthly Church Council Meeting in class room with up to 10 people attending.
- 1:00 p.m. Only Church Council Meeting in class room, rest of the people are gone from the building.
- 2:00 p.m. Church Council Meeting ends. Everyone leaves and church is locked.
- 6:30 p.m. Small Group Meeting with up to 15 people meeting in class room at church.
- 9:30 p.m. Everyone leaves and church is locked.

Monday

- 8:30 a.m. Pastor and staff (up to 2 people) arrive and unlock church.
- 9:00 a.m. Church visiting hours (up to 6 people in church at one time).
- 5:00 p.m. Pastor and staff (up to 6 people) leave and lock church.
- 7:00 p.m. Small Group Meeting (e.g. Elders meet monthly) with up to 15 people meeting in class room at church.
- 9:30 p.m. Everyone leaves and locks church.

Tuesday

- 8:30 a.m. Pastor and staff (up to 2 people) arrive and unlock church.
- 9:00 a.m. Church visiting hours (up to 6 people in church at one time).

Expected Week in the Life of Living Water Lutheran Church of Whitmore Lake at 200 Barker Road

- 5:00 p.m. Pastor and staff (up to 6 people) leave and lock church.
- 7:00 p.m. Small Group Meeting with up to 15 people meeting in class room at church.
- 9:30 p.m. Everyone leaves and locks church.

Wednesday

- 8:30 a.m. Pastor and staff (up to 2 people) arrive and unlock church.
- 9:00 a.m. Church visiting hours (up to 6 people in church at one time).
- Noon The Advent Wednesdays leading up to Christmas and Ash Wednesday and Lenten Wednesdays leading up to Easter, will hold mid-day worship services (expect up to 50 people) as an option for those who cannot make the evening services.
- 1:00 p.m. Worshipers leave, Pastor and staff with visitors meeting (up to 6 people total).
- 5:00 p.m. Pastor and staff (up to 6 people) leave and lock church.
- 7:00 p.m. Small Group Meeting with up to 15 people meeting in class room at church. Thanksgiving Eve and the following Advent Wednesdays leading up to Christmas, will hold worship service (expect up to 75 people in worship).
- 8:30 p.m. Worshipers leave, Pastor and staff with visitors meeting (up to 6 people total).
- 9:30 p.m. Everyone leaves and locks church.

Thursday

- 8:30 a.m. Pastor and staff (up to 2 people) arrive and unlock church.
- 9:00 a.m. Church visiting hours (up to 6 people in church at one time). Once a month, Mothers of Preschoolers (MPOS) will meet (up to 15 mothers with their children) during the school Year (they do not meet during the summer months).
- Noon MOPS leave, Pastor and staff with visitors meeting (up to 6 people total).
- 5:00 p.m. Pastor and staff (up to 6 people) leave and lock church.
- 7:00 p.m. Small Group Meeting with up to 15 people meeting in class room at church. Maundy Thursday (before Easter), services will be held in the homes and not at the church)
- 9:30 p.m. Everyone leaves and locks church.

Expected Week in the Life of Living Water Lutheran Church of Whitmore Lake at 200 Barker Road

Friday

- 8:30 a.m. Pastor and staff (up to 2 people) arrive and unlock church.
- 9:00 a.m. Church visiting hours (up to 6 people in church at one time).
- Noon Good Friday (before Easter) will hold mid-day worship service (expect up to 50 people) as an option for those who cannot make the evening service.
- 1:00 p.m. Worshipers leave, Pastor and staff with visitors meeting (up to 6 people total).
- 5:00 p.m. Pastor and staff (up to 6 people) leave and lock church.
- 7:00 p.m. Small Group Meeting with up to 15 people meeting in class room at church. Good Friday worship service held the Friday before Easter (up to 75 people expected).
- 9:30 p.m. Everyone leaves and locks church.

Saturday

- 8:30 a.m. Pastor and staff (up to 2 people) arrive and unlock church.
- 9:00 a.m. Beginning in March 2017, twice a month will hold temporary clinic for expectant mothers and mothers with infants under a year old. Will schedule no more than 5 mothers an hour with 10 healthcare workers and volunteers assisting (up to 25 people with children). Luke 52 Clinic be responsible for all medical waste generated with proper disposal off the premises.
- Noon Expect one or two weddings a year with up to 150 people attending in the afternoon.
- 5:00 p.m. Pastor and staff (up to 6 people) leave and lock church.
- 7:00 p.m. Christmas Eve service (2016), expect up to 150 people in worship including Nursery.
- 9:30 p.m. Everyone leaves and locks church.

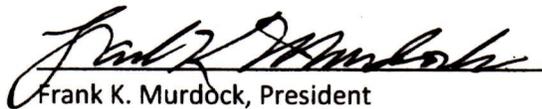
June 13, 2016

Myron Rolison
10237 Cedarcrest
Whitmore Lake, MI 48189

Subject: Letter of Understanding

Dear Mr. Rolison,

We, the undersigned, agree that Living Water Lutheran Church of Whitmore Lake has permission to use the gravel area adjacent to Barker Road at 175 Barker Road in Whitmore Lake for parking for people attending Living Water worship services. These services will run from approximately 9:00 a.m. through 1:00 p.m. on Sundays throughout the year. In addition, we will list Myron Rolison and the property at 175 Barker Road on our liability insurance policy. Living Water expects to have no more than 20 cars parking at 175 Barker Road at one time. Living Water will provide parking attendants to direct parking traffic and crossing guards to ensure people can safely cross Barker Road to our location at 200 Barker Road before and after our worship services on Sundays.



Frank K. Murdock, President
Living Water Lutheran Church of Whitmore Lake



Myron Rolison, Owner
175 Barker Road, Whitmore Lake, MI

NORTHFIELD TOWNSHIP

SITE PLAN REVIEW APPLICATION

PROJECT NAME: Living Water Lutheran Church Worship Center

PROJECT ADDRESS: 200 Barker Road, Whitmore Lake, MI 48189

Applicant Information:

Name: Living Water Lutheran Church of Whitmore Lake

Address: 9876 Main St., Whitmore Lake, MI 48189

Phone: 734-426-4006

Email: lmurdock@livingwatermi.org

Owner Information:

Name: Whitewood Enterprises, Inc.

Address: 3400 Apache Trail, Pinkney, MI 48169

Phone: 734-449-8617

Email:

If the applicant is not the property owner, then a statement from the owner **MUST** be attached authorizing the application.

Proof of ownership **OR** Statement if applicant is not owner is attached.

If applicant is not the owner, describe applicant's interest in the property
To purchase property to use as a church

PROPERTY DESCRIPTION

Legal Description: Attached On Site Plan

Parcel ID(s): B-02-06-105-025

Description of Proposed Use: Use as a worship center, Sunday School, Adult Bible Class, and Youth Bible Class Sunday mornings. Office and meetings during business hours during the week. Evening adult education, children and youth classes during the week.

Total Acreage of Site:

2.2 acres

Total Floor Area:

Existing: 7,031 sq. ft. (5,900 + 1,131)

Proposed: 7,161 sq. ft. (6,030 + 1,131)

Height of Structure(s) (in stories & feet):

1 story, 22 feet

Sanitary Facilities: Sewer Septic

Water: Municipal Private Well

Zoning Classification(s):

RC AR LR SR1 SR2 MR VC LC GC ES HC GI LI Other _____

SITE PLAN REVIEW OPTIONS

Administrative Site Plan Review:

- Expansion or reduction of an existing, conforming structure less than 2,000 sq. ft. / 5% of floor area
- Additional parking, loading / unloading spaces and landscape improvements

Site Plan Review:

- New Construction
- Building Addition

Development Plan Review:

- Planned Unit Development
- Planned Residential Development
- Site Condominium Plan

Amendment to Approved Site Plan or Development Plan:

- Site Plan
- Development Plan

Site or Development Plan Review in conjunction with: Rezoning Request Special Land Use Request

Application # _____

AUTHORIZED SIGNATURE

I hereby state that all of the above statements and all of the accompanying information are true and correct.

Applicant's Signature: *Janet R. Munk* Date: 5/13/2016

FOR OFFICE USE ONLY

Application Received Date: _____

Planning Commission Received Date: _____

Planning Commission Action: Approved Date: _____ Denied Date: _____

Expiration Date: _____

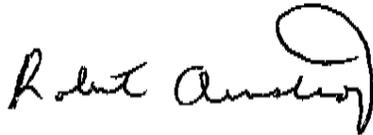
Fee Received: Cash Check # _____

Northfield Township Planning Commission
8350 Main St.
Whitmore Lake, MI

To Whom it May Concern:

Whitewood Enterprises, Inc. hereby consents to zoning changes proposed by Living Water Lutheran Church for the property at 200 Barker Rd., provided that no current permitted or conditional uses are eliminated as a result of the zoning change. Any expansion of permitted or conditional uses is approved.

Whitewood Enterprises, Inc.

A handwritten signature in black ink, appearing to read "Robert Armstrong". The signature is written in a cursive style with a large, looping initial "R".

By Robert Armstrong
President

Washtenaw County Parcel Summary

This data is received from local cities, villages, and townships. For additional information or verification, please contact your local city, village or township assessor or the Washtenaw County Department of Equalization at (734)222-6662.

Information herein deemed reliable but **not** guaranteed.

Parcel Identification

Parcel Number:	B -02-06-105-025
City, Village, or Township:	TOWNSHIP OF NORTHFIELD
Parcel Status:	ACTIVE
Property Address Street Number, Name & Direction	200 BARKER RD
Property City, State, Zip Code	WHITMORE LAKE MI, 48189
School District Number & Name	81140 WHITMORE LAKE PUBLIC SCHO
Property Classification	201 COMMERCIAL

Taxpayer Identification -- Year 2016

Taxpayer Name 1:	WHITEWOOD ENTERPRISES INC (2016)
Taxpayer Name 2:	
Taxpayer Mailing Address:	3400 APACHE TRAIL
Taxpayer City, State, Zip Code:	PINCKNEY, MI, 48169

Assessment

Year	State Equalized Value	Taxable Value	Principal Residence Exemption %
2015	\$176,300.00	\$150,185.00	0
2014	\$167,700.00	\$147,820.00	0

Sales

Sale Date:	04/02/2001	Sale Price:	\$0.00
Liber-Page:	L4005 P761	Last Update:	

Washtenaw County Legal Description

This data is received from local cities, villages, and townships. For additional information or verification, please contact your local city, village or township assessor, the Washtenaw County Clerk/Register of

Deeds at (734)222-6710 or the Washtenaw County Department of Equalization at (734)222-6662.

Parcel Identification	
Parcel Number:	B -02-06-105-025
Property Address Street Number, Name & Direction	200 BARKER RD
City, Village, or Township:	TOWNSHIP OF NORTHFIELD
Legal Description:	TRANS 3/31/95 ASSR REQUEST **FROM 0206105010 02/09/95 NO 6-5B-2B COM AT E 1/4 COR SEC 6, TH S 88-37-43 W 491.33 FT, TH N 38-56-47 W 75.70 FT TO N'LY R/W BARKER RD & POB, THS 88-37-43 W 200.00 FT, TH N 01-22-17 W 30.03 FT, TH ALNG C/L OF HORSHOE LAKE OUTLET DRAIN N 38-39-29 W 199.90 FT, TH N 49-42-06 W 100.91 FT, TH N 34-36-53 W 175.65 FT, TH 230.67 FT ALNG ARC-CURV-RT RAD=3669.72 FT CH=N 00-04-10 W 230.63 FT, TH S 38-56-47 E 799.49 FT TO POB. PT OF NE 1/4 SEC 6 T1S-R6E. 2.20 AC.

Washtenaw County Sales History

This data is received from local cities, villages, and townships. For additional information or verification, please contact your local city, village or township assessor, the Washtenaw County Clerk/Register of Deeds at (734)222-6710 or the Washtenaw County Department of Equalization at (734)222-6662.

Parcel Identification			
Parcel Number:	B -02-06-105-025		
Property Address Street Number, Name & Direction	200 BARKER RD		
City, Village, or Township:	TOWNSHIP OF NORTHFIELD		
Liber-Page:	Sale Date	Instrument	Sale Price
L4005 P761	04/02/2001	QUIT CLAIM DEED	\$0.00
L3963 P610	08/04/2000	WARRANTY DEED	\$90,000.00

SITE PLAN FOR CHANGE OF USE LIVING WATER LUTHERAN CHURCH OF WHITMORE LAKE

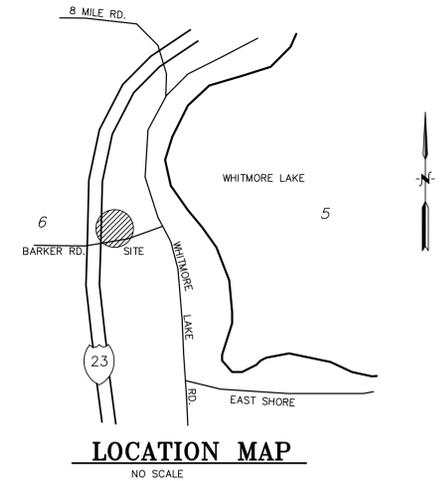
200 BARKER ROAD, WHITMORE LAKE, MICHIGAN
A PART OF THE NORTHEAST 1/4 OF SECTION 6, T1S,R6E
NORTHFIELD TOWNSHIP, WASHTENAW COUNTY, MICHIGAN



AERIAL PHOTOGRAPH
SCALE: 1in. = 50ft.

OWNER
LIVING WATER LUTHERAN CHURCH OF WHITMORE LAKE
2020 TIBBITTS COURT
ANN ARBOR, MICHIGAN 48195

ENGINEER/SURVEYOR
DESINE INC.
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114
PHONE: (810) 227-9533



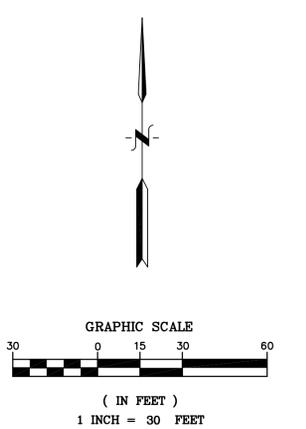
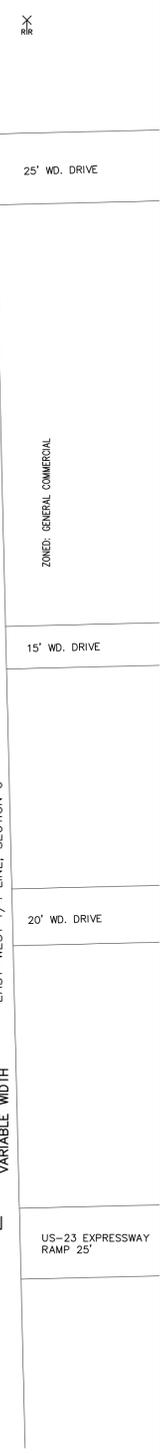
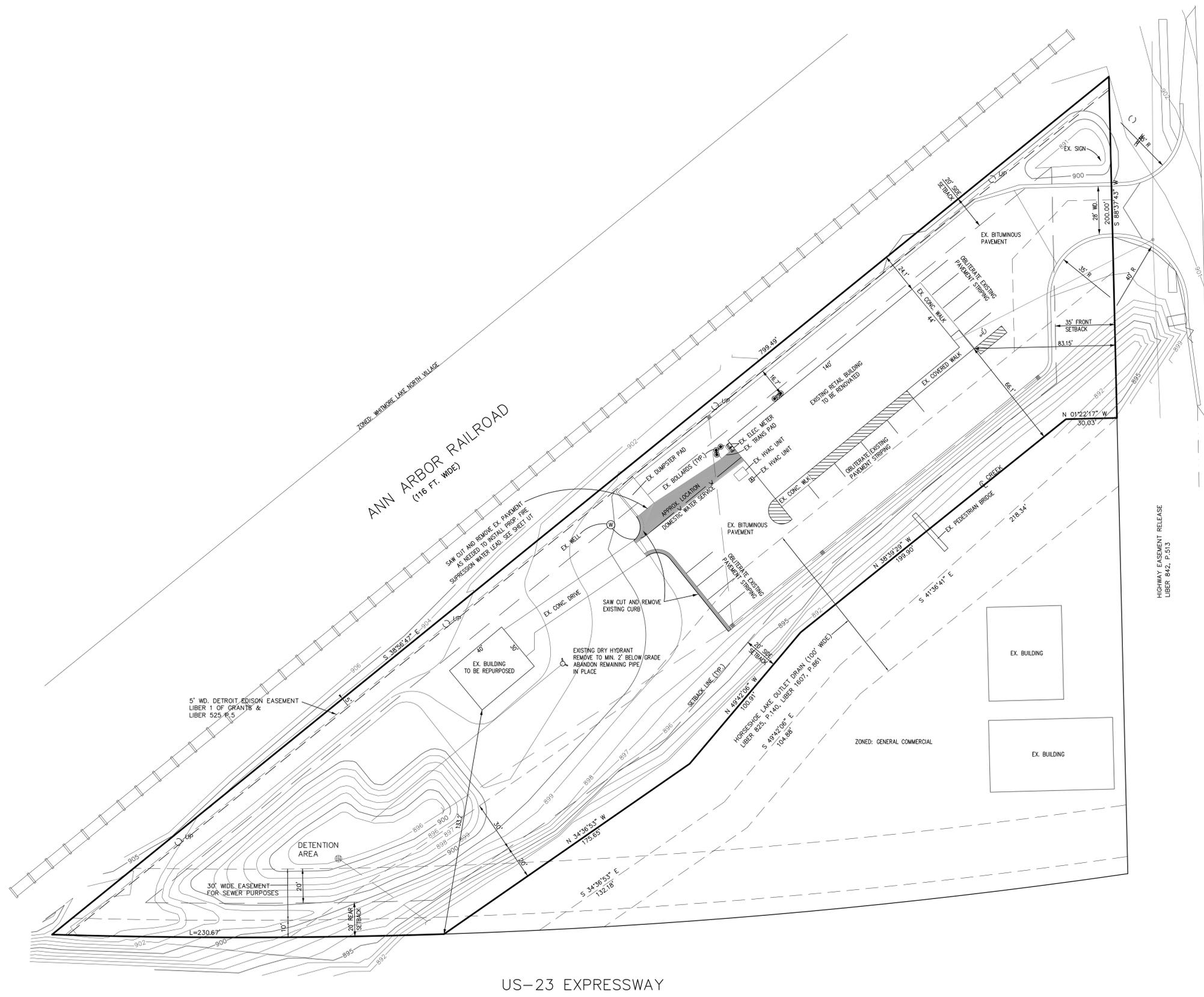
- SHEET INDEX**
- EX EXISTING CONDITIONS & DEMOLITION PLAN
 - SP SITE PLAN FOR CHANGE OF USE
 - UT GRADING AND UTILITY PLAN
 - DT DETAILS

2.20 ACRE PARCEL

Commencing at the East 14 Corner of Section 6, T1S, R6E, Northfield Township, Washtenaw County, Michigan; thence S88°37'43"W 491.33 feet along the East-West 1/4 line of said Section 6 and the centerline of Barker Road; thence N38°56'47"W 75.70 feet along the southwesterly right-of-way line of the Ann Arbor Railroad for a PLACE OF BEGINNING; thence S88°37'43"W 200.00 feet along the north right-of-way line of said Barker Road; thence N01°22'17"W 30.03 feet; thence the following 3 courses along the centerline of the Horseshoe Lake Outlet Drain; N38°39'29"W 199.90 feet, N49°42'06"W 100.91 feet, and N34°36'53"W 1785.65 feet; thence along the easterly right-of-way line of the US-23 Expressway 230.67 feet along the arc of a 3669.72 foot radius non-tangential circular curve to the right, with a chord bearing N00°04'10"W 230.63 feet; thence S388°47"E 799.49 feet along the southwesterly right-of-way line of said Ann Arbor Railroad to the Place of Beginning, being a part of the Northeast 1/4 of said Section 6, containing 2.20 acres of land, more or less, being subject to easements and restrictions of record, if any.
TAX. ID. # 02-06-105-025



REVISED	SCALE: 1"=50'
	PROJECT No.: 132313
	DWG NAME: 2854-COV
	PRINT: MAY 18, 2016



- LEGEND**
- x- FENCE LINE
 - UP UTILITY POLE
 - OU OVERHEAD ELECTRIC
 - - - EX. CONTOUR LINE
 - - - BUILDING SETBACK
 - - - EASEMENT LINE
 - ⊙ SANITARY MANHOLE
 - ⊙ AMERITECH MANHOLE
 - ⊙ DTE ENERGY MANHOLE
 - ↑ SIGN
 - - - STORM SEWER
 - ⊙ CATCHBASIN
 - ⊙ OUTLET CONTROL STRUCTURE
 - ⊙ FLARED END SECTION
 - ⊙ EX. HYDRANT
 - ⊙ EX. DOMESTIC WELL
 - - - EX. WATER SERVICE

US-23 EXPRESSWAY

DESIGN: JMB	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: JMB						

LIVING WATER CHURCH

EXISTING CONDITIONS AND DEMOLITION PLAN

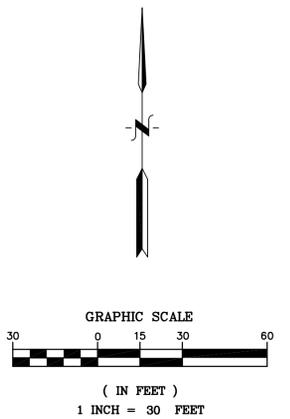
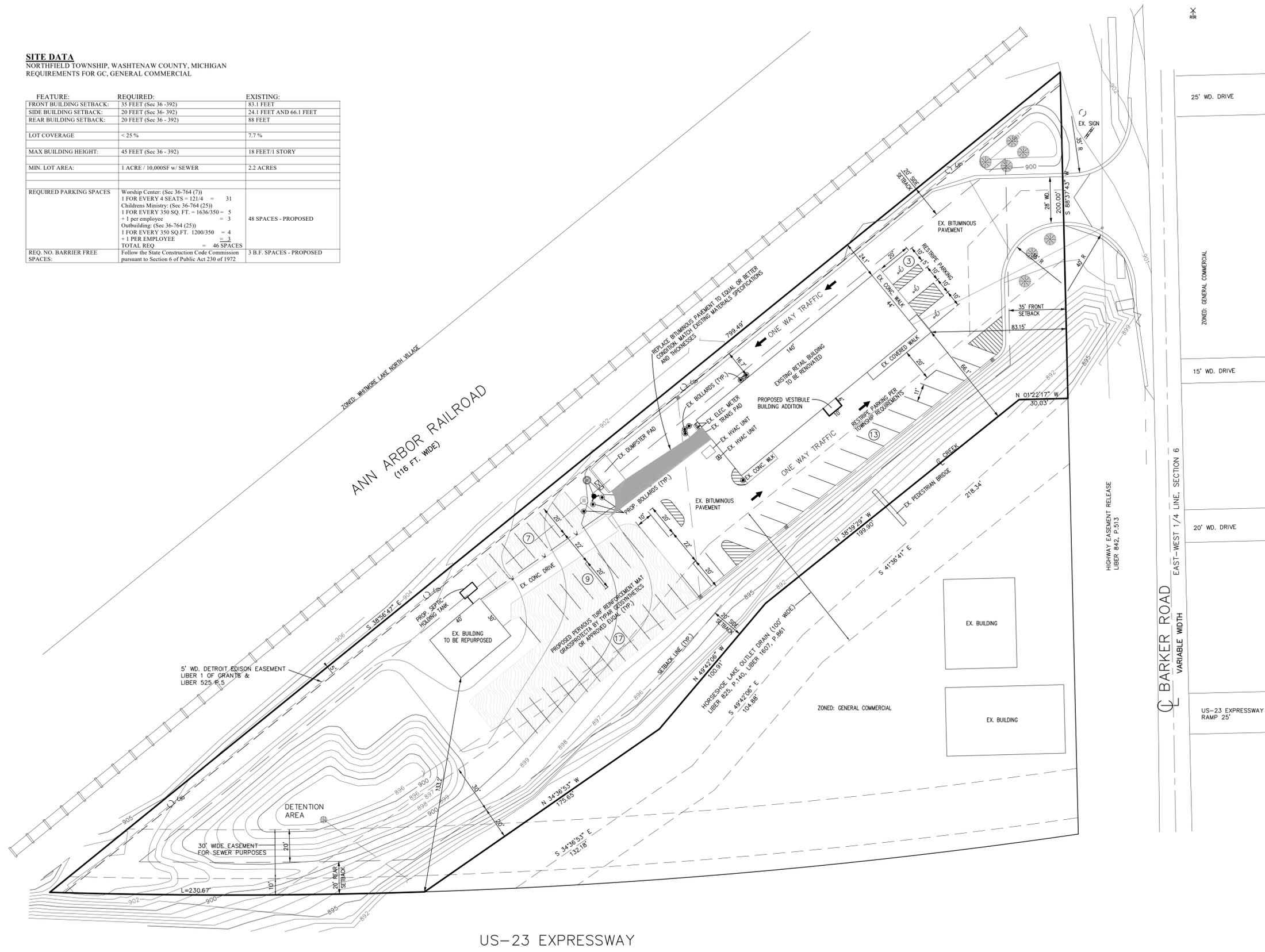
CLIENT:
LIVING WATER LUTHERAN CHURCH
C/O FRANK MURDOCK
2020 TIBBITTS COURT
ANN ARBOR, MICHIGAN 48195
734-417-7073

SCALE: 1in. = 30ft.
PROJECT No.: 162854
DWG NAME: 2854 EX
ISSUED: MAY 18, 2016

EX

SITE DATA
NORTHFIELD TOWNSHIP, WASHTENAW COUNTY, MICHIGAN
REQUIREMENTS FOR GC, GENERAL COMMERCIAL

FEATURE:	REQUIRED:	EXISTING:
FRONT BUILDING SETBACK:	35 FEET (Sec 36-392)	83.1 FEET
SIDE BUILDING SETBACK:	20 FEET (Sec 36-392)	24.1 FEET AND 66.1 FEET
REAR BUILDING SETBACK:	20 FEET (Sec 36-392)	88 FEET
LOT COVERAGE:	< 25%	7.7%
MAX BUILDING HEIGHT:	45 FEET (Sec 36-392)	18 FEET/1 STORY
MIN. LOT AREA:	1 ACRE / 10,000SF w/ SEWER	2.2 ACRES
REQUIRED PARKING SPACES	Worship Center: (Sec 36-764 (7)) 1 FOR EVERY 4 SEATS = 121.4 = 31 Childrens Ministry: (Sec 36-764 (25)) 1 FOR EVERY 350 SQ. FT. = 1636/350 = 5 + 1 per employee = 3 Outbuilding: (Sec 36-764 (25)) 1 FOR EVERY 350 SQ.FT. 1200/350 = 4 + 1 PER EMPLOYEE = 3 TOTAL REQ = 46 SPACES	48 SPACES - PROPOSED
REQ. NO. BARRIER FREE SPACES:	Follow the State Construction Code Commission pursuant to Section 6 of Public Act 230 of 1972	3 B.F. SPACES - PROPOSED



- LEGEND**
- x — FENCE LINE
 - UP UTILITY POLE
 - OU — OVERHEAD ELECTRIC
 - EX. CONTOUR LINE
 - BUILDING SETBACK
 - - - EASEMENT LINE
 - ⊙ SANITARY MANHOLE
 - ⊙ AMERITECH MANHOLE
 - ⊙ DTE ENERGY MANHOLE
 - ↑ SIGN
 - STORM SEWER
 - ⊙ CATCHBASIN
 - ⊙ OUTLET CONTROL STRUCTURE
 - FLARED END SECTION
 - EX. HYDRANT
 - ⊙ EX. DOMESTIC WELL
 - EX. WATER SERVICE
 - ⊙ PROPOSED FIRE SUPPRESSION WELL
 - ↑ PROPOSED HYDRANT
 - PROPOSED WATER SERVICE
 - ⊙ PROPOSED BOLLARD
 - ▨ PROPOSED GRASSPROTECTA

811
Know what's below.
Call before you dig.
3 WORKING DAYS
BEFORE YOU DIG.
CALL 811 OR 1-800-482-7171
(TOLL FREE)
OR VISIT CALL811.COM

DESIGN INC.
(810) 227-9533
CIVIL ENGINEERS
LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

DESIGN: JMB	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: JMB						

LIVING WATER
CHURCH

SITE PLAN
for
CHANGE OF USE

CLIENT:
LIVING WATER LUTHERAN CHURCH
C/O FRANK MURDOCK
2020 TIBBITTS COURT
ANN ARBOR, MICHIGAN 48195
734-417-7073

SCALE: 1in. = 30ft.
PROJECT No.: 162854
DWG NAME: 2854 SP
ISSUED: MAY 12, 2016

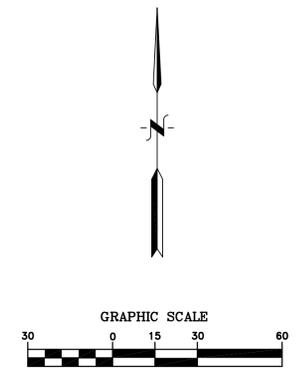
SP



SOILS MAP
NOT TO SCALE

Washtenaw County, Michigan (M1161)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HsB	Glennwood loam, 2 to 6 percent slopes	18.2	84.2%
Sb	Sabrewa loam, disintegration massive, 0 to 2 percent slopes	3.4	15.8%
Totals for Area of Interest		21.6	100.0%

SOILS LEGEND



GRAPHIC SCALE
(IN FEET)
1 INCH = 30 FEET

- LEGEND
- x- FENCE LINE
 - o UP UTILITY POLE
 - OU OVERHEAD ELECTRIC
 - - - EX. CONTOUR LINE
 - - - BUILDING SETBACK
 - - - EASEMENT LINE
 - o SANITARY MANHOLE
 - o AMERITECH MANHOLE
 - o DTE ENERGY MANHOLE
 - SIGN
 - STORM SEWER
 - o CATCHBASIN
 - o OUTLET CONTROL STRUCTURE
 - FLARED END SECTION
 - EX. HYDRANT
 - o EX. DOMESTIC WELL
 - EX. WATER SERVICE
 - o PROPOSED FIRE SUPPRESSION WELL
 - o PROPOSED HYDRANT
 - PROPOSED WATER SERVICE
 - o PROPOSED BOLLARD
 - PROPOSED GRASSPROTECTA

811
Know what's below.
Call before you dig.

3 WORKING DAYS
BEFORE YOU DIG.
CALL 811 OR 1-800-482-7171
(TOLL FREE)
OR VISIT CALL811.COM

DESIGN INC
(810) 227-9533
CIVIL ENGINEERS
LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

DESIGN: JMB	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: JMB						

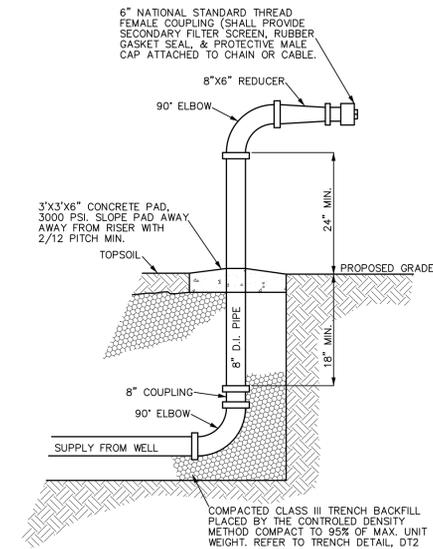
LIVING WATER
CHURCH

GRADING & UTILITY PLAN

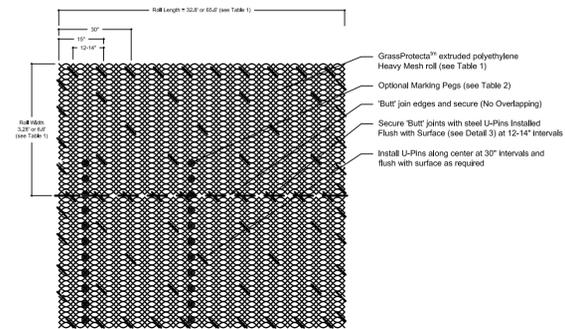
CLIENT:
LIVING WATER LUTHERAN CHURCH
C/O FRANK MURDOCK
2020 TIBBITTS COURT
ANN ARBOR, MICHIGAN 48195
734-417-7073

SCALE: 1in. = 30ft.
PROJECT No.: 162854
DWG NAME: 2854 UT
ISSUED: MAY 18, 2016

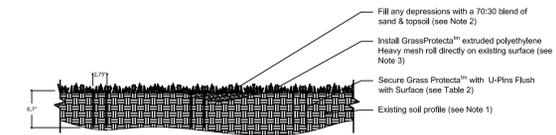
UT



DRY HYDRANT SCHEMATIC
NOT TO SCALE



① GrassProtecta™ Pinning Diagram
Scale: 1/4\"/>



② GrassProtecta™ Typical Construction Profile
Scale: 1/4\"/>

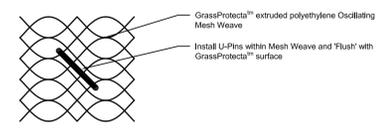
DESIGN NOTES:

- Note 1: Where used and/or unapproved ground conditions exist, these must be brought into alignment of GrassProtecta™. For occasional use by trucks, a subbase may be required.
- Note 2: Fill any surface depressions on the ground surface with a 70/30 blend of clean sand and good quality topsoil. Sand and topsoil must be added to the depth of the hole to match the surface within the mesh.
- Note 3: Use additional techniques to secure any raised areas or where any lifting or lifting of the rolls is required.
- Note 4: GrassProtecta™ extruded polyethylene Heavy mesh roll is made from polypropylene. It is not recommended that it be used in areas where it will be subjected to high temperatures or where it will be subjected to high UV radiation.
- Note 5: GrassProtecta™ extruded polyethylene Heavy mesh roll is made from polypropylene. It is not recommended that it be used in areas where it will be subjected to high temperatures or where it will be subjected to high UV radiation.
- Note 6: GrassProtecta™ extruded polyethylene Heavy mesh roll is made from polypropylene. It is not recommended that it be used in areas where it will be subjected to high temperatures or where it will be subjected to high UV radiation.

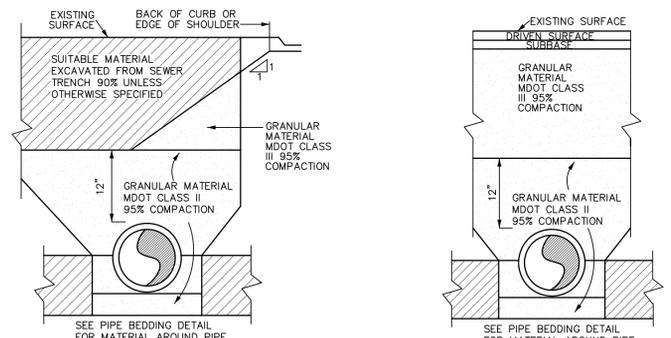
Physical Characteristics		Standard 2.0x3.0m (6'x10')	Heavy Duty Roll (6'x12')
Material	HDPE (90% High, 10% Recycled)	HDPE (90% High, 10% Recycled)	HDPE (90% High, 10% Recycled)
Color	Green	Green	Green
UV Resistance	Yes	Yes	Yes
Nominal Dimensions			
Roll Width	6.0'	3.0'	6.0'
Roll Length	30.0'	30.0'	30.0'
Weight per Square Meter	0.24 kg/m ²	0.24 kg/m ²	0.41 kg/m ²
Thickness	0.45"	0.55"	0.55"
Mesh Aperture (Nominal Size)			
Technical Characteristics		2:1 Ratio	2:1 Ratio
Measurement	Method	Results	Results
Tensile Strength (ISO)	ISO 10310	12.0kN	10.0kN
Yield Point (European EN)	EN 10355	30%	30%
Residual Tensile @ 100 kPa	ASTM D1681	45%	60%
ISO 9001 PIV Value	ISO 9001:1:1	400 (500-400)	400 (500-400)

GrassProtecta™ Pins & Pags				
Product	Color	Page - Black	Page - Yellow	Washer - Yellow
Material	Steel	Black	Black	Black
Size	6.7" x 2.75" x 0.22"	6" x 6"	6" x 6"	2.75" diameter
Color	100 pack	100 pack	100 pack	100 pack

Please note that the information shown is given as a guide only. All sizes and weights are nominal figures and may vary to what is published. Polymer Group Inc. cannot be held liable for damage caused by incorrect installation of the product. The installation of the product is the responsibility of the user and the user must assume all risk and responsibility for correct installation.

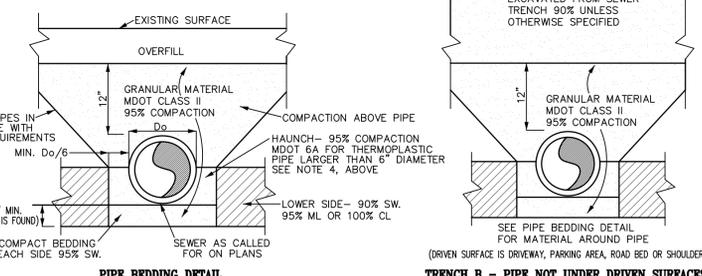


③ GrassProtecta™ Fixing Pin - Proper Installation Diagram
Scale: 1/4\"/>



TRENCH A - PIPE UNDER OR WITHIN INFLUENCE OF DRIVEN SURFACE
NOT TO SCALE

- NOTES:**
1. COMPACTION PRESENTED AS STANDARD PROCTOR VALUES.
 2. SOIL TYPES: AASHTO DESIG.
GRAVEL SANDY (SW) A1, A3
SANDY SILTY (ML) A2, A4
SILTY CLAY (CL) A5, A6, A7
 3. SOIL IN HAUNCH AND LOWER SIDE ZONES OUTSIDE OF D₀/6 FROM SPRING LINE SHALL BE COMPACTED TO AT LEAST THE SAME COMPACTION AS THE SOIL IN THE OVERFILL ZONE.
 4. MATERIALS AROUND THERMO. PLASTIC PIPE WITH DIAMETER 6 INCHES SHALL PASS 0.5 INCH SIEVE. MATERIALS AROUND OTHER PIPES SHALL PASS 1.5 INCH SIEVE.



TRENCH B - PIPE NOT UNDER DRIVEN SURFACES
NOT TO SCALE

TRENCH DETAILS
NOT TO SCALE

TYPAR Geosynthetics Toll-Free: 1-800-941-5519
 70 Oak Ridge Blvd., Oak Ridge, TN 37138 6118 grass@polygroup.com
 www.polygroup.com

GrassProtecta™
Standard & Heavy
Specification, Design & Installation Guide

- GENERAL NOTES:**
1. Contractor shall perform the work in accordance with the requirements of the appropriate Local, County and State Agencies and all other Government and Regulatory Agencies with jurisdiction over the project. Contractor shall notify the appropriate Agencies in advance of each stage of work in accordance with each Agency's requirements.
 2. Contractor shall comply with all permit, insurance, licensing and inspection requirements associated with the work. Prior to construction, Contractor and Owner/Developer shall determine who is responsible for obtaining each required permit. Contractor shall verify that each required permit has been obtained prior to commencement of the stage of work associated with the required permit(s).
 3. Contractor shall furnish liability insurance and property damage insurance to save harmless the Owner, Developer, Architect, Engineer, Surveyor and Government Agencies for any accident occurring during the construction period. Refer to the appropriate Local, County and State Agencies for additional requirements. Copies of insurance certifications shall be made available to the Owner/Developer.
 4. Contractor shall conduct and perform work in a safe and competent manner. Contractor shall perform all necessary measures to provide for traffic and pedestrian safety from the start of work and through substantial completion. Contractor shall determine procedures and provide safety equipment such as traffic controls, warning devices, temporary pavement markings and signs as needed. Contractor shall comply with the safety standards of the State Department of Labor, the occupational health standards of the State Department of Health and safety regulations of the appropriate Local, County, State and Federal Agencies. Refer to the safety specifications of the appropriate Regulatory Agencies. The Contractor shall designate a qualified employee with complete job site authority over the work and safety precautions; said designated employee shall be on site at all times during the work.
 5. Contractor shall coordinate scheduling of all work in the proper sequence, including work by Subcontractors. Additional costs due to improper planning by Contractor or work done out of sequence as determined by standard acceptable construction practices, shall be Contractor's responsibility.
 6. Contractor shall contact the 811 Underground Public Utility Locating System or other appropriate local underground utility locating Agency, a minimum of three (3) working days prior to construction. Existing utility information on the project plans may be from information disclosed to this firm by the Utility Companies, Local, County or State Agencies, and/or various other sources. No guarantee is given as to the completeness or accuracy thereof. Prior to construction, locations and depths of all existing utilities (in possible conflict with the proposed improvements) shall be verified in the field.
 7. Contractor shall coordinate scheduling a Pre-Construction Meeting with Engineer prior to commencement of work.
 8. The Local Municipality, County and/or State in which the project is located may require an Engineer's Certification of construction of the proposed site improvements. Contractor shall verify the certification requirements with Engineer prior to commencement of work. Contractor shall coordinate construction staking, testing, documentation and observation with the appropriate Agency, Surveyor and/or Engineer as required for Engineer's Certification and Government Agency Acceptance. All materials used and work done shall meet or exceed the requirements of certification and acceptance, the contract documents and the material specifications noted on the project plans. Any materials used or work done that does not meet said requirements, contract documents and/or specifications shall be replaced and/or redone at Contractor's expense. The Owner/Developer may wait for test results, certifications and/or Agency reviews prior to accepting work.
 9. Engineer may provide subsurface soil evaluation results, if available, to Contractor upon request. Subsurface soil evaluation results, soils maps and/or any other documentation does NOT guarantee existing soil conditions or that sufficient, acceptable on-site granular material is available for use as structural fill, pipe bedding, pipe backfill, road subbase or use as any other granular material specified on the project plans. On-site granular material that meets or exceeds the material specifications noted on the project plans may be used as structural fill, pipe bedding, pipe backfill and/or road subbase material. On-site granular material shall be stockpiled and tested as acceptable to the appropriate Agency and/or Engineer prior to use.
 10. During the performance of their work, Contractor shall be solely responsible for determining soil conditions and appropriate construction methods based on the actual field conditions. Contractor shall furnish, install and maintain sheeting, shoring, bracing and/or other tools and equipment and/or construction techniques as needed for the safety and protection of the workers, pedestrians and vehicular traffic and for protection of adjacent structures and site improvements.
 11. Contractor shall install temporary and permanent soil erosion and sedimentation control devices at the appropriate stages of construction in accordance with the appropriate regulatory Agencies. Refer to Soil Erosion and Sedimentation Control Plans and Notes on the project plans.
 12. Structural fill shall be placed as specified on the project plans and within the 1 on 1 influence zone of all structures, paved areas and other areas subject to vehicular traffic. Structural fill shall be placed using the controlled density method (12" maximum lifts, compacted to 95% maximum unit weight, modified proctor). Fill material shall meet or exceed the specifications noted on the project plans or as directed by Engineer when not specified on the project plans.
 13. All existing monuments, property corners, ground control and benchmarks shall be protected and preserved; and if disturbed by Contractor, shall be restored at Contractor's expense. Contractor shall notify Surveyor of any conflicts between existing monuments, property corners, ground control and/or benchmarks and the proposed site improvements.
 14. Contractor shall notify Owner/Developer and Engineer immediately upon encountering any field conditions, which are inconsistent with the project plans and/or specifications.
 15. When noted on the project plans for demolition and/or removal, Contractor shall remove existing structures, building and debris and recycle and/or dispose of in accordance with Local, County, State and Federal regulations.
 16. Contractor shall remove excess construction materials and debris from site and perform restoration in accordance with the project plans and specifications. Disposing of excess materials and debris shall be performed in accordance with Local, County, State and Federal regulations.
 17. Construction access to the site shall be located as acceptable to the Owner/Developer and to the appropriate Local, County and/or State Agency with jurisdiction over the road(s) providing access to the site. Construction access shall be maintained and cleaned in accordance with the appropriate Local, County and/or State Agencies and as directed by Owner/Developer and/or Engineer.
 18. Contractor shall take necessary precautions to protect all site improvements from heavy equipment and construction procedures. Damage resulting from Contractor actions shall be repaired at Contractor's expense.

811
Know what's below.
Call before you dig.

3 WORKING DAYS BEFORE YOU DIG
CALL 811 OR 1-800-482-7171 (TOLL FREE)
OR VISIT CALL811.COM

DESIGN INC.
(810) 227-9533
CIVIL ENGINEERS
LAND SURVEYORS
2183 PLESS DRIVE
BRIGHTON, MICHIGAN 48114

DESIGN: JMB	REVISION #	DATE	REVISION-DESCRIPTION	REVISION #	DATE	REVISION-DESCRIPTION
DRAFT: JHG						
CHECK: JMB						

LIVING WATER CHURCH

DETAILS

CLIENT: LIVING WATER LUTHERAN CHURCH
C/O FRANK MURDOCK
2020 TIBBITTS COURT
ANN ARBOR, MICHIGAN 48195
734-417-7073

SCALE: AS NOTED
PROJECT No.: 162854
DWG NAME: 2854 DT
ISSUED: MAY 18, 2016

DT

June 8, 2016

Northfield Township
Building & Zoning Department
8350 Main Street, Suite A
Whitmore Lake, Michigan 48189

Regarding: **Living Water Church**
 Site Plan Review #1
 OHM Job Number: 0151-16-1031
 Conditional Use Review #1
 OHM Job Number: 0151-16-1037

We have reviewed the site plan material, received by this office on May 23, 2016 for the above-referenced project based on the Township's Engineering Standards. Plans were prepared by Desine Inc. with a date of May 18, 2016. The applicant is requesting Conditional Use and Site Plan approval for the existing general commercial site. A general summary of the site, followed by our review comments and recommendations is noted below.

General

The existing site is located on parcel #B-02-06-105-025 with address 200 Barker Road. The site is currently zoned as GC, General Commercial. The applicant is proposing to convert the existing building into a worship center and an auxiliary storage structure into a youth center. The applicant also proposes a vestibule addition to the existing building along with additional parking area.

Utilities

Water service for the existing site is supplied by a private on-site well. Existing sanitary sewer service is provided by a connection to the public sewer along Barker Road. The Applicant is proposing to install an additional well to provide fire suppression service. The existing auxiliary structure, which is planned to be repurposed as a youth center, also includes the addition of new water and sewer services. Water for the youth center is proposed to be connected to the existing domestic well and a septic holding tank is proposed for sanitary sewer. The property has an existing connection to the Township's public sanitary sewer. In this case a septic tank is not permissible by Township ordinance or by the Washtenaw County Department of Public Health.

Because of the change in building use, the number of Residential Equivalent Units (REUs) for the property will need to be assessed based on the proposed use of the site. We have reviewed the proposed building use and site plan with the Township Sewer System Superintendent in order to calculate an appropriate REU assignment. According to the Township Utilities Ordinance, churches are assigned a unit factor of 0.25 REU per 1,000 square feet. Based on the unit factor and square footage of the building a total of 1.5 REUs will need to be assigned to this site. It should be noted that if the youth center building is also proposed to be connected to the public sanitary sewer system, the REU assignment would need to be revised to account for that additional building area.

Paving/Access/Grading

Access to the site is provided from Barker Road by way of an existing asphalt drive. The existing site has fifteen (15) parking spaces provided. Additional parking is proposed north of the existing parking lot in the grass area by installing permeable, reinforced matting. The Township Ordinance for off-street parking states that “all parking areas shall be paved with a concrete or asphaltic surface” [Sec. 36-762 (b)(3)].

The existing aisle on the north side of the site has a width of 16.7 feet. Emergency vehicle circulation does not appear to be adequate for a WB-50 truck or a fire apparatus due to potential obstructions from parked vehicles in the proposed parking locations. Dedicated fire lane signage shall be provided. Proposed site access for emergency vehicle circulation and maneuverability will be evaluated by the Northfield Township Fire Department.

Existing and proposed grades are shown via contours. The parking lot has some spot grades, but more are necessary to ensure drainage patterns are correct and ADA compliance is met for the designated barrier-free parking spaces.

Drainage

The existing conditions appear to convey storm water runoff from the parking lot entering three (3) catch basins on the outside curb line of the parking lot that flow into an existing detention pond in the southwest corner of the property. Storm water is detained and then discharged into the Horseshoe Lake Outlet (County) Drain. In general, the drainage properties of the proposed site are the same as the existing site. We note that the requirement for paving the additional proposed parking area will increase the impervious area of the site and will require evaluation of the storm water management system (storm sewer and detention pond). Any necessary modifications to the existing detention pond to accommodate the additional impervious surface stormwater flow must comply with the Rules and Guidelines of the Washtenaw County Water Resources Commissioner (WCWRC) and may require a permit from the WCWRC.

Permits and Other Agency Approvals

Copies of all permits and/or letters of waiver, obtained to date, shall be forwarded to this office. The current status of all necessary permits should be included on the cover sheet. We note that this project will require the following permits:

- Washtenaw County Water Resources Commissioner for soil erosion and sedimentation control, work within the county drain easement, and any modification to the detention pond discharge into the Horseshoe Lake Outlet Drain
- Northfield Township Fire Department approval for emergency vehicle access and maneuverability.
- Northfield Township Building Department.

Conclusion and Recommendations

As submitted, the Conditional Use application appears to be in substantial compliance with the Township requirements and we recommend the Planning Commission consider approval, conditional on the site plan being approved.

As submitted, the Site Plan does not appear to be in substantial compliance with the Northfield Township Site Plan requirements. We recommend that these comments be addressed prior to consideration of the Site Plan for approval by the Planning Commission. Please note that additional comments may be generated on future reviews based upon revised material being presented.

1. If sewer service is desired for the proposed youth center it must be connected to the public sanitary sewer system and REU assignments revised accordingly.
2. The proposed parking lot addition shall be paved with concrete or asphalt per the Township Ordinance.
3. Fire lanes shall be designated by signs and/or pavement markings.
4. Additional spot grades shall be provided for the parking lot to ensure drainage patterns are correct and ADA compliance is met for handicap parking spaces.
5. Any necessary detention pond modifications shall be shown on the plans with preliminary calculations for the detention pond design.
6. The plans shall include a landscape plan showing size, location, and type of all plant materials.
7. Soil erosion and sedimentation control measures shall be shown on the plans.
8. The plans shall include delineation of the 100-year floodplain. If no floodplain exists, a note shall indicate so.

If you have any questions regarding this review or any of the comments presented, feel free to contact us at (734) 522-6711 or jacob.rushlow@ohm-advisors.com.

Sincerely,

OHM ADVISORS



Jacob Rushlow, P.E.
Township Engineer

cc: Howard Fink, Township Manager (via e-mail)
Tim Hardesty, Northfield Township (via e-mail)
William Wagner, Public Safety Director (via e-mail)
Kurt Weiland, Building/Zoning Official (via e-mail)
Ken Dignan, Planning Commission Chair (via e-mail)
Sally Hodges, AICP, McKenna Associates (via e-mail)
Frank Murdock, President, Living Water (via e-mail)
File

June 8, 2016

Planning Commission
Northfield Township
8350 Main Street
Whitmore Lake, MI 48189-0576

Subject: Conditional Use Review #1; Living Water Church /200 Barker Road; Application received by Township on 5/13/2016.

Dear Commissioners:

We have reviewed the proposed application for conditional use approval submitted by Living Water Church for a new church to be located in an existing building at 200 Barker Road. The site is 2.2 acres and zoned GC (General Commercial) District. The existing 6,160 sq. ft. building on the site is the former Lakeside Saddlery. The plan proposes to add a small 6'x10' vestibule on the west side entrance to the building. Our review of the site plan is under separate cover.



CONDITIONAL USE COMMENTS

Conditional use approval of a church, synagogue, cathedral, mosque, temple or other building used for public worship is subject to the general discretionary standards in Section 36-838 applicable to all conditional uses. Our comments are provided below:

A. Section 36-838. General Conditional Use Approval Requirements. For conditional use approval to be granted, the Planning Commission and Township Board must find that the proposed use satisfies the following general criteria:

- 1. Will be harmonious with and in accordance with the general objectives, intent and purpose of this chapter.** The applicant's application includes a description of how the proposed use complies with the Ordinance criteria. Further, a typical weekly schedule of events has been submitted to give a better understanding of the number of people present on the site at any one time, the potential traffic, and the related impacts the use could have on the surrounding area. As expected, the times of heaviest traffic will be before and after religious services, generally at times of lower traffic on the abutting public road. The stated purpose of the GC zoning district is for general retail, service and repair business activities that serve the entire township and surrounding area, and which utilize major roads. Reuse of this site and building for a church, while not a business use, would be

consistent with the separation of more intense from less intense uses because of the site's location between the freeway and the railroad tracks at an entrance to the downtown. The use description indicates the outbuilding, labelled "to be repurposed", is proposed as a future youth center, anticipated in about 2 years.

- 2. Will be designed, constructed, operated, maintained and managed so as to be harmonious and appropriate in appearance with the existing or intended character of the general vicinity.** The existing building is attractive and will not detract from the intended character of the general area. Photos of all 4 building elevations and the elevation plans for the vestibule must be provided and will be reviewed to be sure they are appropriate in appearance during site plan review.

The Zoning Ordinance requires paved parking in all districts except, under specific circumstances, in the AR, Agricultural District. The existing lot and drives are paved but additional parking spaces are required for the church use. Although the plan proposes using a "green" material to reinforce the existing lawn for unpaved vehicle parking in the rear of the parcel and allow stormwater infiltration, the functioning of such material is dependent upon soils and construction techniques and the Zoning Ordinance does not permit commercial lots to be unpaved. The plan will have to be revised prior to site plan approval to add sufficient paved parking.

- 3. Will be compatible with the natural environment and existing and future uses in the vicinity.** The site is bordered by railroad tracks to the east, and US-23 to the northwest. To the south and west are commercial uses with some residential interspersed. Reuse of the existing building is compatible with the natural environment, and as proposed will have no greater impacts of the existing and future uses than are present currently. Churches are traditionally found in many different zoning districts, including residential and commercial. The proposed church will be compatible with the uses in the vicinity.
- 4. Will be compatible with the Township land use development plan.** The site and vicinity are master planned VC, Village Center, a district that promotes mixed uses with a village scale and character. Community support facilities, such as churches, are a compatible use in an area planned for Village Center. Although the site is zoned GC, General Commercial (not a Village Center district), the proposed use is compatible with the Township's land use development plan.
- 5. Will be or can be served adequately by essential public facilities and services.** Access is to Barker Road, a paved rural major collector road. Collector roads are intended to funnel traffic to arterial roads, like US-23. Access to southbound US-23 is available just west of the site; northbound US-23 traffic can exit at Barker Road and access the site from the freeway. The site is served by public facilities and has access to emergency services. Details of utility access will be addressed by the Township engineer during site plan review.
- 6. Will not be hazardous or disturbing to existing or future neighboring uses.** As noted above, the proposed church is in a commercial zoning district and separated from concentrations of residential use by the railroad, freeway and distance. It is adjacent to commercial uses. Although the church use will increase weekend traffic to the site, the road infrastructure should be adequate to handle the traffic peaks with little disturbance to the area.

7. Will not create excessive additional requirements at public cost for public facilities and services.

The proposed use should not create excessive additional requirements at public cost for public facilities and services. The building will be renovated and will have to meet all building codes for the assembly use.

RECOMMENDATION

We recommend that the Planning Commission recommend that the Township Board grant approval of the conditional use application from Living Water Church for the proposed church at 200 Barker Road, subject to site plan approval.

Respectfully submitted,

McKENNA ASSOCIATES



Sara J. Hodges, AICP
Senior Vice President



Michael Deem
Senior Planner

cc: Howard Fink, Northfield Township Manager, 8350 Main St., Whitmore Lake, MI 48189
Jacob Rushlow, OHM Advisors, 34000 Plymouth Road, Livonia, MI 48150
Frank Murdock, President, Living Water Church, 9876 Main St., Whitmore Lake, MI 48189

June 8, 2016

Planning Commission
Northfield Township
8350 Main Street
Whitmore Lake, MI 48189-0576

Subject: Site Plan Review #1; Living Water Church /200 Barker Road; Application received by Township on 5/13/2016.

Dear Commissioners:

We have reviewed the above referenced application for site plan approval submitted by Living Water Church, to modify an existing 6,160 sq. ft. commercial building as a new church. The site at 200 Barker Road, is 2.2 acres in area and is zoned GC (General Commercial) District. The plan proposes to add a small 6'x10' vestibule at the west side entrance to the building. Our review of the conditional use application is under separate cover.



COMMENTS

Our comments that follow are based upon the requirements of the Northfield Township Zoning Ordinance, observation of the site and principles of good planning.

- 1. Use.** The GC, General Commercial District is intended for general retail, service, and repair business activities. A church may be allowed in the GC district as a conditional use. The church's use description includes a children's nursery and youth ministry spaces. These uses are customarily accessory to a church use; in the case of the nursery, these would be children of families attending worship services, and in the case of the youth ministry, the activities would not overlap with times of worship. Our review of the associated conditional use application is under separate cover.
- 2. Dimensional Requirements.** The minimum lot area in the GC district is one acre, and the site is 2.2 acres. The existing building meets or exceeds the minimum required setbacks and is less than the maximum permitted height. The north arrow on the plans must be corrected to point north.
- 3. Access and Circulation.** The site's driveway is on Barker Road. The proposed site circulation is one way around the building, the same as it is now on the site, with ingress along the east side of the building and egress from the west side.

4. Parking.

- a. As described above, we believe the nursery and youth ministry will not generate more cars than will be present during maximum capacity of the worship center. Thus, for purposes of calculating parking requirements, it is reasonable to use the maximum seating of the worship center as the cap, plus one space for each nursery employee. The parking calculations on Sheet SP should be corrected to match the following:

USE	ORDINANCE STANDARD	# PARKING SPACES REQUIRED	# PARKING SPACES PROVIDED
Churches, auditoriums, stadiums, sports arenas, theaters, dancehalls other than schools	One space for each four seats	151 seats/4 = 38 spaces	
	One space for each employee (nursery, youth ministry)	3 employees x 1 = 3 spaces	
	Total	41 spaces	48 spaces

- b. The site plan proposes 7 spaces more than the minimum required. 23 of the parking spaces are located on paved asphalt or concrete surface, as required by Section 36-762(b)(3). In lieu of paving any additional parking lot, the plan proposes a green, pervious turf material surface for the remaining 25 spaces. According to the specifications submitted, that material allows rainwater to naturally penetrate the ground and reduce the need for storm water detention. However, the Zoning Ordinance does not permit this type of material as a parking lot surface. The plan should be revised so that the required parking is all paved. Also, if paving were provided, the parking lot could be laid out more efficiently, so the amount of pavement required would not need to be as large as the turf area shown.
- c. The Ordinance does provide that off-street parking spaces required for churches may be reduced by 50% where churches are located in nonresidential districts and within 300 feet of existing usable public or private off-street spaces where permission is granted. In this case, although the site is located in a nonresidential district, access to additional parking is very limited and likely not a practical solution.
- d. Under Section 36-762(b)(1), off-street parking spaces and all driveways must be setback a minimum of ten feet to any lot line, unless a wall, screen, or compact planting strip is provided as a parking barrier along that lot line. The seven new parking spaces along the east lot line are setback approximately eight feet, thus the parking layout should be revised to either meet the required ten-foot setback, or provide a hedge or other screening.
- e. The depth of the angle parking spaces must be dimensioned on the site plan to confirm that they are large enough; the aisle in this location may be reduced to 18 feet wide.
- 5. Outdoor Equipment and Screening.** The existing mechanical equipment is located behind the main building and is not visible from the road. The dumpster must be screened in an enclosure that

conforms to [Section 36-701(3)], and details of that enclosure (color, height, materials) must be included on the plan.

6. **Stormwater Management.** The site's existing detention area is at the rear of the parcel. Paving the parking lot as discussed above, will likely require changes to the stormwater facilities. This aspect is subject to the review of the Township engineer.
7. **Landscaping.** The Zoning Ordinance requires 1 canopy tree per 8 parking spaces. There are 48 proposed parking spaces, requiring 6 canopy trees. The existing site has 7 trees, mostly evergreen at the Barker Road entrance, and there are several mature trees along the County drain that parallels the west side of the parking lot that provide greenery and shade for the paved area. We recommend that the applicant create a new landscape island in the triangle where the angle parking transitions to 90-degree parking and plant a canopy tree there, and incorporate several new canopy trees into the new part of the parking lot. A plant list with number, variety and size of trees and shrubs at planting must be added, along with a maintenance plan specifying that dead or diseased trees will be replaced within 6 months or the next appropriate growing season, whichever comes first.
8. **Lighting.** The plan does not show any new lighting. The locations, type, height of mounting and cut sheets of any new lights must be submitted with the plan.
9. **Building Facades/Floor Plans.** Few changes are proposed to the exterior of the building. Photos of all four building elevations and the elevation plans for the vestibule (identifying the dimensions, façade materials and colors) must be submitted for review. The application narrative states that the outbuilding will be converted into a youth center in a second phase within the next two years. In order to be approved now, a floor plan and elevations of that structure must be submitted, along with all required engineering information. If the plan labels it as a future phase, the details could be approved administratively in the future; in that case, the outbuilding's intended immediate use should be identified on the plan, the future phase described, and the holding tank removed from the site plan.
10. **Signs.** No new signs are proposed on the plan. There is an existing wall sign on the front of the building and a small freestanding sign in the Barker Road right-of-way.

RECOMMENDATION

AS discussed above, there are several items of information and changes that need to be made to the site plan in order to comply with the Zoning Ordinance and considerations for conditional use approval. Therefore, we recommend that, prior to granting site plan approval, the Planning Commission direct the applicant to revise and resubmit the site plan to address the following:

1. Correct the north arrow on all plan sheets;
2. Correct the parking calculations on sheet SP consistent with Comment 4.a. above;
3. Provide pavement for all parking, consistent with Comment 4.b. above;
4. Setback all new parking spaces at least 10 feet from the lot lines, or provide a hedge or other screening;
5. Dimension the depth of the angle parking spaces on the plan;
6. Enclose the dumpster and provide enclosure details consistent with Comment 5. above;

7. Provide the parking lot canopy trees as described in Comment 7. on the parking lot landscape plan, and add a plant list with number, variety and size of trees and shrubs at planting, along with a maintenance plan specifying that dead or diseased trees will be replaced within 6 months or the next appropriate growing season, whichever comes first;
8. The location, type, height of mounting and cut sheets of any new lights must be submitted and be concealed source, downward focused fixtures;
9. Photos of all four building elevations and the elevation plans for the vestibule (identifying the dimensions, façade materials and colors) must be submitted;
10. Provide information and address the future conversion of the outbuilding as described in Comment 9. above;
11. Approval of the Township engineer and approval of all agencies with jurisdiction; and
12. Subject to conditional use approval.

Respectfully submitted,

McKENNA ASSOCIATES



Sara J. Hodges, AICP
Senior Vice President



Michael Deem
Senior Planner

cc: Howard Fink, Northfield Township Manager, 8350 Main St., Whitmore Lake, MI 48189
Jacob Rushlow, OHM Advisors, 34000 Plymouth Road, Livonia, MI 48150
Frank Murdock, President, Living Water Church, 9876 Main St., Whitmore Lake, MI 48189

**NORTHFIELD TOWNSHIP
PLANNING COMMISSION
Minutes of Regular Meeting
May 18, 2016**

1. CALL TO ORDER

The meeting was called to order by Vice-Chair Janet Chick at 7:00 P.M. at 8350 Main Street.

2. PLEDGE OF ALLEGIANCE

**3. ROLL CALL
AND DETERMINATION OF QUORUM**

Roll call:	
Janet Chick	Present
Marlene Chockley	Present
Brad Cousino	Present (arrived 7:10 P.M.)
Kenneth Dignan	Absent with notice
Sam Iaquinto	Present
Larry Roman	Present
Mark Stanalajczo	Present

Also present:
Township Manager Howard Fink
Assessing & Building Assistant Mary Bird
Planning Consultant Sally Hodges, McKenna Associates
Recording Secretary Lisa Lemble
Members of the Community

4. APPROVAL OF AGENDA

- ▶ **Motion:** Iaquinto moved, Roman supported, that the agenda be adopted as presented.
Motion carried 5—0 on a voice vote.

5. FIRST CALL TO THE PUBLIC

David Gordon, 5558 Hellner Road, urged preservation of open space and farmland.

6. CLARIFICATIONS FROM COMMISSION

None.

7. CORRESPONDENCE

None.

8. PUBLIC HEARINGS

None.

9. REPORTS

7A. Board of Trustees

Chick reported on the Board's May 10th meeting, including approval of soils testing for a possible sewage equalization basin.

7B. ZBA

Chockley reported a front yard setback variance was granted at the May 16th meeting to allow the addition of a garage to an existing home.

7C. Staff Report

Fink reported the Township has signed a purchase agreement for the Van Curler property.

Stanalajczo referred to the AT&T cellular tower proposal presented at the last meeting and suggested that proposals not be placed on an agenda unless they are ready for consideration.

7D. Planning Consultant

Nothing to report.

[Cousino arrived].

10. UNFINISHED BUSINESS

10A. Proposed Lake Overlay District Zoning Ordinance Amendments.

Hodges reviewed the proposed ordinance amendment and map which she had prepared at the direction of the Commission based on previous discussions regarding changing setbacks in some lake districts. She answered questions about the proposed zero setback on the street side of Horseshoe Lake lots and requirements for setbacks from private roads. The Commission discussed possibly increasing the lakeside building setback requirement from the existing 20 feet to 25 to match the wetlands setback required elsewhere in the ordinance.

- ▶ **Motion:** Stanalajczo moved, Chick supported, to set the public hearing for the Whitmore Lake and Horseshoe Lake overlay amendments.
Motion carried 6—0 on a roll call vote.

10B. Discussion of 2016 Goals & Objectives

The Commission discussed the list of goals and objectives prepared by Chair Dignan based on feedback from Commissioners.

- ▶ **Motion:** Iaquinto moved, Stanalajczo supported, to adopt as the goals and objectives for the Planning Commission to address in 2016 the list as reviewed which starts with "Discussion of Business Oriented Zonings" and ends with "Scenic Vistas Inventory/Identification."
Motion carried 6—0 on a roll call vote.

11. NEW BUSINESS

11A. Review Zoning Board of Appeals Standards for Determination for Variances.

Hodges reviewed her May 11th memo and recommended changes to Section 36-943, *Variances*, of the Township's zoning ordinance to clarify the authority of the ZBA and to bring the language into compliance with State law. Commissioners recommended minor changes.

- ▶ **Motion:** Iaquinto moved, Stanalajczo supported, to set the public hearing for the next available time for the changes to the Variances section of the Northfield Township zoning ordinance. **Motion carried 6—0 on a roll call vote.**

12. MINUTES

May 4, 2016, Regular Meeting

Chockley made three corrections.

- ▶ **Motion:** Chockley moved, Stanalajczo supported, that the minutes of the May 4, 2016, regular meeting be approved as corrected, and to dispense with the reading. **Motion carried 6—0 on a voice vote.**

13. SECOND CALL TO THE PUBLIC

David Gordon said the Commission's goals and objectives should concentrate on preservation of open space rather than business and downtown development.

14. COMMENTS FROM THE COMMISSIONERS

Chockley proposed considering a ban on coal-tar based asphalt seal-coating. The Commission made brief comments in response to David Gordon's comments about goals and objectives.

Roman suggested that reports on topics before the Commission be fully presented before Commissioners make comments and ask questions.

15. ANNOUNCEMENT OF NEXT MEETING

June 1, 2016, at 7:00 P.M. at the Public Safety Building was announced as the next regular Commission meeting time and location.

16. ADJOURNMENT

- ▶ **Motion:** Roman moved, Cousino supported, that the meeting be adjourned. **Motion carried 6—0 on a voice vote.**

The meeting was adjourned at 7:55 P.M.

Prepared by Lisa Lemble.

Corrections to the originally issued minutes are indicated as follows:

Wording removed is ~~stricken through~~;

Wording added is underlined.

Adopted on _____, 2016.

Kenneth Dignan, Chair

Mark Stanalajczo, Secretary

Official minutes of all meetings are available on the Township's website at <http://www.twp-northfield.org/government/>

To: Northfield Township Board

From: Howard Fink

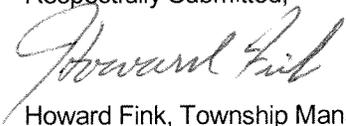
Date: 6/23/2016

Re: Inspectors Contract

Dear Township Board,

Currently our outside contract inspectors (mechanical / plumbing) are billed through Pittsfield Township. Both communities agree that these inspectors should be directly contracted through Northfield Township. Attached is the contract, developed by me and reviewed by legal council to use for these purposes. I recommend a motion by the Board to authorize me to enter into contracts with our inspectors using the attached document.

Respectfully Submitted,

A handwritten signature in cursive script that reads "Howard Fink".

Howard Fink, Township Manager

NORTHFIELD TOWNSHIP MICHIGAN

8350 Main St., Whitmore Lake, MI 48189 • P: 734-449-5000 • F: 734-449-0123

Inspector Contract

Whereas, the Township of Northfield (the “Township”) has the need for state-authorized inspectors to perform regular inspections and plan reviews to determine compliance with the Michigan Electrical Code, Michigan Plumbing Code, or Michigan Mechanical Code for work performed in Northfield Township; and

Whereas, the undersigned (“Inspector”) has complied with any and all local, state or federal requirements to be qualified to perform code inspections and/or plan reviews regarding electrical, plumbing or mechanical systems in the State of Michigan;

The Parties hereby agree to the following terms and conditions for Inspector’s performance of inspections and reviews as an independent contractor regarding the Michigan Electrical Code, Michigan Plumbing Code, or Michigan Mechanical Code:

1. The term of this Agreement shall be for one year from the date of execution, with one year extensions as agreed to, in writing, by the Township and Inspector (the “Parties”).
2. The Inspector agrees to perform all inspections as may be reasonably requested by the Township, Monday through Friday, between the hours of 8:00 a.m. and 4:30 p.m. The Township will identify, in writing, all inspections to be performed by the Inspector on each day. The Inspector shall conduct only the inspections identified in writing, or such other inspections as the parties mutually agree shall be conducted on any given day.
3. The Inspector agrees to provide one weeks’ notice for any and all requested time off greater than three days.
4. The Township agrees to reimburse the Inspector for inspections performed at the rate of \$40.00 for each inspection performed, and for which the Inspector has submitted a monthly, itemized, written bill as an independent contractor. The Township shall pay the Inspector for each such bill during the first cycle for payables subsequent to board approval.
5. The Inspector shall, by the end of the business day, provide the Township with copies of the inspection paperwork indicating the disposition of each inspection performed that day by:
 - 1) Providing the original signed inspection sheets, or
 - 2) Sending facsimile or email copies
6. A notice of the results of each inspection shall be left on the job site, by the Inspector, at the time of the inspection.
7. The Inspector shall provide, at his or her expense, a means of communication while in the field.

NORTHFIELD TOWNSHIP MICHIGAN

8. The Inspector shall make himself or herself available during the hours set forth in paragraph 2, above, to answer code interpretation questions related to the Michigan Electrical Code, Michigan Plumbing Code or the Michigan Mechanical Code, as needed.
9. The Inspector shall meet and continue to maintain compliance with any and all registration, certification, and licensing requirements any and all local, state or federal entity needed for inspector to be authorized to perform inspections under this Agreement, at all times while working under this Agreement. Any and all costs of complying with this section shall be the sole responsibility of the Inspector.
10. Inspector shall maintain liability and workers compensation insurance at all times, in an amount and form acceptable to the Township's insurance carrier.
11. This Agreement may be terminated upon 30 days written notice by either of the parties and shall terminate on one year from inception unless otherwise previously terminated pursuant to this Agreement.

Inspector

Date

License Registration Number

Expiration Date

Township Manager

Date

MEMO

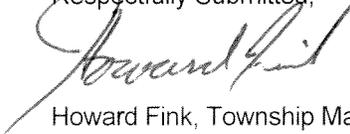
To: Northfield Township Board
From: Howard Fink
Date: 6/23/2016
Re: Arvin Sango IFT

Dear Township Board,

Attached please find the *Resolution Calling Public Hearing on an Application for an Industrial Facilities Tax Exemption Certificate* which we have prepared for consideration by the Township Board at its meeting on June 28th. The resolution sets July 12th at 7:00 pm as the date for a public hearing to consider the application.

Exhibit A contains the form of notice for the public hearing. The notice needs to be mailed by certified mail, no less than 10 days prior to the hearing, to Arvin Sango and to the legislative body of each taxing unit that levies ad valorem property taxes in the Township. A copy of the notice must also be provided to the Township Assessor. There is no publication requirement for the notice.

Respectfully Submitted,



Howard Fink, Township Manager

**RESOLUTION CALLING A PUBLIC HEARING ON AN APPLICATION FOR AN
INDUSTRIAL FACILITIES TAX EXEMPTION CERTIFICATE**

**TOWNSHIP OF NORTHFIELD
COUNTY OF WASHTENAW, STATE OF MICHIGAN**

Minutes of a regular meeting of the Township Board of the Township of Northfield, County of Washtenaw, State of Michigan, held in the Township on the 28th day of June, 2016, at 7:00 p.m., Eastern Daylight Time.

PRESENT: Members _____

ABSENT: Members _____

The following preamble and resolution were offered by Member _____ and supported by Member _____:

WHEREAS, by resolution, Township Board established the 955 E. North Territorial Road Industrial Development District (the "District") pursuant to Act 198, Public Acts of Michigan, 1974, as amended ("Act 198"); and

WHEREAS, the Township has received an application from Arvin Sango, Inc. for an Industrial Facilities Exemption Certificate for a new facility at 955 E. North Territorial Road, located within the District; and

WHEREAS, Arvin Sango, Inc. has indicated in its application that the facility will be used for facilities and test equipment to develop and test exhaust systems, the facility will be completed by May 25, 2017, and the company expects to create eleven (11) new jobs within two (2) years of completion; and

WHEREAS, Act 198 requires the Township Board to afford the applicant, the assessor, and affected taxing units an opportunity for a hearing before acting on the application of Arvin Sango, Inc.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. A public hearing shall be held on July 12, 2016, at 7:00 p.m. at the Public Safety Building to afford the applicant, the assessor and the affected taxing units an opportunity to comment on the application of Arvin Sango, Inc. for an industrial facilities exemption certificate.

2. The Township Clerk shall notify in writing the Township assessor, the applicant, and the legislative body of each taxing unit that levies ad valorem property taxes in the Township of the hearing. The notice shall be substantially in the form appearing as Exhibit A. The

Township Clerk is further directed to mail and publish any other such notices required by Act 198.

3. All resolutions and parts of resolutions insofar as they conflict with the provisions of this resolution be and the same hereby are rescinded.

AYES: Members: _____

NAYS: Members: _____

RESOLUTION DECLARED ADOPTED.

Angela Westover
Township Clerk

I hereby certify that the foregoing is a true and complete copy of a resolution adopted by the Township Board of the Township of Northfield, County of Washtenaw, State of Michigan, at a regular meeting held on June 28, 2016, and that said meeting was conducted and public notice of said meeting was given pursuant to and in full compliance with the Open Meetings Act, being Act 267, Public Acts of Michigan, 1976, and that the minutes of said meeting were kept and will be or have been made available as required by said Act.

Angela Westover
Township Clerk

EXHIBIT A

FORM OF NOTICE

NOTICE OF PUBLIC HEARING
TOWNSHIP OF NORTHFIELD
COUNTY OF WASHTENAW
STATE OF MICHIGAN

REQUEST FOR
INDUSTRIAL FACILITIES EXEMPTION CERTIFICATE

Pursuant to Public Act 198 of 1974, a Public Hearing will be held by the Township of Northfield, County of Washtenaw, State of Michigan, at 7:00 p.m., Tuesday, July 12, 2016, in the Northfield Township Public Safety Building, located at 8350 Main Street, Whitmore Lake, Michigan 48189.

PURPOSE OF PUBLIC HEARING

To hear and consider an application submitted by Arvin Sango, Inc. for an Industrial Facilities Exemption Certificate ("tax abatement") for the operation of a facility, equipment and related improvements at 955 E. North Territorial Road, Northfield Township, Michigan, 48189. The application is available upon request for review from the Clerk of the Township.

As you may be aware, the Township Board passed a resolution on June 14, 2016 establishing the 955 E. North Territorial Road Industrial Development District. The Arvin Sango property is included in the 955 E. North Territorial Road Industrial Development District.

All interested parties are encouraged to attend this Public Hearing or submit written comments to the Township Board at the aforementioned address. In order to be considered, all written comments must be received by the time set for public hearing.

Angela Westover, Township Clerk

Dated: June ____, 2016

RESOLUTION NO. 16-545

A RESOLUTION OF NORTHFIELD TOWNSHIP, MICHIGAN CHANGING THE POLLING PLACE LOCATION FOR BOTH THE 2016 PRIMARY AND GENERAL ELECTIONS FOR PRECINCTS 1 & 3 DUE TO THE INACCESSIBILITY OF THE NORTHFIELD TOWNSHIP PUBLIC SAFETY BUILDING

WHEREAS, Michigan Election Law Act 116 of 1954, section 168.662(4) allows for The Legislative Body of the Township to change the polling location fewer than 60 days before said election if the location has been damaged, destroyed, or rendered inaccessible or unusable as a polling place; and

WHEREAS, The Northfield Township Board of Trustees is greatly concerned with the access to parking and general building accessibility for the elections.

NOW, THEREFORE, BE IT RESOLVED BY THE NORTHFIELD TOWNSHIP BOARD OF TRUSTEES that:

1. The inaccessibility of the Township Public Safety Building, due to lack of sufficient parking and space for overflow lines, is deemed to be an emergency.
2. The Township will be holding the August 2016 Primary and November 2016 General Election for Precincts 1 & 3 at the Whitmore Lake Middle School located at 8877 Main St., Whitmore Lake, MI 48189
3. The Township will provide signage, and persistent notice informing residents of the Polling Locations.

ROLL CALL VOTE:

AYE: _____

NAY: _____

ABSENT: _____

PASSED AND RESOLVED by the Northfield Township Board of Trustees, Northfield Township, Michigan, on this 28th day of June, 2016.

Marilyn Engstrom, Supervisor

ATTEST:

Angela Westover, Clerk

Memo

To: Northfield Township Board

From: Howard Fink

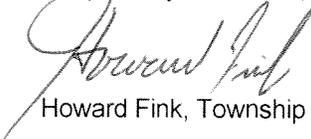
Date: 6/23/2016

Re: Budget Amendment

Dear Township Board,

Attached is a budget amendment for both my raise and an increase that Kathy Braun intended to give Pam, but slipped through. She is requesting to take Pam to \$22.00 per hour. Regarding my raise, there are various line items affected, which are reflected in the budget amendment. While the budget is now negative, I am not concerned, as there is always room with unspent appropriations. As a reminder, we are expecting to be in the black for the 2016 fiscal year. This will now be 4 years running that we have not dipped into fund balance.

Respectfully Submitted,



Howard Fink, Township Manager

RESOLUTION 16- 546

**TOWNSHIP OF NORTHFIELD, MICHIGAN
A RESOLUTION OF THE TOWNSHIP OF NORTHFIELD, WASHTENAW COUNTY,
MICHIGAN, TRANSFERRING MONIES AND AMENDING THE 2016 BUDGET WITHIN
THE GENERAL, POLICE, DONATION, STATE NARC, FEDERAL NARC AND BUILDING
DEPARTMENT BUDGETS**

WHEREAS, in the appropriation of funds for the year 2016 there is a need to transfer certain monies from the General Fund,

WHEREAS, in the appropriation of funds for the year 2016 there is a need to amend the General, Police, Donation, State NARC, Federal NARC and Building Department.

BE IT RESOLVED BY THE TOWNSHIP BOARD OF THE TOWNSHIP OF NORTHFIELD, WASHTENAW COUNTY, MICHIGAN, that the following transfers and amendments be approved:

See Attached Transfer and Amendment Schedule

DULY RESOLVED BY THE TOWNSHIP BOARD OF THE TOWNSHIP OF NORTHFIELD, WASHTENAW COUNTY, MICHIGAN, THIS 28th DAY OF JUNE, 2016.

Marilyn Engstrom, Supervisor

NORTHFIELD TOWNSHIP

8350 Main St.

734-449-2880

To: Township Board

Date: June 28, 2016

From: Rick Yaeger

RE: Amendment #1 and Budgeted Transfers/Contributions

Attached you will find a schedule showing final amendments for the Fiscal 2016 year. The amendments have brief explanations as to why they are being done and they impact the General, Police, Donation, State NARC, Federal NARC and Building Department.

In addition, there are three Transfers/Contributions that were budgeted that I am seeking approval to make. They are listed on the last page of the amendment schedule.

Thank You,

Rick Yaeger
Controller – Northfield Township

NORTHFIELD TOWNSHIP

Amendment #1

FYE 2016

GENERAL FUND - #101

TRANSFER AMENDMENT

- None

Total Transfer Increases/Decreases

AMENDMENT #1

Increases	Decreases
0	0

REGULAR AMENDMENT

REVENUE

- Increase Cablevision Franchise Fees for higher than anticipated activity	7,000	
- Decrease Grant Income that will not be received this budget year		250,000
- Increase Reimbursement/Other Income for Elections for Monies Received	5,745	
- Increase Penalty & Interest on Taxes to level we actually received	3,050	
- Increase Zoning Compliance Permits to recognize the additional activity	4,100	
- Increase Site Plan Review to recognize activity never budgeted	5,000	
- Increase Tax Abatement Fees for activity never budgtded	1,000	
- Increase Split Applications to recognize the additional activity	1,550	
- Increase Reimbursement/Other Income for CC Monies received for Meals on Wheels	5,500	
Total Revenue Amendments	32,945	250,000

EXPENDITURES

Hall and Grounds

- Increase R & M for Asbestos Removal at 9129 Main Charged to Contingency 800

Planning/Zoning

- Increase Planner Fees for greater activity than anticipated 15,000

- Additional for Zoning Administrator 2,500

Streetlights

- Increase Utilities to cover a potential overage 1,500

Roadwork

- Increase Road Improvements to cover Path Expenditures 250

- Decrease Grant Expense that won't be recognized this fiscal year 250,000

Solid Waste Management

- Increase May/Oct Clean-up Program budgeted under Contingency 4,000

Community Center

- Increase Salaries for Meals on Wheels Assistant 5,000

- Increase Janitorial Salaries due to change in Service 3,000

- Increase Social Security for above wage additions 615

- Decrease Grounds/Cleaning/Janitorial for transfer to Janitorial Salaries 3,000

- Increase Senior Nutrition for costs associated with Meals on Wheels 1,800

Township Contingency

- Decrease Contingency and Transfer to Solid Waste Management Dept 4,000

- Decrease Contingency and Transfer to R & M Town Hall for Asbestos Removal 800

- Decrease Contingency and Transfer to Computer for the purchase of a Computer 800

- Decrease Contingency and Transfer to Computer for Video Conferencing Camera 2,900

Capital Outlay

- Increase Computer for a Computer charged to Contingency 800

- Increase Computer for a Video Conferencing Camera charged to Contingency 2,900

Total Expenditure Amendments 261,500

Total **Recommended** Amendments 6,280

FYE 2016 Amended Contribution to Fund Balance (70,681)

NORTHFIELD TOWNSHIP

Amendment #1

FYE 2016

	<u>AMENDMENT #1</u>	
	<u>Increases</u>	<u>Decreases</u>
FYE 2016 Ending Contribution to Fund Balance	<u>(64,401)</u>	
Beginning Fund Balance	<u>1,550,163</u>	
Ending Fund Balance	<u>1,485,762</u>	

NORTHFIELD TOWNSHIP

Amendment #1

FYE 2016

		<u>AMENDMENT #1</u>	
		<u>Increases</u>	<u>Decreases</u>
<hr/>			
<u>POLICE FUND - #207</u>			
	<u>TRANSFER AMENDMENT</u>		
- None			
	<u>REGULAR AMENDMENT</u>		
<u>REVENUE</u>			
- Increase Sale of Fixed Assets for sale of vehicle		13,000	
Total Revenue Amendments		<u>13,000</u>	<u>0</u>
<u>EXPENDITURES</u>			
<u>Labor</u>			
- Decrease Hospitalization and Transfer to Insurance & Bonds to cover overage			11,000
<u>Legal/Professional</u>			
- Increase Legal for a payment made to HCC Public Risk Claim related to a FOIA		1,000	
<u>Operating Costs</u>			
- Increase Insurance & Bonds to cover overage (from Hospitalization)		11,000	
Total Expenditure Amendments		<u>12,000</u>	<u>11,000</u>
Total Recommended Amendments		<u>12,000</u>	
FYE 2016 Amended Contribution to Fund Balance		<u>13</u>	
FYE 2016 Ending Contribution to Fund Balance		<u>12,013</u>	
Beginning Fund Balance		<u>455,531</u>	
Ending Fund Balance		<u>467,544</u>	

NORTHFIELD TOWNSHIP
Amendment #1
FYE 2016

AMENDMENT #1

Increases	Decreases
-----------	-----------

ST.NARC FUND - #265

TRANSFER AMENDMENT

- None

REGULAR AMENDMENT

REVENUE

- Increase Forfeitures to a level closer to what we will receive	57,000	
Total Revenue Amendments	57,000	0

EXPENDITURES

Operating Costs

- Increase Forfeiture Sharing for additional funds sent to other jurisdictions	37,000	
Total Expenditure Increases	37,000	0

Total Recommended Amendments	20,000	
-------------------------------------	--------	--

FYE 2016 Amended Contribution to Fund Balance	6,000	
---	-------	--

FYE 2016 Ending Contribution to Fund Balance	26,000	
--	--------	--

Beginning Fund Balance	99,844	
------------------------	--------	--

Ending Fund Balance	125,844	
---------------------	---------	--

FED. NARC FUND - #266

TRANSFER AMENDMENT

- None

REGULAR AMENDMENT

REVENUE

- Increase Forfeitures to a level closer to what we will receive	5,000	
Total Revenue Amendments	5,000	0

EXPENDITURES

Operating Costs

- Increase Supplies for a slight overage	500	
- Increase Miscellaneous for a slight overage	500	
Total Expenditure Increases	1,000	0

Total Recommended Amendments	4,000	
-------------------------------------	-------	--

FYE 2016 Amended Contribution to Fund Balance	(182,000)	
---	-----------	--

FYE 2016 Ending Contribution to Fund Balance	(178,000)	
--	-----------	--

Beginning Fund Balance	359,912	
------------------------	---------	--

Ending Fund Balance	181,912	
---------------------	---------	--

NORTHFIELD TOWNSHIP

Amendment #1

FYE 2016

AMENDMENT #1

Increases

Decreases

BUILDING DEPT. FUND - #287

TRANSFER AMENDMENT

- None

REGULAR AMENDMENT

REVENUE

- Increase Building Plan Review Fees for additional activity during the year	2,200	
- Increase Building Permit Fees for additional activity during the year	16,000	
- Increase Contractor's Registration for additional activity during the year	950	
- Increase Trade Permit Fees for additional activity during the year	11,000	
Total Revenue Amendments	<u>30,150</u>	<u>0</u>

EXPENDITURES

Government Shared Services

- Increase Inspector Expenses due to higher than anticipated activity during the year	18,000	
Total Expenditure Increases	<u>18,000</u>	<u>0</u>

Total **Recommended** Amendments

12,150

FYE 2016 Amended Contribution to Fund Balance

1,596

FYE 2016 Ending Contribution to Fund Balance

13,746

Beginning Fund Balance

79,862

Ending Fund Balance

93,608

TRANSFER/CONTRIBUTION APPROVAL

1) Annual Contribution to Fire Fund from General Fund	25,000
2) Annual Contribution to Fire and Police for 4th of July	2,500
3) Annual Contribution to Police from FNARC	35,000

RESOLUTION 16- 547

**TOWNSHIP OF NORTHFIELD, MICHIGAN
A RESOLUTION OF THE TOWNSHIP OF NORTHFIELD, WASHTENAW COUNTY,
MICHIGAN, TRANSFERRING MONIES AND AMENDING THE 2017 BUDGET WITHIN
THE GENERAL AND BUILDING DEPARTMENT BUDGETS**

WHEREAS, in the appropriation of funds for the year 2017 there is a need to transfer certain monies from the General Fund,

WHEREAS, in the appropriation of funds for the year 2017 there is a need to amend the General and Building Department.

BE IT RESOLVED BY THE TOWNSHIP BOARD OF THE TOWNSHIP OF NORTHFIELD, WASHTENAW COUNTY, MICHIGAN, that the following transfers and amendments be approved:

See Attached Transfer and Amendment Schedule

DULY RESOLVED BY THE TOWNSHIP BOARD OF THE TOWNSHIP OF NORTHFIELD, WASHTENAW COUNTY, MICHIGAN, THIS 28th DAY OF JUNE, 2016.

Marilyn Engstrom, Supervisor

NORTHFIELD TOWNSHIP

8350 Main St.

734-449-2880

To: Township Board

Date: June 28, 2016

From: Rick Yaeger

RE: Amendment #1 and Budgeted Transfers/Contributions

Attached you will find a schedule showing amendments for the Fiscal 2017 year. The amendments have brief explanations as to why they are being done and they impact the General and Building Department.

In addition, there is one Transfers/Contributions that is budgeted that I am seeking approval to make. It is listed on the last page of the amendment schedule.

Thank You,

Rick Yaeger
Controller – Northfield Township

NORTHFIELD TOWNSHIP

Amendment #1

FYE 2017

	<u>AMENDMENT #1</u>	
	<u>Increases</u>	<u>Decreases</u>
<u>GENERAL FUND - #101</u>		
<u>TRANSFER AMENDMENT</u>		
- None		
Total Transfer Increases/Decreases	<u>0</u>	<u>0</u>
<u>REGULAR AMENDMENT</u>		
<u>REVENUE</u>		
- NONE		
Total Revenue Amendments	<u>0</u>	<u>0</u>
<u>EXPENDITURES</u>		
<u>Township Manager</u>		
- Increase Salaries for Township Manager for approved Increase over budgeted amount	3,690	
- Increase Social Security for wage increase above	285	
- Increase Pension for additional wages mentioned above	369	
- Increase Allocate to Departments for additional amount allocated to the Building Dept.	(543)	
<u>Treasurer</u>		
- Increase Deputy Salaries for additional increase over budgeted amount	320	
- Increase Social Security for wage increase above	25	
- Increase Pension for wage increase mentioned above	32	
Total Expenditure Amendments	<u>4,178</u>	<u>0</u>
Total Recommended Amendments	<u>(4,178)</u>	
FYE 2017 Amended Contribution to Fund Balance	<u>1,070</u>	
FYE 2017 Ending Contribution to Fund Balance	<u>(3,108)</u>	
Beginning Fund Balance	<u>1,485,762</u>	
Ending Fund Balance	<u>1,482,654</u>	

NORTHFIELD TOWNSHIP

Amendment #1

FYE 2017

AMENDMENT #1

Increases

Decreases

BUILDING DEPT. FUND - #287

TRANSFER AMENDMENT

- None

REGULAR AMENDMENT

REVENUE

- None

Total Revenue Amendments

0

0

EXPENDITURES

Personnel

- Increase Allocate to Departments for Twp. Mgr. Wage Increase

Total Expenditure Increases

543

543

0

Total **Recommended** Amendments

(543)

FYE 2016 Amended Contribution to Fund Balance

(33,019)

FYE 2016 Ending Contribution to Fund Balance

(33,562)

Beginning Fund Balance

93,608

Ending Fund Balance

60,046

TRANSFER/CONTRIBUTION APPROVAL

1) Annual Contribution to Fire and Police for 4th of July

2,500

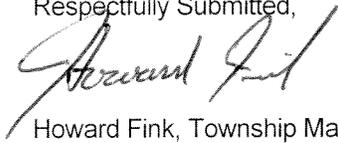
MEMO

To: Northfield Township Board
From: Howard Fink
Date: 6/23/2016
Re: Van Curler Financing

Dear Township Board,

Attached are the schedules that show financing of the Van Curler property at 100% and at 50%. The Board can choose whatever percentage they wish. My previous recommendation was to finance the property, and I recommend a decision be made at this meeting.

Respectfully Submitted,

A handwritten signature in cursive script, appearing to read "Howard Fink", written in black ink.

Howard Fink, Township Manager

\$330,000
 TOWNSHIP OF NOTHFIELD
 COUNTY OF WASHTENAW, STATE OF MICHIGAN
 INSTALLMENT PURCHASE CONTRACT

SCHEDULE OF DEBT SERVICE REQUIREMENTS

On a Calendar Year Basis

Year	Principal Due April 1	Interest Rate	Interest Due April 1	Interest Due October 1	Total Principal & Interest Requirements
2017	33,202	3.250%	5,363 *	4,823	43,387
2018	28,919	3.250%	4,823	4,353	38,095
2019	29,859	3.250%	4,353	3,868	38,080
2020	30,829	3.250%	3,868	3,367	38,064
2021	31,831	3.250%	3,367	2,850	38,047
2022	32,865	3.250%	2,850	2,316	38,030
2023	33,933	3.250%	2,316	1,764	38,013
2024	35,036	3.250%	1,764	1,195	37,995
2025	36,175	3.250%	1,195	607	37,977
2026	37,351	3.250%	607	0	37,958
	<u>\$330,000</u>		<u>\$30,504</u>	<u>\$25,142</u>	<u>\$385,646</u>

Assumptions:

Bonds Dated:	10/01/2016
First Interest Payment:	04/01/2017
Number of Days:	180 *
Subsequent Interest Payment:	10/01/2017
Number of Days:	180
First Principal Payment:	04/01/2017
Projected Interest Rate	3.25%

615 Griswold Street, Suite 1225, Detroit, Michigan 48226-3997
PHONE: (313) 961-8222 FAX: (313) 961-8220

The information contained herein was derived from sources generally recognized as reliable and does not make any representations as to correctness or completeness and has in no way been altered except to the extent that some information may be summarized, and is in no way intended to be a solicitation for orders.

\$330,000
TOWNSHIP OF NOTHFIELD
COUNTY OF WASHTENAW, STATE OF MICHIGAN
INSTALLMENT PURCHASE CONTRACT

SCHEDULE OF DEBT SERVICE REQUIREMENTS

On a Calendar Year Basis

Year	Principal Due April 1	Interest Rate	Interest Due April 1	Interest Due October 1	Total Principal & Interest Requirements
2017	22,510	4.000%	6,600 *	6,150	35,260
2018	16,810	4.000%	6,150	5,814	28,773
2019	17,483	4.000%	5,814	5,464	28,761
2020	18,182	4.000%	5,464	5,100	28,746
2021	18,909	4.000%	5,100	4,722	28,731
2022	19,666	4.000%	4,722	4,329	28,717
2023	20,452	4.000%	4,329	3,920	28,701
2024	21,270	4.000%	3,920	3,494	28,684
2025	22,121	4.000%	3,494	3,052	28,667
2026	23,006	4.000%	3,052	2,592	28,650
2027	23,926	4.000%	2,592	2,113	28,631
2028	24,883	4.000%	2,113	1,616	28,612
2029	25,878	4.000%	1,616	1,098	28,592
2030	26,914	4.000%	1,098	560	28,572
2031	27,990	4.000%	560	0	28,550
	<u>\$330,000</u>		<u>\$56,623</u>	<u>\$50,023</u>	<u>\$436,647</u>

Assumptions:

Bonds Dated:	10/01/2016
First Interest Payment:	04/01/2017
Number of Days:	180 *
Subsequent Interest Payment:	10/01/2017
Number of Days:	180
First Principal Payment:	04/01/2017
Projected Interest Rate	4.00%

615 Griswold Street, Suite 1225, Detroit, Michigan 48226-3997
PHONE: (313) 961-8222 FAX: (313) 961-8220

The information contained herein was derived from sources generally recognized as reliable and does not make any representations as to correctness or completeness and has in no way been altered except to the extent that some information may be summarized, and is in no way intended to be a solicitation for orders.

\$165,000
 TOWNSHIP OF NOTHFIELD
 COUNTY OF WASHTENAW, STATE OF MICHIGAN
 INSTALLMENT PURCHASE CONTRACT

SCHEDULE OF DEBT SERVICE REQUIREMENTS

On a Calendar Year Basis

Year	Principal Due April 1	Interest Rate	Interest Due April 1	Interest Due October 1	Total Principal & Interest Requirements
2017	16,601	3.250%	2,681 *	2,411	21,694
2018	14,459	3.250%	2,411	2,177	19,047
2019	14,929	3.250%	2,177	1,934	19,039
2020	15,415	3.250%	1,934	1,683	19,032
2021	15,915	3.250%	1,683	1,425	19,023
2022	16,433	3.250%	1,425	1,158	19,016
2023	16,967	3.250%	1,158	882	19,007
2024	17,518	3.250%	882	597	18,997
2025	18,088	3.250%	597	303	18,989
2026	18,675	3.250%	303	0	18,978
	<u>\$165,000</u>		<u>\$15,252</u>	<u>\$12,571</u>	<u>\$192,823</u>

Assumptions:

Bonds Dated:	10/01/2016
First Interest Payment:	04/01/2017
Number of Days:	180 *
Subsequent Interest Payment:	10/01/2017
Number of Days:	180
First Principal Payment:	04/01/2017
Projected Interest Rate	3.25%

615 Griswold Street, Suite 1225, Detroit, Michigan 48226-3997
PHONE: (313) 961-8222 FAX: (313) 961-8220

The information contained herein was derived from sources generally recognized as reliable and does not make any representations as to correctness or completeness and has in no way been altered except to the extent that some information may be summarized, and is in no way intended to be a solicitation for orders.

\$165,000
 TOWNSHIP OF NOTHFIELD
 COUNTY OF WASHTENAW, STATE OF MICHIGAN
 INSTALLMENT PURCHASE CONTRACT

SCHEDULE OF DEBT SERVICE REQUIREMENTS

On a Calendar Year Basis

Year	Principal Due April 1	Interest Rate	Interest Due April 1	Interest Due October 1	Total Principal & Interest Requirements
2017	11,255	4.000%	3,300 *	3,075	17,630
2018	8,405	4.000%	3,075	2,907	14,387
2019	8,741	4.000%	2,907	2,732	14,380
2020	9,091	4.000%	2,732	2,550	14,373
2021	9,455	4.000%	2,550	2,361	14,366
2022	9,833	4.000%	2,361	2,164	14,358
2023	10,226	4.000%	2,164	1,960	14,350
2024	10,635	4.000%	1,960	1,747	14,342
2025	11,060	4.000%	1,747	1,526	14,333
2026	11,503	4.000%	1,526	1,296	14,325
2027	11,963	4.000%	1,296	1,057	14,316
2028	12,442	4.000%	1,057	808	14,306
2029	12,939	4.000%	808	549	14,296
2030	13,457	4.000%	549	280	14,286
2031	13,995	4.000%	280	0	14,275
	<u>\$165,000</u>		<u>\$28,312</u>	<u>\$25,012</u>	<u>\$218,323</u>

Assumptions:

Bonds Dated:	10/01/2016
First Interest Payment:	04/01/2017
Number of Days:	180 *
Subsequent Interest Payment:	10/01/2017
Number of Days:	180
First Principal Payment:	04/01/2017
Projected Interest Rate	4.00%

615 Griswold Street, Suite 1225, Detroit, Michigan 48226-3997
PHONE: (313) 961-8222 FAX: (313) 961-8220

The information contained herein was derived from sources generally recognized as reliable and does not make any representations as to correctness or completeness and has in no way been altered except to the extent that some information may be summarized, and is in no way intended to be a solicitation for orders.

Jennifer Carlisle

To: Howard Fink
Subject: RE: Van Curler Site Soil Analysis

-----Original Message-----

From: Jacob Rushlow [<mailto:jacob.rushlow@ohm-advisors.com>]
Sent: Wednesday, June 22, 2016 2:35 PM
To: Howard Fink
Subject: Van Curler Site Soil Analysis

Howard,

I am providing a quick update on our progress with the geotechnical and environmental analyses at the VanCurler property. All field work, including 13 soil borings at the locations identified on the attached map and the Phase I ESA, has been completed. Additionally, all laboratory testing of those 13 soil samples has also been completed. At this time we are working to prepare the full report related to our findings. While the report is being finalized I would like to give you a short summary on some of the highlights.

From the environmental test results, there has been no evidence of any environmental concerns and all 4 environmental soil samples analyzed had no detection of volatile organics or semi-volatile organics.

From the physical tests of the soil samples, most (11 of 13) indicate suitable native soils at or near the conventional bearing depth for building foundations. The soil profile in these 11 samples generally consists of stiff to very stiff silty clay, or loose to medium compact clayey sand. Groundwater was generally encountered within all 13 boring locations measured at depths ranging from 6 to 16 feet below the existing ground. Two of the boring locations (B-03 and B-04) contained organic peat and very soft to soft clayey silt ranging from 5.5 feet to 17 feet at its maximum thickness. The material at these two locations is not suitable for support of conventional shallow foundations. Any buildings proposed in this area would require removal of the unsuitable material and replacement with engineered fill to support the shallow foundation or alternatively, deep foundations extending down to suitable native material would be needed.

We anticipate having our full report completed by the end of next week. In the meantime, please feel free to contact me with any questions. Thank you.

JACOB A. Rushlow, PE
PROJECT MANAGER

OHM Advisors | ARCHITECTS. ENGINEERS. PLANNERS.

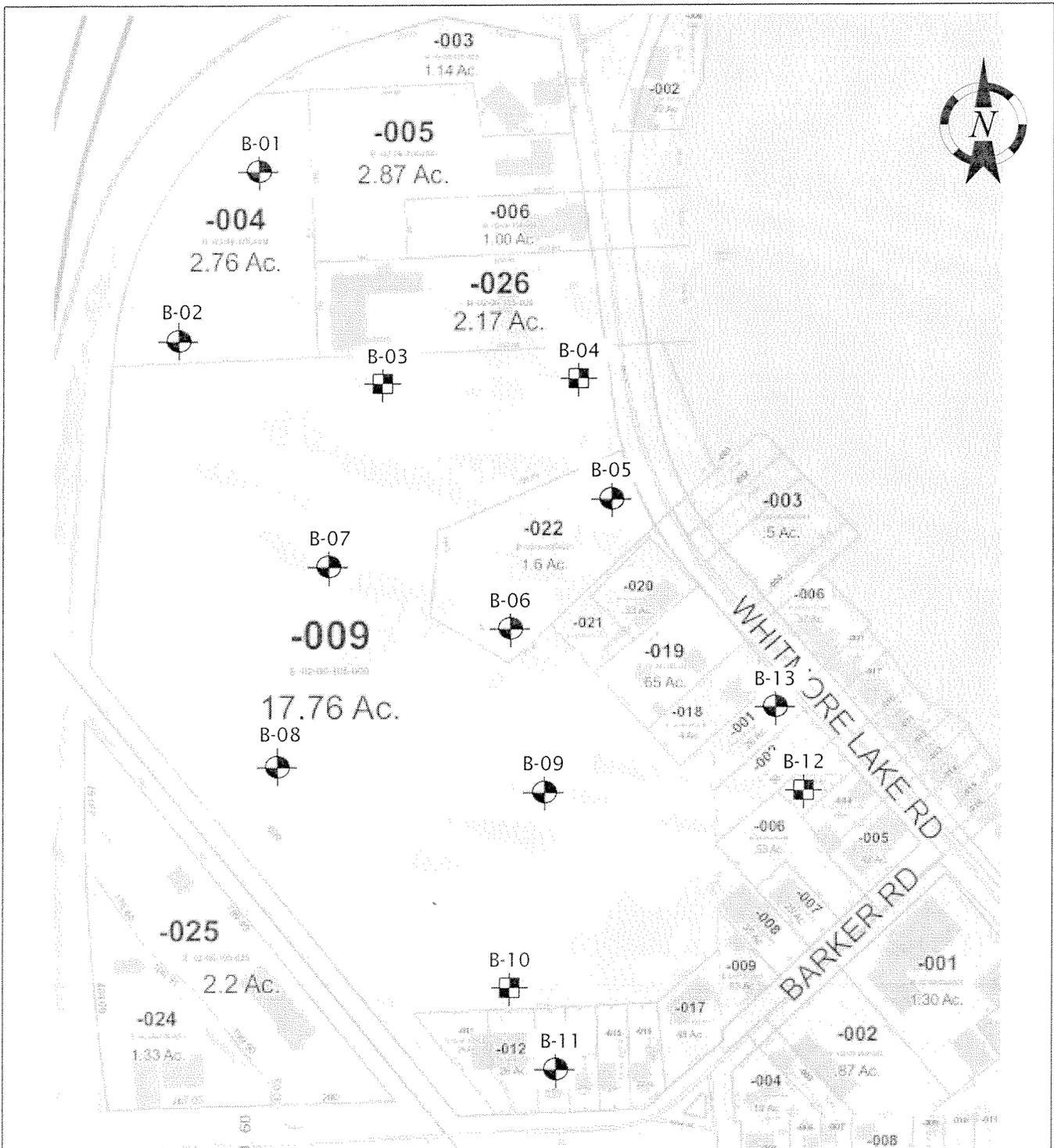
T 734.522.6711
F 734.522.6427
D 734.466.4517
C 734.812.7154

Advancing Communities(r)

[ohm-advisors<http://ohm-advisors.com/>.com<http://ohm-advisors.com/>](http://ohm-advisors.com/) |
[Facebook<https://www.facebook.com/OHMadvisors?sk=wall>](https://www.facebook.com/OHMadvisors?sk=wall) |
[Twitter<http://twitter.com/ohmadvisors>](http://twitter.com/ohmadvisors) | [LinkedIn<http://www.linkedin.com/company/420876>](http://www.linkedin.com/company/420876)

This message, including attachments, is confidential and may be privileged. If you are not an intended recipient, please notify the sender then delete and destroy the original message and

all copies. You should not copy, forward and/or disclose this message, in whole or in part, without permission of the sender.



Legend

-  Proposed Soil Boring Locations
-  Proposed Environmental Testing Locations

Soil Boring and Environmental Sampling Location Plan

Northfield Township Proposed Lake Access
Whitmore Lake Road and Barker Road
Northfield Township, Michigan



Project No. 163137

Drawn by: CJB

Date: 05-16-16

Scale: NTS

Plate
No. 1

Project Name: Proposed Lake Access Parcels
 Project Location: NW Corner of Main Street and Barker Road
 Northfield Township, Michigan
 G2 Project No. 163137
 Latitude: N/A Longitude: N/A



Soil Boring No. B-01
G2 CONSULTING GROUP

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
ELEV. (ft)	PRO-FILE	GROUND SURFACE ELEVATION: 907.0 ft ±	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Brown Silty Clay (12 inches)	1.0						
		Stiff Brown Silty Clay with trace sand and gravel	2.3	S-01	2 3 2	5	18.7		4000*
902.0		Loose Brown Clayey Sand with trace silt and gravel	5	S-02	3 4 6	10			
			6.0	S-03	3 5 7	12	13.8		5000*
897.0		Very Stiff Brown Sandy Clay with trace silt and gravel	10	S-04	7 22 32	54	11.7		5000*
			12.5						
892.0		Compact Gray Clayey Sand with trace silt and gravel, and occasional clay layers	15	S-05	9 15 17	32			
			20.0	S-06	14 17 20	37			
887.0		End of Boring @ 20 ft	20						
882.0			25						

Total Depth: 20 ft
 Drilling Date: June 10, 2016
 Inspector:
 Contractor: Strata Drilling, Inc.
 Driller: B. Sienkiewicz
 Drilling Method:
 2-1/4 inch inside diameter hollow-stem auger

Water Level Observation:
 13-1/2 feet during and upon completion of drilling operations

Notes:
 Borehole offset 30 feet south
 Borehole collapsed at 14 ft after auger removal
 * Calibrated Hand Penetrometer

Excavation Backfilling Procedure:
 Borehole backfilled with auger cuttings

Figure No. 1

SOIL / PAVEMENT BORING 163137.GPJ 20140820 G2 CONSULTING DATA TEMPLATE.GDT 6/22/16

Project Name: Proposed Lake Access Parcels
 Project Location: NW Corner of Main Street and Barker Road
 Northfield Township, Michigan
 G2 Project No. 163137
 Latitude: N/A Longitude: N/A



Soil Boring No. B-02
G2 CONSULTING GROUP

SUBSURFACE PROFILE

SOIL SAMPLE DATA

ELEV. (ft)	PRO-FILE	GROUND SURFACE ELEVATION: 906.0 ft ±	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Brown Silty Clay (9 inches)	0.8						
		Brown Silty Clay with trace sand and gravel	1.5	S-01	3 3 3	6			
901.0		Loose to Medium Compact Brown Clayey Sand with trace silt and gravel	5	S-02	2 4 7	11			
			10	S-03	4 6 7	13			
896.0				S-04	6 9 12	21			
		Compact Brown Sand with little gravel and trace silt	13.0						
891.0			15	S-05	13 19 23	42			
		Compact Gray Clayey Sand with trace silt and gravel	17.0						
886.0			20	S-06	11 20 24	44			
		End of Boring @ 20 ft							
881.0			25						

Total Depth: 20 ft
 Drilling Date: June 10, 2016
 Inspector:
 Contractor: Strata Drilling, Inc.
 Driller: B. Sienkiewicz

Water Level Observation:
 12-1/2 feet during and upon completion of drilling

Excavation Backfilling Procedure:
 Borehole backfilled with auger cuttings

Drilling Method:
 2-1/4 inch inside diameter hollow-stem auger

SOIL / PAVEMENT BORING: 163137.GPJ 20140820 G2 CONSULTING DATA TEMPLATE.GDT 6/22/16

Figure No. 2

Project Name: Proposed Lake Access Parcels
 Project Location: NW Corner of Main Street and Barker Road
 Northfield Township, Michigan
 G2 Project No. 163137
 Latitude: N/A Longitude: N/A



Soil Boring No. B-03
G2 CONSULTING GROUP

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
ELEV. (ft)	PRO-FILE	GROUND SURFACE ELEVATION: 899.0 ft ±	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Brown Clayey Sand (12 inches)	1.0						
		Fill: Medium Compact Brown Clayey Sand with little gravel and trace silt		S-01	5 5 7	12			
894.0			5	S-02	3 12 10	22			
		Very Loose Dark Brown Fibrous Peat (Organic Matter Content = 83%)	5.5						
				10	S-03	2 2 2	4		
889.0					S-04	2 2 2	4		
884.0		Very Soft Gray Clayey Silt with trace organics (Organic Matter Content = 1.4%)	12.0						
		Very Stiff Gray Silty Clay with trace sand and gravel	15	S-05	WoH/18"	---	29.3		200**
				17.0					
879.0			20	S-06	3 4 5	9	16.0		4220
		End of Boring @ 20 ft	20.0						
874.0			25						

SOIL / PAVEMENT BORING 163137.GPJ 20140820 G2 CONSULTING DATA TEMPLATE.GDT 6/22/16

Total Depth: 20 ft
 Drilling Date: June 9, 2016
 Inspector:
 Contractor: Strata Drilling, Inc.
 Driller: D. Watkins
 Drilling Method:
 2-1/4 inch inside diameter hollow-stem auger

Water Level Observation:
 Dry during and upon completion of drilling

Notes:
 Borehole offset 30 feet west and 100 feet south
 Borehole collapsed at 15 ft after auger removal
 * Calibrated Hand Penetrometer
 ** Torvane

Excavation Backfilling Procedure:
 Borehole backfilled with auger cuttings

Project Name: Proposed Lake Access Parcels
 Project Location: NW Corner of Main Street and Barker Road
 Northfield Township, Michigan
 G2 Project No. 163137
 Latitude: N/A Longitude: N/A



Soil Boring No. B-04
G2 CONSULTING GROUP

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
ELEV. (ft)	PRO-FILE	GROUND SURFACE ELEVATION: 901.0 ft ±	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Brown Sandy Clay (11 inches)	0.9						
		Fill: Brown Sandy Clay	1.8		3				
		Buried Topsoil: Brown Silty Sand with trace gravel	3.0	S-01	3 4	7			
896.0		Loose Gray Clayey Sand with trace silt and gravel	5	S-02	4 3 2	5			
		Soft Gray Clayey Silt with little organics	6.0		4				
			8.0	S-03	3 5	8	18.7		1000*
891.0			10	S-04	5 7 11	18	13.0		7000*
		Stiff to Very Stiff Gray Silty Clay with trace sand and gravel	15	S-05	5 6 7	13	14.2		4000*
886.0									
			20.0	S-06	3 5 6	11	15.3		3000*
881.0		End of Boring @ 20 ft	20						
876.0			25						

DRAFT

SOIL / PAVEMENT BORING: 163137.GPJ 20140820.G2 CONSULTING DATA TEMPLATE.GDT 6/22/16

Total Depth: 20 ft
 Drilling Date: June 9, 2016
 Inspector:
 Contractor: Strata Drilling, Inc.
 Driller: B. Sienkiewicz
 Drilling Method:
 2-1/4 inch inside diameter hollow-stem auger

Water Level Observation:
 4 feet during drilling operations; 13 feet upon completion
 Notes:
 Borehole collapsed at 15-1/2 ft after auger removal
 * Calibrated Hand Penetrometer
 Excavation Backfilling Procedure:
 Borehole backfilled with auger cuttings

Figure No. 4

Project Name: Proposed Lake Access Parcels
 Project Location: NW Corner of Main Street and Barker Road
 Northfield Township, Michigan
 G2 Project No. 163137
 Latitude: N/A Longitude: N/A



Soil Boring No. B-05
G2 CONSULTING GROUP

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
ELEV. (ft)	PRO-FILE	GROUND SURFACE ELEVATION: 902.0 ft ±	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Dark Brown Clayey Sand (14 inches)	1.2						
		Loose Dark Brown Clayey Sand with trace silt and gravel	3.0	S-01	3 4 4	8			
897.0		Medium Brown and Gray Mottled Silty Clay with trace sand and gravel	5	S-02	3 3 5	8	21.9		1820
			7.0	S-03	8 14 17	31	11.2		9000*
892.0		Hard Brown and Gray Mottled Silty Clay with trace sand and gravel	10	S-04	7 13 17	30	11.2		9000*
			12.0						
887.0		Very Stiff Gray Silty Clay with trace sand and gravel	15	S-05	3 5 7	12	10.9		5000*
			20.0	S-06	6 9 11	20	8.0		7000*
882.0		End of Boring @ 20 ft	20						
877.0			25						

SOIL / PAVEMENT BORING 163137.GPJ 20140820 G2 CONSULTING DATA TEMPLATE.GDT 6/22/16

Total Depth: 20 ft
 Drilling Date: June 10, 2016
 Inspector:
 Contractor: Strata Drilling, Inc.
 Driller: B. Sienkiewicz

Water Level Observation:
 Dry during and upon completion of drilling

Notes:
 Borehole collapsed at 14 ft after auger removal
 * Calibrated Hand Penetrometer

Drilling Method:
 2-1/4 inch inside diameter hollow-stem auger

Excavation Backfilling Procedure:
 Borehole backfilled with auger cuttings

Figure No. 5

Project Name: Proposed Lake Access Parcels
 Project Location: NW Corner of Main Street and Barker Road
 Northfield Township, Michigan
 G2 Project No. 163137
 Latitude: N/A Longitude: N/A



Soil Boring No. B-06
G2 CONSULTING GROUP

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
ELEV. (ft)	PRO-FILE	GROUND SURFACE ELEVATION: 908.0 ft ±	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Brown Silty Clay (11 inches)	0.9						
				S-01	2 3 3	6	20.1		5000*
903.0			5	S-02	4 7 11	18	12.3		8000*
		Very Stiff to Hard Brown Silty Clay with trace sand and gravel		S-03	5 8 13	21	13.7		9000*
898.0			10	S-04	5 10 12	22	10.8		5000*
		Very Stiff Gray Silty Clay with trace sand, gravel and occasional sand seams		S-05	3 4 6	10	14.8		4000*
893.0			15						
		Medium Compact Gray Sand with trace silt and gravel, and occasional gravel layers		S-06	5 9 9	18			
888.0			20						
		End of Boring @ 20 ft							
883.0			25						

SOIL / PAVEMENT BORING 163137.GPJ 20140820 G2 CONSULTING DATA TEMPLATE.CDT 6/22/16

Total Depth: 20 ft
 Drilling Date: June 10, 2016
 Inspector:
 Contractor: Strata Drilling, Inc.
 Driller: B. Sienkiewicz
 Drilling Method:
 2-1/4 inch inside diameter hollow-stem auger

Water Level Observation:
 14 feet during drilling operations; 14-1/2 feet upon completion
 Notes:
 Borehole collapsed at 15-1/2 ft after auger removal
 * Calibrated Hand Penetrometer
 Excavation Backfilling Procedure:
 Borehole backfilled with auger cuttings

Figure No. 6

Project Name: Proposed Lake Access Parcels
 Project Location: NW Corner of Main Street and Barker Road
 Northfield Township, Michigan
 G2 Project No. 163137
 Latitude: N/A Longitude: N/A



Soil Boring No. B-07

G2 CONSULTING GROUP

SUBSURFACE PROFILE

SOIL SAMPLE DATA

ELEV. (ft)	PRO-FILE	GROUND SURFACE ELEVATION: 907.0 ft ±	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Brown Clayey Sand (9 inches)	0.8						
		Loose to Medium Compact Brown Clayey Sand with trace silt and gravel	5	S-01	3 3 3	6			
902.0				S-02	4 4 5	9			
		Brown Sand and Gravel	10	S-03	4 9 13	22			
897.0				S-04	7 9 16	25			
		Medium Compact Brown Sand with trace silt and gravel	15	S-05	12 27 40	67			
892.0									
		Hard Gray Silty Clay with trace sand and gravel, and occasional sand layers	20	S-06	11 24 18	42	10.7		9000*
887.0									
		End of Boring @ 20 ft	25						
882.0									

SOIL / PAVEMENT BORING: 163137.GPJ 20140820 G2 CONSULTING DATA TEMPLATE.GDT 6/22/16

Total Depth: 20 ft
 Drilling Date: June 10, 2016
 Inspector:
 Contractor: Strata Drilling, Inc.
 Driller: B. Sienkiewicz

Water Level Observation:
 16 feet during drilling operations; 14 feet upon completion

Notes:
 Borehole collapsed at 16 ft after auger removal
 * Calibrated Hand Penetrometer

Drilling Method:
 2-1/4 inch inside diameter hollow-stem auger

Excavation Backfilling Procedure:
 Borehole backfilled with auger cuttings

Figure No. 7

Project Name: Proposed Lake Access Parcels
 Project Location: NW Corner of Main Street and Barker Road
 Northfield Township, Michigan
 G2 Project No. 163137
 Latitude: N/A Longitude: N/A



Soil Boring No. B-08
G2 CONSULTING GROUP

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
ELEV. (ft)	PRO-FILE	GROUND SURFACE ELEVATION: 907.0 ft ±	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Brown Sandy Clay (10 inches)	0.8						
		Very Stiff Brown Sandy Clay with trace silt and gravel	5	S-01	3 3 3	6	15.0		7000*
902.0				S-02	3 3 4	7	12.3		5000*
		Medium Compact Brown Clayey Sand with some gravel and trace silt	6.0	S-03	7 7 9	16			
		Brown Sand and Gravel	8.0	S-04	7 15 19	34			
897.0									
		Compact Brown Sand with trace silt and gravel	9.5	S-05	11 34 50	84			
892.0		Very Compact Gray Clayey Sand with trace silt and gravel, and occasional gravel layers (Finer than No. 200 = 49%)	12.5	S-06	16 20 31	51			
887.0		End of Boring @ 20 ft	20.0						
882.0			25						

Total Depth: 20 ft
 Drilling Date: June 10, 2016
 Inspector:
 Contractor: Strata Drilling, Inc.
 Driller: B. Sienkiewicz

Water Level Observation:
 16 feet during and upon completion of drilling

Notes:
 Borehole offset 15 feet east of tree line
 * Calibrated Hand Penetrometer

Drilling Method:
 2-1/4 inch inside diameter hollow-stem auger

Excavation Backfilling Procedure:
 Borehole backfilled with auger cuttings

SOIL / PAVEMENT BORING: 163137.GPJ 20140820 G2 CONSULTING DATA TEMPLATE.GDT 6/22/16

Figure No. 8

Project Name: Proposed Lake Access Parcels
 Project Location: NW Corner of Main Street and Barker Road
 Northfield Township, Michigan
 G2 Project No. 163137
 Latitude: N/A Longitude: N/A



Soil Boring No. B-09
G2 CONSULTING GROUP

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
ELEV. (ft)	PRO-FILE	GROUND SURFACE ELEVATION: 910.0 ft ±	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Brown Sandy Clay (8 inches)	0.7						
		Very Stiff Brown Sandy Clay with trace silt and gravel	5	S-01	3 2 3	5	13.7		5000*
905.0				S-02	3 4 6	10	13.3		4000*
		Loose to Medium Compact Brown Silty Sand with trace gravel	10	S-03	3 4 6	10			
900.0				S-04	4 6 7	13			
		Compact Brown Silty Sand with trace gravel	15	S-05	9 20 23	43			
895.0									
		Gray Sandy Clay							
		Very Loose Gray Sand with trace silt and gravel	20	S-06	1 2 2	4			
890.0									
		End of Boring @ 20 ft							
885.0			25						

Total Depth: 20 ft
 Drilling Date: June 10, 2016
 Inspector:
 Contractor: Strata Drilling, Inc.
 Driller: B. Sienkiewicz

Water Level Observation:
 6-1/2 feet during drilling operations; 7-1/2 feet upon completion

Notes:
 Borehole collapsed at 9 ft after auger removal
 * Calibrated Hand Penetrometer

Drilling Method:
 2-1/4 inch inside diameter hollow-stem auger

Excavation Backfilling Procedure:
 Borehole backfilled with auger cuttings

Figure No. 9

SOIL / PAVEMENT BORING: 163137.GPJ 20140820.G2 CONSULTING DATA TEMPLATE.GDI 6/22/16

Project Name: Proposed Lake Access Parcels
 Project Location: NW Corner of Main Street and Barker Road
 Northfield Township, Michigan
 G2 Project No. 163137
 Latitude: N/A Longitude: N/A



Soil Boring No. B-10
G2 CONSULTING GROUP

SUBSURFACE PROFILE				SOIL SAMPLE DATA					
ELEV. (ft)	PRO-FILE	GROUND SURFACE ELEVATION: 910.0 ft ±	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Brown Sandy Clay (14 inches)	1.2						
		Very Stiff Brown Sandy Clay with trace silt and gravel (Finer than No. 200 = 54%)	3.0	S-01	4 4 3	7	14.6		5000*
905.0		Loose Brown Clayey Sand with trace gravel and silt (Finer than No. 200 = 22%)	5	S-02	2 2 3	5			
		Stiff to Very Stiff Brown Sandy Clay with trace silt and gravel (No Recovery at 7-1/2 feet)	6.0	S-03	3 3 3	6			
900.0			10	S-04	4 10 12	22	9.4		4000*
		Compact Brown Silty Sand with trace gravel and clay	12.0						
895.0			15	S-05	10 20 13	33			
		Compact Brown Silty Sand	18.0						
890.0			20	S-06	11 20 20	40			
		End of Boring @ 20 ft	20						
885.0			25						

DRAFT

SOIL / PAVEMENT BORING: 163137.GPJ 20140820: G2 CONSULTING DATA TEMPLATE.GDT 6/22/16

Total Depth: 20 ft
 Drilling Date: June 9, 2016
 Inspector:
 Contractor: Strata Drilling, Inc.
 Driller: D. Watkins

Water Level Observation:
 12 feet during and upon completion of drilling

Notes:
 Borehole collapsed at 12 ft after auger removal
 * Calibrated Hand Penetrometer

Drilling Method:
 2-1/4 inch inside diameter hollow-stem auger

Excavation Backfilling Procedure:
 Borehole backfilled with auger cuttings

Figure No. 10

Project Name: Proposed Lake Access Parcels
 Project Location: NW Corner of Main Street and Barker Road
 Northfield Township, Michigan
 G2 Project No. 163137
 Latitude: N/A Longitude: N/A



Soil Boring No. B-11
G2 CONSULTING GROUP

SUBSURFACE PROFILE

SOIL SAMPLE DATA

ELEV. (ft)	PRO-FILE	GROUND SURFACE ELEVATION: 909.0 ft ±	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Brown Sand (2 inches)	0.2						
		Fill: Medium Compact Brown Sand with some gravel and brick and trace roots	3.0	S-01	5 9 12	21			
904.0		Very Stiff Brown Silty Clay with some sand, trace gravel and roots	5	S-02	3 5 6	11	12.3		5000*
			8.0	S-03	4 6 7	13	11.7		5000*
899.0		Loose Brown Clayey Sand with trace silt and gravel (Finer than No. 200 = 42%)	10	S-04	4 4 6	10			
			15	S-05	6 13 16	29			
894.0		Medium Compact Brown Sand with trace silt and gravel	20	S-06	4 9 13	22			
889.0		End of Boring @ 20 ft	20						
884.0			25						

DRAFT

SOIL / PAVEMENT BORING 163137.GPJ 20140820.G2 CONSULTING DATA TEMPLATE.GDT 6/22/16

Total Depth: 20 ft
 Drilling Date: June 10, 2016
 Inspector:
 Contractor: Strata Drilling, Inc.
 Driller: B. Sienkiewicz

Water Level Observation:
 15 feet during and upon completion of drilling

Notes:
 Borehole collapsed at 15 ft after auger removal
 * Calibrated Hand Penetrometer

Drilling Method:
 2-1/4 inch inside diameter hollow-stem auger

Excavation Backfilling Procedure:
 Borehole backfilled with auger cuttings

Figure No. 11

Project Name: Proposed Lake Access Parcels
 Project Location: NW Corner of Main Street and Barker Road
 Northfield Township, Michigan
 G2 Project No. 163137
 Latitude: N/A Longitude: N/A



Soil Boring No. B-12
G2 CONSULTING GROUP

SUBSURFACE PROFILE

SOIL SAMPLE DATA

ELEV. (ft)	PRO-FILE	GROUND SURFACE ELEVATION: 910.0 ft ±	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Brown Sandy Clay (14 inches)	1.2						
		Very Stiff Brown Sandy Clay with trace silt and gravel		S-01	3 4 3	7	11.6		5160
905.0			5	S-02	5 5 7	12	9.9		5000*
		Medium Compact Brown Silty Sand with trace clay and gravel		S-03	7 6 7	13			
			5.5	8.0					
900.0		Hard Brown Sandy Clay with trace silt and gravel		S-04	6 7 9	16	9.4		9000*
			10						
		Hard Dark Gray Sandy Clay with trace silt and gravel		S-05	14 15 15	30	8.8		9000*
895.0			12.0	15					
		Medium Compact Brown Sand with trace silt and gravel		S-06	5 4 7	11			
890.0			16.0	20					
		End of Boring @ 20 ft							
885.0			25						

SOIL / PAVEMENT BORING: 163137.GPJ 20140820 G2 CONSULTING DATA TEMPLATE.GDT 6/22/16

Total Depth: 20 ft
 Drilling Date: June 9, 2016
 Inspector:
 Contractor: Strata Drilling, Inc.
 Driller: B. Sienkiewicz

Water Level Observation:
 16 feet during drilling operations; 15-1/2 feet upon completion

Notes:
 * Calibrated Hand Penetrometer

Drilling Method:
 2-1/4 inch inside diameter hollow-stem auger

Excavation Backfilling Procedure:
 Borehole backfilled with auger cuttings

Figure No. 12

Project Name: Proposed Lake Access Parcels
 Project Location: NW Corner of Main Street and Barker Road
 Northfield Township, Michigan
 G2 Project No. 163137
 Latitude: N/A Longitude: N/A



Soil Boring No. B-13
G2 CONSULTING GROUP

SUBSURFACE PROFILE

SOIL SAMPLE DATA

ELEV. (ft)	PRO-FILE	GROUND SURFACE ELEVATION: 909.0 ft ±	DEPTH (ft)	SAMPLE TYPE-NO.	BLOWS/6-INCHES	STD. PEN. RESISTANCE (N)	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	UNCONF. COMP. STR. (PSF)
		Topsoil: Brown Silty Sand (12 inches)	1.0						
		Fill: Brown Silty Sand with trace brick and roots	3.0	S-01	10 50/5"	---			
904.0		Loose to Medium Compact Brown Clayey Sand with trace silt and gravel	5	S-02	3 2 5	7			
				S-03	5 6 6	12			
899.0			9.0	S-04	8 9 10	19	9.6		7000*
		Very Stiff Brown Sandy Clay with trace silt and gravel	13.0						
894.0		Hard Dark Brown Silty Clay with trace gravel, sand, and cobble	15	S-05	8 9 12	21	8.6		9000*
		Hard Dark Brown Silty Clay with trace sand and gravel and occasional sand seams	16.0						
889.0			20.0	S-06	5 6 8	14	10.2		9000*
		End of Boring @ 20 ft	20						
884.0			25						

SOIL / PAVEMENT BORING 163137.GPJ 20140820 G2 CONSULTING DATA TEMPLATE.GDT 6/22/16

Total Depth: 20 ft
 Drilling Date: June 9, 2016
 Inspector:
 Contractor: Strata Drilling, Inc.
 Driller: D. Watkins
 Drilling Method:
 2-1/4 inch inside diameter hollow-stem auger

Water Level Observation:
 9 feet during drilling operations; 11-1/2 feet upon completion
 Notes:
 Borehole collapsed at 15-1/2 ft after auger removal
 * Calibrated Hand Penetrometer
 Excavation Backfilling Procedure:
 Borehole backfilled with auger cuttings

Figure No. 13

Northfield Township Fire Department

Apparatus Replacement Plan

The Northfield Township Fire Department recently made its last payment of a loan used to purchase 3 pieces of fire apparatus. While I am opposed to taking out loans for apparatus I am not judging the decisions made by previous Fire Chiefs or Boards.

Because of the state of the budget and economy over the recent years it has been difficult put ourselves in a position to plan for future purchases because the recent goals have been to try to provide the service of fire suppression, medical response and rescue.

The Fire Department is in desperate need of a plan to start replacing is large cost pieces of apparatus. The plan I submit will be a complete change of the current number and type of apparatus and equipment.

Starting with the most expensive apparatus, we currently have 2 tankers and 2 engines. I would propose to replace these 4 pieces of apparatus with 2- Engine/ Tanker combos (1 for each station). Currently our tankers are generally used only for the purpose of carrying water to the fire from the station or a water source. There is minimal equipment on those trucks for the actual fire scene operations such as saws, ladders and scba's. Our current tankers only carry 1800 gallons of water. The minimum generally accepted amount is 2500 gallons. We cannot even participate in a MABAS tanker task force because both tankers don't carry the minimum amount of water and 1 of the tankers only has a pump capacity of 500 gpm. Our current Engines carry 1,000 gallons of water in the water tank and the appropriate equipment to meet NFPA 1901 which sets the standard for fire apparatus. When combining these two types of apparatus like all area fire departments have done the trucks appear much larger. I would propose an Engine/Tanker combo that meets NFPA 1901 and carries 2,500 gallons of water. The spread sheet attached to this document shows the ages of the current apparatus. I would propose for the budget year 2016/2017 the selling of E8-1 and T8-1 and replacing those with the above mentioned Engine/Tanker combo. I will discuss the plan for purchasing this below.

The next most needed replacement will be of the Rescue trucks. We currently have two nearly identical rescue trucks at each station. These were two of the three trucks that have just been paid off. I would propose replacing the R8-2 with a Utility pickup truck that will have brush fire fighting capability in the spring season. We believe we can trade this rescue truck in and purchase a new ¾ ton pick-up and purchase a slid-in water tank and pump for brush fires for a neutral cost. This truck would be stationed at station #2 where we took a brush truck out of service several years ago and never replaced. I would propose trading R8-1 in for a new rescue truck that would be a Suburban type of vehicle that could withstand the high use better than our current rescues. I also believe that we can make this change cost neutral and have newer pieces of apparatus. This will require some operational changes but I believe will save money in maintenance costs. We have put approximately \$15,000 in the last couple years of in engine repairs to these 2 vehicles.

Ladders 8-1 was purchased just prior to my arrival in Northfield Township. The voters approved a millage around 15 years ago for the purchase of a ladder. The ladder purchase was around \$1,000,000. The truck purchased was a 100' Pierce aerial platform truck. The previous Chief and Board at the time of 2006 sold that truck to a City in the Upper Peninsula and purchased the current 75' straight ladder. This current ladder has very minimal hours and miles on it is still in very good shape. I don't anticipate having to replace this for the next 15 years.

We currently have 2 utility vehicles. The 2000 Crown Vic (Utility 8-1) is out of service and in my opinion not worth putting money into repairs. The Crown Vic was basically donated to the fire department by the Police Department for \$1. Utility 8-2 is a 1997 Dodge Ram 2500. This truck was donated to us from the Wastewater treatment plant for \$1. Utility 8-2 is extremely rusty and the transmission was in very poor shape when we acquired it. It is not worth replacing the transmission or putting needed money into the engine. I would propose purchasing a new 4-door utility pick-up truck to replace the current utilities that we have. I would also recommend putting a snow plow on that truck to take care of the plowing of Station #2 and to be used during extreme snow storms to access homes that had not been plowed as was needed several times over the last 2 years.

This plan would take the numbers of vehicles in the fire department fleet 2 years ago that was 12 to a total of 7 vehicles. This will save on fuel, maintenance costs and un-needed miles on the larger pieces of equipment and insurance.

The plan to start to replace some of the equipment is as follows:

R8-2- Sell and replace with new ¾ ton pickup and with available remaining funds purchase a slide in water tank and pump. This truck will then be used for medicals from station #2, brush fires and general use. This can be done at any time as it does not require budgeted money.

R-8-1- Sell the current Rescue truck and replace it with a Suburban style rescue vehicle. This will be able to do nearly all the same things the current rescue only at a savings in fuel and maintenance costs and would be a newer vehicle.

E8-1 and Tanker 8-1- Replace these two vehicles with an Engine/ Tanker combo. The cost of this truck would be between \$450,000- \$500,000. I would propose that this truck be purchased using current Fire Department fund balance with a contribution from the general fund balance and the money received by the sale of E8-1 and T8-1.

U8-1 and U8-2- I would propose replacing these two utilities with 1 utility truck that would be a four door ¾ ton vehicle with a snow plow. This money would come from the fire department fund balance.

I would then move E8-2 and T8-2 out to station #2 until they can be replaced using a newly developed capital improvement fund. I would expect that within 8 years we would have the money built up in that fund to replace the two of these vehicles with a previously mentioned Engine/Tanker combo.

The Ladder would probably need to be addressed in about 15 years.

Establishment of a Fire Department Apparatus Capital Improvement Fund. After several discussions with the Township Manager we have come up with a plan to start replacing much needed fire department apparatus. We discussed always maintaining a 33% fund balance which would leave 4 months of the current budget to run the fire department in case of a millage failure. At the start of the 2015/2016 budget year the fund balance was \$413,000. The appropriations budget for the same period is \$670,000.

Using 33% for a fund balance we would be required to keep \$225,000 in the fund balance. This would allow us to move \$188,000 into a capital improvement fund. With the sale of E8-1 and T8-1 we would receive in the area of \$75,000. This would give us \$263,000 available for use of purchasing apparatus.

My first requests for purchase that would affect the budget would be for the replacement of the utilities. O would request this for the current budget year (15/16). I am estimating that this purchase would be in the neighborhood of \$35,000-\$40,000.

My second request would occur in the budget year (16/17). This would be for the proposed sale of and Engine and Tanker and the purchase of an Engine/ Tanker combo. This purchase would be in the area of \$450,000-\$500,000. This would require a contribution from the general fund of around \$250,000-\$300,000.



OFFICE OF COUNTY TREASURER

200 N. MAIN STREET, SUITE 200 PO BOX 8645
ANN ARBOR, MI 48107-8645 PHONE: (734) 222-6600 FAX: (734) 222-6632
taxes@ewashtenaw.org

CATHERINE McCLARY, CPFO, CPFIM
TREASURER

June 2016

Dear City, Township, or Village Clerk:

This letter serves as your notice of the parcels that I foreclosed upon in Circuit Court in my capacity as the Foreclosing Governmental Unit under the authority of the General Property Tax Act. These foreclosures were made for delinquent real property taxes.

A public auction of these properties is scheduled. Minimum bids have been established and include all delinquent taxes, fees, penalties, and interest plus any costs related to holding the auction. Attached is a list of parcels that have been foreclosed on and may be acquired by your municipality for public use before the public auction for the indicated minimum bid.

The General Property Tax Act establishes a procedure for the State and for local municipalities to purchase foreclosed property prior to public auction. **The purchase must be for a governmental use and to carry out a public purpose exempt from taxation.** The law establishes the following order of preference:

- a) The State of Michigan has first right of refusal and *must pay the higher of the minimum bid or the market value of the property.* The State has until the first day Tuesday in July to exercise its right.
- b) The City, Village, or Township (in that order) in which the property is located can purchase the property if the State declines and *must pay the minimum bid, prior to the auction beginning on the third Tuesday in July.*
- c) The County may purchase the property if the City, Village, or Township declines and *must pay the minimum bid.*

If the City, Village, Township, or County purchases a property under this process and later sells the property for more than the purchase price, plus the cost of any improvements, the excess proceeds are due back to the Treasurer to replenish the tax foreclosure fund.

Please let me know as soon as possible if you have any questions about the process for acquiring this parcel or any general questions about foreclosures or charge-backs.

Sincerely,

A handwritten signature in black ink that reads "Catherine McClary".

Catherine McClary

cc: City, Township, or Village Treasurer



<http://www.auction.com/washtenaw>

List of Tax Foreclosed Properties

Auction 2016

Washtenaw County, Michigan

Please Note: The Treasurer has the right to withdraw any property on this list prior to the auction. Please contact the office for up to date information.

All bidding is done online. Please read the terms and conditions before bidding.

All attempts were made for accuracy and proof-reading. Please report any errors you may find to taxes@ewashtenaw.org

Catherine McClary, CPFO, CPFIM
Washtenaw County Treasurer

Phone: 734-222-6600

Fax: 734-222-6632

Email: taxes@ewashtenaw.org

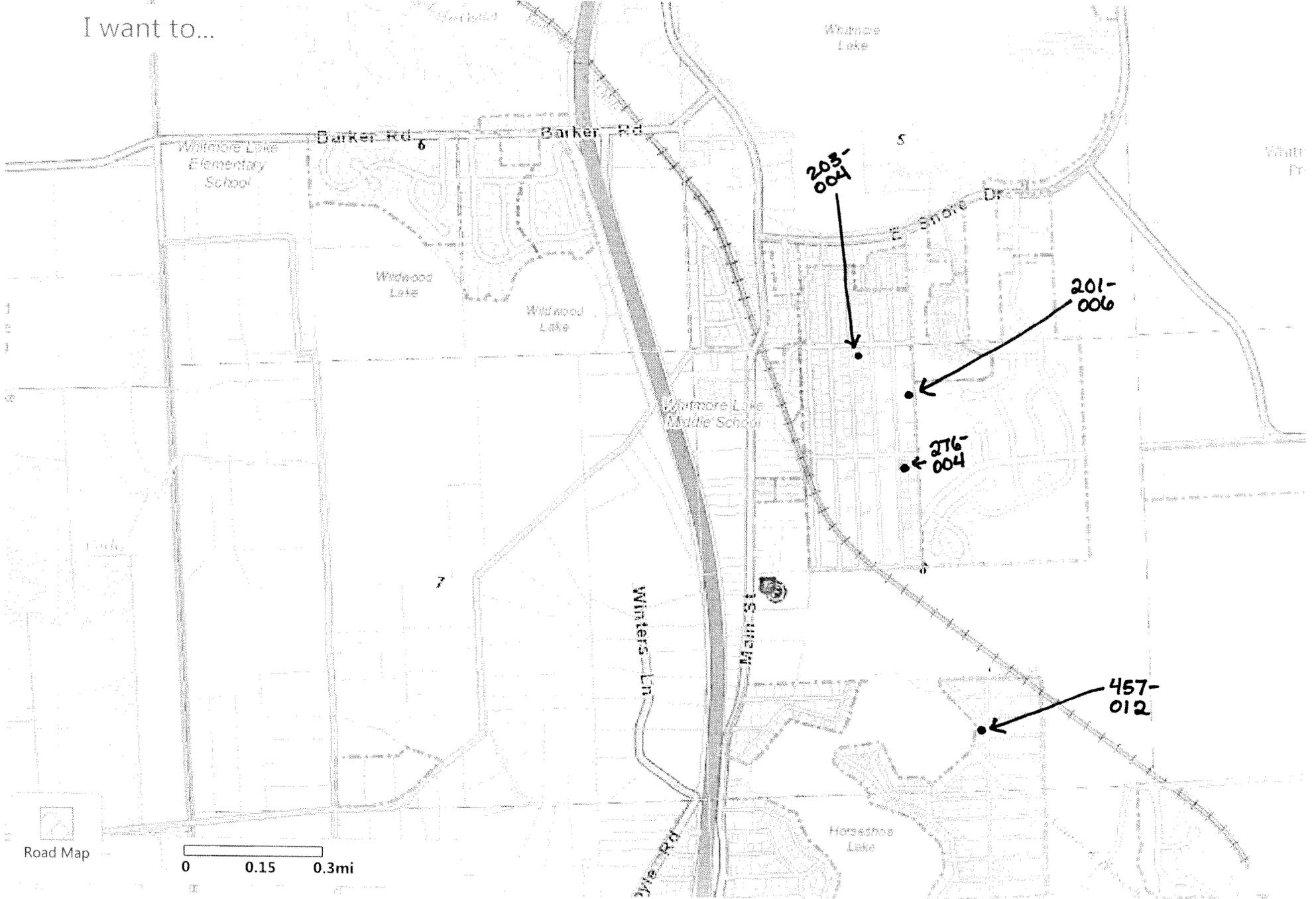
Auction Item Number	Parcel Identification Number	Address and Municipality	Auction Date	2016 Assessed Value x 2**	Minimum Bid***	Legal Description
	B -02-08-368-009	Main St Whitmore Lake, MI 48189 Township of Northfield	7/22/2016	\$40,600	\$2,626	*OLD SID - B 02-008-045-00 NO 8-13B-1 COM AT SW COR OF SEC, TH N 87 DEG 15' E 201.4 FT ALNG SLN OF SEC, TH N 4 DEG 42'30" E 201.71 FT TO POB, TH N 4 DEG 42'30" E 277.76 FT, TH S 69 DEG 11' E 300 FT MORE OR LESS TO LAKE SHORE, TH SLY ALNG LAKE SHORE TO A POINT N 87 DEG 15' E FRM POB, TH S 87 DEG 15' W 258 FT MORE OR LESS TO POB, SEC 8, T1S-R6E; CONT 1.43 ACRES
	Northfield Parks	Walnut Dr Et Al. Forest Dr Butternut Dr Raphael Ave Whitmore Lake, MI 48189	7/22/2016	\$2,800	\$3,579	*OLD SID - B 02-115-457-00 NO 45-565 LOT 1055 WHITMORE LAKE SUMMER HOMES SUBD'N. *OLD SID - B 02-115-299-00 NO 45-351 LOT 577 & 578 WHITMORE LAKE SUMMER HOMES SUBD'N. *OLD SID - B 02-115-423-00 NO 45-520 LOTS 949-952 INCL. WHITMORE LAKE SUMMER HOMES SUBD'N. *OLD SID - B 02-090-296-00 NO 40-624 LOT 624 LINCOLN REALTY CO., HORSESHOE LAKE SUBDIVISION.
	B -02-17-226-003	Shady Beach Dr Whitmore Lake, MI 48189 Township of Northfield	8/12/2016	\$9,800	\$1,446	*OLD SID - B 02-060-034-00 NO 38-39 LOT 39 HORSESHOE LAKE DEVELOPMENT CO'S SHADY BEACH SUBDIVISION.
	B -02-17-229-007 & -010	Elm St & Grove Dr Whitmore Lake, MI 48189 Township of Northfield	8/12/2016	\$2,600	\$1,572	OLD SID B-02-060-149-00 NO 38-218 LOT 218 HORSESHOE LAKE DEVELOPMENT CO'S SHADY BEACH SUBDIVISION. OLD SID B-02-060-153-00 NO 38-225 LOT 225 HORSESHOE LAKE DEVELOPMENT CO'S SHADY BEACH SUBDIVISION.
	B -02-17-232-001	Delaware Rd Whitmore Lake, MI 48189 Township of Northfield	7/22/2016	\$9,400	\$1,260	*OLD SID - B 02-060-265-00 NO 38-391 LOT 391 HORSESHOE LAKE DEVELOPMENT CO'S SHADY BEACH SUBDIVISION.
	B -02-17-261-013	Glenmoor Dr Whitmore Lake, MI 48189 Township of Northfield	8/12/2016	\$2,800	\$1,047	*OLD SID - B 02-060-340-00 NO 38-527 ALL THAT PART OF LOTS 527 & 583 WHICH LIES ELY OF A LINE 50 FT ELY OF, MEASURED AT RIGHT ANGLES, AND PARALLEL TO THE SURVEY CENTER LINE FOR THE E SERVICE ROAD OF HWY. U.S. 23 HORSESHOE LAKE DEVELOPMENT CO'S SHADY BEACH SUBDIVISION.
	B -02-18-185-003	Coyle Rd Whitmore Lake, MI 48189 Township of Northfield	7/22/2016	\$3,600	\$1,105	*OLD SID - B 02-060-346-00 NO 38-555 LOT 555 HORSESHOE LAKE DEVELOPMENT CO'S SHADY BEACH SUBDIVISION; LOT DIMEN: 35.00 X 130.00
	B -02-21-400-019	1960 E North Territorial Rd Whitmore Lake, MI 48189 Township of Northfield	8/12/2016	\$34,600	\$4,990	NO 21-13 REWRITE 2/8/91 COM AT SE COR SEC 21, TH N 02-16-04 E 831.81 FT TO POB, TH N 83-11-14 W 314.00 FT, TH N 02-16-04 E 215.00 FT, TH S 83-11-14 E 217.12 FT, TH 98.02 FT ALNG ARC OF CURV RT-RAD, 572.40 FT, CH S 78-16-53 E 97.90 FT, THS 02-16-04 W 206.60 FT TO POB. PT OF SE 1/4, SEC 21, T1S-R6E; CONT 1.54 ACRES

** Per Michigan Constitution, assessed value shall not exceed 50% of true cash value (Article 9, Section 3).

*** Includes all delinquent taxes, interest, penalties, fees, costs, and expenses.



I want to...





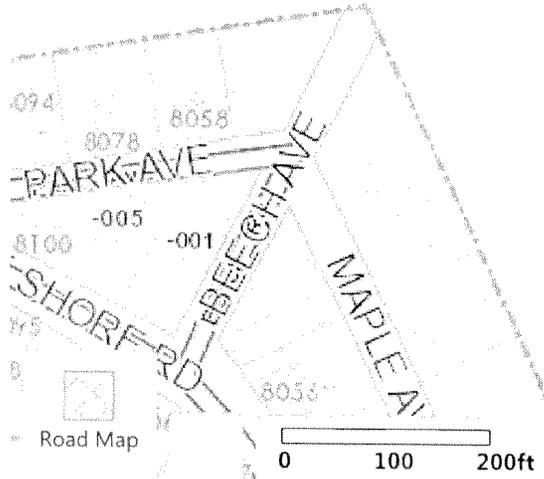
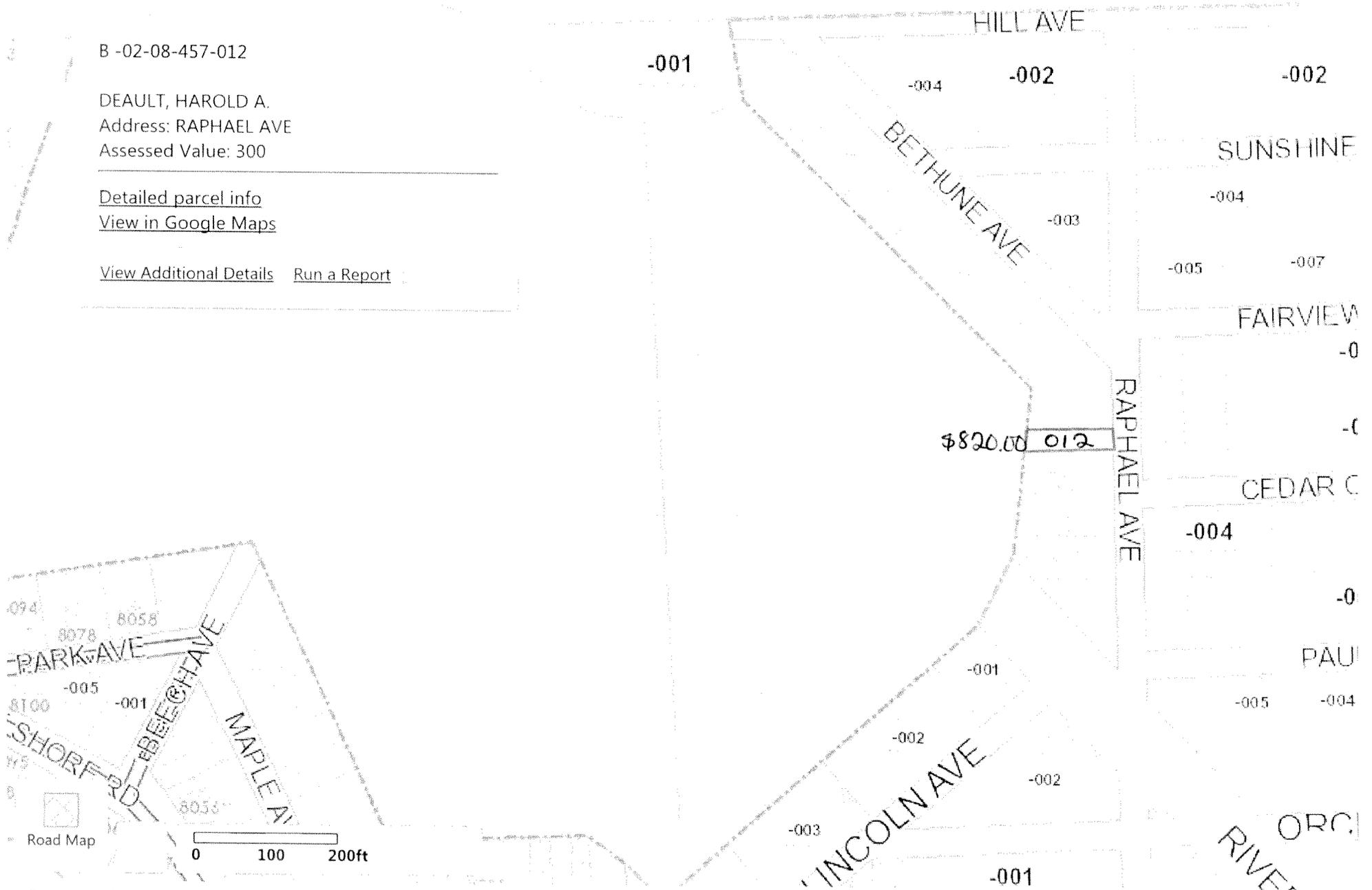
I want to...

B -02-08-457-012

DEAULT, HAROLD A.
Address: RAPHAEL AVE
Assessed Value: 300

[Detailed parcel info](#)
[View in Google Maps](#)

[View Additional Details](#) [Run a Report](#)





Washtenaw County MapWashtenaw

b-02-08-276-004

I want to...

8878

-046

-009

B -02-08-276-004

HECKMAN ROBERT M & SHAWN M

Address: BUTTERNUT DR

Assessed Value: 600

[Detailed parcel info](#)

[View in Google Maps](#)

R HOME SUBDIVISION

[View Additional Details](#) [Run a Report](#)

-047

COMMON AREA

-027

BIRCH DR

-001

276-004

\$ 848.00

-037

LINCOLN DR

GARFIELD DR

FOREST DR

GROVE DR

BUTTERNUT DR

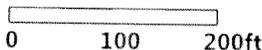
WALNUT DR

-001

-033



Road Map



Loading Layers map data...