AGENDA CITY COUNCIL STUDY SESSION NOVEMBER 8, 2021 – 6:00PM CITY OF FARMINGTON HILLS CITY HALL – COMMUNITY ROOM 31555 W ELEVEN MILE ROAD FARMINGTON HILLS, MICHIGAN Telephone: 248-871-2410 Website: www.fhgov.com

- 1. Call Study Session to Order
- 2. Roll Call
- 3. ARPA Funding/Expenditures
- 4. Neighborhood Safety3 Program
- 5. Adjourn Study Session

Respectfully submitted,

Pamela B. Smith, City Clerk

Reviewed by:

Gary Mekjian, City Manager

NOTE: Anyone planning to attend the meeting who has need of special assistance under the Americans with Disabilities Act (ADA) is asked to contact the City Clerk's Office at 248-871-2410 at least two (2) business days prior to the meeting, wherein necessary arrangements/accommodations will be made. Thank you.



AMERICAN RESCUE PLAN ACT (ARPA)

THOMAS C. SKROBOLA, FINANCE DIRECTOR/TREASURER

NOVEMBER 8, 2021 CITY COUNCIL STUDY SESSION

ARPA:

Passage

into

Law

The U.S. Congress passed the **American Rescue Plan Act of 2021** (ARPA), which was signed into law in March 2021. This legislation was intended to provide needed relief to state, local, and Tribal governments to enable them to continue to support the public health response and lay the foundation for a strong and equitable economic recovery.

ARPA:

Interim

Final

Rule

In May 2021, the U.S. Treasury adopted the so-called "Interim Final Rule", which governs the eligibility for the reception of ARPA funds, and the amount of funds allocated to specific state and local governments, including the City of Farmington Hills.

ARPA:

Award

of Grant

to City

The U.S. Treasury has awarded the City of Farmington Hills Total: \$8.91M distributed in two equal segments:

- \$4,455,879 in June 2021
- \$4,455,879 in June 2022

ARPA: City Reports and Spending

The City is required to provide on-line quarterly updates to the U.S. Treasury regarding the use of ARPA funds and must expend eligible dollars by the end of 2024.

City Plan: the ARPA

Utilization

Strategy

- Administration is recommending utilizing the ARPA funding as we did CARES Act funds: to fund already-budgeted Public Safety payroll costs, in accordance with Federal law and regulations.
- WHY? To provide maximum flexibility for the City to address current capital liabilities.

City Plan:

Capital Needs

The flexibility of this approach will allow the City to:

- Fund previously identified projects in the City's CIP
- Pay for annual debt service on existing capital improvements

City Plan:

Capital Needs

Infrastructure and environmental projects, especially large culvert replacements that coincide with local road projects

- Oakland County WRC County Drain Projects
- Technology
- Facilities
- Capital Equipment

City Plan: Leverage potential opportunity

Pending legislation may provide the opportunity to leverage ARPA dollars for enhanced community goals, including economic development.



Safety Awareness For Everyone Through Education, Enforcement, and Engineering

What is the Traffic SAFE-TE3 Program?

 Traffic SAFE-TE3 is an acronym for "Safety Awareness For Everyone Through Education, Enforcement, and Engineering." The Farmington Hills Traffic SAFE-TE3 Program was created to address neighborhood traffic safety concerns. This program allows City staff and the community to work together to create safe conditions in our residential areas for motorists, bicyclists, and pedestrians.

History and Development of the Traffic SAFE-TE3 Program

 The City needed a way to address the estimated 150+ annual requests for assistance from residents with speeding and traffic issues that wasn't entirely based on Police enforcement

History and Development of the Traffic SAFE-TE3 Program

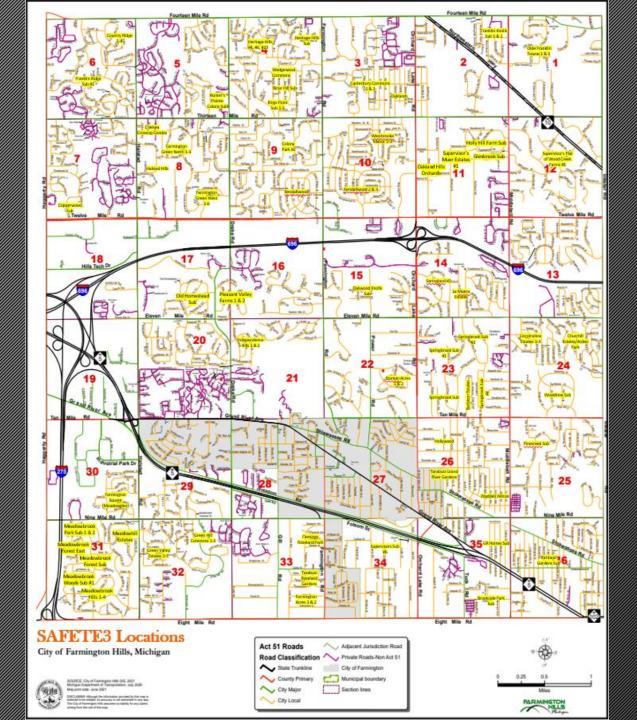
- The City initiated the Traffic SAFE-TE3
 Program after viewing a presentation made by
 the community of Belleview, Washington.
 Additional information was reviewed from
 other communities as well as the Institute of
 Transportation Engineers and as a result the
 City of Farmington Hills developed the Traffic
 SAFE-TE3 Program.
- This Program is a partnership between the residents, police department, court and local government all in agreement and working together with the same goals and expectations

SAFETE3 LOCATIONS

- Barbizon Estates
- Briar Hill Sub
- Canterbury Commons 1 & 2 & Oaklands
- Chelsea Crossing Condos
- Churchill Estates/Arden Park
- Colony Park #2
- Farmington Square (Meadowglen)
- Flemings Roseland Park
- Franklin Knolls Sub
- Franklin Knolls Sub #1 & #2
- Franklin Ridge Sub #1
- Glenbrook Sub
- Halsted Hills
- Heritage Hills #4, #6, #10
- Heritage Hills Sub
- Holly Hill Farm Sub
- Hollywood
- Hunter's Pointe Colony Sub
- Kendallwood
- Kendallwood #3 & #2
- Kings Point Sub 1-3

- La Muera Estates
- Meadowbrook Forest East
- Meadowbrook Forest Sub
- Meadowbrook Hills
- Meadowbrook Hills 1 & 2
- Meadowbrook Woods Sub #1
- Oakland Hills Orchards
- Oakwood Knolls Sub
- Old Homestead Sub
- Olde Franklin Towne #3
- Pinecreek Sub
- Richland Gardens Sub
- Springbrook Sub #1-#4
- Springland #1
- Staman Acres #1, #2
- Supervisor's Muer Estates #1
- Supervisor's Plat of Wood Creek
 Farms #1
- Tarabusi Grand River Gardens

- Wedgewood Commons Sub
- Meadowhill estates
- Greenhill Commons 1-3
- Woodbine Sub
- Waddell Wilcox
- GR Homes Sub
- Brookside park sub
- Supervisors Sub #6
- Independence Hills 1 & 2
- Pleasant Valley Farms 1 & 2
- Westbrooke Manor 1-3
- Farmington Green West 1-6
- Green Valley Estates 1-5
- Farmington Green North 1-3
- Copperwood Sub
- Country Ridge 1-8
- Tarabusi Roseland Gardens
- Farmington Acres 1 & 2
- Lincolnshire Estates 1-3
- Meadowbrook Park Sub 1 & 2
- Olde Franklin Towne



What types of issues can the program address?

- Speeding
- Pedestrian safety
- Cut-through traffic
- Sight distance
- Collisions

How does the program work?

 The program is divided into three phases that <u>must</u> occur in order.

PHASE I INFORMATIONAL MEETING

 Provides for a complete explanation of the Traffic SAFE-TE3 Program

PHASE I PROBLEM IDENTIFICATION

- Identify safety issues that need to be addressed
- Provide specific locations and times to collect data
- Establish a Core group of residents that will work directly with City Employees to collect required traffic data



Safety Awareness For Everyone Through Education, Enforcement, and Engineering

MINUTES SAFE-TE³MEETING FOR Meadowbrook Hills, Section 31 May 31, 2017 Engineering Conference Room 31555 W. 11 Mile road Farmington Hills, MI 48336

<u>Attendance:</u>

Representatives of the Meadowbrook Hills Subdivisions and City Staff. Please see the attached attendance sheet.

<u>SAFE-TE³ Program:</u>

The City's SAFE-TE³ Program was discussed in detail covering all phases of the program from base data collection to the possibility of installing physical devices such as speed humps within the roadway. A detailed program outline is attached.

Items of Discussion:

The following items were discussed in detail:

<u>Speeding Issues</u>. Three primary locations of concern with respect to speeding were identified on Lujon Drive. The neighborhood group indicated they would like to schedule two studies at each location, one in the morning and one late afternoon.

- <u>Zone 1</u>- Lujon Drive from 8 Mile Road to Rhonswood. Currently studies at this location are scheduled from 4 p.m. to 6 p.m. on Wednesday, June 14 and from 7 a.m. to 9 a.m. on Friday, June 16.
- <u>Zone2</u>- Lujon Drive, South of Klarr Drive. Currently studies are scheduled for 7 a.m. to 9 a.m. and from 4 p.m. to 6 p.m. on Thursday June 15.
- <u>Zone 3</u>-Lujon Drive from Rutgers Drive to Klarr Drive. Currently studies are scheduled for 7:30 a.m. to 9:30 a.m. on Wednesday, June 14 and from 3:30 p.m. to 5:30 p.m. on Friday, June 16.

Safety-TE³ Meeting Minutes May 31, 2017 Page 2

Time and location of data collection can be modified at the request of the Neighborhood Association. Studies are scheduled for duration of two hours or 100 vehicles in order to get an adequate sample of speeds. As discussed, a requirement of the program is that one member of the association or subdivision is present during the data collection with a staff member from the City. A minimum of two surveys are completed at each location identified in order to get a reasonable representation of the speeds in the neighborhood. In the event it is raining or the pavement is wet the survey will be rescheduled.

<u>Cut – Thru Study</u> - Attendees requested that a cut-thru study be completed to identify if motorists are using the Meadowbrook Hills neighborhood streets to bypass the major road intersections. Of particular concern was the back-up for westbound 8 Mile Road traffic heading toward I-275. A cut-thru study would identify the number of vehicles using the neighborhood streets at the peak morning and afternoon hours, as well as their traffic patterns. This will allow all parties to evaluate the significance of this issue. Completing this study requires 2 volunteers collecting data at each entrance/exit to the Meadowbrook Hills Subdivisions for a total of 14 participants. Two members of the City Staff will assist with the study. That leaves a minimum of 12 positions to be filled by neighborhood volunteers. Typically cut-thru studies are completed from 7 a.m. to 9 a.m. as well as 4:00 p.m. to 6:00 p.m. However, these times can be modified based on input from your neighborhood residents. This study has not been scheduled at this time.

<u>Results:</u>

Once the data collection is complete, arrangements will be made to provide the results and consider how to move forward in dealing with any identified issues. If you have any questions or concerns, please do not hesitate to contact me at 248-871-2554.

Mark S. Saksewski, P.E. Traffic Engineer

SAFE TE³ PROGRAM OUTLINE

The program is divided into three phases that must occur in order.

PHASE I PROBLEM IDENTIFICATION/ INFORMATIONAL MEETING

Phase I begins with an informational meeting. From that informational meeting, a subgroup of residents or Core Group is formed to work with the City to gather information. Speed studies will be performed at locations identified by the resident group. In addition, traffic counts may be taken and other operational areas may be studied. All of the data gathering will be done in partnership; City employees and resident volunteers working together. This information, jointly collected, will establish base data from which Phase II and Phase III of the program will stem.

PHASE II EDUCATION AND ENFORCEMENT

Phase II is the development of an educational and enforcement plan. Based on the specific findings of the field review, an education and enforcement plan will be agreed upon.

EDUCATION

Two educational programs are available. Which programs and to what extent they will be used, will be determined by the City Staff and the Core Group. They are:

1. THE NEIGHBORHOOD TRAFFIC SAFETY CAMPAIGN

This involves the distribution of a brochure or letter describing techniques that pedestrians and parents can use to help address speeding issues and to become better aware of their driving habits.

2. USE OF THE <u>SMART</u> TRAILER (Speed Monitoring Awareness Radar Trailer)

This program consists of a portable, unmanned trailer equipped with radar speed detection equipment. The unit obtains speeds of oncoming vehicles and displays them on a digital display board visible to the passing motorist. The intent is to show motorists their actual travel speed. This program can be combined with Police Department enforcement activity.

ENFORCEMENT

The enforcement plan includes strict selective enforcement of specific traffic controls and vehicle movements by our Police Department. Following current practice, the Core Group would identify specific time periods and locations that the Police would target for specific ordinance enforcement. (i.e. speeding, disobeying stop signs, improper parking, etc.) Once these measures are taken, the effectiveness is monitored and a re-evaluation of the location is completed. If the measures prove to be effective and the speeding problem is reduced, the Core Group will notify the neighborhood of their success and encourage the continuation of safe driving. If however, these measures prove ineffective and the 85th percentile speed (the speed at which 85% of the traffic is traveling at or below) is still found to be 35 MPH or greater the location then qualifies for consideration of Phase III of the program.

PHASE III ENGINEERING

Phase III involves the installation of an actual physical speed control device in the roadway. Because these devices are designed to make it less comfortable for the motorist to speed, it is extremely important that these devices only be installed after exhausting the steps chosen from the alternatives provided in Phase I and II. In addition, specific installation/location criteria must be followed. Each individual location must conform to specific criteria. Proper engineering analysis and judgement must be included prior to installation of any physical devices. These devices include, speed humps, traffic circles, slow points, and entrance/exit barriers.

Once the Core Group and City Staff have determined the best traffic control plan it is presented to residents at a community informational meeting. Input from the residents is incorporated into the plan. Neighborhood support is absolutely essential during the entire process, and even more so if traffic control devices are to be installed.

Before implementation, 75% support from residents on the segment of roadway being considered is required, through petitions. After petitions have been received and verified, the City Council will be notified of the recommended project. Funds can only be allocated based on acceptance by City Council after review of budget limitations. Following this approval step, the device(s) will be designed and constructed.

KM|SAFETE|MTG MINUTES ATTACHMENT

Phase I DATA COLLECTION

- Speed studies will be performed at locations identified by the residents. In addition, traffic counts may be taken and other operational analysis conducted.
- All of the data gathering will be done in partnership; City employees and resident volunteers working together. This information, jointly collected, will establish baseline data from which Phase II and Phase III of the program will stem.

City Of Farmington Hills Speed Survey Field Sheet

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Phase II - EDUCATION AND ENFORCEMENT

 Phase II is the development of an education and enforcement plan based on the specific findings of the field review. Past enforcement activities in the City have found that most violations of traffic ordinances within a residential area are the residents of that area. Therefore, much of the following activities will be directed towards neighbors and their visitors.

THE NEIGHBORHOOD TRAFFIC SAFETY CAMPAIGN

 This involves the distribution of a brochure or letter describing the findings of the data collection, providing techniques that pedestrians and parents can use to create a safer neighborhood and encourage motorists to become better aware of their driving habits.



June 21, 2017

The Kendallwood Neighborhood Association needs your help! As many of you know, we have a problem with speeding on our streets. In an attempt to resolve this traffic safety issue, we have joined forces with the City of Farmington Hills. We are participating in the TRAFFIC SAFE-TE³ PROGRAM (Traffic Safety Awareness for Everyone Through Education, Enforcement and Engineering.)

With the help of the City, we have been monitoring the speed of traffic on our streets. The legal speed limit is 25 miles per hour (MPH). One neighborhood resident was recorded traveling at 43 MPH! We need your help to make sure that everyone obeys the 25 MPH SPEED LIMIT!

In the coming weeks, important steps will be taken to help all drivers monitor their speed:

<u>USE OF RADAR SPEED LIMIT SIGNS</u>— An unmanned trailer with radar equipment or a speed limit sign that displays your speed will be placed in our neighborhood. This unit will flash your speed as you approach. Please use it as a monitoring tool to stay within the speed limit.

<u>ENFORCEMENT</u> - The Farmington Hills Police Department will be providing additional enforcement. All traffic laws, including speeding, will be enforced.

We need your support and cooperation to make our streets safe, especially for the children!

Drivers:

- Obey or drive below the speed limit.
- Reduce speed around corners, near parked vehicles, and near pedestrians.
- Yield to pedestrians.

Parents:

- Discourage playing in the road.
- Make sure kids know the "Rules of the Road."
- Reinforce "Stop, Look and Listen."

Neighbors:

- Support the program and talk about it with family members, friends or anyone else who drives in the Kendallwood Subdivision.
- Identify and report violators.
- Commit to making our neighborhood streets safe for everyone!

Join in the effort to make our neighborhood safer - DRIVE 25 MPH IN ALL SUBDIVISIONS!

Sincerely,

Kendallwood Neighborhood Association

USE OF THE SPEED MONITORING RADAR TRAILER OR RADAR SIGN

 This program consists of a portable, unmanned trailer or sign equipped with radar speed detection equipment. The unit obtains speeds of oncoming vehicles and displays them on a digital display board visible to the passing motorist. The intent is to show motorists their actual travel speed.



STRICT ENFORCEMENT

 The enforcement plan includes the selective enforcement of specific traffic controls and vehicle movements by our Police Department. Following current practice, the Core Group would identify specific time periods and locations from the collected data. Police will use this data as a guideline for strict traffic enforcement. (i.e. speeding, disobeying stop signs, improper parking, etc.)



City of Farmington Hills Police Department



Inter-Office Correspondence

 TO:
 Traffic Officers

 PROM:
 Sergeant Patrick Comini

 DATE:
 April 16, 2003

SUBJECT: SAFE TE3 - Churchill Estates Subdivision

The city has entered into a SAFE TE3 program with the above subdivision. As in the past, this program will be completed in three phases. During the program, Arden Park and Branchaster will be targeted for enforcement. SMART units were placed in the subdivision between April 10 and 16, 2003. Phases 2 and 3 will take place in the near future.

During this enforcement phase, each assigned Traffic Officer will be required to log a minimum of two hours per shift at the designated locations. No more than two officers will be on site at any given time. Arrangements should be made by each officer prior to stress duty to complete this requirement.

Speed violations should be written when the violator exceeds 32 mph. Violations will be marked TE3 in the upper right corner under "Local". Daily kogs will reflect how many TR3 violations were issued and warnings given in the "Remarks" section. Primary and secondary enforcement of safety bult violations is suggested.

Attached is the schedulo of assignments for this enforcement phase, a listing of spoed study locations and the BSth percentile locations.

Sgt. Patrick A. Comini Traffic Section

Attachment

Co: Assistant Chief M. Bledsoe Commander C. Summers Licatenent G. Bawald Mark Saksewski, Engineering Communications



City of Farmington Hills Police Department



Inter-Office Correspondence

TO:	Mark Saksowski	- 4 St
FROM:	Sgt. Patrick Comini	APR 2 4 2903
DATE:	April 22, 2003	ا منظوم
SUBJECT:	SAFR TE3 - Churchill Estates Subdivision	La de la tractica de la

Phase one of the above detail has been completed. A SMART unit was placed in the subdivision between April 10 and 16, 2003. Officers were detailed for selective embroament on April 17, 18, 21 and 22, 2003. A total of 27.5 hours were dedicated to the detail and resulted in the following violations being issued:

21 Speed violations 1 stop sign violation 2 seatbelt violations 1 licensing violation

Phase 2 is tentatively scheduled to begin in May.

Sgi. Patrick A. Comini Traffic Section

Cc: Assistant Chief'Hledane Cmdr. Summers Lt. Hawald

POST ENFORCEMENT

 After implementation of the education and enforcement measures, the effectiveness is monitored, re-measured, and reevaluated. If the measures prove to be effective and the speeding situation is reduced, the Core Group will notify the neighborhood of their success and encourage the continuation of safe driving and continued enforcement. If however, these measures prove ineffective, the location then qualifies for consideration of Phase III of the program.

Phase III Engineering

 Phase III involves the installation of actual physical speed control devices in the roadway. Because the devices are designed to make it less comfortable for the motorist to speed, <u>it</u> is extremely important that these devices only <u>be installed after exhausting the alternatives</u> provided in Phase I and II. Installation is determined by traffic engineering analysis and four main factors:

- Residential street must be functionally classified as a local roadway.
- 85th percentile speeds of 35 mph or greater (the speed at which 85% of the traffic is traveling at or below).
- Topography (i.e. hills, curves and intersections).
- Presence of existing traffic controls (i.e. traffic signals, stop signs).

Speed Hump Criteria

- AASHTO sight std.
- Topography
- Intersections and driveways
- 400' to 600' spacing

- 75% written support
- Sub Assoc. support
- Council approval

• City \$\$

85th
 percentile
 speed =>35
 mph

Physical Devices

 Once the Core Group and City staff has determined the best traffic control plan, it is presented to residents at a community informational meeting. Input from the residents is incorporated into the plan.
 Neighborhood support is essential during the entire process, but especially if traffic control devices are to be installed.

Physical Devices

 Before implementation, 75% support from residents on the segment of roadway being considered is required. After petitions have been received and verified, the City Council will be notified of the recommended project. Funds can only be allocated based on acceptance by City Council. Following this approval step, the device(s) will be designed and constructed.

Physical Devices



• Speed "Humps"

SAFE TE³ SPEED STUDY SUMMARY KENDALLWOOD

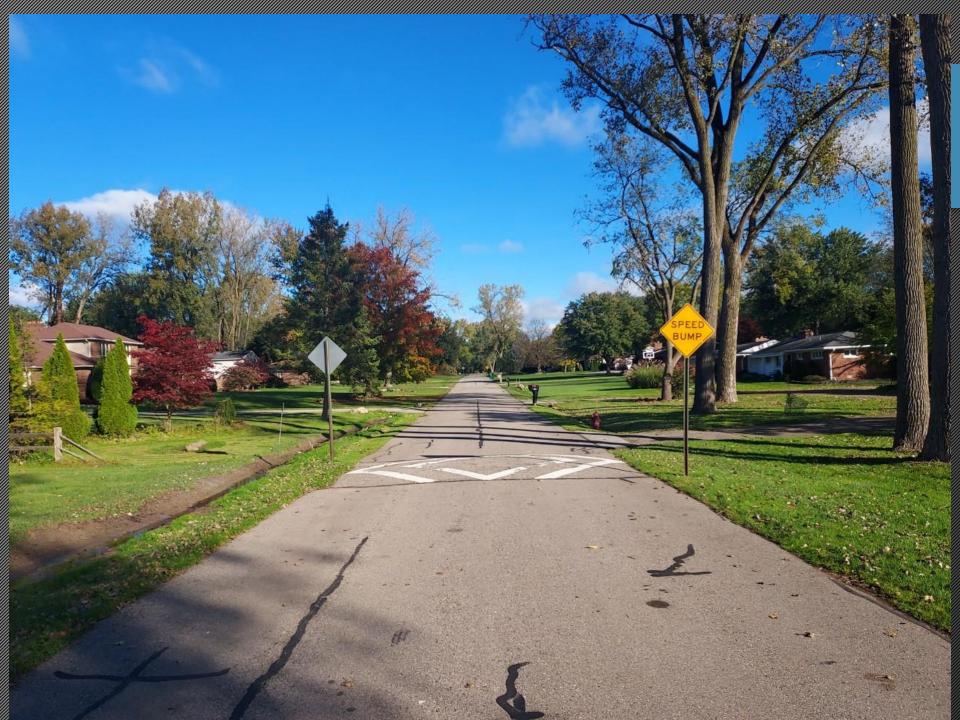
ROADWAY	ZONE	TYPE	DATE	START TIME	END TIME	# OF OBS.	AVG MPH	85TH% MPH
HEARTHSTONE	1	BEFORE	5/4/95	0:00	0:00	107	32.4	37
HEARTHSTONE	1	BEFORE	5/4/95	0:00	0:00	123	32	35
HEARTHSTONE	1	FOLLOW	10/25/95	0:00	0:00	90	31.5	34
HEARTHSTONE	1	FOLLOW	10/25/95	0:00	0:00	103	32.3	35
HEARTHSTONE	1	FOLLOW	11/27/95	0:00	0:00	73	33.5	37
HEARTHSTONE	1	AFTER	9/12/96	0:00	0:00	164	25.4	28
HEARTHSTONE	1	AFTER	9/12/96	0:00	0:00	100	26.2	29
KENDALLWOOD	1	BEFORE	5/11/95	0:00	0:00	108	33.3	37
KENDALLWOOD	1	BEFORE	5/11/95	0:00	0:00	121	31.8	36
KENDALLWOOD	2	BEFORE	5/31/95	0:00	0:00	82	30.4	34
KENDALLWOOD	2	BEFORE	5/31/95	0:00	0:00	69	31.1	34
KENDALLWOOD	3	BEFORE	6/14/95	0:00	0:00	178	31.1	34
KENDALLWOOD	3	BEFORE	6/14/95	0:00	0:00	192	30.5	34
KENDALLWOOD	2	BEFORE	6/20/95	0:00	0:00	58	31.3	36
KENDALLWOOD	2	FOLLOW	10/24/95	0:00	0:00	69	31.5	35
KENDALLWOOD	1	FOLLOW	10/24/95	0:00	0:00	85		36
KENDALLWOOD	1	FOLLOW	11/2/95	0:00	0:00	94	32.4	36
KENDALLWOOD	1	AFTER	9/11/96	0:00	0:00	114	26.6	30
KENDALLWOOD	2	AFTER	9/11/96	0:00	0:00	92	26.8	31
RED CLOVER	1	BEFORE	6/15/95	0:00	0:00	46	31.1	35
RED CLOVER	1	BEFORE	6/15/95	0:00	0:00	72	31.2	35
RIDGEBROOK	1	BEFORE	6/13/95	0:00	0:00	81	30.7	34
RIDGEBROOK	1	BEFORE	6/13/95	0:00	0:00	80	30	33

10/17/02





Safety Awareness For Everyone Through Education, Enforcement, and Engineering









AGENDA CITY COUNCIL MEETING NOVEMBER 8, 2021 – 7:30PM CITY OF FARMINGTON HILLS 31555 W ELEVEN MILE ROAD FARMINGTON HILLS, MICHIGAN Telephone: 248-871-2410 Website: www.fhgov.com YouTube Channel: https://www.youtube.com/user/FHChannel8

REGULAR SESSION MEETING BEGINS AT 7:30P.M. IN THE CITY COUNCIL CHAMBER

STUDY SESSION (6:00 P.M. Community Room – See Separate Agenda)

REGULAR SESSION MEETING

CALL REGULAR SESSION MEETING TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

- 1. Approval of Regular Session Meeting Agenda
- 2. Oath of Office to Mayor and Council Members elected on November 2, 2021
- 3. Proclamation recognizing Movember 2021 as Men's Health Awareness Month

CORRESPONDENCE

CONSENT AGENDA - (See Items No. 5 – 13)

All items listed under Consent Agenda are considered routine by the City Council and will be enacted by one motion. There will be no separate discussion of these items, unless a Council Member or citizen so requests, in which event the items may be removed from the Consent Agenda for consideration.

CONSENT AGENDA ITEMS FOR DISCUSSION

PUBLIC QUESTIONS AND COMMENTS

Limited to five (5) minutes for any item of City business not on the agenda.

COUNCIL MEMBERS COMMENTS AND ANNOUNCEMENTS

CITY MANAGER UPDATE

PUBLIC HEARING:

4. Public hearing and consideration of authorizing the conversion of Shady Ridge Drive from gravel to hard surface. <u>CMR 11-21-105</u>

CONSENT AGENDA:

- 5. Recommended approval of an agreement for Michigan Indigent Defense Commission (MIDC) Managing Attorney Services with Kim Wilson in an amount not to exceed \$12,000. <u>CMR 11-21-106</u>
- 6. Recommended adoption of a resolution authorizing a lease agreement with New Cingular Wireless PCS, LLC for the lease of space on and adjacent to the City Water Tower for a period of 5 years; with possible extensions. <u>CMR 11-21-107</u>

- 7. Recommended approval of extension of award of agreement for mass notification (FH Alert) and Employee Engagement Subscription to SHI, Inc. for five years at \$20,999.99 per year. <u>CMR 11-21-108</u>
- 8. Recommended authorization of agreement for architectural and engineering services for The Hawk stadium field replacement project with Wakely Associates in the amount of \$80,000. <u>CMR 11-21-109</u>
- 9. Recommended approval of award of bid for Laser Cutter System to Fairway Laser Systems in the amount of \$23,945. <u>CMR 11-21-110</u>
- 10. Recommended approval of a special event permit for the Anthology of Farmington Hills Family Fun Event to be held on Thursday, November 11, 2021.
- 11. Recommended approval of canceling the December 27, 2021 City Council Meeting.
- 12. Recommended approval of the City Council study session meeting minutes of October 25, 2021
- 13. Recommended approval of the City Council regular session meeting minutes of October 25, 2021.

ADDITIONS TO AGENDA

14. Attorney Report

ADJOURNMENT

Respectfully submitted,

Reviewed by:

Pamela B. Smith, City Clerk

Gary Mekjian, City Manager

<u>REQUESTS TO SPEAK:</u> Anyone requesting to speak before Council on any agenda item other than an advertised public hearing issue must complete and turn in to the City Clerk a blue, Public Participation Registration Form (located in the wall rack by the south door entering the council chambers).

<u>NOTE:</u> Anyone planning to attend the meeting who has need of special assistance under the Americans with Disabilities Act (ADA) is asked to contact the City Clerk's Office at 248-871-2410 at least two (2) business days prior to the meeting, wherein necessary arrangements/ accommodations will be made.



PROCLAMATION Movember 2021 Men's Health Awareness Month

- WHEREAS, each year during the month of November, men across the globe are encouraged to band together and grow mustaches to promote and raise awareness of men's health issues; and
- WHEREAS, since 2003, the Mustaches in November (or "Movember") campaign has generated a global health movement and raised thousands of dollars to fund more than 1,250 men's health projects around the world including prostate and testicular cancer research, mental health initiatives, and suicide prevention; and
- WHEREAS, the newly grown mustaches of the Movember Men's Health Awareness Movement prompt conversations, create greater understanding of the health risks men face, and motivate them to take action for their health since men are 24% less likely than women to have an annual visit with a physician; and
- WHEREAS, representatives from the City of Farmington Hills, including firefighters and police officers, have abandoned shaving for the month of November to "Gro a Mo" and show their support for the Movember Men's Health Awareness Month cause.

NOW, THEREFORE, BE IT RESOLVED, that I, Vicki Barnett, Mayor of the City of Farmington Hills, on behalf of the City Council, do hereby recognize **Movember 2021 as Men's Health Awareness Month** and urge men to learn about their risks for prostate cancer, testicular cancer, and mental health issues, and to undertake screenings for early detection, talk to health care providers about treatment options if diagnosed, and to motivate their fellow men to take care of their health.

Vinia Barnot

Vicki Barnett, Mayor

REPORT FROM THE CITY MANAGER TO CITY COUNCIL – November 8. 2021

SUBJECT: Consideration of Authorizing the Gravel Road Conversion to Hard Surface Pavement for Shady Ridge Drive.

Administrative Summary

- City Council previously approved the Policy for Converting Gravel Public Roads to Paved Roads by Petition in March of 2019.
- Based on this policy, over 60% of the property owners on Shady Ridge Drive signed a Paving Request Petition and submitted it to the City Engineering Department in the spring of 2019.
- Engineering staff performed preliminary engineering for the project and held an informational meeting on October 3, 2019. At the conclusion of this meeting, City staff circulated a second petition for property owners to sign, confirming their support for the paving project. City Staff also mailed this petition to all property owners in the project area who did not attend the meeting, allowing residents 14 days from October 3, 2019 to complete and return the petition to the City.
- 9 of these 13 property owners (69.77%) signed the second petition in favor of moving forward with the project. In several instances where properties have been sold since October 17,2019, updated signatures were obtained from the new owners. Of the 4 remaining properties, 2 were not in support of the petition and 2 did not respond.
- Public sanitary sewer and public water main are available for all properties on this street.
- As a result of the resident support for this project, staff has scheduled a public hearing for this evening's City Council Meeting. All property owners received notice of the public hearing 10 days in advance of this hearing. Please note that this hearing would have been scheduled in the winter of 2020 but because of Covid-19 public meetings were postponed to summer of 2021 and we are now scheduling these meetings.

RECOMMENDATION

IT IS RESOLVED, that the City Council of the City of Farmington Hills authorize the conversion of Shady Ridge Drive from gravel to hard surface, and;

FURTHER RESOLVED, that the City staff identify a specific project schedule for this conversion consistent with the Capital Improvement Program and within the City's Local Road budget and also accounting for any specific issues presented by this conversion.

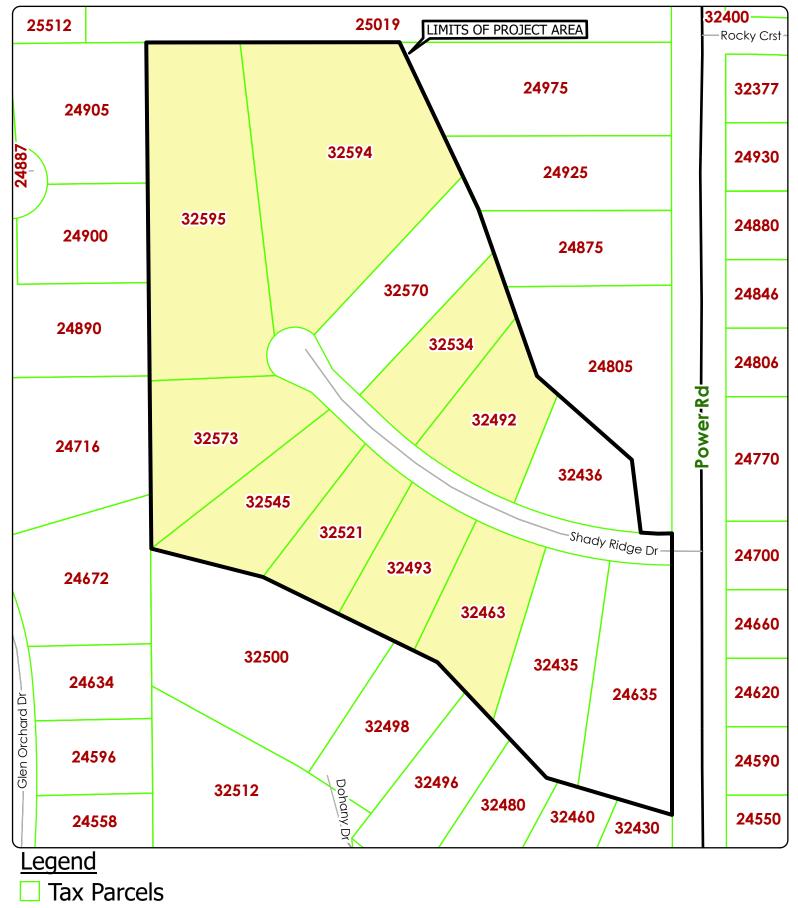
Support Documentation

In November of 2018, a local road millage was passed by the residents of the City of Farmington Hills. This allowed for increased local road funding to address local road maintenance and the change over from a predominant SAD Local Road Improvement to a City millage-sponsored Local Road Improvement Program. The millage proposal also identified the inclusion of gravel road conversion to hard surface pavement for local roads where it was determined that the property owners abutting the gravel road supported a conversion. City Council directed staff to prepare a Gravel Road Conversion Policy, which City Council reviewed and adopted on March 25, 2019.

Since that time, several gravel roads have gone through the process identified in the Gravel Road Conversion Policy. Shady Ridge Drive is one of those streets and is being considered tonight.

Prepared by: James Cubera, P.E., City Engineer Departmental Authorization by: Karen Mondora, P.E., Director of Public Services Approved by: Gary Mekjian, P.E., City Manager

FARMINGTON SHADY RIDGE DRIVE GRAVEL ROAD CONVERSION PROGRAM



Yes Votes

Ν

HILLS Michiga

Oakland County GIS, 2020

NOTICE OF PUBLIC HEARING CITY OF FARMINGTON HILLS 31555 ELEVEN MILE ROAD FARMINGTON HILLS, MICHIGAN 48336

NOTICE IS HEREBY GIVEN:

That the Farmington Hills City Council will meet in the City Hall Council Chamber, 31555 Eleven Mile Road, Farmington Hills, Michigan, on <u>November 8, 2021</u> at <u>7:30p.m</u> to hear and consider any comments in favor or in opposition of the following road improvements:

CONVERSION OF SHADY RIDGE DRIVE FROM A GRAVEL PUBLIC ROAD TO A PAVED ROAD AS REFERENCED ON THE "LIMITS OF PROJECT AREA" MAP ATTACHED TO THIS NOTICE.

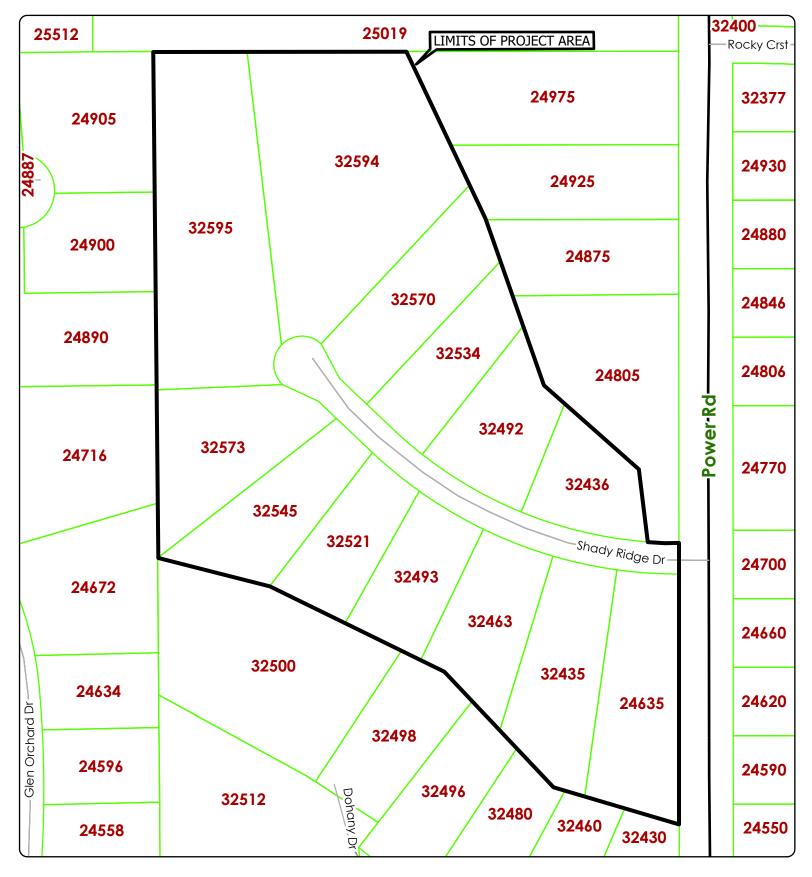
Our records show that you own property that abuts Shady Ridge Drive in the City of Farmington Hills. Accordingly, you and any other interested parties are invited to participate in the public hearing or submit written comments concerning the proposed improvement before the public hearing to Pam Smith, City Clerk at 31555 W. 11 Mile Road, Farmington Hills, MI 48336 or by fax or email below.

Phone: 248.871-2420 Fax: 248.871-2411 psmith@fhov.com PAMELA B. SMITH, MiPMC/MMC CITY CLERK

Mailing Date: October 29, 2021



FARMINGTON SHADY RIDGE DRIVE **GRAVEL ROAD CONVERSION PROGRAM**



HILLS Michigan

Oakland County GIS, 2020

REPORT FROM THE CITY MANAGER TO CITY COUNCIL November 8, 2021

SUBJECT: APPROVAL OF CONTRACT FOR MICHIGAN INDIGENT DEFENSE COMMISSION (MIDC) MANAGING ATTORNEY SERVICES

ADMINISTRATIVE SUMMARY

- The Michigan Indigent Defense Commission (MIDC) was created by legislation in 2013 after an advisory commission recommended improvements to the state's legal system. The MIDC works to ensure the state's public defense system is fair, cost-effective, and constitutional while simultaneously protecting public safety and accountability.
- Beginning in the State's 2022 fiscal year (beginning 10/01/21), the statutory responsibility for the administration of the MIDC efforts through the 47th District Court have moved from the District Court to the responsibility of both Cities of Farmington and Farmington Hills.
- Farmington Hills is implementing a Managed Assigned Counsel System (MAC) for grant year 2021-22 and during the course of the grant year, will develop a permanent process for grant year 2022-23 for City Council consideration.
- Previously, City Council approved a contract for Mr. David Walsh to act as the MIDC Administrator. Under that MAC System and grant application, grant funds have also been approved for a managing attorney position.
- The *managing attorney* shall be responsible for creating a list of attorneys approved for appointment within the System and making appointments from the qualified list. In addition, the managing attorney shall be responsible for evaluating and approving/denying all attorney requests for investigators, expert witnesses, and extraordinary fees over and above the established per case standard of \$300 per case.
- The *grant administrator* shall be responsible for all administrative duties under the grant including, but not limited to compliance reporting, attorney invoice processing, attorney training compliance tracking, and house counsel schedule creation.
- The managing attorney and grant administrator shall work with stakeholders from the cities, court and local Bar Association to develop the System's grant application and compliance plan for 2022-23.
- Ms. Wilson has worked as an assistant prosecuting attorney with Oakland County for 6 years and has a strong criminal law background. She was the Magistrate for the 43rd District Court, Madison Heights for over 26 years (December 1994-April 2021) and has been representing criminal defendants, felony and misdemeanors, in her private practice for the past 14 years. She has received court appointed clients from multiple District Courts in Oakland and Macomb County.

- Ms. Wilson is also the System Managing Attorney for the 47th D MACC team overseeing the administration of the MIDC grant, and specifically approving new attorneys for the vertical and house counsel list, reviewing requests from attorneys for extraordinary fees, and fees for expert witnesses.
- Ms. Wilson possesses the experience and knowledge necessary to make decisions regarding the appropriateness of extraordinary fees and the necessity for expert witnesses and their fees, as well as whether attorneys meet the qualifications to be on the court appointed list. She has the expertise to fully perform the scope of services and staff is recommending approval of an independent contractor agreement with her. The agreement has been reviewed by the City Attorney as to form and content.
- Finally, the MIDC grant application requests full reimbursement for these costs, up to the contract maximum. The Cities of Farmington and Farmington Hills will pay their proportionate share (based on the City's respective caseloads) in the unlikely event the contract maximum is exceeded

RECOMMENDATION

It is recommended that City Council authorize the City Manager to enter in agreement with Kim Wilson to provide MIDC managing attorney services as described in the grant application. The contractors pay will be \$100/hour, not to exceed \$12,000, with the contract valid from October 1, 2021through September 30, 2022 or upon completion of all grant requirements.

Prepared by: Gary Mekjian, City Manager Reviewed by: Kelly Monico, Director of Central Services Approved by: Gary Mekjian, City Manager



INDEPENDENT CONTRACTOR AGREEMENT

This Independent Contractor Agreement ("Contract") shall be effective as of the date of the last signature and is between the City of Farmington Hills, ("City"), whose address is 31555 West Eleven Mile Road, Farmington Hills, MI 48336-1165, and <u>KIMBERLY WILSON</u> ("Contractor"), whose address is

The City and Contractor agree as follows:

1.<u>Services</u>. Contractor shall perform Michigan Indigent Defense Commission (MIDC) grant administration Services for the City as described in the Service Description that is attached to and part of this Contract ("Services") in a competent, efficient, timely, good and workmanlike manner and in accordance with all other terms and conditions of this Contract. Contractor's Services shall be subject to review at all times by the City Manager's Office to assure compliance with this Contract and Contractor shall cooperate and coordinate its provision of Services with that Department.

2. <u>Nature and Duration of Agreement</u>. This Contract does not provide the City with an exclusive right to Contractor's Services, and Contractor may in his/her discretion, provide the same or similar services to other clients. This Contract also does not provide Contractor with an exclusive right to be the only provider of the type of Services described in the Service Description and the City may enter into agreements for the same or similar Services with other providers of such services. This Contract shall be in effect and apply to the period of time described in the attached Service Description and such additional periods of time as may be agreed to in a Supplemental Service Description, which upon signing by the City and Contractor shall be attached to and become a part of this Contract.

3. <u>Termination.</u> The City shall have the right to terminate this Contract: (i) for cause by written notice to Contractor, and (ii) without cause upon 14 days written notice to Contractor. If Contractor terminates this Contract before completing required Services, all rights to payment for Services that were provided are forfeited and waived.

4. <u>Payment</u>. The City will pay Contractor for the Services as described in the Service Description or any applicable Supplemental Service Description that is attached to and part of this Contract. If the City terminates this Contract without cause, Contractor shall be entitled to payment for services specified in the Service Description that were performed and completed prior to termination.

5. <u>Independent Contractor</u>. The parties to this Contract intend that the relationship between them created by this Contract is that of service provider and service purchaser. It is expressly agreed, understood and intended that no employee-employer relationship shall exist or be established, and that Contractor is an independent contractor who has been retained to render the Services to achieve specific results in exchange for specified recompense. As an independent contractor, Contractor expressly agrees that: (a) In the performance of this Contract, the relationship of Contractor to the City shall be that of an independent contractor and not that of an employee or agent of the City, and Contractor shall not be deemed to be the employee or agent of, or a servant to, the City; (b) Unless otherwise indicated in the Service Description, Contractor shall be responsible for all tools, equipment, supplies and materials necessary to perform the Services and shall not be entitled to City payment or reimbursement for any resulting costs or expenses; (c) Contractor shall be solely responsible for training, supervising, and compensating Contractor and Contractor's personnel, if any, involved in providing the Services; (d) Contractor and Contractor's personnel, if any, are not employees of the City, shall not make any representations or statements that suggest otherwise, and have no authority to make any agreement for or

otherwise bind the City; (e) Contractor will determine and control the means of performing the Services, within such general parameters or specifications as may be provided by the City, this Contract, the MIDC grant requirements, and applicable laws and codes; (f) Contractor will be responsible for the satisfactory performance and completion of the Services that Contractor performs or agrees to perform and may be held liable for failure to satisfactorily complete such Services; (g) Contractor will be solely responsible for payment of salaries, wages, and other compensation for Contractor's employees and agents, if any; (h) Contractor shall not be eligible for coverage under or eligible to receive the benefits of the City's employee pension plans, employee welfare plans, workers' compensation, unemployment or health insurance, or other benefit plans; (i) Contractor is and shall perform under this Contract as an independent contractor, and no liability or responsibility with respect to benefits of any kind, including without limitation, pension, medical/health benefits, worker's compensation, or other rights or liabilities arising out of or related to a contract for hire or employer/employee relationship shall arise or accrue to either party as a result of the performance of this Contract; and (j) Contractor holds or has applied for a federal, state or local employer identification number (or the equivalent number applicable in the jurisdiction in which the services are performed), unless the Contractor is a sole proprietor and is not required to obtain such an identification number under applicable federal, state or local requirements. The City will not provide workers' compensation insurance or withhold income tax, social security or other amounts that apply to employees, from the payments made to Contractor, but will report those payments to the federal and state taxing authorities. The Contractor agrees to be responsible for withholding and paying income, FICA and FUTA taxes relating to performance of the Services and payments received from the City in connection therewith. The City will provide the Contractor with a Form 1099-MISC., and the Contractor agrees to report the earnings shown on the Contractor's Schedule C. The Contractor further agrees to furnish, upon written request from the City, a copy of his/her Schedule C to the City, along with a statement verifying that all of the income reported by the City on the Contractor's Schedule C, and that the Contractor has paid all income and employment taxes on it.

6. Right of Supervision and Inspection. In the performance of the Services, the Contractor is an independent contractor with the authority to control and direct the performance of the details of the work, the City being interested only in the results obtained. However, performance of the Services contemplated herein must meet the approval of the City and shall be subject to the City's general right of inspection and supervision to secure the satisfactory performance and completion thereof. The Contractor agrees to comply with all federal, state, and municipal laws, rules, and regulations that are now or may in the future become applicable to the Contractor or the Contractor's business, equipment, and personnel engaged in operations covered by this Contract or accruing out of the performance of such operations. The actual performance and superintendence of all Services shall be by the Contractor, but the City shall designate a representative or representatives who shall at all times have access to the work Contractor is performing for the purpose of inspecting the Services performed by the Contractor and to judge whether such Services are being performed by the Contractor in accordance with the provisions of this Contract. Such representative or representatives shall be empowered to act for the City in all matters relating to the Contractor's performance of the Services contemplated. Prior to commencing any work or services under this Contract and at the time of each and every extension of this Contract, if any, Contractor and Contractor's personnel, if any, shall submit to a personal criminal history background check, if required by the City in its discretion, and shall provide any written consent to such background checks as may be requested or required by the City, in its discretion, or by law.

7. <u>Insurance</u>. Contractor shall have no right to or expectation of coverage under any insurance policies of City. Contractor shall be responsible for having and maintaining during the life of this Contract all insurance required by law or otherwise necessary to cover Contractor's liability relating in any way to the performance or nonperformance of the Services under this Contract and any personal injury or property damage suffered by Contractor relating in any way to the performance or nonperformance of the Services under this Contract and motor vehicle liability insurance for the vehicle(s) used by Contractor in or for purposes of the performance of the Services. The City will not and is not obligated to insure Contractor. If the attached Service Description or applicable Supplemental Service Description requires it, for all periods this Contract is in effect and for all Services provided by Contractor to the City, Contractor shall have and maintain the following insurance, which shall be documented by a Policy of Insurance and/or Endorsement

of a Policy of Insurance that entitles the City to prior notice of cancellation, changes, or non-renewal of the Policy or any portion thereof:

A. General Liability insurance against claims for bodily injury or death and property damage in the amount of at least \$1,000,000.00 per occurrence and \$1,000,000.00 aggregate, with such insurance to be primary and noncontributory and name the City and its officials and employees as additional insureds.

B. Workers Compensation (statutory amount) and Employer's Liability of at least \$100,000.00 if Contractor has employees or agents involved in providing Services.

8. <u>Liability</u>. Injuries to or damages suffered by Contractor and any Contractor employees or agents, third persons, and/or their property that occur during or as a result of the Services, are Contractor's responsibility, without recourse against or contribution from the City or any of its officials or employees, with Contractor accepting all risks of and agreeing to indemnify, defend, and hold the City harmless from, any claims and related costs and expenses, including attorney fees, for any such injuries or damage. The City and its officials, employees, agents, and volunteers shall have no liability or responsibility for any such injuries or damages, consistent with the governmental immunity provided by law, which this Contract does not waive. This Contract is not for, and confers no benefit on, persons or entities that are not parties to it.

9. <u>Compliance with Laws</u>. This Contract and all of Contractor's Services shall be subject to and in compliance with all applicable laws, rules and regulations, including without limitation, those which apply because the City is a governmental entity, the City's Ordinances, and the City's Rules, Policies and/or Procedures that apply to the Services Contractor is to provide, and shall be governed by the laws of the State of Michigan.

10. <u>*Non-Discrimination.*</u> In providing the Services and the employment of any person, Contractor shall not discriminate because of race, color, religion, national origin, age, sex, height, weight, marital status, disability, or other classification that is protected from discrimination by law, ordinance or City policy.

11. <u>Assignment and Subcontracts</u>. Contractor shall not assign or subcontract the performance of this Contract or any part thereof without the written consent of the City.

12. <u>Notices</u>. Written notice under this Contract shall be given to the Contractor and Director of the City's Special Services Department at the addresses contained in this Contract by personal, overnight or registered mail delivery.

13. <u>Agreement, Changes, and Waivers</u>. There are no verbal agreements and any changes in or waivers of the provisions of this Contract must be in writing and signed by the City and Contractor.

CITY OF FARMINGTON HILLS

Date

By: Gary Mekjian, City Manager

CONTRACTOR

Date

By: Kimberly Wilson

SERVICE DESCRIPTION FOR INDEPENDENT CONTRACTOR AGREEMENT

This Service Description is part of the Independent Contractor Agreement between the City of Farmington Hills and the identified Contractor and sets forth the agreed upon Services and manner in which they are to be provided and paid for.

Contractor Name KIMBERLY WILSON Contractor Phone

Contractor Email

Service: MIDC Staff Administrative Attorney

Service Description and Contract valid through <u>Provide MIDC program administration services, as the MIDC Staff Administrative Attorney, as described in the Cost Analysis section of the attached and incorporated grant documentation.</u> Valid from October 1, 2021 through September 30, 2022 or completion all grant requirements (whichever is later).

City provided tools, equipment, supplies and materials (if any) <u>3 reams of paper for correspondence purposes</u>

Contractor Insurance: _____ is required _____ is not required

Concerning these services, Contractor, will:

• Provide any & all services as required for MIDC grant administration

The City will:

- Pay Contractor \$100.00 /hr., NOT TO EXCEED \$12,000 for October 1, 2021 through September 30, 2022 or completion all grant requirements (whichever is later). Hours to be submitted to City Manager's Office.
- Payment will be made monthly, according to the City's accounts payable schedule.
- Any additional terms or conditions: None

*Any extensions/renewals of the Contract or modifications of this Service Description must be provided in a Supplemental Service Description that is signed by Contractor and a Special Services Department representative.

Contractor Signature

City of Farmington Hills

By: Kimberly Wilson

By: Gary Mekjian, City Manager

SUBJECT: LEASE OF DPW WATER TOWER SPACE FOR NEW CINGULAR WIRELESS PCS, LLC. (AT&T)

ADMINISTRATIVE SUMMARY

- In 2014 Oakland County, in cooperation with the City of Farmington Hills constructed a 209 ft. water tower on the property of the Department of Public Works (DPW). Once the tower was constructed Oakland County sold the tower to the City for \$1.00 in exchange for lease space on said tower.
- City staff and the City Attorney's Office have been working with the New Cingular Wireless PCS, LLC (AT&T) team for over a year. Their team has confirmed FCC requirements, completed a structural analysis of the tower, and provided project construction plans. City staff & the City Attorney have reviewed their submittals and are all in support of this project. New Cingular Wireless PCS, LLC has approved the lease and will sign it if it is approved by the City Council.
- The annual rental payment for the first year of the agreement (paid by New Cingular Wireless PCS, LLC) is \$38,181 prorated with a 3% increase in annual rent required each year beginning at year two(2) of the agreement. This schedule of rental charges mirrors the City's lease agreement with New Par (Verizon Wireless). Exhibit D in the attached proposed lease agreement outlines current & future rental payments.
- Attached for your consideration are the lease agreement for the tower (including exhibits), and associated documents.

RECOMMENDATION

In view of the above, it is recommended that the City Council adopt a resolution approving the lease agreement between the City of Farmington Hills and New Cingular Wireless PCS, LLC for the lease of space on and adjacent to the City Water Tower upon the terms and conditions presented. In addition, the City Council authorizes the City Manager and City Clerk to enter into said lease agreement with New Cingular Wireless PCS, LLC (AT&T) for lease of space on the water tower located at the DPW for five(5) years with up to four (4) automatic five (5) year renewal options.

- Prepared by: Kelly Monico, Director of Central Services
- Reviewed by: Edward Gardiner, Director of Planning & Community Development
- Reviewed by: Kevin McCarthy, DPW Superintendent
- Reviewed by: Karen Mondora, Director of Public Services
- Authorized by: Gary Mekjian, City Manager

STATE OF MICHIGAN COUNTY OF OAKLAND **CITY OF FARMINGTON HILLS**

RESOLUTION APPROVING A LEASE AGREEMENT FOR USE OF THE CITY WATER TOWER

RESOLUTION NO. 2021-

At a regular meeting of the City Council of the City of Farmington Hills, County of Oakland, State of Michigan, held on November 8, 2021, at 7:30 o'clock p.m., Eastern Daylight Savings Time, with those present and absent being,

PRESENT: ABSENT:

the following preamble and resolution were offered by Councilperson and supported by Councilperson :

WHEREAS, on March 29, 2016, the City of Farmington Hills entered into a lease agreement with Oakland County, by an through its Water Resource Commissioner, which authorizes the City to enter into lease agreements with wireless telecommunications service providers for placement and use of antennas and related equipment on and adjacent to the City Water Tower; and

WHEREAS, the City has received a request from New Cingular Wireless PCS, LLC to lease space on and near the Water Tower for the placement and use of its antennas and wireless telecommunications equipment; and

WHEREAS, pursuant to City Ordinance No. C-2-2016, adopted March 28, 2016, a lease agreement for use of the City Water Tower for the installation and operation of antennas and equipment must be approved by resolution of Council.

NOW, THEREFORE, BE IT HEREBY RESOLVED that the City Council of the City of Farmington Hills hereby approves the lease agreement between the City of Farmington Hills and New Cingular Wireless PCS, LLC for the lease of space on and adjacent to the City Water Tower upon the terms and conditions presented to City Council during its regular meeting on November 8, 2021.

BE IT FURTHER RESOLVED that City Council authorizes the City Manager and City Clerk to enter into said lease agreement.

AYES: NAYS: **ABSENT: ABSTENTIONS:**

RESOLUTION DECLARED ADOPTED.

STATE OF MICHIGAN)) ss.)

COUNTY OF OAKLAND

I, the undersigned, the duly qualified and acting City Clerk of the City of Farmington Hills, County of Oakland, State of Michigan, do hereby certify that the foregoing is a true and complete copy of a Resolution adopted by the City Council of the City of Farmington Hills at a regular meeting held on the 8th day of November, 2021, the original of which resolution is on file in my office.

IN WITNESS WHEREOF, I have hereunto set my official signature, this _____ day of November, 2021.

PAMELA B. SMITH, City Clerk City of Farmington Hills

LEASE AGREEMENT

This Lease Agreement is made and effective as of the latter of the signature dates below (the "Effective Date"), by and between the **City of Farmington Hills**, a municipal corporation whose address is 31555 W. Eleven Mile Road, Farmington Hills, Michigan ("Landlord") and **New Cingular Wireless PCS**, LLC, a Delaware limited liability company having a mailing address of 1025 Lenox Park Blvd NE, 3rd floor, Atlanta, Georgia 30319 ("Tenant"). Landlord and Tenant are at times collectively referred to as "Parties."

RECITALS:

Landlord owns real property located at 27245 Halsted Road, Farmington Hills, Michigan, 48331, Tax Parcel Id No: 22-23-18-200-023, described in the attached Exhibit A and referred to in the Lease as the "Site," upon which an elevated Water Tower is located.

Tenant wishes to lease from Landlord certain designated space on the Water Tower, which is currently owned by the County of Oakland (hereinafter the "County") but which will become the property of Landlord. Pursuant to a Lease Agreement Landlord entered into with the County on March 29, 2016, Landlord has the right to enter into this Lease Agreement with Tenant for the placement and use of antenna and related equipment on and adjacent to the Water Tower ("Tower").

Landlord desires to lease to Tenant designated space for Tenant's equipment on the Tower and ground area adjacent to the Tower as provided in this Lease Agreement. The specific portion of the Site which Landlord has agreed to lease to Tenant for the stated purposes is the "Lease Area," which together with the other areas of the Site this Lease allows Tenant to use, including any access and utility easements, is referred to in this Lease as the "Premises," legally described in Exhibit A.

NOW THEREFORE, for and in consideration of value received and the mutual promises contained in this Lease, Landlord and Tenant agree as follows:

1. <u>Use of Leased Premises</u>. This Lease of the Premises by Landlord to Tenant grants to Tenant, subject to the restrictions or limitations contained in this Lease:

(a) The right to use vertical space on the Tower for the installation, maintenance, and operation of nine (9) antennas, twelve (12) Remote Radio Heads ("RRH"), nine (9) power or fiber trunks, and three (3) surge units, located at a height of approximately 138 feet above ground level on the Tower, with the top of the antenna to be no higher than 142 feet above ground level, together with necessary transmission cables or lines and related equipment as disclosed, defined and limited by the equipment specifically identified in the attached Exhibit B. Any additional plans and specifications which shall be submitted to and approved by Landlord's Building Department for building permit issuance will be a part of this Lease as Exhibit C. All antennas, cables or lines, related radio equipment, including transmitters and receivers, and other equipment installed on the Premises in accordance with this Lease are and shall remain Tenant's personal property (hereafter referred to as "Tenant Facilities").

(b) The right to construct or install, secure and use an equipment cabinet, generator, and related equipment to support the Tower antenna on the ground of the Premises in an area measuring approximately 12' x 25' as described and depicted on Exhibit B.

(c) Access, utility, and transmission line rights necessary for Tenant to use, enjoy and maintain Tenant Facilities as described on Exhibit B.

(d) The right to install and maintain cables and transmission lines between the equipment enclosure and Tenant's installations on the Tower subject to Landlord's right to designate the route to be utilized, which shall be consistent with the accepted engineering practice, the Landlord and other Tower users' existing installations, and the primary purpose for which the Tower was constructed.

(e) The rights and access granted to Tenant are non-exclusive, Landlord hereby reserving the right to (i) enter in and upon the Premises with prior notice to Tenant for entry within the Lease Area except in emergencies, when notice may be provided as soon as practical, and (ii) except for the Lease Area, grant similar rights and access to third persons, including Tenant's existing or future competitors.

2. <u>Term of Lease</u>.

(a) The initial term of the Lease shall be five (5) years from the Commencement Date ("Term").

(b) Provided Tenant is not in default, the Term of this Lease shall be automatically extended for up to four (4) additional and separate five (5) year terms ("Renewal Terms") unless Tenant or Landlord provides written notice of intention to terminate at least six (6) months prior to the end of each current term in which event this Lease shall expire at the end of that term.

(c) Absent termination as provided below, and provided Tenant is not in default, at the end of the fourth, five year Renewal Term, this Lease shall automatically continue in effect on the same terms and conditions for one or more additional terms of one (1) year until terminated. Landlord or Tenant may terminate this Lease by written notice at least six (6) months prior to the end of the last Renewal Term or any one (1) year holdover term.

(d) For purposes of this Lease, the "Commencement Date" shall be the first to occur of either: (1) January 12, 2022; or (2) the first day of the month following the date of the first permit issued by the City for the installation of Tenant's Facilities on the Premises.

3. <u>Rent Payments and Inspection Charges.</u>

(a) The annual rental payment for the first full year of this Agreement beginning on January 12, 2022 shall be Thirty-Nine Thousand Three Hundred Twenty-Six Dollars and 43 cents (\$39,326.43). In the event of commencement prior to January 12, 2022, rent at a monthly rate of Three Thousand One Hundred Eighty-One Dollars (\$3,181.00) shall be paid from the date of

commencement through January 11, 2022, which shall be paid in full on or before the Commencement Date. The fee will be prorated for partial months.

(b) The annual rent for each year of this Agreement shall be the annual rent for the immediately preceding year, increased by three percent (3%), as set forth on attached Exhibit D.

(c) Annual Rent payments ("Rent") shall be paid by Tenant to Landlord in full on or before the Commencement Date of this Lease and each anniversary date thereafter by delivery to the City of Farmington Hills Finance Director, 31555 W. Eleven Mile Road, Farmington Hills, Michigan, or to such other person or location as Landlord designates in writing at least one month prior to the annual rental payment due date.

(d) A payment of Rent or other financial obligation of Tenant, received by Landlord more than fifteen (15) days after, (i) it is due and (ii) Landlord provides Tenant with a written notice of default, shall include an administrative late charge equal to five (5%) percent of the required payment.

(e) Tenant shall be responsible for all review fees, permitting fees, and costs required by the City in relation to Tenant's activities under this Agreement in addition to the Annual Rent described herein. Payment of the First Annual Rent and review and permitting fees and costs shall be paid in full prior to Tenant's installation of the Tenant Facilities.

4. <u>Utilities.</u> Tenant shall be responsible for arranging for, obtaining, and securing installation of separate lines and meters, at its sole cost and expense, and for all charges, fees and expenses for utility service for the leased Premises. Landlord agrees to sign such documents or grant such licenses as may be required by utility companies to provide such service to the Premises.

5. <u>Installation, Alterations, Repairs and Maintenance</u>.

(a) Tenant's Facilities, which Landlord has approved for placement or installation on the Premises, are depicted and described on Exhibit B. In the ordinary course of business and without Landlord's consent, except as required by Section 9(e) or as required to access to the Site as described in Exhibit E, Tenant may replace used, broken or obsolete equipment with similar or different equipment that has similar physical dimensions, weight, characteristics, and impact as the existing equipment. Tenant shall not install equipment in a manner which may adversely affect the physical and structural integrity and capacity of the Tower or cause damage to Landlord's or other Tower or Tower users' property.

(b) Except for replacement in the ordinary course of business as described in paragraph 5(a), above, Tenant shall not make any other alterations or improvements to the Premises without Landlord's prior written consent which shall not be unreasonably withheld. Landlord shall not be required to consider any request by Tenant under this Section unless it is accompanied by detailed plans and specifications, which if approved, will serve as an amendment of Exhibit B, as well as an amendment of Exhibit C, as applicable.

(c) Tenant's installation and operation of materials, equipment and fixtures shall be done in a neat, workmanlike manner, consistent with the property and the operations of Landlord and other Site or Tower users and good engineering practices in accordance with standards promulgated and published by the American National Standards Institute. Subject to Section 7, Tenant shall promptly repair or correct any damages caused by its installations and operations, including but not limited to the repair and/or replacement of landscaping and vegetation damaged or removed during Tenant's installations, operation, repairs, use, and/or maintenance. Except for damages caused solely by Landlord or other Tower users, Tenant shall also be responsible, at its cost and expense, for promptly repairing or correcting damages to the Premises. Landlord agrees to provide notice to Tenant of the necessity of such repairs.

(d) Subject to Section 12(e) and Tenant's independent determination and representation to Landlord that the Tower can safely accommodate Tenant's Facilities and existing installations, Landlord shall be responsible for repair and maintenance of the Tower necessary to assure its physical and structural integrity consistent with its design. Except for emergencies, Landlord will provide at least fourteen (14) days written notice of planned repair or maintenance (including painting) activities. Tenant shall be responsible for protecting Tenant's Facilities during the course of such repair or maintenance and Landlord shall have no responsibility for any damages that result from Tenant's failure to do so. Otherwise, Landlord shall be responsible for any damages to Tenant's property caused solely by Landlord in the course of fulfilling its repair and maintenance obligations to the extent not covered by insurance.

(e) Tenant, by its authorized representatives, shall have access to the Premises as provided in the Rules and Regulations for Access to Site and Premises attached to this Agreement as Exhibit E.

6. <u>Taxes and Assessments.</u> Tenant shall be solely responsible for and shall promptly pay all personal property taxes levied and assessed against it or its personal property. Tenant shall also be responsible for its portion of all real estate taxes, special assessments or similar taxes relating to the Premises, including Tenant's improvements to and use of same. Nothing in this Section shall be construed as limiting Tenant's right to contest, appeal or challenge such taxes or assessments.

7. <u>Insurance by Tenant</u>. Tenant shall maintain throughout the initial and all renewal terms of this Lease, a commercial general liability insurance policy, with limits of liability of at least Three Million Dollars (\$3,000,000.00) in respect of bodily injury, including death, arising from any one occurrence and at least Three Million Dollars (\$3,000,000.00) in respect to damage to property arising from any one occurrence, or a commercial general liability policy with a combined single limit for bodily injury and property damage of at least Three Million Dollars (\$3,000,000.00). Both Landlord and the County of Oakland, including their respective elected and appointed officers, employees, and agents, shall be named as additional insureds and certificate holders. Tenant shall furnish to Landlord certificates of insurance confirming the coverage required throughout the term of this Lease. Landlord is entitled to at least thirty (30) days prior written notice of any cancellation of insurance coverage.

8. <u>Indemnification by Tenant.</u> Tenant agrees to indemnify, defend, and hold Landlord and the County of Oakland, including their respective elected and appointed officers, employees, and agents, harmless from any claims for damages, injury or loss to property or persons, including costs and reasonable attorney fees incurred by Landlord and/or the County of Oakland, arising from or in connection with Tenant's installations and/or operations on the Site. Landlord shall provide Tenant prompt written notice of any claims within the scope of Tenant's obligations under this Section.

9. <u>Interference</u>. The parties recognize the potential for broadcast and electronic interference inherent in multiple uses of the Tower and the need to cooperate with each other and other Tower users in preventing the occurrence of interference and promptly eliminating it if it occurs. Consistent with this recognition and objective, the Tenant understands and/or agrees as follows:

(a) That the definitions of and procedures to prevent or eliminate interference contained in this Lease are binding on Tenant and will be uniform and included in all other new leases or license agreements which Landlord may enter into with other tenants or licensees.

(b) As used in this Lease, "interference" shall mean a material impairment of the quality of sound, picture or data signals on any broadcasting activity or electronic equipment use as compared with that which would be obtained if no other broadcaster were using or had equipment on the Tower different than what existed or had been approved for installation on the date of this Lease. To the extent applicable, the existence of interference and procedures for preventing or eliminating it shall be according to rules and regulations of the FCC and the recommended practice of the Electronic Industries Association (EIA).

(c) Tenant acknowledges that its knowledge, experience, and resources on the subject of interference and the recommended practices of EIA and the rules and regulations of the FCC are superior to Landlord's. Tenant agrees that at all times it will conduct its operations in full compliance with the practices of EIA and rules and regulations of the FCC, and that upon written request by Landlord regarding any particular operation or activity, will provide written documentation confirming the required compliance.

(d) Tenant acknowledges that in addition to Landlord, the Tower may be used by Tenant's existing or future competitors and agrees that it will not install its equipment or conduct its operations on the Premises in a manner which will prevent, obstruct, or interfere with its competitors realizing the same level of broadcasting quality that Tenant desires and expects to obtain under this Lease.

(e) In order to prevent the occurrence of interference and allow prompt identification of possible sources of interference if it occurs, Tenant shall provide Landlord with written notice of the day, time and nature of all equipment placed, or work performed, on the Tower or Premises as part of installations, repairs, maintenance, movement or replacement, with operating specifications for all new equipment. Tenant shall also create and maintain a written record of any changes or adjustments Tenant makes in its operations (not involving equipment installations, repairs, maintenance, movement), which shall be disclosed and made immediately available to Landlord and every other party involved in an interference claim. Except for

emergencies or situations which require more immediate activity, the written notice shall be provided at least seven (7) days before the activity, in which case, the actual date and time of the activity shall be confirmed by a second notice.

(f) The parties shall promptly notify the other of any interference experienced with their respective broadcasting activities believed to be attributable to others, including the date and time it was first experienced and a description of the interference.

(g) Tenant's installations, operations and use of the Premises shall not cause electronic frequency interference with existing broadcast activities or electronic communication equipment of Landlord, the County, or other Tower users, including but not limited to any police and fire emergency communication equipment and SCADA equipment. Any such interference shall be eliminated by Tenant at its expense in a prompt manner consistent with the nature, extent, and effects of the interference. If the interference is disrupting or reducing the continuous nature and required quality of Landlord's or other Tower user's communications, Tenant shall, upon receiving written notice from Landlord to do so, immediately suspend its operations until the interference has been eliminated or remedied. Upon Tenant's failure to immediately suspend operations, Landlord may take whatever action it deems necessary to eliminate or remedy the interference, with any cost or expense of said action to be paid by Tenant within thirty (30) days of written notice.

(h) If interference with Tenant's broadcast activities or electronic equipment is caused by a change in Landlord's installations and operations from those which existed on the date of this Lease, or by other Tower users, Landlord will cooperate in taking reasonable steps to correct the condition causing the interference, as provided in Subsection (i).

(i) Claims by or against the parties and/or other Tower users regarding interference and any disagreements regarding the existence and sources of interference shall be resolved consistent with the following general principles, subject to the users' respective leases, or as may be otherwise agreed by the parties involved in the claim or disagreement.

(i) Time is of the essence.

(ii) Interference claimed should be specifically described, and whenever possible, specify the alleged or potential sources and proposed or requested corrective measures.

(iii) Parties alleged to be causing interference shall voluntarily implement requested corrections whenever possible, consistent with their analysis of the claim.

(iv) Parties causing or contributing to interference shall be responsible for the cost of correction.

(v) Where requested or suggested corrections are voluntarily implemented and do not correct the interference, the cost of implementation and restoration to the prior condition shall be the responsibility of the party who made the request or suggestion.

(vi) Disputes regarding the existence and/or sources of claimed interference shall be resolved, when necessary, by analysis and opinion of an independent expert, selected at random, from names submitted by the parties involved in the dispute or designated by Landlord, if Landlord is not involved in the dispute, with the cost of the independent expert to be paid pro rata by the parties found to be causing or contributing to the interference.

(vii) The determinations and any recommendations for correction of interference by the independent expert shall be binding upon, and immediately implemented by, the responsible parties.

10. Assignment. This Lease may be assigned or transferred by Tenant without the approval or consent of Landlord to the Tenant's principal, affiliates, subsidiaries of its principal, or to any entity which acquires all or substantially all of Tenant's assets in the market defined by the Federal Communications Commission in which the Premises is located by reason of merger, acquisition or other business reorganization; provided, however, that, in the event of such assignment or transfer, and within sixty (60) days of receipt of a written request from the Landlord to the assignee or transferee as identified on a payment or otherwise, the assignee or transferee shall as a condition of this Lease provide Landlord with a written statement, signed by an authorized representative of the assignee or transferee, disclosing its official name and address for purposes of this Lease and agreeing to assume and satisfy all Tenant's duties and obligations under this Lease. Except as specifically allowed above, Tenant covenants and agrees that it will not assign or transfer all or any part of this Lease or Tenant's interest or rights under this Lease without the prior written consent of Landlord, which consent shall not be unreasonably withheld. An assignment or transfer shall only be for the same purposes and expressly permitted uses of the Premises as recited and agreed to in this Lease.

11. <u>Subletting Prohibited.</u> Tenant shall be prohibited from subletting all or any part of the Site or Premises.

12. <u>Termination; Default.</u> This Lease may be terminated prior to its expiration as provided in this Section.

(a) If either party is in default or breach of this Lease for more than thirty (30) days after written notice of breach or default from the other party, or such longer period as the party not in default may agree to in writing as reasonably necessary for correction of the default or breach, the rights of the party in breach or default may be terminated by the other party, to be effective sixty (60) days after written notice to terminate is given. If Landlord terminates this Lease, it shall be entitled to all remedies provided in this Lease and by law, including but not limited to re-entry, repossession and denial of Tenant's access to the Premises, retention of Rent paid in advance and liquidated damages as provided in Section 12(g). The parties acknowledge that this subsection intends to provide sufficient time to obtain alternate licensing or leasing arrangements. If Landlord defaults and Tenant terminates this Lease, Tenant shall be entitled to all remedies provided for in this Lease and by law.

(b) Provided that Tenant's financial obligations under Sections 3, 6, 7 and 25 are paid, upon one month written notice to Landlord, Tenant may terminate this Lease if and to the extent, through

no fault of Tenant, it has lost or been denied any necessary governmental authorization for its uses of the Premises as contemplated in this Lease, documentation of which shall accompany the written notice. Such a termination shall not require Landlord to return any portion of the Rent to the Tenant unless the loss or denial was caused by Landlord's acts or omissions in violation of this Lease.

(c) Within ninety (90) days of the termination of this Lease for any reason, Tenant shall remove Tenant's equipment from the Premises and restore the Tower and ground area adjacent to the Tower to the condition which existed prior to Tenant's use and occupancy, reasonable wear and tear excepted.

(d) If the Premises are destroyed or damaged through no fault of Tenant to an extent that materially and adversely will affect Tenant's use of the Premises for more than thirty (30) days, Tenant may terminate this Lease by thirty (30) days written notice to Landlord, unless the destruction or damage is repaired and the material and adverse affects are eliminated within the thirty (30) days. In the event Tenant agrees to repair its Tenant Facilities, Landlord agrees in good faith to assist Tenant in establishing a temporary mobile wireless communication facility on the Site to allow Tenant to continue to provide service during the repair period.

(e) If the Tower is damaged or destroyed, Landlord may elect, within thirty (30) days, to repair, rebuild or restore the Tower to the same condition which existed immediately prior to the damage or destruction or to terminate this Lease by written notice to Tenant, given within thirty (30) days of the damage or destruction. If Landlord terminates the Lease, Tenant shall be entitled to a refund of Rent for each full month from the date of termination to the next anniversary date, with the monthly refund amount being equal to 1/12 of the last annual Rent. If Landlord elects to repair, rebuild or restore the Tower, the Lease has not been terminated as provided in Section 12(d), the damage or destruction has deprived Tenant of its full use and enjoyment of the premises and Landlord has refused to permit, or, despite Landlord's permission and Tenant's diligent and good faith efforts, Tenant has been unable to establish a temporary mobile wireless communication facility on the Site to allow Tenant to continue to provide service during the repair period, Tenant shall be entitled to fifty (50%) percent Rent abatement by credit against its next annual Rent payment, from the date of damage or destruction to the date repairs or restoration are completed, with the amount of rent abatement to be based on the number of days without use, using the last annual Rent as a basis.

(f) If the portion of the Site occupied by all or part of the Premises is taken by eminent domain or condemned by any public authority, this Lease shall terminate, with Landlord entitled to the amount of any condemnation award that is not specifically attributable to and for Tenant's Facilities.

(g) Upon a termination by Landlord under Section 12(a), or a termination by Tenant that is not allowed by Sections 12(b) or 12(d) and is on less than one (1) year advance written notice or the applicable and required notice under Section 2, in addition to any Rent which has been paid to Landlord, Tenant shall also be liable for and pay liquidated damages in the amount of the Rent that was last due under Section 3, in satisfaction of any then remaining term of this Lease, this provision

being in recognition of the long range nature of this Lease, the Landlord's annual budget process and to limit and define liability in advance of any such termination.

(h) If Tenant's estate created by this Lease is taken by execution or other legal process, is assigned for the benefit of creditors except to that of the Financing Entity or, if a petition in bankruptcy or for appointment of receiver concerning Tenant is filed and pending without dismissal for more than sixty (60) days or upon a bankruptcy adjudication or appointment of receiver for Tenant, this Lease may be terminated at the option of Landlord.

(i) The parties agree that, should Landlord cease using the Site for its purposes, upon one year's prior written notice (unless the time available for such notice is shortened pursuant to or by virtue of court order), the Lease shall terminate. Landlord hereby represents that, in the event any other governmental entity requests or demands removal of the Tower for any reason during the term of this Lease, Landlord will oppose the request or demand to remove the Tower for the balance of the term of this Lease. Landlord will concur in Tenant's right to intervene regarding the continued maintenance and/or existence of the Tower.

13. Quiet Enjoyment, Cooperation; Estoppel Letters.

(a) Landlord covenants and agrees that upon payment of the rent and observance and performance of all covenants, terms and conditions by Tenant under this Lease, Tenant shall peaceably and quietly hold and enjoy the Premises, rights and privileges granted hereunder for the term hereby demised without hindrance or interference by Landlord.

(b) Landlord agrees, provided there is no expense to, or changes required by, Landlord, to reasonably cooperate with Tenant in any efforts by Tenant to secure or renew any governmental permits, that are not issued or required by Landlord, necessary to use the Premises as contemplated in this Lease, and to join in any applications or other documents reasonably requested by Tenant.

(c) Landlord and Tenant agree to furnish to each other upon request, letters confirming whether this Lease is in full force and effect free of known defaults and such other matters concerning the status of this Lease which may be reasonably requested.

14. <u>Construction</u>. This Lease shall be construed in accordance with the laws of the State of Michigan. In the event that any provisions hereof shall be legally unenforceable as determined by final order of a court of competent jurisdiction or the FCC, the remaining provisions shall nevertheless be carried into effect. The parties agree that time is of the essence of this Lease.

15. <u>Paragraph Headings; Entire Agreement; Oral Modifications.</u> The Section or paragraph headings contained herein are for convenience only and shall not be deemed a part of this Lease. This Lease, which includes the attached Exhibits, contains the entire understanding between the Parties with reference to the matters contained herein, there being no terms, conditions, warranties, or representations other than those contained herein. No amendment to this Lease or the attached Exhibits shall be valid unless made in writing and signed by both Parties hereto.

16. <u>Successors in Interest</u>. Subject to the provisions regarding assignment, this Lease shall be binding upon, and inure to the benefit of, the successors-in-interest and permitted assigns of the Parties hereto.

17. <u>Landlord's Representations</u>. Landlord states that:

(a) Landlord has full authority to execute, deliver and perform this Lease, which benefits and serves a legitimate public purpose by generated revenues.

(b) There is no litigation or other proceeding pending or threatened affecting title or permitted uses of the site and Premises.

(c) It will provide written notice to Tenant upon discovering or receiving notice of any fact or claim related to the title, authority or proceedings described in Subsections (a) and (b).

18. <u>Tenant's Agreements</u>. Tenant acknowledges and agrees that:

(a) At all times it will conduct its operations on the Premises in a lawful manner, in compliance with all standards, rules and regulations of the FCC and any other governmental agency with authority over Tenant's use and business on the Premises, including Landlord's ordinances.

(b) It has inspected the Premises and accepts and finds the existing conditions to be satisfactory for installation of the Tower and Tenant's Facilities, which shall be in accordance with all required governmental permits, licenses, or approvals.

(c) It will obtain and thereafter diligently maintain, all permits, licenses or other governmental approvals required for its use and operations on the premises throughout the initial and extension terms of this Lease.

(e) It shall provide to and maintain with Landlord, a surety bond in the amount of \$20,000.00, which shall be payable or available to Landlord to assure removal of Tenant's Facilities and restoration of the Premises upon expiration or termination of this Lease.

(f) Information provided to Landlord that Tenant claims to be confidential, proprietary, or privileged will be identified as such at the time it is provided and be accompanied by written documentation and/or explanation of the basis for the claim.

19. <u>Notices</u>. All notices, requests or other writings provided for under this Lease must be in writing and shall be deemed validly given on the date of (a) personal delivery or (b) receipt, if sent by certified mail, return receipt requested, or by overnight courier, addressed as follows (or any other address that the party to be notified may have designated to the sender by like written notice):

TENANT:	New Cingular Wireless PCS, LLC
	Attn: Tower Asset Group – Lease Administration
	RE: Cell Site #: MI6098; Cell Site Name: Farmington Hills Water
	Tank (MI)

	Fixed Asset #: 15327514 1025 Lenox Park Blvd NE, 3 rd Floor Atlanta, Georgia 30319
WITH A COPY TO:	New Cingular Wireless PCS, LLC Attn: Legal Dept – Network Operations RE: Cell Site # MI6098; Cell Site Name: Farmington Hills Water Tank (MI) Fixed Asset #: 15327514 208 S. Akard Street Dallas, TX 75202-4206
LANDLORD:	City of Farmington Hills 31555 W. Eleven Mile Road

20. <u>Broker's Commissions.</u> The Parties represent that neither of them has used real estate brokers in connection with this Lease.

Farmington Hills, MI 48336

Attn: City Manager

21. <u>Environmental Matters.</u> The provisions of this Section shall survive the termination of this Lease.

(a) For purposes of this Lease, "Hazardous Material" includes any hazardous, toxic or dangerous waste, substance or material as defined in the Comprehensive Environmental Response, Compensation, and Liability Act, or any other existing federal or state statute, relating to, or imposing liability or standards of conduct concerning any hazardous, toxic or dangerous waste, substance or material.

(b) Landlord agrees to indemnify and defend Tenant from any losses, claims, damages, penalties, liabilities or costs that Tenant suffers as a result of the presence of hazardous material in, on or under the Site, that was known to Landlord at the time of this Lease or that results from Landlords' generation or storage of hazardous material on the Site or Premises.

(c) Landlord and Tenant will not generate or store any hazardous material on or about the Site or Premises.

(d) Tenant agrees to indemnify and defend Landlord from any losses, claims, damages, penalties, liabilities or costs that Landlord may suffer as a result of Tenant's generation or storage of hazardous material on the Site or Premises, with or without Landlord's approval.

22. <u>Lease Memorandum.</u> Upon commencement of this Lease and receipt of the first year's rent, and a written request from Tenant, Landlord agrees that Tenant may prepare and record a Lease Memorandum for the Premises in a form acceptable to and approved by Landlord.

23. <u>Remedies Not Exclusive</u>. It is agreed that the rights, remedies, and benefits provided by this Lease shall be cumulative and shall not be exclusive of any other of said rights, remedies, and benefits, or of any other rights, remedies and benefits allowed by law.

24. <u>Waiver</u>. One or more waivers of any covenant or condition by Landlord or by Tenant shall not be construed as a waiver of a further breach of the same covenant or condition by such party.

25. <u>Obligations</u>. Tenant's obligations under this Lease include, without limitation, fulfilling and satisfying all payment, performance and improvement obligations as were, or may be legally, specified as conditions or requirements of site plan or building permit approvals, with any improvements to the Site, Tower and Premises considered to be Landlord's property and not subject to removal by Tenant under Section 12, unless otherwise specified.

26. <u>Freedom of Information Act</u>. Landlord and Tenant agree that this Lease Agreement is subject to disclosure under the Michigan Freedom of Information Act. Landlord agrees that any information submitted by Tenant under Section 18(f) will only be used as necessary in administering and enforcing the provisions of this and other leases for use of the Site and that any other disclosure of such information will be if required by the Michigan Freedom of Information Act or other legal process in the manner required by law.

27. <u>Governing Law/Consent to Jurisdiction and Venue</u>. This Agreement shall be deemed to be executed in the State of Michigan and shall be governed in all respects, including validity, interpretation and effect, and construed in accordance with, the laws of the State of Michigan as applicable to contracts entered into and performed entirely within the State, irrespective of conflict of laws principles. Except as otherwise required by law or court rule, any action brought to enforce, interpret, or decide any Claim arising under or related to this Contract shall be brought in the Sixth Judicial Circuit Court of the State of Michigan, the 47th District of the State of Michigan, or the United States District Court for the Eastern District of Michigan, Southern Division, as dictated by the applicable jurisdiction of the court. Except as otherwise required by law or court rule, venue is proper in the courts set forth above. The choice of forum set forth above shall not be deemed to preclude the enforcement of any judgment obtained in such forum or taking action under this Contract to enforce such judgment in any appropriate jurisdiction.

28. <u>Counterparts</u>. This Agreement may be executed in several counterparts, each of which shall be an original, and all of which shall constitute one and the same instrument.

[Remainder of this page intentionally left blank; signatures appear on following page]

IN WITNESS WHEREOF, the parties hereto have set their hands on the day and year set forth with the notarization of their signatures.

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

By:	 	
Print Name:		
Its:		

Date:_____

STATE OF)
) ss
COUNTY OF)

On this ______, 2021, before me personally appeared _______, the ______ of New Cingular Wireless PCS, LLC, a Delaware limited liability company.

Subscribed and sworn to before me this

Notary Public My Commission Expires:_____

[Signatures continued on following page]

ATTESTED:

CITY OF FARMINGTON HILLS

Pamela B. Smith, City Clerk

By:_____ Gary Mekjian, City Manager

STATE OF MICHIGAN)) ss. COUNTY OF OAKLAND)

On this ______, 2021, before me personally appeared Gary Mekjian, the City Manager of the City of Farmington Hills, who signed this Lease Agreement on behalf of the City.

Subscribed and sworn to before me this

Notary Public, Acting in Oakland County, Michigan My Commission Expires:_____

EXHIBIT A

LEGAL DESCRIPTIONS OF OVERALL PARCEL (SITE) (Taken from Title Commitment)

Land situated in the City of Farmington Hills, County of Oakland, State of Michigan, described as follows:

Lot 1 and Lot 2 of "Howard Acres", a subdivision of the Southeast 1/4 of the Northeast 1/4 of Section 18, T.1N., R.9E., City of Farmington Hills, Oakland County, Michigan Liber 41, Page 42 of Oakland County records

Commonly Known As: Tax Parcel Id No.: 27245 Halstead Road, Farmington Hills, MI 48331 22-23-18-200-023

LEGAL DESCRIPTION OF PREMISES (WATER TOWER AND LEASE AREA):

Commencing at the East 1/4 corner of Section 18, T1N, R9E, City of Farmington Hills, Oakland County, Michigan; thence N 03°20'00" E 1005.00 feet along the East line of said Section 18 (also being the centerline of Halsted Road, 120 feet wide, and the East line of "Howard Acres" as recorded in Liber 41, Page 42 of Oakland County records; thence N 86°40'00" W 640.00 feet; thence N 04°20'00" E 185.00 feet; thence N 86°03'59" W 480.00 feet; thence S 76°35'19" W 113.00 feet; thence N 87°33'50" W 60.00 feet; thence N 45°06'28" W 35.00 feet; thence N 44°53'32" E 12.50 feet to the POINT OF BEGINNING:

thence continuing N 44°53'32" E 20.00 feet;

thence S 45°06'28" E 30.00 feet;

thence S 44°53'32" W 20.00 feet;

thence N 45°06'28" W 30.00 feet to the POINT OF ENDING; being a part of the Northeast 1/4 of Section 18, T1N, R9E, City of Farmington Hills, Oakland County, Michigan; containing 300 square feet; together with a 3 foot wide non-exclusive easement for ice bridge and underground conduit, a 3 foot wide non-exclusive easement around the equipment for the ground ring and a variable width non-exclusive easement from the existing meter bank to the generator for the purpose of supplying the generator with natural gas; subject to easements and restrictions of record, if any;

[continued on following page]

EXHIBIT A – Continued from previous page

Together with a 25-foot-wide non-exclusive easement for ingress, egress, and public utilities, the centerline of said easement is described as follows:

Commencing at the East 1/4 corner of Section 18, T1N, R9E, City of Farmington Hills, Oakland County, Michigan; thence N 03°20'00" E 1005.00 feet along the East line of said Section 18 (also being the centerline of Halsted Road, 120 feet wide, and the East line of "Howard Acres" as recorded in Liber 41, Page 42 of Oakland County records; thence N 86°40'00" W 60.00 feet to the west right-of-way line of said Halsted Road and the POINT OF BEGINNING:

thence N 86°40'00" W 580.00 feet thence N 04°20'00" E 185.00 feet; thence N 86°03'59" W 480.00 feet; thence S 76°35'19" W 113.00 feet; thence N 87°33'50" W 60.00 feet; thence N 45°06'28" W 35.00 feet to the POINT OF ENDING; being a part of the Northeast 1/4 of Section 18, T1N, R9E, City of Farmington Hills, Oakland County, Michigan; and subject to easements and restrictions of record, if any;

And together with a 10-foot-wide non-exclusive easement for public utilities, the centerline of said easement is described as follows:

Commencing at the East 1/4 corner of Section 18, TIN, R9E, City of Farmington Hills, Oakland County, Michigan; thence N 03°20'00" E 1005.00 feet along the East line of said Section 18 (also being the centerline of Halsted Road, 120 feet wide, and the East line of "Howard Acres" as recorded in Liber 41, Page 42 of Oakland County records; thence N 86°40'00" W 640.00 feet; thence N 04°20'00" E 185.00 feet; thence N 86°03'59" W 480.00 feet; thence S 76°35'19" W 113.00 feet; thence N 87°33'50" W 60.00 feet; thence N 45°06'28" W 35.00 feet; thence N 44°53'32" E 32.50 feet; thence S 45°06'28" E 35.00 feet to the POINT OF BEGINNING:

thence S 44°53'32" W 100.76 feet;

thence S 02°33'14" W 127.68 feet to the south line of Lot 2 of said "Howard Acres" and the POINT OF ENDING; being a part of the Northeast 1/4 of Section 18, T1N, R9E, City of Farmington Hills, Oakland County, Michigan; and subject to easements and restrictions of record, if any.

EXHIBIT B

Exhibit B consists of the following plans, drawings and specifications, reduced-size copies of which are attached hereto, prepared by Black & Veatch in cooperation with New Cingular Wireless PCS, LLC under Project No. 129391 as last revised on 04/13/2021. Complete full-size sets of the plans, drawings and specifications are on file with the City of Farmington Hills Building Department.

1. M16098 – City of Farmington Hills WaterTank Site Plan, Project: NSB, AT&T FA#: 15327514, including the following:

Title Page Overall Site Plan C-1 Compound Plan C-2 Enlarged Compound Plan C-2.1 WIC Platform w/Generator C-3 Site Details C-4 Site Details C-5 Signage Details C-6 Concrete Work Notes C-7 Site Work and Drainage Notes C-8 Elevation T-1 Antenna Layout T-2 Antenna Configuration T-3 **Equipment Details T-4** Equipment Details T-5 Structural Notes T-6 Equipment Notes T-7 **Electrical Section Notes E-1 Overall Electrical Plan E-2 One-Line Grounding Diagram E-3** Grounding Details E-4 Grounding Details E-5 Grounding Details E-6 General Notes N-1 General Notes N-2 MI6098_Sector_A_After MI6098_Sector_B_After MI6098 Sector C After

SITE PHOTO



PROJECT INFORMATION 27245 HALSTED ROAD FARMINGTON HILLS, MI 48331 SITE ADDRESS: COUNTY: BARR CITY OF FARMINGTON HILLS WATERTANK SITE NAME: SITE NUMBER: MI6098 FA NUMBER: 15327514 USID NUMBER: 295762 LATITUDE: 42* 29' 37.2" N LONGITUDE: 83° 25' 18.1" W GROUND ELEVATION: 877' TOWER OWNER: CITY OF FARMINGTON HILLS SITE ACQUISITION: ANTHONY ZOLNIERZAK 412.269.5927 CONSTRUCTION MANAGER: TYLER MILLER 913.458.6194 LEAD ENGINEER: JORDAN HENR 913.458.4293

PROJECT MANAGER: PHONE 317.822.8969 APPLICANT AT&T MOBILITY CONTACT: PHONE:

AT&T MOBILITY

PROJECT: NSB AT&T SITE ID: MI6098 AT&T FA#: 15327514

CITY OF FARMINGTON HILLS WATERTANK 27245 HALSTED ROAD **FARMINGTON HILLS, MI 48331**



ENGINEERING	APPLICANT/OWNER:
	AT&T MOBILITY
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DRAWING INDEX	16025 NORTHLAND DR SOUTHFIELD, MI 48075
	PREPARED BY:
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GENERATOR	BLACK & VEATCH
	6800 W. 115TH ST, SUITE 2292 OVERLAND PARK, KANSAS 66211
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G DIAGRAM	40r
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	ALTER THIS DOCUMENT.
DIAGRAMS ATTACHED	LANDLORD/PROPERTY OWNER SIGNATURE
	A 04.13.21 ISSUED FOR REVIEW
FERENCE MATERIALS	REV DATE DESCRIPTION
ARE BASED ON THE AT&T RFDS DATED 05/13/2020	PROJECT LOCATION: USID (295762)
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811 OR (800) 482-7171 www.missdig.org	TITLE PAGE
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2015 MICHIGAN BUILDING CODE 2014 MICHIGAN ELECTRICAL CODE TIA-222-G OR LATEST EDITION AWWA D100-11 OR LATEST EDITION

SHEET NO: SHEET TITLE TITLE PAGE TITLE PAGE

OVERALL SITE PLAN

WIC PLATFORM WITH GENERAT

COMPOUND PLAN ENLARGED COMPOUND PLAN

SITE DETAILS

SITE DETAILS

FI EVATION

SIGNAGE DETAILS

ANTENNA LAYOUT

EQUIPMENT DETAILS

EQUIPMENT DETAILS

STRUCTURAL NOTES

EQUIPMENT NOTES

GROUNDING DETAILS

CONCRETE WORK NOTES

ANTENNA CONFIGURATION

ELECTRICAL SECTION NOTES OVERALL ELECTRICAL PLAN

ONE-LINE GROUNDING DIAGRA

SITE WORK AND DRAINAGE NO

C-1

C-2

C-2.1

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C-7 C-8

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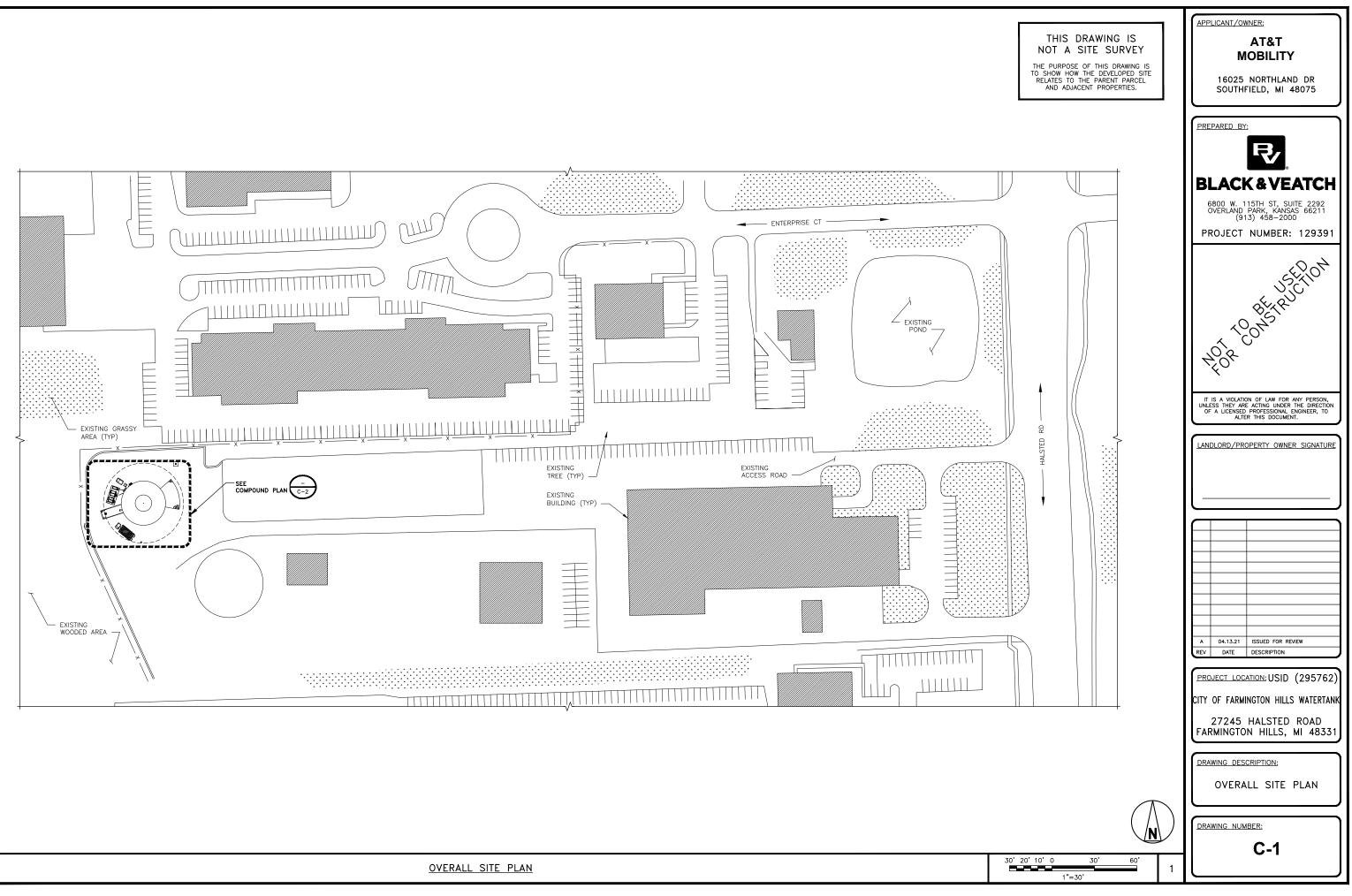
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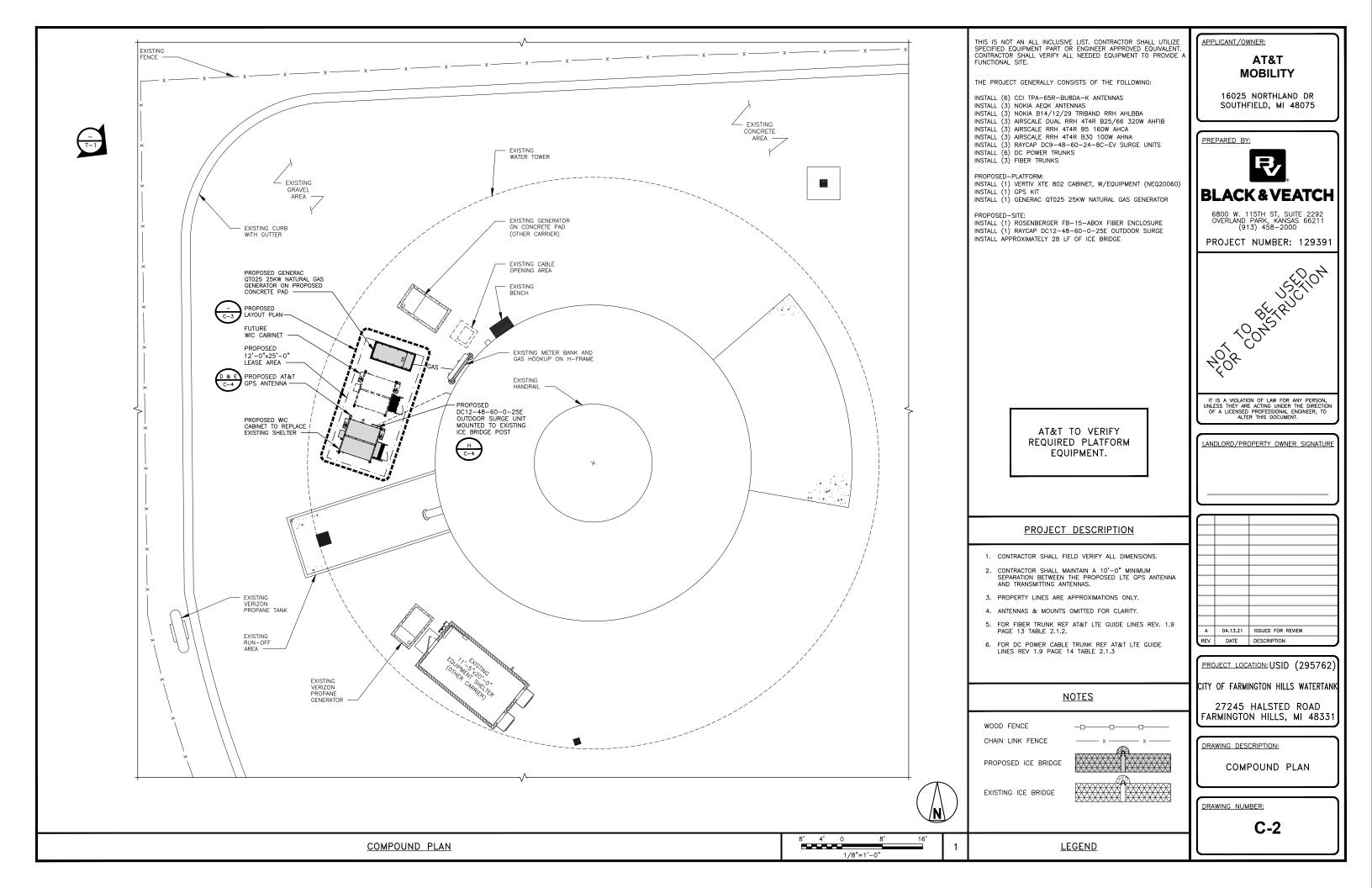
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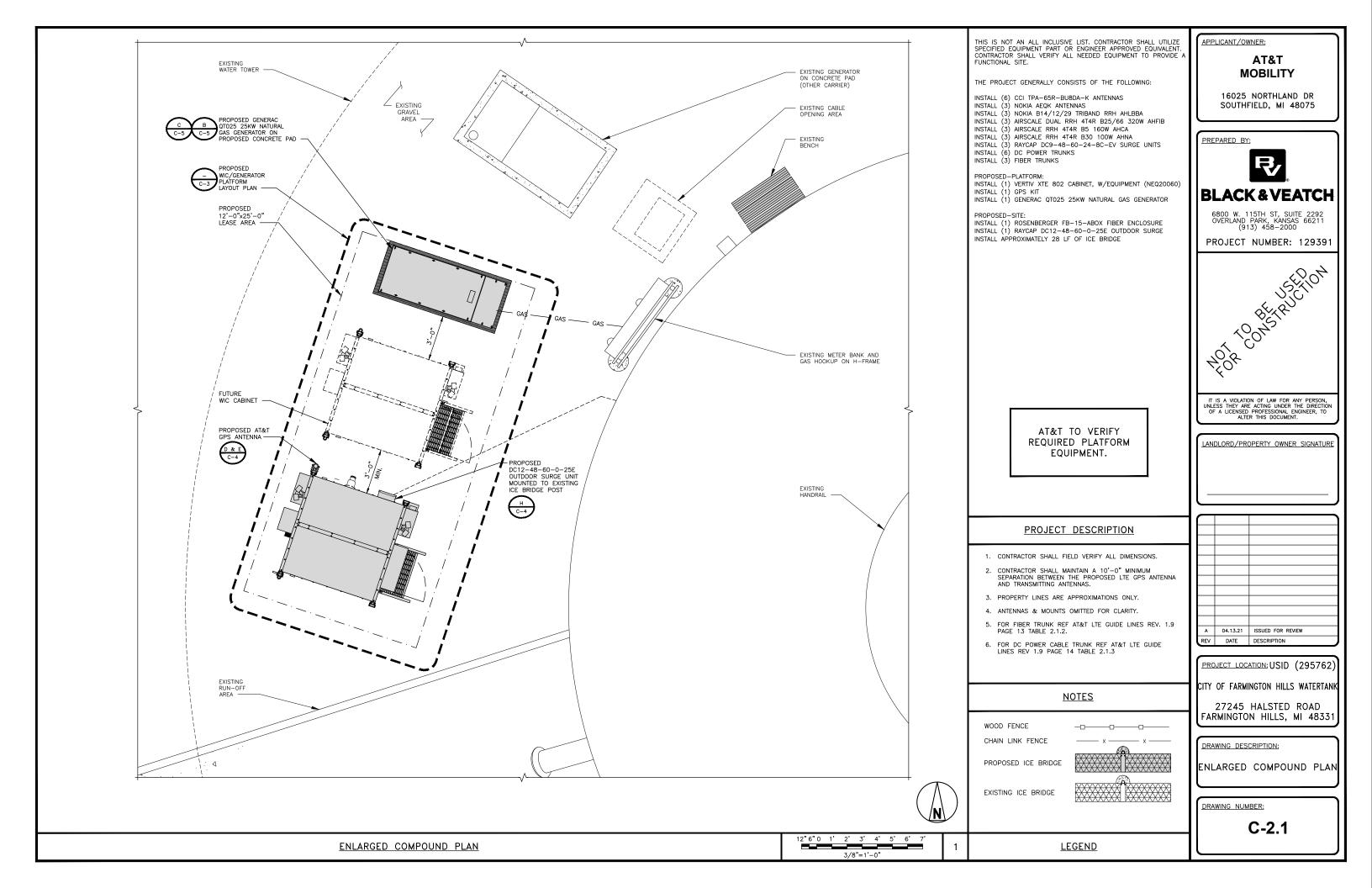
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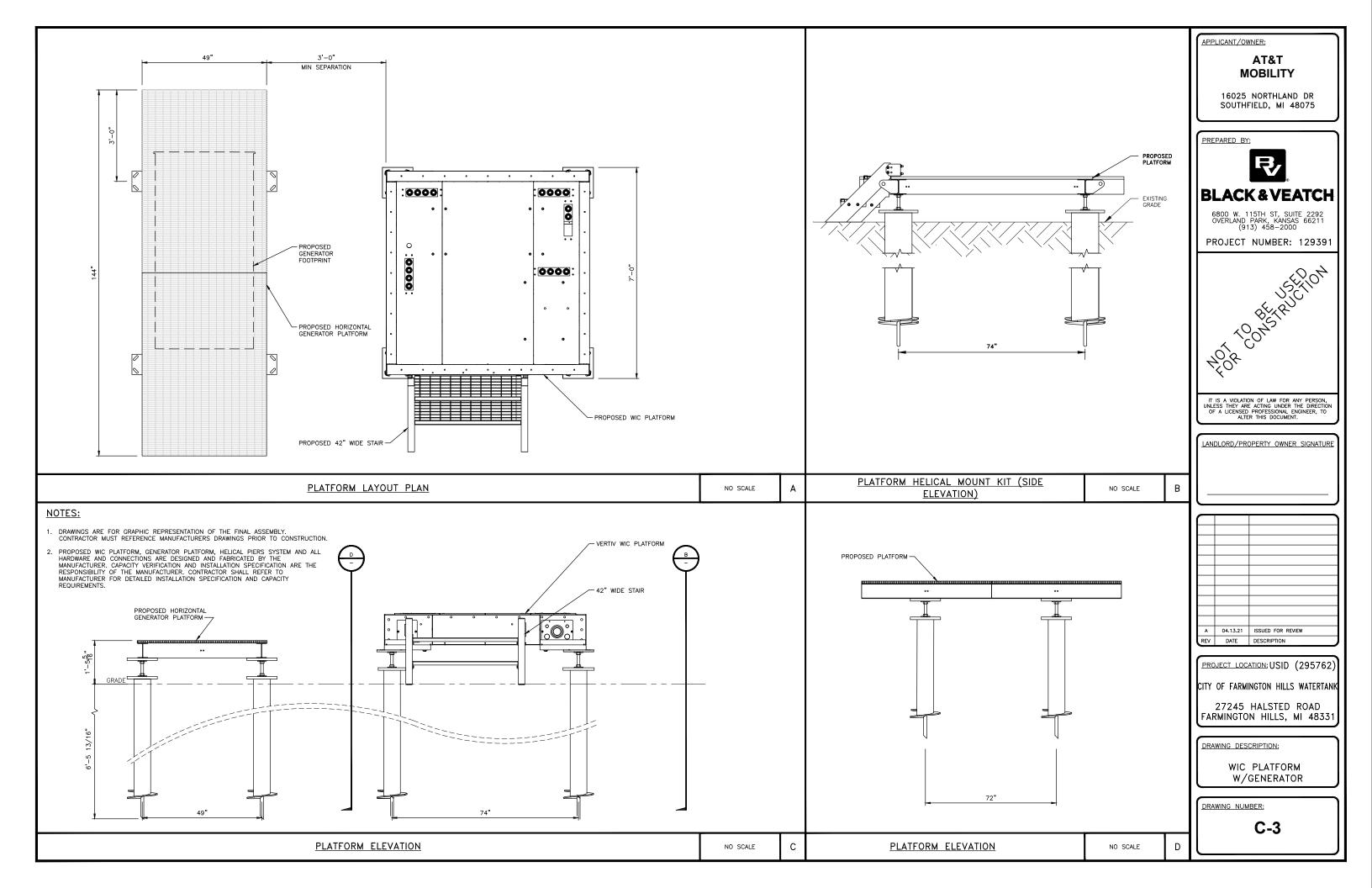
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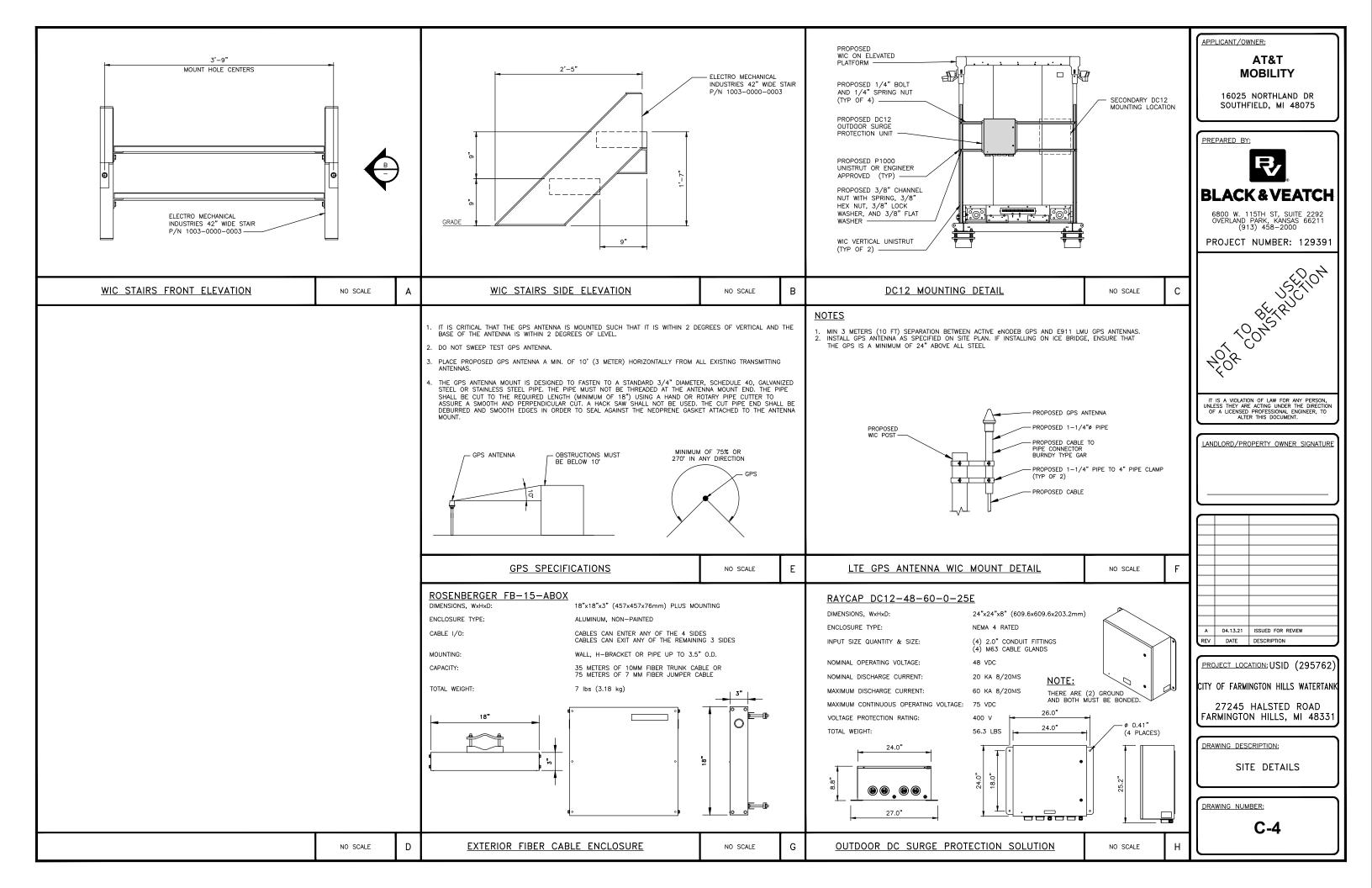
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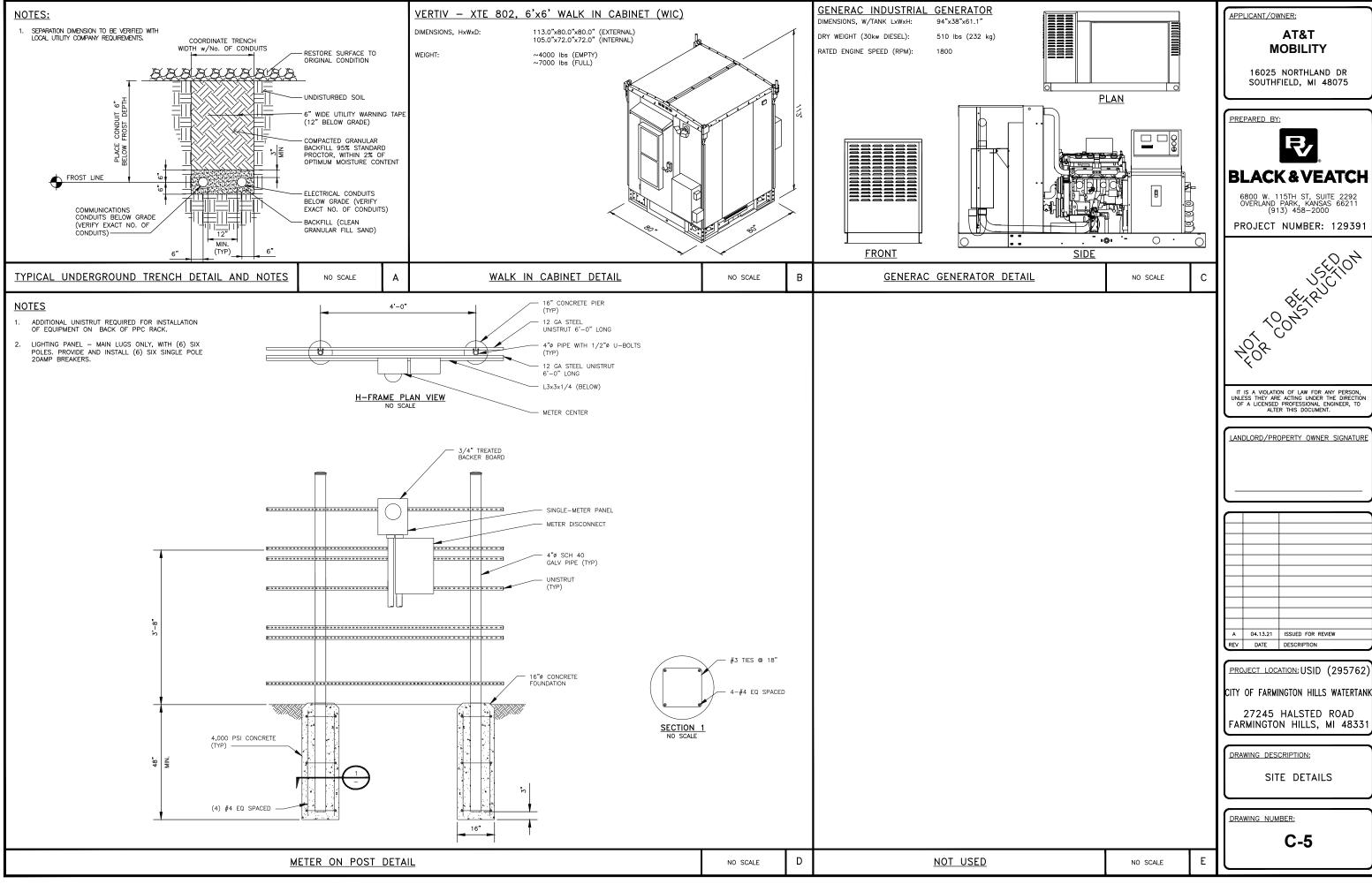












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AT&T

MOBILITY

16025 NORTHLAND DR SOUTHFIELD, MI 48075

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27245 HALSTED ROAD

SITE DETAILS

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SERIOUS INJURY. CONTACT CURRENT MAY EXCEED LIMITS PRESCRIBED IN ANSI/EEE C95.1-1992 FOR CONTROLLED ENVIRONMENTS.	te, call 800-638-2822	Utility Wood Poles (JPA)	entrance gates, shelter doors OR or the outdoor cabinets	on the pole, no less than 3ft below the Antenna and no less than 9ft above ground on the pole, no less	On backside of Antennas	entrance gates, shelter doors OR on the outdoor cabinets		is: 0-99%: Noti Caution sign at n antenna and	f MPE at antenna level ice sign; over 99%: o less than 3ft below 9ft above ground n sign at no less than	LANDLORD/PROPERTY OWNER SIGNATURE
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	F R	Roof Tops At all access points to the roof On Antennas Concealed Antennas antennas mounted facing outside the building	~	x x	x	x x x x				
INFORMATION		antennas on support structure Roofview Graph:	X	X		X				
Contact the owner(s) of the antenna(s) before working closer than 3 feet from the antenna. Contact AT&T Mobility at 800-638-2822 prior to performing any maintenance or reput not before the set of th	FORMATION ANTENNAS ARE MOUNTED COUTSIDE OF THIS BUILDING DITHIS PANEL N	Radiation area is within 3ft from antenna Radiation area is beyond 3ft from antenna	x	adjacent to each antenna adjacent to each antenna		x x	diagonal, yellow striping as to Roofview graph		aution sign (based on s) at antennas/barrier	A 04.13.21 ISSUED FOR REVIEW REV DATE DESCRIPTION PROJECT LOCATION; USID (295762)
STAY BA	STRUCTURE T CK A MINIMUM OF 3 FEET DM THESE ANTENNAS E	Church Steeples	Access to steeple	adjacent to antennas if antennas are concealed	On backside of Antennas	Access to steeple			Caution sign at the antennas	CITY OF FARMINGTON HILLS WATERTANK 27245 HALSTED ROAD
En esta propiedad se ubican antenas de telecomunicationes operadas por ATAT their inst Mohilly: Foro mantener una distancia de no menos de a pies y obsedecer todos los avisos.	ATET Mobility at 800-838-2822 and follow rurations prior to performing any maintenance os closer than 3 feet from the antennas.	Water Stations	Access to ladder	adjacent to antennas if antennas are concealed	On backside of Antennas	Access to ladder			Caution sign beside Info sign #1, min. 9ft above ground	FARMINGTON HILLS, MI 48331
Indimensione reparaziones cereta de la dineta do ALEL 3000007. Esta es la estacion base numero Parov communicarse con la oficica de la administración del edificio si esta puerta o compuerta se encuentra sin candado.	SAT&T	Notes for Rooftop sites: 1. Either NOTICE or CAUTION signs need to 2. If Roofview shows: only blue = Notice Si 3. Should the required striping area interfer please notify AT&T to modify the striping	gn, blue and yellow = 0 e with any structures o	Caution Sign, only yello or equipment (A/C, ver	ow = Caution Sign to	be installed.		nnas of the sector.		SIGNAGE DETAILS DRAWING NUMBER: C-6
INFO_SIGN_#1INF	O SIGN #2 INFO SIGN	_ <u>#3</u>		SIGNAGE (GUIDELINES CH	IART				1

PART 1 - GENERAL

- 1.1 SCOPE:
 - A. FORM WORK, REINFORCING STEEL, ACCESSORIES, CAST-IN PLACE CONCRETE, FINISHING, CURING AND TESTING FOR STRUCTURAL CONCRETE FOUNDATIONS.

1.2 REFERENCES:

- A. ACI (AMERICAN CONCRETE INSTITUTE)
 - 1. ACI 301 SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS.
 - 2. ACI 304 RECOMMENDED PRACTICE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE.
 - 3. ACI 305 RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING.
 - 4. ACI 306 RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING.
 - 5. ACI 308 STANDARD PRACTICE FOR CURING CONCRETING.
 - 6. ACI 309 STANDARD PRACTICE FOR CONSOLIDATION OF CONCRETE.
 - 7. ACI 318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
 - 8. ACI 347 RECOMMENDED PRACTICE FOR CONCRETE FORMWORK DRILL PIERS.
- B. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS). THE APPLICABLE STANDARDS OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS ARE LISTED IN THE ACI STANDARDS AND ARE A PART OF THIS SPECIFICATION.

<u>PART 2 – PRODUCTS</u>

2.1 REINFORCING MATERIALS:

- REINFORCING BARS: ASTM A615, GRADE 60, PROPOSED DEFORMED BILLET-STEEL BARS, PLAIN FINISH.
- B. FURNISH CHAIRS, BOLSTERS, BAR SUPPORTS, SPACERS AS REQUIRED FOR SUPPORT OF REINFORCING STEEL AND WIRE FABRIC.

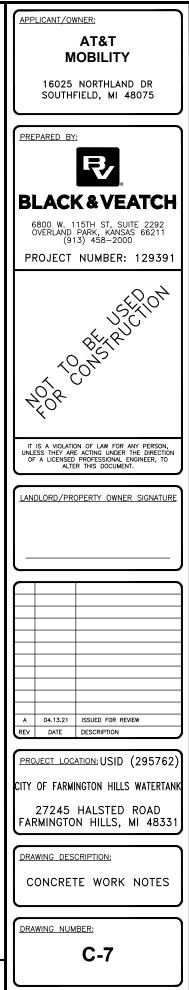
2.2 CONCRETE MATERIALS:

- A. PORTLAND CEMENT SHALL BE TYPE II, CONFORMING TO ASTM C-150.
- B. AGGREGATE SHALL CONFORM TO ASTM C-33.
 - 1. FINE AGGREGATE SHALL BE UNIFORMLY GRADED, CLEAN SHARP, WASHED NATURAL, OR CRUSHED SAND, FREE FROM ORGANIC IMPURITIES.
 - 2. COARSE AGGREGATE SHALL BE NATURAL WASHED GRAVEL OR WASHED CRUSHED ROCK HAVING HARD, STRONG, DURABLE PIECES, FREE FROM ADHERENT COATINGS.
 - 3. MAXIMUM SIZE OF COARSE AGGREGATE SHALL BE 3/4 INCH IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM C-33 GRADATION SIZE NO. 67.
- C. WATER USED IN CONCRETE MIX SHALL BE POTABLE, CLEAN, AND FREE FROM OILS, ACIDS, SALTS, CHLORIDES, ALKALI, SUGAR, VEGETABLE, OR OTHER INJURIOUS SUBSTANCES.
- D. THE CONCRETE SHALL CONTAIN AN AIR-ENTRAINING ADMIXTURE COMPLYING WITH THE REQUIREMENTS OF ASTM C-260 AND ACI 212. 1R AND A WATER- REDUCING ADMIXTURE COMPLYING WITH THE REQUIREMENTS OF ASTM C-494 AND ACI 212. 1R. ADMIXTURES SHALL BE PURCHASED AND BATCHED IN LIQUID SOLUTION. THE USE OF CALCIUM CHLORIDE OR AN ADMIXTURE CONTAINING CALCIUM CHLORIDE IS PROHIBITED. ADMIXTURES SHALL BE OF THE SAME MANUFACTURER TO ASSURE COMPATIBILITY. ACCEPTABLE MANUFACTURERS ARE:
 - 1. W.R. GRACE
 - 2. SIKA CORP.
 - 3. MASTER BUILDERS
 - 4. EUCLID CHEMICAL CO.
 - 5. APPROVED EQUAL
- E. CURING COMPOUND SHALL CONFORM TO ASTM C309, TYPE I, ID, CLASS A AND B AND ASTM C171 AS APPLICABLE.
- 2.3 CONCRETE MIX:
 - A. PROPORTION CONCRETE MIX IN ACCORDANCE WITH REQUIREMENTS OF ACI 301. THE STRENGTH OF CONCRETE SHALL BE AS INDICATED ON THE DRAWINGS. WHERE STRENGTH IS NOT CLEARLY INDICATED, CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI.
 - B. THE CONCRETE MIX SHALL BE DESIGNED FOR A MAXIMUM SLUMP OF THREE INCHES (PLUS OR MINUS 1-INCH) AT THE POINT OF DISCHARGE. MIXES OF THE STIFFEST CONSISTENCY THAT CAN BE EFFICIENTLY PLACED SHALL BE USED.
 - C. ALL CONCRETE SHALL BE TO SIX PERCENT (6%) AIR ENTRAINED (PLUS OR MINUS 1%).
 - D. ALL STRUCTURAL CONCRETE SHALL CONTAIN A WATER-REDUCING AGENT.

PART 3 - EXECUTION

- 3.1 GENERAL:
 - A. CONSTRUCT AND ERECT THE FORM WORK IN ACCORDANCE WITH ACI 301 AND ACI 347.
 - B. COLD-WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 306
 - C. HOT-WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305
- 3.2 INSERTS, EMBEDDED COMPONENTS AND OPENINGS:
 - A. CONTRACTOR SHALL CHECK ALL CIVIL, ARCHITECTURAL, STRUCTURAL AND ELECTRICAL DRAWINGS FOR OPENINGS, SLEEVES, ANCHOR BOLTS, INSERTS AND OTHER ITEMS TO BE BUILT INTO THE CONCRETE WORK.
 - B. COORDINATE THE WORK OF OTHER SECTION IN FORMING AND SETTING OPENINGS. RECESSES, SLOTS, CHASES, ANCHORS, INSERTS AND OTHER ITEMS TO BE EMBEDDED.

- C. EMBEDDED ITEMS SHALL BE SET ACCURATELY IN LOCATION, ALIGNMENT, ELEVATION AND PLUMBNESS, LOCATE AND MEASURE FROM ESTABLISHED SURVEYED REFERENCE BENCHMARKS.
- D. EMBEDDED ITEMS SHALL BE ANCHORED INTO PLACE IN A MANNER TO PREVENT MOVEMENT DURING CONCRETE PLACEMENT AND CONSOLIDATION. COMPONENTS FORMING A PART OF A COMPLETE ASSEMBLY SHALL BE ALIGNED BEFORE ANCHORING INTO PLACE. PROVIDE TEMPORARY BRACING, ANCHORAGE, AND TEMPLATES AS REQUIRED TO MAINTAIN THE SETTING AND ALIGNMENT.
- 3.3 REINFORCEMENT PLACEMENT:
 - A. PLACE REINFORCEMENT ACCORDING TO CHECKED AND RELEASED DRAWINGS AND IN ACCORDANCE WITH ACI 301 AND ACI 318.
 - B. ACCURATELY POSITION, SUPPORT AND SECURE REINFORCEMENT AGAINST DISPLACEMENT FROM FORM WORK CONSTRUCTION OR CONCRETE PLACEMENT AND CONSOLIDATION. SUPPORT REINFORCING ON METAL CHAIRS, RUNNERS, BOLSTERS, SPACERS AND HANGERS.
 - C. SPLICES OF REINFORCING BARS SHALL BE CLASS B UNLESS SHOWN OTHERWISE ON THE DRAWINGS. SPLICES SHALL BE STAGGERED. FULL DEVELOPMENT LENGTH SHALL BE PROVIDED ACROSS JOINTS.
 - D. LOCATE REINFORCING TO PROVIDE CONCRETE COVER AND SPACING SHOWN ON THE DRAWINGS. MINIMUM COVER SHALL BE AS REQUIRED BY ACI 318.
 - E. WELDING OF AND TO ANY REINFORCING MATERIALS INCLUDING TACK WELDING OF CROSSING BARS IS STRICTLY PROHIBITED.
- 3.4 CONCRETE PLACEMENT:
 - A. PRIOR TO PLACING CONCRETE, THE FORMS AND REINFORCEMENT SHALL BE THOROUGHLY INSPECTED; ALL TEMPORARY BRACING, TIES AND CLEATS REMOVED; ALL OPENINGS FOR UTILITIES PROPERLY BOXED; ALL FORMS PROPERLY SECURED IN THERE CORRECT POSITION AND MADE TIGHT. ALL REINFORCEMENT AND EMBEDDED ITEMS SHALL BE SECURED IN THEIR PROPER LOCATIONS. ALL OLD AND DRY CONCRETE AND DIRT SHALL BE CLEANED OFF AND ALL STANDING WATER AND OTHER FOREIGN MATERIAL REMOVED.
- B. PLACING CONCRETE SHALL BE IN ACCORDANCE WITH ACI 301 AND ACI 304 AND SHALL BE CARRIED OUT AT SUCH A RATE THAT THE CONCRETE PREVIOUSLY PLACED IS STILL PLASTIC AND INTEGRATED WITH THE FRESHLY PLACED CONCRETE. CONCRETING ONCE STARTED, SHALL BE CARRIED ON AS A CONTINUOUS OPERATION UNTIL THE SECTION IS COMPLETED. NO COLD JOINTS SHALL BE ALLOWED.
- C. ALL CONCRETE SHALL BE THOROUGHLY CONSOLIDATED AND COMPACTED BY VIBRATION SPACING, RODDING, OR FORKING DURING THE OPERATION OF PLACING AND DEPOSITING IN ACCORDANCE WITH ACI 309. THE CONCRETE SHALL BE THOROUGHLY WORKED AROUND REINFORCEMENT, EMBEDDED ITEMS, AND INTO THE CORNER OF THE FORMS SO AS TO ELIMINATE ALL AIR AND STONE POCKETS.
- 3.5 FINISHING:
 - A. FINISHING OF THE FLOOR SLABS SHALL BE IN ACCORDANCE WITH ACI 302.1 SECTION 7.2 WITH A MINIMUM OF THREE TROWELINGS. THE SLAB FINISH TOLERANCE AS MEASURED IN ACCORDANCE WITH ASTM E 1155 SHALL HAVE AN OVERALL TEST NUMBER FOR FLATNESS, FF= 20 AND FOR LEVEL, FL=15. THE MINIMUM LOCAL NUMBER FOR FLATNESS, FF= 15 AND FOR LEVEL, FL=10.
 - B. SURFACE OF FLOOR SLAB SHALL RECEIVE TWO COATS OF CLEAR SEALER/HARDENER.
 - C. ABOVE GRADE WALL SURFACES SHALL HAVE A SMOOTH FORM FINISH AS DEFINED IN CHAPTER 10 OF ACI 301.
- 3.6 CURING:
- A. FRESHLY DEPOSITED CONCRETE SHALL BE PROTECTED FROM PREMATURE DRYING AND EXCESSIVELY HOT AND COLD TEMPERATURES AND SHALL BE MAINTAINED WITH MINIMUM MOISTURE LOSS AT A RELATIVELY CONSTANT TEMPERATURE FOR A PERIOD OF TIME NECESSARY FOR THE HYDRATION OF THE CEMENT AND PROPER HARDENING OF THE CONCRETE.
- B. CONCRETE SHALL BE KEPT CONTINUOUSLY MOIST AT LEAST OVERNIGHT, IMMEDIATELY FOLLOWING THE INITIAL CURING. BEFORE THE CONCRETE HAS DRIED, ADDITIONAL CURING SHALL BE ACCOMPLISHED BY ONE OF THE FOLLOWING MATERIALS OR METHODS:
 - 1. PONDING OR CONTINUOUS SPRINKLING.
 - 2. ABSORPTIVE MAT OR FABRIC KEPT CONTINUOUSLY WET.
 - 3. NON-ABSORPTIVE FILM (POLYETHYLENE) OVER PREVIOUSLY SPRINKLED SURFACE.
 - 4. SAND OR OTHER COVERING KEPT CONTINUOUSLY WET.
 - 5. CONTINUOUS STEAM (NOT EXCEEDING 150° F) OR VAPOR MIST BATH.
 - 6. SPRAYED-ON CURING COMPOUND APPLIED IN TWO COATS, SPRAYED IN PERPENDICULAR DIRECTION.
- C. THE FINAL CURING SHALL CONTINUE UNTIL THE CUMULATIVE NUMBER OF DAYS OR FRACTION THEREOF, NOT NECESSARILY CONSECUTIVE, DURING WHICH TEMPERATURE OF THE AIR IN CONTACT WITH CONCRETE IS ABOVE 50° F HAS TOTALED SEVEN (7) DAYS. CONCRETE SHALL NOT BE PERMITTED TO FREEZE DURING THE CURING PERIOD. RAPID DRYING AT THE END OF THE CURING PERIOD SHALL BE PREVENTED.



PART 1 - GENERAL

CLEARING, GRUBBING, STRIPPING, EROSION CONTROL, SURVEY, LAYOUT, SUBGRADE PREPARATION AND FINISH GRADING AS REQUIRED TO COMPLETE THE PROPOSED WORK SHOWN IN THESE PLANS.

1.1 REFERENCES

- A. DOT (STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION-CURRENT EDITION)
- B. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS).
- C. OSHA (OCCUPATION SAFETY AND HEALTH ADMINISTRATION).

1.2 INSPECTION AND TESTING:

- FIELD TESTING OF EARTHWORK COMPACTION AND CONCRETE CYLINDERS SHALL BE PERFORMED BY CONTRACTORS INDEPENDENT TESTING LAB. THIS WORK TO BE COORDINATED BY THE CONTRACTOR.
- ALL WORK SHALL BE INSPECTED AND RELEASED BY THE GENERAL CONTRACTOR WHO SHALL CARRY OUT THE GENERAL INSPECTION OF THE WORK WITH SPECIFIC CONCERN TO PROPER PERFORMANCE OF THE WORK AS SPECIFIED AND/OR CALLED FOR ON THE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REQUEST TIMELY INSPECTIONS PRIOR TO PROCEEDING WITH FURTHER WORK THAT WOULD MAKE PARTS OF WORK INACCESSIBLE OR DIFFICULT TO INSPECT.
- 1.3 SITE MAINTENANCE AND PROTECTION:
 - PROVIDE ALL NECESSARY JOB SITE MAINTENANCE FROM COMMENCEMENT OF WORK UNTIL COMPLETION OF
 - AVOID DAMAGE TO THE SITE AND TO EXISTING FACILITIES, STRUCTURES, TREES, AND SHRUBS DESIGNATED TO REMAIN. TAKE PROTECTIVE MEASURES TO PREVENT EXISTING FACILITIES THAT ARE NOT DESIGNATED FOR REMOVAL FROM BEING DAMAGED BY THE WORK. в.
 - C. KEEP SITE FREE OF ALL PONDING WATER.
 - D. PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT AND EPA REQUIREMENTS.
 - PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES NECESSARY TO PROTECT AGAINST THEFT FROM PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION. E. REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE WORK.
 - EXISTING UTILITIES: DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE ENGINEER AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICES HAVE BEEN PROVIDED.
 - PROVIDE A MINIMUM 48-HOUR NOTICE TO THE ENGINEER AND RECEIVE WRITTEN NOTICE TO PROCEED 3.4 TRENCH BACKFILL: BEFORE INTERRUPTING ANY UTILITY SERVICE. 1.

PART 2 - PRODUCTS

- 2.1 SUITABLE BACKFILL: ASTM D2321 (CLASS I, II, III OR IV) FREE FROM FROZEN LUMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.2 NON-POROUS GRANULAR EMBANKMENT AND BACKFILL: ASTM D2321 (CLASS III, IVA OR IVB) COARSE AGGREGATE. FREE FROM FROZEN LUMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.3 POROUS GRANULAR EMBANKMENT AND BACKFILL: ASTM D2321 (CLASS IA, IB OR II) COARSE AGGREGATE FREE FROM FROZEN LUMPS, REFUSE, STONES OR ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION OR OTHER MATERIAL THAT MAY MAKE THE INORGANIC MATERIAL UNSUITABLE FOR BACKFILL.
- 2.4 SELECT STRUCTURAL FILL: GRANULAR FILL MATERIAL MEETING THE REQUIREMENTS OF ASTM E850-95. FOR USE AROUND AND UNDER STRUCTURES WHERE STRUCTURAL FILL MATERIAL ARE REQUIRED.
- 2.5 GRANULAR BEDDING AND TRENCH BACKFILL: WELL-GRADED SAND MEETING THE GRADATION REQUIREMENTS OF ASTM D2487 (SE OR SW-SM).
- 2.6 COARSE AGGREGATE FOR ACCESS ROAD SUBBASE COURSE SHALL CONFORM TO ASTM D2940.
- 2.7 UNSUITABLE MATERIAL: HIGH AND MODERATELY PLASTIC SILTS AND CLAYS (LL>45). MATERIAL CONTAINING REFUSE, FROZEN LUMPS, DEMOLISHED BITUMINOUS MATERIAL, VEGETATIVE MATTER, WOOD, STONES IN EXCESS OF 3 INCHES IN ANY DIMENSION, AND DEBRIS AS DETERMINED BY THE CONSTRUCTION MANAGER. TYPICALLY THESE WILL BE SOILS CLASSIFIED BY ASTM AS: PT, MH, CH, OH, ML, AND OL.
- 2.8 GEOTEXTILE FABRIC: MIRAFI 500X OR ENGINEER APPROVED EQUAL
- 2.9 PLASTIC MARKING TAPE: SHALL BE ACID AND ALKALI RESISTANT POLYETHYLENE FILM SPECIFICALLY PLASTIC MARKING TAPE: STALL BE ACID AND ALKALI RESISTANT POLYETHTENE FILM SPECIFICALLY MANUFACTURED FOR MARKING AND LOCATING UNDERGROUND UTILITES, 6 INCHES WIDE WITH A MINIMUM THICKNESS OF 0.004 INCH. TAPE SHALL HAVE MINIMUM STRENGTH OF 1500 PSI IN BOTH DIRECTIONS AND MANUFACTURED WITH INTEGRAL CONDUCTORS, FOIL BACKING OR OTHER MEANS TO ENABLE DETECTION BY A METAL DETECTOR WHEN BURIED UP TO 3 FEET DEEP. THE METALLIC CORE OF THE TAPE SHALL BE ENCASED IN A PROTECTIVE JACKET OR PROVIDED WITH OTHER MEANS TO PROTECT IT FROM CORROSION. TAPE COLOR SHALL BE RED FOR ELECTRIC UTILITIES AND ORANGE FOR TELECOMMUNICATION UTILITIES.

PART 3 - EXECUTION

3.1 GENERAL

- BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES, INSTALL EROSION AND SEDIMENT CONTROL MEASURES. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE DRAINED AT ANY TIME.
- B. BEFORE ALL SURVEY, LAYOUT, STAKING, AND MARKING, ESTABLISH AND MAINTAIN ALL LINES, GRADES, ELEVATIONS AND BENCHMARKS NEEDED FOR EXECUTION OF THE WORK.
- C. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF THE SITE. REMOVE TREES, BRUSH, STUMPS, RUBBISH AND OTHER DEBRIS AND VEGETATION RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE SITE AREA TO BE CLEARED.
 - REMOVE THE FOLLOWING MATERIALS TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE ORIGINAL GROUND SURFACE: ROOTS, STUMPS, AND OTHER DEBRIS, BRUSH, AND REFUSE EMBEDDED IN OR PROTRUDING THROUGH THE GROUND SURFACE, RAKE, DISK OR PLOW THE AREA TO A DEPTH OF NO LESS THAN 6 INCHES, AND REMOVE TO A DEPTH OF 12 INCHES ALL ROOTS AND OTHER DEBRIS
- REMOVE TOPSOIL MATERIAL COMPLETELY FROM THE SURFACE UNTIL THE SOIL NO LONGER MEETS THE DEFINITION OF TOPSOIL. AVOID MIXING TOPSOIL WITH SUBSOIL OR OTHER UNDESIRABLE MATERIALS. 3.6 FINISH GRADING
- EXCEPT WHERE EXCAVATION TO GREATER DEPTH IS INDICATED, FILL DEPRESSIONS RESULTING FROM 3. CLEARING, GRUBBING AND DEMOLITION WORK COMPLETELY WITH SUITABLE FILL.
- A. REMOVE FROM THE SITE AND DISPOSE IN AN AUTHORIZED LANDFILL ALL DEBRIS RESULTING FROM CLEARING AND GRUBBING OPERATIONS. BURNING WILL NOT BE PERMITTED.

- PRIOR TO EXCAVATING, THOROUGHLY EXAMINE THE AREA TO BE EXCAVATED AND/OR TRENCHED TO VERIFY THE LOCATIONS OF FEATURES INDICATED ON THE DRAWINGS AND TO ASCERTAIN THE EXISTENCE AND LOCATION OF ANY STRUCTURE, UNDERGROUND STRUCTURE, OR OTHER ITEM NOT SHOWN THAT MIGHT INTERFERE WITH THE PROPOSED CONSTRUCTION. NOTIFY THE CONSTRUCTION MANAGER OF ANY OBSTRUCTIONS THAT WILL PREVENT ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE DRAWINGS.
- C. SEPARATE AND STOCK PILE ALL EXCAVATED MATERIALS SUITABLE FOR BACKFILL. ALL EXCESS EXCAVATED AND UNSUITABLE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER

3.2 BACKFILL:

- A. AS SOON AS PRACTICAL, AFTER COMPLETING CONSTRUCTION OF THE RELATED STRUCTURE, INCLUDING EXPIRATION OF THE SPECIFIED MINIMUM CURING PERIOD FOR CAST-IN-PLACE CONCRETE, BACKFILL THE EXCAVATION WITH APPROVED MATERIAL TO RESTORE THE REQUIRED FINISHED GRADE.
 - 1. PRIOR TO PLACING BACKFILL AROUND STRUCTURES, ALL FORMS SHALL BE REMOVED AND THE EXCAVATION CLEANED OF ALL TRASH, DEBRIS, AND UNSUITABLE MATERIALS.
 - 2. BACKFILL BY PLACING AND COMPACTING SUITABLE BACKFILL MATERIAL OR SELECT GRANULAR BACKFILL MATERIAL WHEN REQUIRED IN UNIFORM HORIZONTAL LAYERS OF NO GREATER THAN 8-INCHES LOOSE THICKNESS AND COMPACTED. WHERE HAND OPERATED COMPACTORS ARE USED, THE FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 4 INCHES IN LOOSE DEPTH AND COMPACTED.
 - 3. WHENEVER THE DENSITY TESTING INDICATES THAT THE CONTRACTOR HAS NOT OBTAINED THE SPECIFIED DENSITY, THE SUCCEEDING LAYER SHALL NOT BE PLACED UNTIL THE SPECIFICATION REQUIREMENTS ARE MET UNLESS OTHERWISE AUTHORIZED BY THE GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL TAKE WHATEVER APPROPRIATE ACTION IS NECESSARY, SUCH AS DISKING AND DRYING, ADDING WATER, OR INCREASING THE COMPACTIVE EFFORT TO MEET THE MINIMUM COMPACTION DEDUCTOR THE SUCCESSARY. REQUIREMENTS.
- THOROUGHLY COMPACT EACH LAYER OF BACKFILL TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698. в.
- 3.3 TRENCH EXCAVATION
 - A. UTILITY TRENCHES SHALL BE EXCAVATED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE GENERAL CONTRACTOR. PROVIDE SHORING, SHEETING AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF THE TRENCH WALLS.
 - В. EXTEND THE TRENCH WIDTH A MINIMUM OF 6 INCHES BEYOND THE OUTSIDE EDGE OF THE OUTERMOST
 - WHEN SOFT YIELDING, OR OTHERWISE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, BACKFILL AT THE REQUIRED TRENCH TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE REQUIRED ELEVATION AND с. BACKFILL WITH GRANULAR BEDDING MATERIAL.
- - PROVIDE GRANULAR BEDDING MATERIAL IN ACCORDANCE WITH THE DRAWINGS AND THE UTILITY REQUIREMENTS.
 - B. NOTIFY THE GENERAL CONTRACTOR 24 HOURS IN ADVANCE OF BACKFILLING.
 - C. CONDUCT UTILITY CHECK TESTS BEFORE BACKFILLING. BACKFILL AND COMPACT TRENCH BEFORE ACCEPTANCE TESTING
 - D. PLACE GRANULAR TRENCH BACKFILL UNIFORMLY ON BOTH SIDES OF THE CONDUITS IN 6-INCH UNCOMPACTED LIFTS UNTIL 12 INCHES OVER THE CONDUITS. SOLIDLY RAM AND TAMP BACKFILL INTO SPACE AROUND CONDUITS.
 - E. PROTECT CONDUIT FROM LATERAL MOVEMENT, IMPACT DAMAGE, OR UNBALANCED LOADING.
 - F. ABOVE THE CONDUIT EMBEDMENT ZONE, PLACE AND COMPACT SATISFACTORY BACKFILL MATERIAL IN 8-INCH MAXIMUM LOOSE THICKNESS LIFTS TO RESTORE THE REQUIRED FINISHED SURFACE GRADE.
 - G. COMPACT FINAL TRENCH BACKFILL TO A DENSITY EQUAL TO OR GREATER THAN THAT OF THE EXISTING UNDISTURBED MATERIAL IMMEDIATELY ADJACENT TO THE TRENCH BUT NO LESS THAN A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE STANDARD PROCTOR TEST, ASTM D 698.

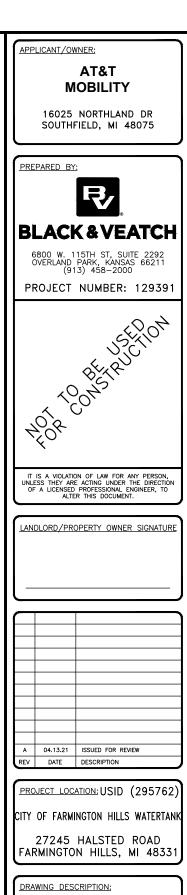
3.5 AGGREGATE ACCESS ROAD:

- A. CLEAR, GRUB, STRIP AND EXCAVATE FOR THE ACCESS ROAD TO THE LINES AND GRADES INDICATED ON THE DRAWINGS. SCARIFY TO A DEPTH OF 6 INCHES AND PROOF-ROLL. ALL HOLES, RUTS, SOFT PLACES AND OTHER DEFECTS SHALL BE CORRECTED.
- THE ENTIRE SUBGRADE SHALL BE COMPACTED TO NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED PROCTOR TEST, ASTM D 1557. в.
- C. AFTER PREPARATION OF THE SUBGRADE IS COMPLETE THE GEOTEXTILE FABRIC (MIRAFI 500XI) SHALL BE INSTALLED TO THE LIMITS INDICATED ON THE DRAWINGS BY ROLLING THE FABRIC OUT LONGITUDINALLY ALONG THE ROADWAY. THE FABRIC SHALL NOT BE DRAGGED ACROSS THE SUBGRADE. PLACE THE ENTIRE ROLL IN A SINGLE OPERATION, ROLLING OUT AS SMOOTHLY AS POSSIBLE.
 - OVERLAPS PARALLEL TO THE ROADWAY WILL BE PERMITTED AT THE CENTERLINE AND AT LOCATIONS BEYOND THE ROADWAY SURFACE WIDTH (I.E. WITHIN THE SHOULDER WIDTH) ONLY. NO LONGITUDINAL OVERLAPS SHALL BE LOCATED BETWEEN THE CENTERLINE AND THE SHOULDER. PARALLEL OVERLAPS SHALL BE A MUNUMUM OF A SECT WIDE SHALL BE A MINIMUM OF 3 FEET WIDE.
 - 2. TRANSVERSE (PERPENDICULAR TO THE ROADWAY) OVERLAPS AT THE END OF A ROLL SHALL OVERLAP IN THE DIRECTION OF THE AGREGATE PLACEMENT (PREVIOUS ROLL ON TOP) AND SHALL HAVE A MINIMUM LENGTH OF 3 FEET.
 - ALL OVERLAPS SHALL BE PINNED WITH STAPLES OR NAILS A MINIMUM OF 10 INCHES LONG TO INSURE POSITIONING DURING PLACEMENT OF AGGREGATE. PIN LONGITUDINAL SEAMS AT 25 FOOT CENTERS AND TRANSVERSE SEAMS EVERY 5 FEET.
- THE AGGREGATE BASE AND SURFACE COURSES SHALL BE CONSTRUCTED IN LAYERS NOT MORE THAN 4 THE AGGREGATE BASE AND SOLVACE COURSES SHALL BE CONSTRUCTED FABRIC SHALL BE INCH (COMPACTED) THICKNESS. AGGREGATE O BE PLACED ON GEOTEXTILE FABRIC SHALL BE END-DUMPED ON THE FABRIC FROM THE FREE END OF THE FABRIC OR OVER PREVIOUSLY PLACED AGGREGATE. THE FIRST LIFT SHALL BE BLADED DOWN TO A THICKNESS OF 8 INCHES PRIOR TO COMPACTION. AT NO TIME SHALL BOUIPMENT, EITHER TRANSPORTING THE AGGREGATE OR GRADING THE AGGREGATE, BE PERMITTED ON THE ROADWAY WITH LESS THAN 4 INCHES OF MATERIAL COVERING THE
- THE AGGREGATE SHALL BE IMMEDIATELY COMPACTED TO NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY AS PROVIDED BY THE MODIFIED PROCTOR TEST, ASTM D 1557 WITH A TAMPING ROLLER, OR WITH A PNEUMATIC-TIRED ROLLER, OR WITH A VIBRATORY MACHINE OR ANY COMBINATION OF THE ABOVE. THE TOP LAYER SHALL BE GIVEN A FINAL ROLLING WITH A THREE-WHEEL OR TANDEM ROLLER. F.
- PERFORM ALL GRADING TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND SMOOTH, EVEN SURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION. GRADING SHALL BE COMPATIBLE WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES. Α.
- B. UTILIZE SATISFACTORY FILL MATERIAL RESULTING FROM THE EXCAVATION WORK IN THE CONSTRUCTION OF

FILLS, EMBANKMENTS AND FOR REPLACEMENT OF REMO

- C. ACHIEVE FINISHED GRADE BY PLACING A MINIMUM OF 4 TOP SOIL STABILIZER FABRIC
- D. REPAIR ALL ACCESS ROADS AND SURROUNDING AREAS USED DURING THE COURSE OF THIS WORK TO THEIR ORIGINAL CONDITION.

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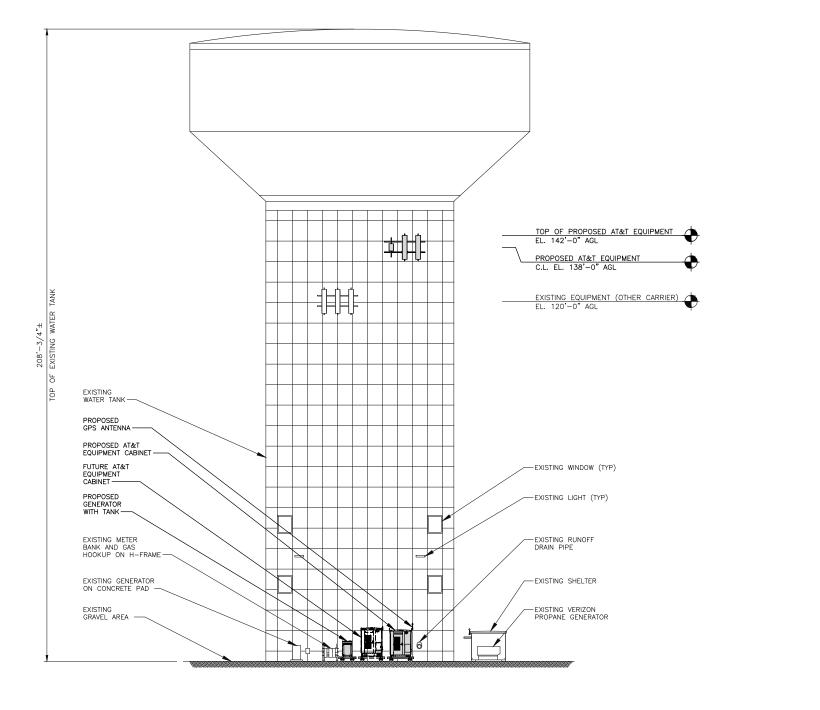


SITE WORK AND DRAINAGE NOTES

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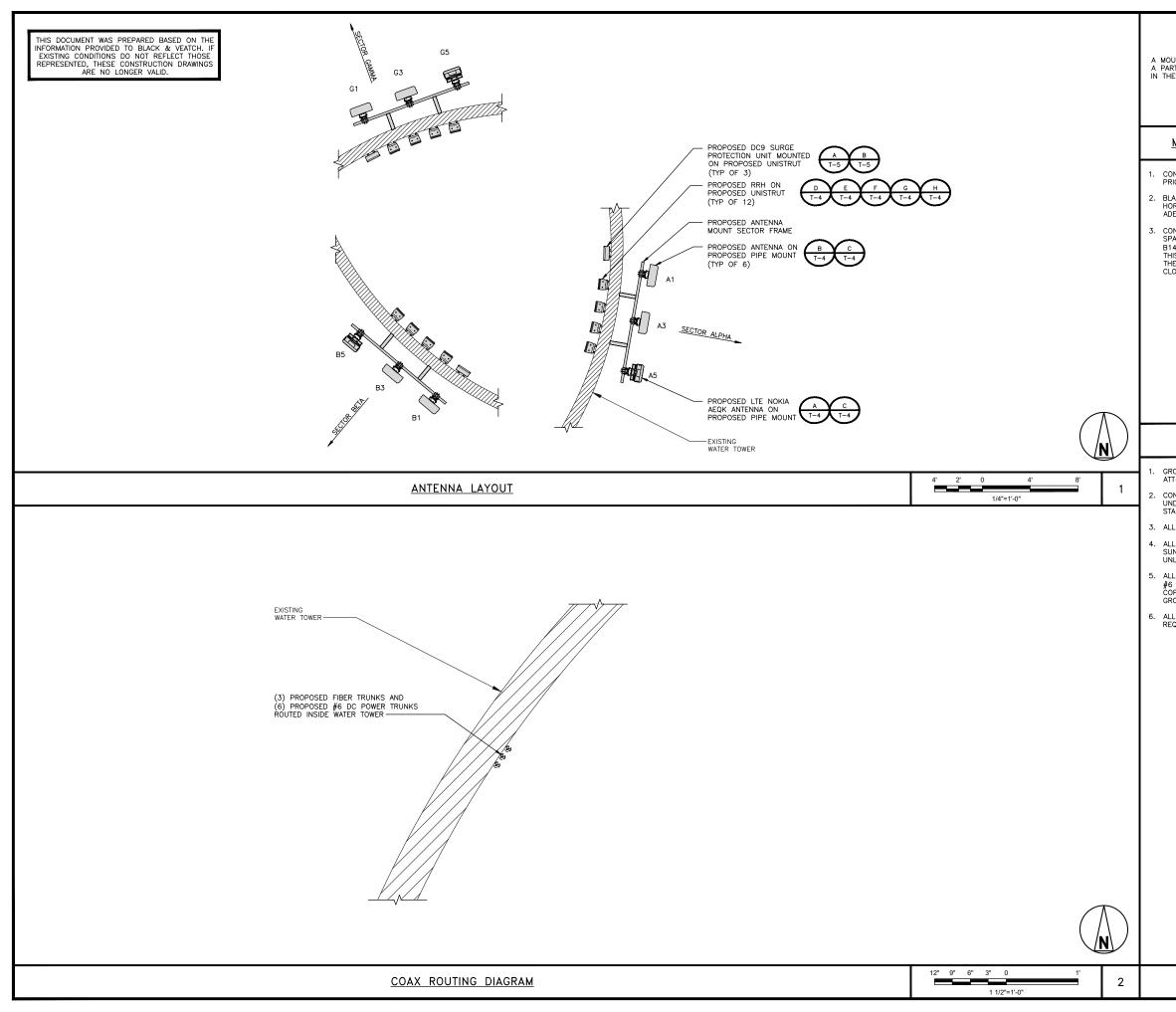
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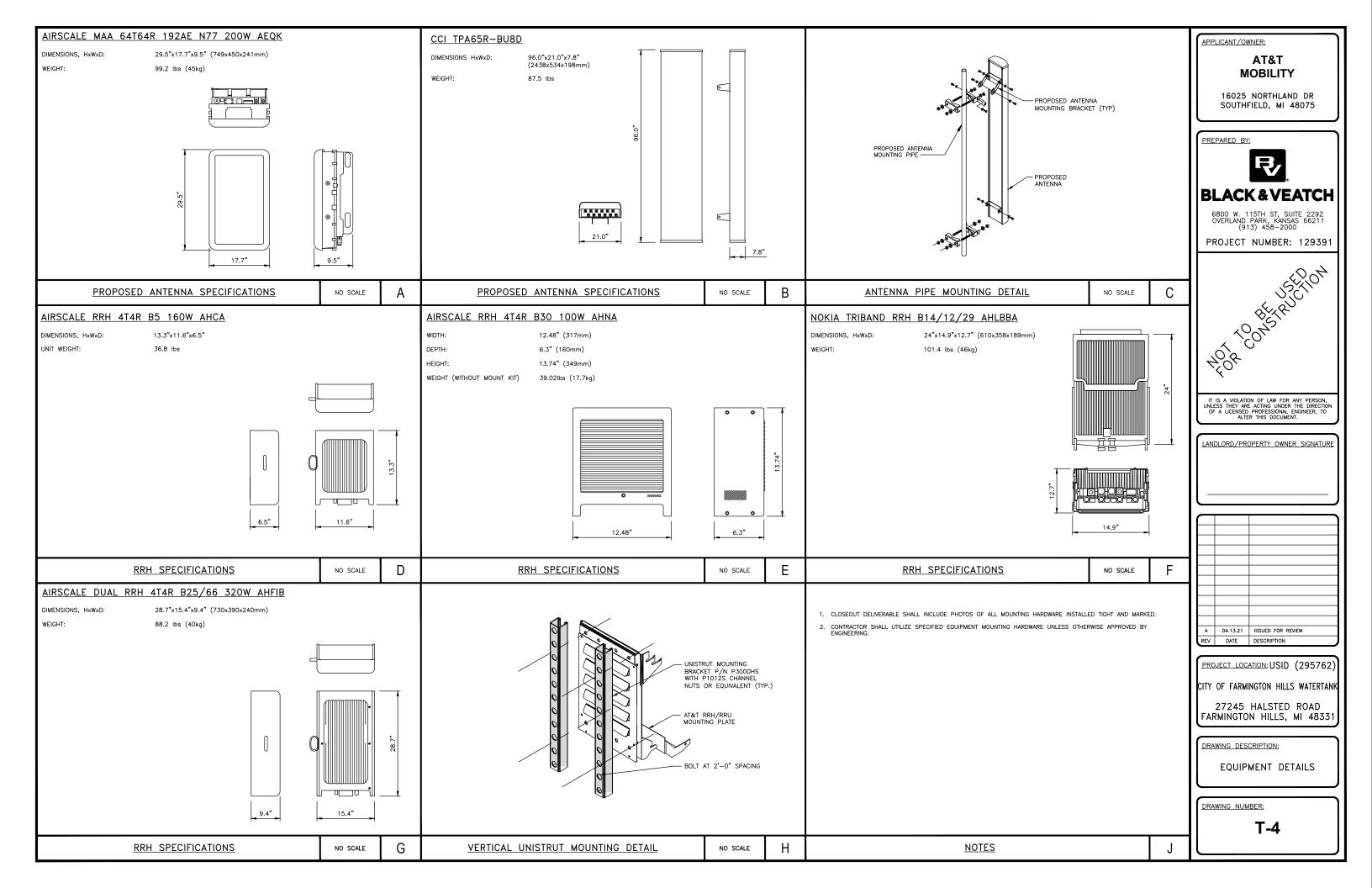
A-65R-BU8DA-K ANTENNAS AEQK ANTENNAS 314/12/29 TRIBAND RRH AHLBBA E DUAL RRH 4T4R B25/66 320W AHFIB E RRH 4T4R B5 160W AHCA E RRH 4T4R B50 100W AHNA DC9-48-60-24-8C-EV SURGE UNITS VER TRUNKS RUNKS		APPLICANT/OWNER: AT&T MOBILITY 16025 NORTHLAND DR SOUTHFIELD, MI 48075 PREPARED BY: PREPARED BY: BLACK & VEATCH 6800 W. 115TH ST, SUITE 2292 OVERLAND PARK, KANSAS 66211 (913) 458–2000 PROJECT NUMBER: 129391
ER SCOPE OF WORK	2	JSERION
IS HAVE BEEN CREATED BASED ON IN THAT THE STRUCTURE HAS ACITY TO SUPPORT THE PROPOSED THE RESPONSIBILITY OF THE TOWER FIRM THAT THE PROPOSED LOADING ORIGINAL DESIGN CAPACITY OF THE		T IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALIER THIS DOCUMENT.
TURAL ANALYSIS NOTE	3	LANDLORD/PROPERTY_OWNER_SIGNATURE
WAS NOT PERFORMED AS DPE OF WORK INCLUDED TION DRAWINGS.		
NALYSIS NOTE	4	
CABLES 3 OR MORE DEEP, USE >-INS, TALLEY PART NUMBER SSH-158-3 PPROVED EQUAL).		A 04.13.21 ISSUED FOR REVIEW REV DATE DESCRIPTION PROJECT LOCATION: USID (295762) CITY OF FARMINGTON HILLS WATERTANK 27245 HALSTED ROAD FARMINGTON HILLS, MI 48331 DRAWING DESCRIPTION: ELEVATION DRAWING NUMBER: T-1
GENERAL NOTES	4	



MOUNT ANALYSIS WAS NOT PERFORMED AS PART OF THE SCOPE OF WORK INCLUDED THESE CONSTRUCTION DRAWINGS.		APPLICANT/OWNER: AT&T MOBILITY 16025 NORTHLAND DR SOUTHFIELD, MI 48075
MOUNT ANALYSIS NOTE	3	PREPARED BY:
PRIOR TO THE CONSTRUCTION COMMENCING. BLACK AND VEATCH RECOMMENDS EQUAL HORIZONTAL SPACING OF ANTENNAS TO ENSURE ADEQUATE WEIGHT DISTRIBUTION. CONTRACTOR SHALL ENSURE 3'-0" MINIMUM SPACING BETWEEN LTE 700 B17 AND LTE 700 B14 (FIRSTNET) ANTENNAS. ANY VARIATION FROM THIS DIRECTIVE SHALL REQUIRE APPROVAL FROM	:	BLACK & VEATCH 6800 W. 115TH ST, SUITE 2292 OVERLAND PARK, KANSAS 66211 (913) 458-2000
THE AT&T PROJECT MANAGER PRIOR TO CLOSEOUT.		PROJECT NUMBER: 129391
NOTES	4	IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION
GROUNDING SHALL BE IN ACCORDANCE WITH ATT-TP-76416.		OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.
CONTRACTOR SHALL HAVE A COMPLETE UNDERSTANDING OF THE CONTENTS OF AT&T STANDARD TP-76416.		LANDLORD/PROPERTY OWNER SIGNATURE
ALL INSTALLATIONS SHALL BE FIELD VERIFIED.		
ALL GROUNDING CONDUCTORS SHALL BE #2 AM SUNLIGHT RESISTANT-TINNED STRANDED COPPER UNLESS NOTED OTHERWISE.		
ALL RRH4X25-B30 RRH MODELS WILL REQUIRE #6 AWG SUNLIGHT RESISTANT-TINNED STRANDED COPPER DUE TO THE LIMITED SPACE AT THE GROUNDING TERMINATION POINT.		
ALL 2X60W 850 & 1900 RRHS MODELS WILL REQUIRE A TOP AND BOTTOM CONNECTION.		
		A 04.13.21 ISSUED FOR REVIEW REV DATE DESCRIPTION
		PROJECT LOCATION: USID (295762)
		CITY OF FARMINGTON HILLS WATERTANK
		27245 HALSTED ROAD FARMINGTON HILLS, MI 48331
		DRAWING DESCRIPTION:
		ANTENNA LAYOUT
		DRAWING NUMBER:
		T-2
GROUNDING NOTES	5	

					Antenna Requirements (verify with current RFDS)											
Sector	Technology	Final Antenna Configuration	Antenna	Antenna Azimuth	Number of TMAs	Number of RRHs	RRH Model #	RRH Model #	Number of Surge Protection	Surge Protection						
A1	LTE	CCI TPA-65R-BU8DA-K	Proposed	100°	-	2	AirScale RRH 4T4R B5 160W AHCA	AirScale RRH 4T4R B30 100W AHNA	-	-						
A2	-	-	-	-	-	-	-	-	-	-						
A3	LTE	CCI TPA-65R-BU8DA-K	Proposed	100°	-	2	AirScale TRI RRH 4T4R B12/14/29 370W AHLBBA	AirScale Dual RRH 4T4R B25/66W 320W AHFIB	2	Raycap I						
A4	-	-	-	-	-	-	-	-	-	-						
A5	LTE	NOKIA AEQK	Proposed	100°		-	-	-	-							
B1	LTE	CCI TPA-65R-BU8DA-K	Proposed	220°	-	2	AirScale RRH 4T4R B5 160W AHCA	AirScale RRH 4T4R B30 100W AHNA	-	-						
B2	-	-	-	-	-	-	-	-	-	-						
B3	LTE	CCI TPA-65R-BU8DA-K	Proposed	220°	-	2	AirScale TRI RRH 4T4R B12/14/29 370W AHLBBA	AirScale Dual RRH 4T4R B25/66W 320W AHFIB	-	-						
B4	-	-	-	-	-	-	-	-	-	-						
B5	LTE	NOKIA AEQK	Proposed	220°		-	-	-								
G1	LTE	CCI TPA-65R-BU8DA-K	Proposed	340°	-	2	AirScale RRH 4T4R B5 160W AHCA	AirScale RRH 4T4R B30 100W AHNA	-	-						
G2	-	-	-	-	-	-	-	-	-	-						
G3	LTE	CCI TPA-65R-BU8DA-K	Proposed	340°	-	2	AirScale TRI RRH 4T4R B12/14/29 370W AHLBBA	AirScale Dual RRH 4T4R B25/66W 320W AHFIB	-	-						
G4	-	-	-	-	-	-	-	-	-	-						
G5	LTE	NOKIA AEQK	Proposed	340°		-	-	-								

		APPLICANT/OWNER: AT&T MOBILITY 16025 NORTHLAND DR SOUTHFIELD, MI 48075
		PREPARED BY: BLACK & VEATCH 6800 W. 115TH ST, SUITE 2292 OVERLAND PARK, KANSAS 66211 (913) 458-2000 PROJECT NUMBER: 129391
e Protection Model #		T IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION
- Raycap DC6		UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.
		A 04.13.21 ISSUED FOR REVIEW
		REV DATE DESCRIPTION PROJECT LOCATION: USID (295762) CITY OF FARMINGTON HILLS WATERTANK 27245 HALSTED ROAD FARMINGTON HILLS, MI 48331
	1	DRAWING DESCRIPTION: ANTENNA CONFIGURATION DRAWING NUMBER: T-3



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			PROPOSED UNISTRUT P1000 (TYP OF 2)	WALL			
	DC SURGE SUPPRESSOR DETAIL	NO SCALE A	SURGE SUPPRESSOR MOUNTING DETAIL	NO SCALE	В	<u>NOT_USED</u>	NO SCALE
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			APPLICANT/OWNER: AT&T MOBILITY 16025 NORTHLAND DR SOUTHFIELD, MI 48075
			PREPARED BY: EESS BLACK & VEATCH 6800 W. 115TH ST, SUITE 2292 OVERLAND PARK, KANSAS 66211 (913) 458–2000 PROJECT NUMBER: 129391
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			(913) 458-2000 PROJECT NUMBER: 129391 PROJECT NUMBER: 129391 USA VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.
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PART 1 - GENERAL

- 1.1 SCOPE:
- PROVIDE FABRICATION AND ERECTION OF STRUCTURAL STEEL AND OTHER ITEMS AS SHOWN ON THE DRAWINGS OR REQUIRED BY OTHER SECTIONS OF THESE SPECIFICATIONS.
- 1.2 REFERENCES
- A. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC). MANUAL OF STEEL CONSTRUCTION (13TH EDITION), ALLOWABLE STRESS DESIGN (ASD).
- AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM). ASTM A36: STRUCTURAL STEEL ASTM A53: PIPE, STEEL BLACK AND HOT DIPPED, ZINC-COATED WELDED AND SEAMLESS. ASTM A108: STEEL BARS, CARBON, COLD FINISHED, STANDARD QUALITY.
- ASTM A123: ZINC (HOT-DIPPED GALVANIZED) COATING ON IRON AND STEEL PRODUCTS. ASTM A107: CARBON STEEL BOLTS AND STUDS, 60,000 PSI TENSILE STRENGTH.

- ASTM A320: HIGH-STRENGTH BOLT FOR STRUCTURAL STEEL JOINTS. ASTM A320: HEAT-TREATED, STRUCTURAL STEEL BOLTS, 150 (KSI) (1035MPA) TENSILE STRENGTH. ASTM A500: COLD-FORMED WELDED AND SEAMLESS CARBON STEEL STRUCTURAL TUBING IN ROUNDS AND SHAPES
- AND SHAFES. ASTM A563: ARCBON AND ALLOY STEEL NUTS. ASTM B695: COATINGS OF ZINC MECHANICALLY DEPOSITED ON IRON AND STEEL. ASTM F436: HARDENED STEEL WASHERS.
- ASTM F959: COMPRESSIBLE-WASHER-TYPE DIRECT TENSION INDICATOR FOR USE WITH STRUCTURAL
- C. AMERICAN WELDING SOCIETY (AWS): AWS A5.1: COVERED CARBON STEEL ARC WELDING ELECTRODES. AWS A5.5: LOW ALLOY STEEL COVERED ARC WELDING ELECTRODES. AWS D1.1: STRUCTURAL WELDING CODE - STEEL
- D. RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSC): "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 BOLTS OR ASTM A490 BOLTS" AS ENDORSED BY AISC.
- E. STEEL STRUCTURES PAINTING COUNCIL (SSPC): SSPC-SP3: POWER TOOL CLEANING. SSPC-PAINT 11: RED IRON OXIDE, ZINC CHROME, RAW LINSEED OIL OR ALKYD PAINT.
- 1.3 SUBMITTALS
- A. SUBMIT THE FOLLOWING FOR APPROVAL:
- 1. FABRICATION AND ERECTION DRAWINGS SHOWING ALL DETAILS, CONNECTIONS, MATERIAL DESIGNATIONS, AND ALL TOP STEEL ELEVATIONS.
- B. WELDERS SHALL BE QUALIFIED AS PRESCRIBED IN AWS D1.1.

PART 2 - PRODUCTS

- 2.1 STRUCTURAL STEEL:
- A. SHAPES, PLATES AND BARS SHALL CONFORM TO ASTM A36 AND ASTM A992.
- B. STRUCTURAL TUBING SHALL CONFORM TO ASTM A500, GRADE B. STEEL PIPE SHALL CONFORM TO ASTM A53, TYPE E OR S, GRADE B.
- 2.2 ANCHOR BOLTS:
- A. ANCHOR BOLTS SHALL CONFORM TO ASTM A307 WITH HEAVY HEXAGONAL NUTS.
- 2.3 BOLTS:
- A. COMMON (MACHINE) BOLTS SHALL CONFORM TO ASTM A307 GRADE A AND NUTS TO ASTM A563. ONE COMMON BOLT ASSEMBLY SHALL CONSIST OF A BOLT, A HEAVY HEX NUT, AND A HARDENED WASHER.
- B. HIGH STRENGTH BOLT SHALL CONFORM TO ASTM A325. ONE HIGH STRENGTH BOLT ASSEMBLY SHALL HIGH STRENGTH BOLL SHALL CUNFORM TO ASTM AS25, ONE HIGH STRENGTH BOLL ASSEMBLT SHALL CONSIST OF A HEAVY HEX STRUCTURAL BOLT, A HEAVY HEX NUT, A HARDENED WASHER CONFIRMING WITH ASTM F436 AND A DIRECT TENSION INDICATOR CONFORMING WITH STM F959. THE HARDENED WASHER SHALL BE INSTALLED AGAINST THE ELEMENT TURNED IN TIGHTENING.UNLESS NOTED OTHERWISE ON THE DRAWINGS, ALL CONNECTIONS SHALL BE BEARING TYPE CONNECTIONS.
- 2.4 WELDING ELECTRODES:
- A. WELDING ELECTRODES SHALL COMPLY WITH AWS D1.1 USING A5.1 OR A5.5 E70XX AND SHALL BE COMPATIBLE WITH THE WELDING PROCESS SELECTED.
- 2.5 PRIMEE
- A. PRIMER SHALL BE RED OXIDE-CHROMATE PRIMER COMPLYING WITH SSPC PAINT SPECIFICATION NO. 11.

PART 3 - EXECUTION

- 3.1 FABRICATION:
- A. SHOP FABRICATE AND ASSEMBLY MATERIALS AS SPECIFIED HEREIN.
- 1. FABRICATE, ITEMS OF STRUCTURAL STEEL IN ACCORDANCE WITH THE AISC-ASD SPECIFICATION, AND AS INDICATED ON THE APPROVED SHOP DRAWINGS
- 2. ALL EXPOSED STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED PER ASTM
- 3. PROPERLY MARK AND MATCH-MARK MATERIALS FOR FIELD ASSEMBLY AND FOR IDENTIFICATION AS TO LOCATION FOR WHICH INTENDED.
- 4. FABRICATE AND DELIVER IN A SEQUENCE WHICH WILL EXPEDITE ERECTION AND MINIMIZE FIELD HANDLING OF MATERIALS.
- 5. WHERE FINISHING IS REQUIRED, COMPLETE THE ASSEMBLY, INCLUDING THE WELDING OF UNITS, BEFORE START OF FINISHING OPERATIONS.
- PROVIDE FINISH SURFACE OF MEMBERS EXPOSED IN THE FINAL STRUCTURE FREE FROM MARKINGS, BURNS, AND OTHER DEFECTS.
- B. PROVIDE CONNECTIONS AS SPECIFIED HEREIN
- 1. PROVIDE BOLTS AND WASHERS OF TYPES AND SIZE REQUIRED FOR COMPLETION OF FIELD ERECTION. USE 3/4 INCH DIAMETER A325 BOLTS UNLESS NOTED OTHERWISE.
- 2. INSTALL HIGH STRENGTH THREADED FASTENERS IN ACCORDANCE WITH RCSC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR ASTM A490 BOLTS."
- WELDED CONSTRUCTION SHALL COMPLY WITH AWS D1.1 FOR PROCEDURES, APPEARANCE, QUALITY OF WELD, AND METHODS USED IN CORRECTING WELDED WORK.

- 4. THE FABRICATOR SHALL FURNISH AND INSTALL ERECTION CLIPS FOR FIT-UP OF WELDED CONNECTIONS.
- 5. DOUBLE ANGLE MEMBERS SHALL HAVE WELDED FILLERS SPACED IN ACCORDANCE WITH CHAPTER E4 OF THE AISC-ASD SPECIFICATION.
- 6. GUSSET AND STIFFENER PLATES SHALL BE 3/8 INCH THICK MINIMUM

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3.2 PRIMING:
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- A. STRUCTURAL STEEL SHALL BE PRIMED AS SPECIFIED HEREIN, UNLESS SHOWN OTHERWISE ON THE DRAWINGS.
- B. STRUCTURAL STEEL SURFACE PREPARATION SHALL CONFORM TO SSPC-SP3, "POWER TOOL CLEANING."
- C. SURFACE PREPARATION AND PRIMER SHALL BE IN ACCORDANCE WITH AISC CODE OF STANDARD PRACTICE AS INCLUDED IN THE ASD MANUAL OF STEEL CONSTRUCTION.
- D. MATERIALS SHALL REMAIN CLOSED UNTIL REQUIRED FOR USE, MANUFACTURER'S POT-LIFE REQUIREMENTS SHALL BE STRICTLY ADHERED TO.
- F. PRIMER SHALL BE APPLIED TO DRY. CLEAN, PREPARED SURFACE AND UNDER FAVORABLE CONDITIONS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER PRIMING SHALL NOT BE DONE WHEN AMBIENT TEMPERATURE IS LESS THAN 50 DEGREE F, THE RELATIVE HUMIDITY IS MORE THAN 90 PERCENT, OR THE SURFACE TEMPERATURE IS LESS THAN 5 DEGREE F ABOVE THE DEW POINT.
- F. GENERALLY ALL PRIMER SHALL BE SPRAY APPLIED. BRUSH OR ROLLER APPLICATION SHALL BE RESTRICTED TO TOUCHUP AND TO AREAS NOT ACCESSIBLE BY SPRAY GUN.
- G. PRIMER SHALL BE UNIFORMLY APPLIED WITHOUT RUNS, SAGS, SOLVENT BLISTERS, DRY SPRAY OR OTHER BLEMISHES. ALL BLEMISHES AND OTHER IRREGULARITIES SHALL BE REPAIRED OR REMOVED AND THE AREA RE-COATED. SPECIAL ATTENTION SHALL BE PAID TO CREVICES, WELD LINES, BOLT HEADS, CORNERS, EDGES, ETC., TO OBTAIN THE REQUIRED NOMINAL FILM THICKNESS.
- H. THE DRY FILM THICKNESS OF THE PRIMER SHALL BE 2.0 MILS.
- I. IF THE PRIMER IS DAMAGED BY WELDING OR PHYSICAL ABUSE, THE AREA SHALL BE TOUCHED-UP AND REPAIRED. THE TOUCHUP PAINT SHALL BE COMPATIBLE WITH THE APPLIED PRIMER WITH MINIMUM DRY FILM THICKNESS OF 1.5 MILS.
- 3.3 INSTALLATION:
- A. INSTALLATION OF STRUCTURAL STEEL SHALL COMPLY WITH AISC "CODE OF STANDARD PRACTICE."
- B. STRUCTURAL FIELD WELDING SHALL BE DONE BY THE ELECTRIC SUBMERGED OR SHIELDED METAL ARC PROCESS. WELDED CONSTRUCTION SHALL COMPLY WITH AWS D1.1.
- C. PROVIDE ANCHOR BOLTS AND OTHER CONNECTORS REQUIRED FOR SECURING STRUCTURAL STEEL TO ELEVATOR SHAFT WALLS AND OTHER IN-PLACE WORK, PROVIDE TEMPLATES AND OTHER DEVICES NECESSARY FOR PRESETTING BOLTS AND ANCHORS TO ACCURATE LOCATIONS.
- D. SPLICE MEMBERS ONLY WHERE INDICATED ON THE DRAWINGS.
- E. ANY GAS CUTTING TORCHES HAVE TO BE APPROVED IN WRITING BY THE PROJECT STRUCTURAL ENGINEER.
- F. PROVIDE TEMPORARY SHORING BRACING WITH CONNECTIONS OF SUFFICIENT STRENGTH TO BEAR IMPOSED LOADS. REMOVE TEMPORARY CONNECTIONS AND MEMBERS WHEN PERMANENT MEMBERS ARE IN PLACE AND THE FINAL CONNECTIONS HAVE BEEN MADE.
- G. ALIGN AND ADJUST MEMBERS, AND OTHER SURFACES WHICH WILL BE IN PERMANENT CONTACT, BEFORE ASSEMBLY.
- H. HIGH-STRENGTH BOLTS, AT A MINIMUM, SHALL BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED IN THE LATEST AISC SPECIFICATION. ALL HIGH-STRENGTH BOLTS SPECIFIED ON THE DESIGN DRAWINGS TO BE USED IN PRETENSIONED OR SLIP-CRITICAL JOINTS SHALL BE TIGHTENED TO A BOLT TENSION NOT LESS THAN THAT GIVEN IN ASSOCIATED STATES AND A DOL TO AND



ANTENNA MOUNTING

- DESIGN AND CONSTRUCTION OF ANTENNA SUPPORTS SHALL CONFORM TO CURRENT ANSI/TIA-222 OR APPLICABLE LOCAL CODES.
- 2. ALL STEEL MATERIALS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123 "ZINC (HOT-DIP GALVANIZED) COATINGS ON IRON AND STEEL PRODUCTS", UNLESS NOTED OTHERWISE.
- 3. ALL BOLTS, ANCHORS AND MISCELLANEOUS HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 "ZINC-COATING (HOT-DIP) ON IRON AND STEEL HARDWARE", UNLESS NOTED OTHERWISE.
- 4. DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED BY COLD GALVANIZING IN ACCORDANCE WITH ASTM A780.
- 5. ALL ANTENNA MOUNTS SHALL BE INSTALLED WITH LOCK NUTS, LOCK WASHERS, OR DOUBLE NUTS AND SHALL BE TORQUED TO MANUFACTURER'S RECOMMENDATIONS.
- 6. CONTRACTOR SHALL INSTALL ANTENNA PER MANUFACTURER'S RECOMMENDATION FOR INSTALLATION AND GROUNDINAG.
- 7. ALL UNUSED PORTS ON ANY ANTENNAS SHALL BE TERMINATED WITH A 50-OHM LOAD TO ENSURE ANTENNAS PERFORM AS DESIGNED.
- 8. PRIOR TO SETTING ANTENNA AZIMUTHS AND DOWNTILTS, ANTENNA CONTRACTOR SHALL CHECK THE ANTENNA MOUNT FOR TIGHTNESS AND ENSURE THAT THEY ARE PLUMB. ANTENNA AZIMUTHS SHALL BE SET FROM TRUE NORTH AND BE ORIENTED WITHIN +/- 5% AS DEFINED BY THE RFDS. ANTENNA DOWNTILTS SHALL BE WITHIN +/- 0.5% AS DEFINED BY THE RFDS. REFER TO ND-00246.
- 9. JUMPERS FROM THE TMA'S MUST TERMINATE TO OPPOSITE POLARIZATIONS IN EACH SECTOR.
- 10. CONTRACTOR SHALL RECORD THE SERIAL #, SECTOR, AND POSITION OF EACH ACTUATOR INSTALLED AT THE ANTENNAS AND PROVIDE THE INFORMATION TO AT&T.
- 11. TMA'S SHALL BE MOUNTED ON PIPE DIRECTLY BEHIND ANTENNAS AS CLOSE TO ANTENNA AS FEASIBLE IN A VERTICAL POSITION.

TORQUE REQUIREMENTS

- 12. ALL RF CONNECTIONS SHALL BE TIGHTENED BY A TORQUE WRENCH.
- 13. ALL 8M ANTENNA HARDWARE SHALL BE TIGHTENED TO 9 LB-FT (12 NM).
- 14. ALL 12M ANTENNA HARDWARE SHALL BE TIGHTENED TO 43 LB-FT (58 NM).
- 15. ALL GROUNDING HARDWARE SHALL BE TIGHTENED UNTIL THE LOCK WASHER COLLAPSES AND THE GROUNDING HARDWARE IS NO LONGER LOOSE.
- 16. ALL DIN TYPE CONNECTIONS SHALL BE TIGHTENED TO 18-22 LB-FT (24.4 29.8 NM).
- 17. ALL N TYPE CONNECTIONS SHALL BE TIGHTENED TO 15-20 LB-IN (1.7 2.3 NM).

FIBER & POWER CABLE MOUNTING

- 18. THE FIBER OPTIC TRUNK CABLES SHALL BE INSTALLED INTO CONDUITS, CHANNEL CABLE TRAYS, OR CABLE TRAY. WHEN INSTALLING FIBER OPTIC TRUNK CABLES INTO A CABLE TRAY SYSTEM, THEY SHALL BE INSTALLED INTO AN INTER DUCT AND A PARTITION BARRIER SHALL BE INSTALLED BETWEEN THE 600 VOLT CABLES AND THE INTER DUCT IN ORDER TO SEGREGATE CABLE TYPES. OPTIC FIBER TRUNK CABLES SHALL HAVE APPROVED CABLE RESTRAINTS EVERY (60) SIXTY FEET AND SECURELY FASTENED TO THE CABLE TRAY SYSTEM. NFPA 70 (NEC) ARTICLE 770 RULES SHALL APPLY.
- 19. THE TYPE TC-ER CABLES SHALL BE INSTALLED INTO CONDUITS, CHANNEL CABLE TRAYS, OR CABLE TRAY AND SHALL BE SECURED AT INTERVALS NOT EXCEEDING (6) SIX FEET. AN EXCEPTION; WHERE TYPE TC-ER CABLES ARE NOT SUBJECT TO PHYSICAL DAMAGE, CABLES SHALL BE PERMITTED TO MAKE A TRANSITION BETWEEN CONDUITS, CHANNEL CABLE TRAYS, OR CABLE TRAY WHICH ARE SERVING UTILIZATION EQUIPMENT OR DEVICES, A DISTANCE (6) SIX FEET SHALL NOT BE EXCEEDED WITHOUT CONTINUOUS SUPPORTING. NFPA 70 (NEC) ARTICLES 336 AND 392 RULES SHALL APPLY.
- 20. WHEN INSTALLING OPTIC FIBER TRUNK CABLES OR TYPE TC-ER CABLES INTO CONDUITS, NFPA 70 (NEC) ARTICLE 300 RULES SHALL APPLY.

COAXIAL CABLE NOTES

- 21. TYPES AND SIZES OF THE ANTENNA CABLE ARE BASED ON ESTIMATED LENGTHS. PRIOR TO ORDERING CABLE, CONTRACTOR SHALL VERIFY ACTUAL LENGTH BASED ON CONSTRUCTION LAYOUT AND NOTIFY THE PROJECT MANAGER IF ACTUAL LENGTHS EXCEED ESTIMATED LENGTHS.
- 22. CONTRACTOR SHALL VERIFY THE DOWN-TILT OF EACH ANTENNA WITH A DIGITAL LEVEL.
- 23. CONTRACTOR SHALL CONFIRM COAX COLOR CODING PRIOR TO CONSTRUCTION. REFER TO "ANTENNA SYSTEM LABELING STANDARD" ND-00027 LATEST VERSION.
- 24. ALL JUMPERS TO THE ANTENNAS FROM THE MAIN TRANSMISSION LINE SHALL BE 1/2" DIA. LDF AND SHALL NOT EXCEED 6'-0".
- 25. ALL COAXIAL CABLE SHALL BE SECURED TO THE DESIGNED SUPPORT STRUCTURE, IN AN APPROVED MANNER, AT DISTANCES NOT TO EXCEED $4^\prime-0^\prime$ OC.
- 26. CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS REGARDING BOTH THE INSTALLATION AND GROUNDING OF ALL COAXIAL CABLES, CONNECTORS, ANTENNAS, AND ALL OTHER EQUIPMENT.
- 27. CONTRACTOR SHALL WEATHERPROOF ALL ANTENNA CONNECTORS WITH SELF AMALGAMATING TAPE. WEATHERPROOFING SHALL BE COMPLETED IN STRICT ACCORDANCE WITH AT&T STANDARDS.
- 28. CONTRACTOR SHALL GROUND ALL EQUIPMENT. INCLUDING ANTENNAS, RET MOTORS, TMA'S, COAX CABLES, AND RET CONTROL CABLES AS A COMPLETE SYSTEM. GROUNDING SHALL BE EXECUTED BY QUALIFIED WIREMEN IN COMPLIANCE WITH MANUFACTURER'S SPECIFICATION AND RECOMMENDATION.
- 29. CONTRACTOR SHALL PROVIDE STRAIN-RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES, COAX CABLES, AND RET CONTROL CABLES. CABLE STRAIN-RELIEFS AND CABLE SUPPORTS SHALL BE APPROVED FOR THE PURPOSE. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

30. CONTRACTOR TO VERIFY THAT EXISTING COAX HANGERS ARE STACKABLE SNAP IN HANGERS. IF EXISTING HANGERS ARE NOT STACKABLE SNAP IN HANGERS THE CONTRACTOR SHALL REPLACE EXISTING HANGERS WITH NEW SNAP IN HANGERS IF APPLICABLE.

GENERAL CABLE AND EQUIPMENT NOTES

- 31. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ANTENNA, TMAS, DIPLEXERS, AND COAX CONFIGURATION, MAKE AND MODELS PRIOR TO INSTALLATION.
- 32. ALL CONNECTIONS FOR HANGERS, SUPPORTS, BRACING, ETC. SHALL BE INSTALLED PER TOWER.

MANUFACTURER'S RECOMMENDATIONS

- 33. CONTRACTOR SHALL REFERENCE THE TOWER STRUCTURAL ANALYSIS/DESIGN DRAWINGS FOR DIRECTIONS ON CABLE DISTRIBUTION/ROUTING.
- 34. ALL OUTDOOR RF CONNECTORS/CONNECTIONS SHALL BE WEATHERPROOFED, EXCEPT THE RET CONNECTORS, USING BUTYL TAPE AFTER INSTALLATION AND FINAL CONNECTIONS ARE MADE. BUTYL TAPE SHALL HAVE A MINIMUM OF ONE-HALF TAPE WIDTH OVERLAP ON EACH TURN AND EACH LAYER SHALL BE WRAPPED THREE TIMES. WEATHERPROOFING SHALL BE SMOOTH WITHOUT BUCKLING. BUTYL BLEEDING IS NOT ALLOWED.
- 35. IF REQUIRED TO PAINT ANTENNAS AND/OR COAX:
- A. TEMPERATURE SHALL BE ABOVE 50° F.
- B. PAINT COLOR MUST BE APPROVED BY BUILDING OWNER/LANDLORD.
- C. FOR REGULATED TOWERS, FAA/FCC APPROVED PAINT IS REQUIRED.
- D. DO NOT PAINT OVER COLOR CODING OR ON EQUIPMENT MODEL NUMBERS.
- ALL CABLES SHALL BE GROUNDED WITH COAXIAL CABLE GROUND KITS. FOLLOW THE MANUFACTURER'S RECOMMENDATIONS.
 A. GROUNDING AT THE ANTENNA LEVEL.
- B. GROUNDING AT MID LEVEL, TOWERS WHICH ARE OVER 200'-0", ADDITIONAL CABLE GROUNDING
- REQUIRED.
- C. GROUNDING AT BASE OF TOWER PRIOR TO TURNING HORIZONTAL
- D. GROUNDING OUTSIDE THE EQUIPMENT SHELTER AT ENTRY PORT.
- E. GROUNDING INSIDE THE EQUIPMENT SHELTER AT THE ENTRY PORT.
- 37. ALL PROPOSED GROUND BAR DOWNLEADS ARE TO BE TERMINATED TO THE EXISTING ADJACENT GROUND
- BAR DOWNLEADS A MINIMUM DISTANCE OF 4'-0" BELOW GROUND BAR. TERMINATIONS MAY BE EXOTHERMIC OR COMPRESSION.
- 39. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ANTENNA AND THE COAX CONFIGURATION IS THE CORRECT MAKE AND MODELS, PRIOR TO INSTALLATION.
- 40. ALL CONNECTIONS FOR HANGERS, SUPPORTS, BRACING, ETC. SHALL BE INSTALLED PER TOWER MANUFACTURER'S SPECIFICATION & RECOMMENDATIONS.

GROUNDING NOTES

41. GROUNDING IS SHOWN DIAGRAMMATICALLY ONLY.

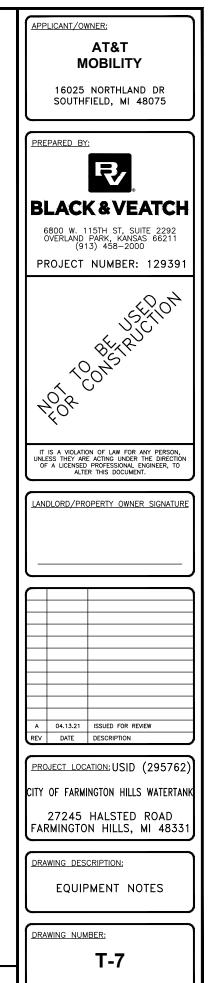
42. CONTRACTOR SHALL GROUND ALL EQUIPMENT AS A COMPLETE SYSTEM. GROUNDING SHALL BE IN COMPLIANCE WITH NEC SECTION 250 AND AT&T GROUNDING AND BONDING REQUIREMENTS (ATT-TP-76416) AND MANUFACTURER'S SPECIFICATIONS.

43. ALL GROUND CONDUCTORS SHALL BE COPPER; NO ALUMINUM CONDUCTORS SHALL BE USED.

44. ALL CABLES SHALL BE GROUNDED WITH COAXIAL CABLE GROUNDING KITS. FOLLOW THE MANUFACTURER'S RECOMMENDATIONS.

- A. GROUNDING AT THE ANTENNA LEVEL.
- B. GROUNDING AT MID LEVEL, TOWERS WHICH ARE OVER 200', ADDITIONAL CABLE GROUNDING REQUIRED.
- C. GROUNDING AT BASE OF TOWER PRIOR TO TURNING HORIZONTAL.
- D. GROUNDING OUTSIDE THE EQUIPMENT SHELTER AT ENTRY PORT. E. GROUNDING INSIDE THE EQUIPMENT SHELTER AT THE ENTRY PORT.

45. ALL PROPOSED GROUNDING BAR DOWNLEADS ARE TO BE TERMINATED TO THE EXISTING ADJACENT GROUNDING BAR DOWNLEADS A MINIMUM DISTANCE OF 4'-0" BELOW GROUNDING BAR. TERMINATIONS MAY BE EXOTHERMIC OR COMPRESSION.



PART 1 - GENERAL

- 1.1 GENERAL CONDITIONS
- CONTRACTOR SHALL INSPECT THE EXISTING SITE CONDITIONS PRIOR TO SUBMITTING BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTORS FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS BEEN AWARDED.
- THE CONTRACTOR SHALL OBTAIN PERMITS, LICENSES, MAKE ALL DEPOSITS, AND PAY ALL FEES REQUIRED FOR THE CONSTRUCTION PERFORMANCE FOR THE WORK UNDER THIS SECTION. В.
- DRAWINGS SHOW THE GENERAL ARRANGEMENT OF ALL SYSTEMS AND COMPONENTS COVERED UNDER THIS SECTION. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS. DRAWING SHALL NOT BE SCALED TO DETERMINE DIMENSIONS. c.
- 1.2 LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES.
- ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, AND ALL APPLICABLE LOCAL LAWS, REGULATIONS, ORDINANCES, STATUTES AND CODES. CONDUIT BENDS SHALL BE THE RADIUS BEND FOR THE TRADE SIZE OF CONDUIT IN COMPLIANCE WITH THE LATEST EDITIONS OF NEC.
- 1.3 REFERENCES
- THE PUBLICATIONS LISTED BELOW ARE PART OF THIS SPECIFICATION. EACH PUBLICATION SHALL BE THE LATEST REVISION AND ADDENDUM IN EFFECT ON THE DATE. THIS SPECIFICATION IS ISSUED FOR CONSTRUCTION UNLESS OTHERWISE NOTED. EXCEPT AS MODIFIED BY THE REQUIREMENT SPECIFIED HEREIN OR THE DETAILS OF THE DRAWINGS, WORK INCLUDED IN THIS SPECIFICATION SHALL CONFORM TO THE APPLICABLE PROVISION OF THESE PUBLICATIONS. A.
- ANSI/IEEE (AMERICAN NATIONAL STANDARDS INSTITUTE
- ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS) ICEA (INSULATED CABLE ENGINEERS ASSOCIATION)
- 4. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
- NEPA (NATIONAL FIRE PROTECTION ASSOCIATION) OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION)
- UL (UNDERWRITERS LABORATORIES INC.)
- 8. AT&T GROUNDING AND BONDING STANDARDS TP-76416
- 1.4 SCOPE OF WORK
- WORK UNDER THIS SECTION SHALL CONSIST OF FURNISHING ALL LABOR, MATERIAL, AND ASSOCIATED SERVICES REQUIRED TO COMPLETE REQUIRED CONSTRUCTION AND BE OPERATIONAL. A.
- ALL ELECTRICAL EQUIPMENT UNDER THIS CONTRACT SHALL BE PROPERLY TESTED, ADJUSTED, AND ALIGNED BY THE CONTRACTOR. В.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATING, DRAINING, TRENCHES, BACKFILLING, AND REMOVAL OF EXCESS DIRT. C.
- THE CONTRACTOR SHALL FURNISH TO THE OWNER WITH CERTIFICATES OF A FINAL INSPECTION AND APPROVAL FROM THE INSPECTION AUTHORITIES HAVING JURISDICTION. D.
- THE CONTRACTOR SHALL PREPARE A COMPLETE SET OF AS-BUILT DRAWINGS, DOCUMENT ALL WIRING EQUIPMENT CONDITIONS, AND CHANGES WHILE COMPLETING THIS CONTRACT. THE AS-BUILT DRAWINGS SHALL BE SUBMITTED AT COMPLETION OF THE PROJECT.
- PART 2 PRODUCTS

2.1 GENERAL

- ALL MATERIALS AND EQUIPMENT SHALL BE UL LISTED, NEW, AND FREE FROM DEFECTS. Α
- ALL ITEMS OF MATERIALS AND EQUIPMENT SHALL BE ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION AS SUITABLE FOR THE USE INTENDED. В.
- ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
- ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 10,000 AIC MINIMUM. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PER THE GOVERNING JURISDICTION
- 2.2 MATERIALS AND EQUIPMENT:
- Α. CONDUIT
- 1. RIGID METAL CONDUIT (RMC) SHALL BE HOT-DIPPED GALVANIZED INSIDE AND OUTSIDE INCLUDING ENDS AND THREADS AND ENAMELED OR LACQUERED INSIDE IN ADDITION TO GALVANIZING.
- 2. LIQUIDTIGHT FLEXIBLE METAL CONDUIT SHALL BE UL LISTED
- 3. CONDUIT CLAMPS, STRAPS AND SUPPORTS SHALL BE STEEL OR MALLEABLE IRON. ALL FITTINGS SHALL BE COMPRESSION AND CONCRETE TIGHT TYPE. GROUNDING BUSHINGS WITH INSULATED THROATS SHALL BE INSTALLED ON ALL CONDUIT TERMINATIONS.
- 4. NONMETALLIC CONDUIT AND FITTINGS SHALL BE SCHEDULE 40 PVC. INSTALL USING SOLVENT-CEMENT-TYPE JOINTS AS RECOMMENDED BY THE MANUFACTURER.
- B. CONDUCTORS AND CABLE:
- 1. CONDUCTORS AND CABLE SHALL BE FLAME-RETARDANT, MOISTURE AND HEAT RESISTANT THERMOPLASTIC. SINGLE CONDUCTOR, COPPER, TYPE THHN/THWN-2, 600 VOLT, SIZE AS INDICATED, #12 AWG SHALL BE THE MINIMUM SIZE CONDUCTOR USED.
- 2. #10 AWG AND SMALLER CONDUCTOR SHALL BE SOLID OR STRANDED AND #8 AWG AND LARGER CONDUCTORS SHALL BE STRANDED.
- SOLDERLESS, COMPRESSION-TYPE CONNECTORS SHALL BE USED FOR TERMINATION OF ALL STRANDED CONDUCTORS.
- 4. STRAIN-RELIEF SUPPORTS GRIPS SHALL BE HUBBELL KELLEMS OR APPROVED EQUAL. CABLES SHALL BE SUPPORTED IN ACCORDANCE WITH THE NEC AND CABLE MANUFACTURER'S RECOMMENDATIONS.
- ALL CONDUCTORS SHALL BE TAGGED AT BOTH ENDS OF THE CONDUCTOR, AT ALL PULL BOXES, J-BOXES, EQUIPMENT AND CABINETS AND SHALL BE IDENTIFIED WITH APPROVED PLASTIC TAGS (ACTION CRAFT, BRADY, OR APPROVED EQUAL).
- С DISCONNECT SWITCHES
- DISCONNECT SWITCHES SHALL BE HEAVY DUTY, DEAD-FRONT, QUICK-MAKE, QUICK-BREAK, EXTERNALLY OPERABLE, HANDLE LOCKABLE AND INTERLOCK WITH COVER IN CLOSED POSITION, RATING AS INDICATED, UL LABELED FURNISHED IN NEMA 3R ENCLOSURE, SQUARE-D OR ENGINEER APPROVED EQUAL.
- D. CHEMICAL ELECTROLYTIC GROUNDING SYSTEM:
- 1. INSTALL CHEMICAL GROUNDING AS REQUIRED. THE SYSTEM SHALL BE ELECTROLYTIC MAINTENANCE FREE ELECTRODE CONSISTING OF RODS WITH A MINIMUM #2 AWG CU EXOTHERMICALLY WELDED PIGTAIL, PROTECTIVE BOXES, AND BACKFILL MATERIAL. MANUFACTURER SHALL BE LYNCOLE XIT GROUNDING ROD TYPES K2-(*)CS OR K2L-(*)CS (*) LENGTH AS REQUIRED.

- 2. GROUND ACCESS BOX SHALL BE A POLYPLASTIC BOX FOR NON-TRAFFIC APPLICATIONS, INCLUDING BOLT DOWN FLUSH COVER WITH "BREATHER" HOLES, XIT MODEL #XB-22. ALL DISCONNECT SWITCHES AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED LAMICOID NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS ID NUMBERING, AND THE ELECTRICAL POWER SOURCE.
- 3. BACKFILL MATERIAL SHALL BE LYNCONITE AND LYNCOLE GROUNDING GRAVEL
- E. SYSTEM GROUNDING
- ALL GROUNDING COMPONENTS SHALL BE TINNED AND GROUNDING CONDUCTOR SHALL BE #2 AWG BARE, SOLID, TINNED, COPPER. ABOVE GRADE GROUNDING CONDUCTORS SHALL BE INSULATED WHERE NOTED.
- 2. GROUNDING BUSES SHALL BE BARE, TINNED, ANNEALED COPPER BARS OF RECTANGULAR CROSS SECTION. STANDARD BUS BARS MGB, SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. THEY SHALL NOT BE FABRICATED OR MODIFIED IN THE FIELD. ALL GROUNDING BUSES SHALL BE IDENTIFIED WITH MINIMUM 3/4" LETTERS BY WAY OF STENCILING OR DESIGNATION PLATE.
- 3. CONNECTORS SHALL BE HIGH-CONDUCTIVITY, HEAVY DUTY, LISTED AND LABELED AS GROUNDING CONNECTORS FOR THE MATERIALS USED. USE TWO-HOLE COMPRESSION LUGS WITH HEAT SHRINK FOR MECHANICAL CONNECTIONS. INTERIOR CONNECTIONS USE TWO-HOLE COMPRESSION LUGS WITH INSPECTION WINDOW AND CLEAR HEAT SHRINK.
- 4. EXOTHERMIC WELDED CONNECTIONS SHALL BE PROVIDED IN KIT FORM AND SELECTED FOR THE SPECIFIC TYPES, SIZES, AND COMBINATIONS OF CONDUCTORS AND OTHER ITEMS TO BE CONNECTED.
- 5. GROUND RODS SHALL BE COPPER-CLAD STEEL WITH HIGH-STRENGTH STEEL CORE AND ELECTROLYTIC-GRADE COPPER OUTER SHEATH, MOLTEN WELDED TO CORE, 5/8"x10'-0". ALL GROUNDING RODS SHALL BE INSTALLED WITH INSPECTION SLEEVES.
- 6. INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS IN COMPLIANCE WITH THE AT&T SPECIFICATIONS AND NEC. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, PULLBOXES, DISCONNECT SWITCHES, STARTERS, AND EQUIPMENT CABINETS.
- F. OTHER MATERIALS:
- THE CONTRACTOR SHALL PROVIDE OTHER MATERIALS, THOUGH NOT SPECIFICALLY DESCRIBED, WHICH ARE REQUIRED FOR A COMPLETELY OPERATIONAL SYSTEM AND PROPER INSTALLATION OF THE WORK.
- 2. PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR REQUIRED BY NEC.
- G. PANELS AND LOAD CENTERS
- 1. ALL PANEL DIRECTORIES SHALL BE TYPEWRITTEN.
- PART 3 EXECUTION
- 3.1 GENERAL:
- ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- EQUIPMENT SHALL BE TIGHTLY COVERED AND PROTECTED AGAINST DIRT OR WATER, AND AGAINST CHEMICAL OR MECHANICAL INJURY DURING INSTALLATION AND CONSTRUCTION PERIODS. В.
- 3.2 LABOR AND WORKMANSHIP
- ALL LABOR FOR THE INSTALLATION OF MATERIALS AND EQUIPMENT FURNISHED FOR THE ELECTRICAL SYSTEM SHALL BE INSTALLED BY EXPERIENCED WIREMEN, IN A NEAT AND WORKMAN-LIKE MANNER. Α.
- ALL ELECTRICAL EQUIPMENT SHALL BE ADJUSTED, ALIGNED AND TESTED BY THE CONTRACTOR AS REQUIRED TO PRODUCE THE INTENDED PERFORMANCE.
- UPON COMPLETION OF WORK, THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL EXPOSED EQUIPMENT, REMOVE ALL LABELS AND ANY DEBRIS, CRATING OR CARTONS AND LEAVE THE INSTALLATION FINISHED AND READY FOR OPERATION. с.
- 3.3 COORDINATION
- THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ELECTRICAL ITEMS WITH THE OWNER-FURNISHED EQUIPMENT DELIVERY SCHEDULE TO PREVENT UNNECESSARY DELAYS IN THE TOTAL WORK. Α.
- 3.4 INSTALLATION
- Α. CONDUIT
- ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT AS SPECIFIED. NO CONDUIT OR TUBING OF LESS THAN 3/4 INCH TRADE SIZE.
- 2. PROVIDE RIGID PVC SCHEDULE 80 CONDUITS FOR ALL RISERS, RMC OTHERWISE NOTED. EMT MAY BE INSTALLED FOR EXTERIOR CONDUITS WHERE NOT SUBJECT TO PHYSICAL DAMAGE.
- INSTALL SCHEDULE 40 PVC CONDUIT WITH A MINIMUM COVER OF 24" UNDER ROADWAYS, PARKING LOTS, STREETS, AND ALLEYS. CONDUIT SHALL HAVE A MINIMUM COVER OF 18" IN ALL OTHER NON-TRAFFIC APPLICATIONS (REFER TO LATEST NEC, TABLE 300.5).
- 4. USE GALVANIZED FLEXIBLE STEEL CONDUIT WHERE DIRECT CONNECTION TO EQUIPMENT WITH MOVEMENT, VIBRATION, OR FOR EASE OF MAINTENANCE. USE LIQUID TIGHT, FLEXIBLE METAL CONDUIT FOR OUTDOOR APPLICATIONS. INSTALL GALVANIZED FLEXIBLE STEEL CONDUIT AT ALL POINTS OF CONNECTION TO EQUIPMENT MOUNTED ON SUPPORT TO ALLOW FOR EXPANSION AND CONTRACTION.
- 5. A RUN OF CONDUIT BETWEEN BOXES OR EQUIPMENT SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF THREE QUARTER-BENDS. CONDUIT BEND SHALL BE MADE WITH THE UL LISTED BENDER OR FACTORY 90 DEGREE ELBOWS MAY BE USED.
- 6. FIELD FABRICATED CONDUITS SHALL BE CUT SQUARE WITH A CONDUIT CUTTING TOOL AND REAMED TO PROVIDE A SMOOTH INSIDE SURFACE.
- 7. PROVIDE INSULATED GROUNDING BUSHING FOR ALL CONDUITS.
- 8. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL CONDUITS DURING CONSTRUCTION. TEMPORARY OPENINGS IN THE CONDUIT SYSTEM SHALL BE PLUGGED OR CAPPED TO PREVENT ENTRANCE OF MOISTURE OR FOREIGN MATTER. CONTRACTOR SHALL REPLACE ANY CONDUITS CONTAINING FOREIGN MATERIALS THAT
- ALL CONDUITS SHALL BE SWABBED CLEAN BY PULLING AN APPROPRIATE SIZE MANDREL THROUGH THE CONDUIT BEFORE INSTALLATION OF CONDUCTORS OR CABLES. CONDUIT SHALL BE FREE OF DIRT AND DEBRIS.
- 10. INSTALL PULL STRINGS IN ALL CLEAN EMPTY CONDUITS. IDENTIFY PULL STRINGS AT EACH END.
- 11. INSTALL 2" HIGHLY VISIBLE AND DETECTABLE TAPE 12" ABOVE ALL UNDERGROUND CONDUITS AND CONDUCTORS.
- 12. CONDUITS SHALL BE INSTALLED IN SUCH A MANNER AS TO ENSURE AGAINST COLLECTION OF TRAPPED CONDENSATION.

ELECTRICAL SECTION NOTES

13. PROVIDE CORE DRILLING AS NECESSARY FOR PENETRATIONS TO ALLOW FOR RACEWAYS AND CABLES TO BE ROUTED THROUGH THE BUILDING. DO NOT PENETRATE STRUCTURAL MEMBERS. SLEEVES AND/OR PENETRATIONS IN FIRE RATED CONSTRUCTION SHALL BE EFFECTIVELY SEALED WITH FIRE RATED MATERIAL WHICH SHALL MAINTAIN THE FIRE RATING OF THE WALL OR STRUCTURE. FIRE STOPS AT FLOOR PENETRATIONS SHALL PREVENT PASSAGE OF WATER, SMOKE, FIRE, AND FUMES. ALL MATERIAL SHALL BE UL APPROVED FOR THIS PURPOSE.

- B. CONDUCTORS AND CABLE:
- 1. ALL POWER WIRING SHALL BE COLOR CODED AS FOLLOWS:

DESCRIPTION	í F
PHASE A	Ē
PHASE B	F
PHASE C	Ē
FUTRAL	Ň
ROUNDING	Ċ

SPLICES SHALL BE MADE ONLY AT OUTLETS, JUNCTION BOXES, OR ACCESSIBLE RACEWAY CONDUITS APPROVED FOR THIS PURPOSE.

GREEN

- 3. PULLING LUBRICANTS SHALL BE UL APPROVED. CONTRACTOR SHALL USE NYLON OR HEMP ROPE FOR PULLING CONDUCTOR OR CABLES INTO THE CONDUIT.
- 4. CABLES SHALL BE NEATLY TRAINED, WITHOUT INTERLACING, AND BE OF SUFFICIENT LENGTH IN ALL BOXES & EQUIPMENT TO PERMIT MAKING A NEAT ARRANGEMENT. CABLES SHALL BE SECURED IN A MANNER TO AVOID TENSION ON CONDUCTORS OR TERMINALS. CONDUCTORS SHALL BE PROTECTED FROM MECHANICAL INJURY AND MOISTURE. SHARP BENDS OVER CONDUIT BUSHINGS IS PROHIBITED. DAMAGED CABLES SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- C. DISCONNECT SWITCHES:
- 1. INSTALL DISCONNECT SWITCHES LEVEL AND PLUMB. CONNECT TO WIRING SYSTEM AND GROUNDING SYSTEM AS INDICATED.
- D. GROUNDING
- ALL METALLIC PARTS OF ELECTRICAL EQUIPMENT WHICH DO NOT CARRY CURRENT SHALL BE GROUNDED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BUILDING MANUFACTURER, AT&X STANDARDS TP-76416, ND-00135, AND THE NATIONAL ELECTRICAL CODE.
- PROVIDE ELECTRICAL GROUNDING AND BONDING SYSTEM INDICATED WITH ASSEMBLY OF MATERIALS, INCLUDING GROUNDING ELECTRODES, BONDING JUMPERS AND ADDITIONAL ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION.
- 3. ALL GROUNDING CONDUCTORS SHALL PROVIDE A STRAIGHT DOWNWARD PATH TO GROUND WITH GRADUAL BEND AS REQUIRED. GROUNDING CONDUCTORS SHALL NOT BE LOOPED OR SHARPLY BENT. ROUTE GROUNDING CONNECTIONS AND CONDUCTORS TO GROUND IN THE SHORTEST AND STRAIGHTEST PATHS POSSIBLE TO MINIMIZE TRANSIENT VOLTAGE RISES.
- 4. BUILDINGS AND/OR NEW TOWERS GREATER THAN 75 FEET IN HEIGHT AND WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 AWG COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL CONTURE LOUTED AND FOR THE AND THE ROUNDING STEEL CONTURE LOUTED AND FOR THE AND THE ROUNDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY). SEE STANDARD 6.3.2.2.
- 5. TIGHTEN GROUNDING AND BONDING CONNECTORS, INCLUDING SCREWS AND BOLTS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALUES FOR CONNECTORS AND BOLTS. WHERE MANUFACTURER'S TORQUING REQUIREMENTS ARE NOT AVAILABLE, TIGHTEN CONNECTIONS TO COMPLY WITH TIGHTENING TORQUE VALUES SPECIFIED IN UL TO ASSURE PERMANENT AND EFFECTIVE GROUNDING.
- 6. CONTRACTOR SHALL VERIFY THE LOCATIONS OF GROUNDING TIE-IN-POINTS TO THE EXISTING GROUNDING SYSTEM. ALL UNDERGROUND GROUNDING CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- 7. ALL GROUNDING CONNECTIONS SHALL BE INSPECTED FOR TIGHTNESS. EXOTHERMIC WELDED CONNECTIONS SHALL BE APPROVED BY THE INSPECTOR HAVING JURISDICTION BEFORE BEING PERMANENTLY CONCEALED.
- 8. APPLY CORROSION-RESISTANT FINISH TO FIELD CONNECTIONS AND PLACES WHERE FACTORY APPLIED PROTECTIVE COATINGS HAVE BEEN DESTROYED. USE KOPR-SHIELD ANTI-OXIDATION COMPOUND ON ALL COMPRESSION GROUNDING CONNECTIONS.
- 9. A SEPARATE, CONTINUOUS, INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED IN ALL FEEDER AND BRANCH CIRCUITS.

ACCEPTANCE TESTING:

C. TEST PROCEDURES:

3.5

208/240/120 VOLT SYSTEMS BLACK

10. BOND ALL INSULATED GROUNDING BUSHINGS WITH A BARE #6 AWG GROUNDING CONDUCTOR TO A GROUND

11. DIRECT BURIED GROUNDING CONDUCTORS SHALL BE INSTALLED AT A NOMINAL DEPTH OF 36" MINIMUM BELOW GRADE, OR 6" BELOW THE FROST LINE, USE THE GREATER OF THE TWO DISTANCES. ALL GROUNDING CONDUCTORS EMBEDDED IN OR PENETRATING CONCRETE SHALL BE INSTALLED IN SCHEDULE 40 PVC CONDUIT.

13. THE INSTALLATION OF CHEMICAL ELECTROLYTIC GROUNDING SYSTEM SHALL BE IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. REMOVE SEALING TAPE FROM LEACHING AND BREATHER HOLES. INSTALL PROTECTIVE BOX FLUSH WITH GRADE.

14. DRIVE GROUND RODS UNTIL TOPS ARE A MINIMUM DISTANCE OF 36" DEPTH OR 6" BELOW FROST LINE, USING THE GREATER OF THE TWO DISTANCES.

15. IF COAX ON THE ICE BRIDGE IS MORE THAN 6 FT. FROM THE GROUNDING BAR AT THE BASE OF THE TOWER, A SECOND GROUNDING BAR WILL BE NEEDED AT THE END OF THE ICE BRIDGE, TO GROUND THE COAX CABLE GROUNDING KITS AND IN-LINE ARRESTORS.

16. CONTRACTOR SHALL REPAIR, AND/OR REPLACE, EXISTING GROUNDING SYSTEM COMPONENTS DAMAGED DURING CONSTRUCTION AT THE CONTRACTOR'S EXPENSE.

CERTIFIED PERSONNEL USING CERTIFIED EQUIPMENT SHALL PERFORM REQUIRED TESTS AND SUBMIT WRITTEN TEST REPORTS UPON COMPLETION.

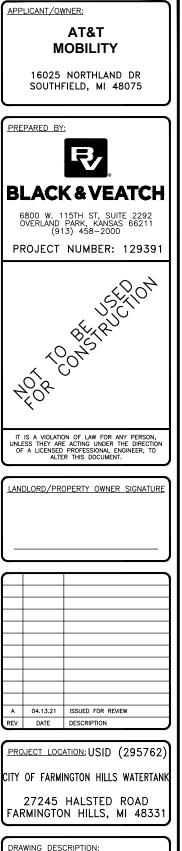
WHEN MATERIAL AND/OR WORKMANSHIP IS FOUND NOT TO COMPLY WITH THE SPECIFIED REQUIREMENTS, THE NON-COMPLYING ITEMS SHALL BE REMOVED FROM THE PROJECT SITE AND REPLACED WITH ITEMS COMPLYING WITH THE SPECIFIED REQUIREMENTS PROMPTLY AFTER RECEIPT OF NOTICE FOR NON-COMPLIANCE.

1. ALL FEEDERS SHALL HAVE INSULATION TESTED AFTER INSTALLATION, BEFORE CONNECTION TO DEVICES. THE CONDUCTORS SHALL TEST FREE FROM SHORT CIRCUITS AND GROUNDS. TESTING SHALL BE FOR ONE MINUTE USING 1000V DC. PROVIDE WRITTEN DOCUMENTATION FOR ALL TEST RESULTS.

2. PRIOR TO ENERGIZING CIRCUITRY, TEST WIRING DEVICES FOR ELECTRICAL CONTINUITY AND PROPER POLARITY CONNECTIONS.

3. MEASURE AND RECORD VOLTAGES BETWEEN PHASES AND BETWEEN PHASE CONDUCTORS AND NEUTRALS. SUBMIT A REPORT OF MAXIMUM AND MINIMUM VOLTAGES.

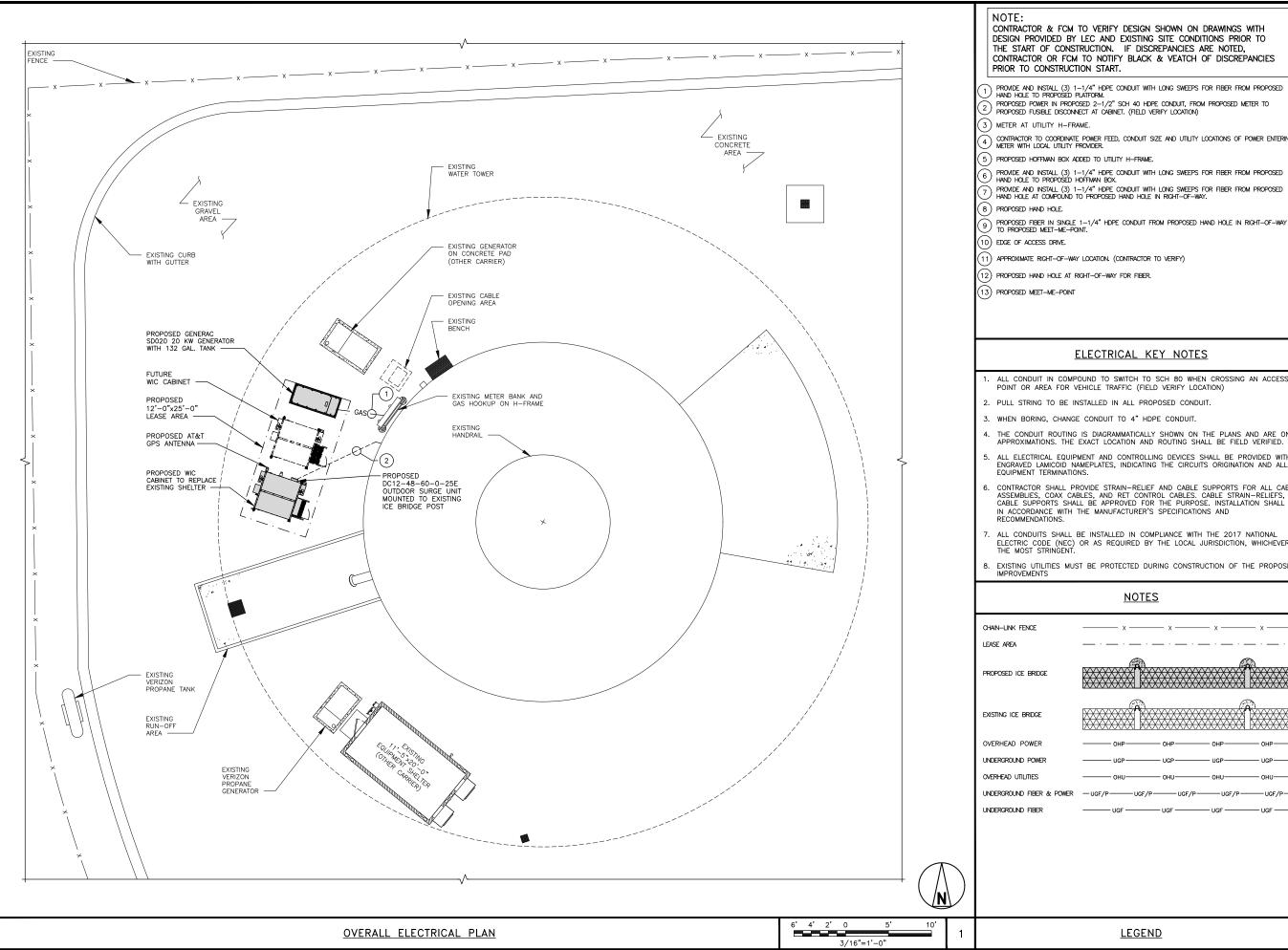
4. PERFORM GROUNDING TEST TO MEASURE GROUNDING RESISTANCE OF GROUNDING SYSTEM USING THE IEEE STANDARD 3-POINT "FALL-OF-POTENTIAL" METHOD. PROVIDE PLOTTED TEST VALUES AND LOCATION SKETCH. NOTIFY THE ENGINEER IMMEDIATELY IF MEASURED VALUE IS OVER 5 OHMS.



ELECTRICAL SECTION NOTES

E-1

DRAWING NUMBER:



CONTRACTOR & FCM TO VERIFY DESIGN SHOWN ON DRAWINGS WITH DESIGN PROVIDED BY LEC AND EXISTING SITE CONDITIONS PRIOR TO THE START OF CONSTRUCTION. IF DISCREPANCIES ARE NOTED, CONTRACTOR OR FCM TO NOTIFY BLACK & VEATCH OF DISCREPANCIES

 $\bar{4}$ contractor to coordinate power feed, conduit size and utility locations of power entering meter with local utility provider.

6 provide and install (3) 1-1/4" hdpe conduit with long sweeps for fiber from proposed hand hole to proposed hoffwan box.

ELECTRICAL KEY NOTES

ALL CONDUIT IN COMPOUND TO SWITCH TO SCH 80 WHEN CROSSING AN ACCESS POINT OR AREA FOR VEHICLE TRAFFIC (FIELD VERIFY LOCATION)

4. THE CONDUIT ROUTING IS DIAGRAMMATICALLY SHOWN ON THE PLANS AND ARE ONLY ROXIMATIONS. THE EXACT LOCATION AND ROUTING SHALL BE FIELD VERIFIED.

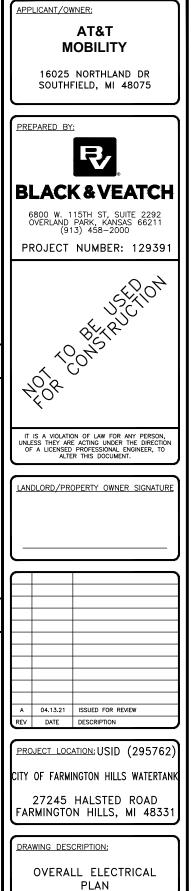
ALL ELECTRICAL EQUIPMENT AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED LAMICOID NAMEPLATES, INDICATING THE CIRCUITS ORIGINATION AND ALL EQUIPMENT TERMINATIONS.

6. CONTRACTOR SHALL PROVIDE STRAIN-RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES, COAX CABLES, AND RET CONTROL CABLES. CABLE STRAIN-RELIEFS, CABLE SUPPORTS SHALL BE APPROVED FOR THE PURPOSE. INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND

ALL CONDUITS SHALL BE INSTALLED IN COMPLIANCE WITH THE 2017 NATIONAL ELECTRIC CODE (NEC) OR AS REQUIRED BY THE LOCAL JURISDICTION, WHICHEVER IS THE MOST STRINGENT.

8. EXISTING UTILITIES MUST BE PROTECTED DURING CONSTRUCTION OF THE PROPOSED IMPROVEMENTS

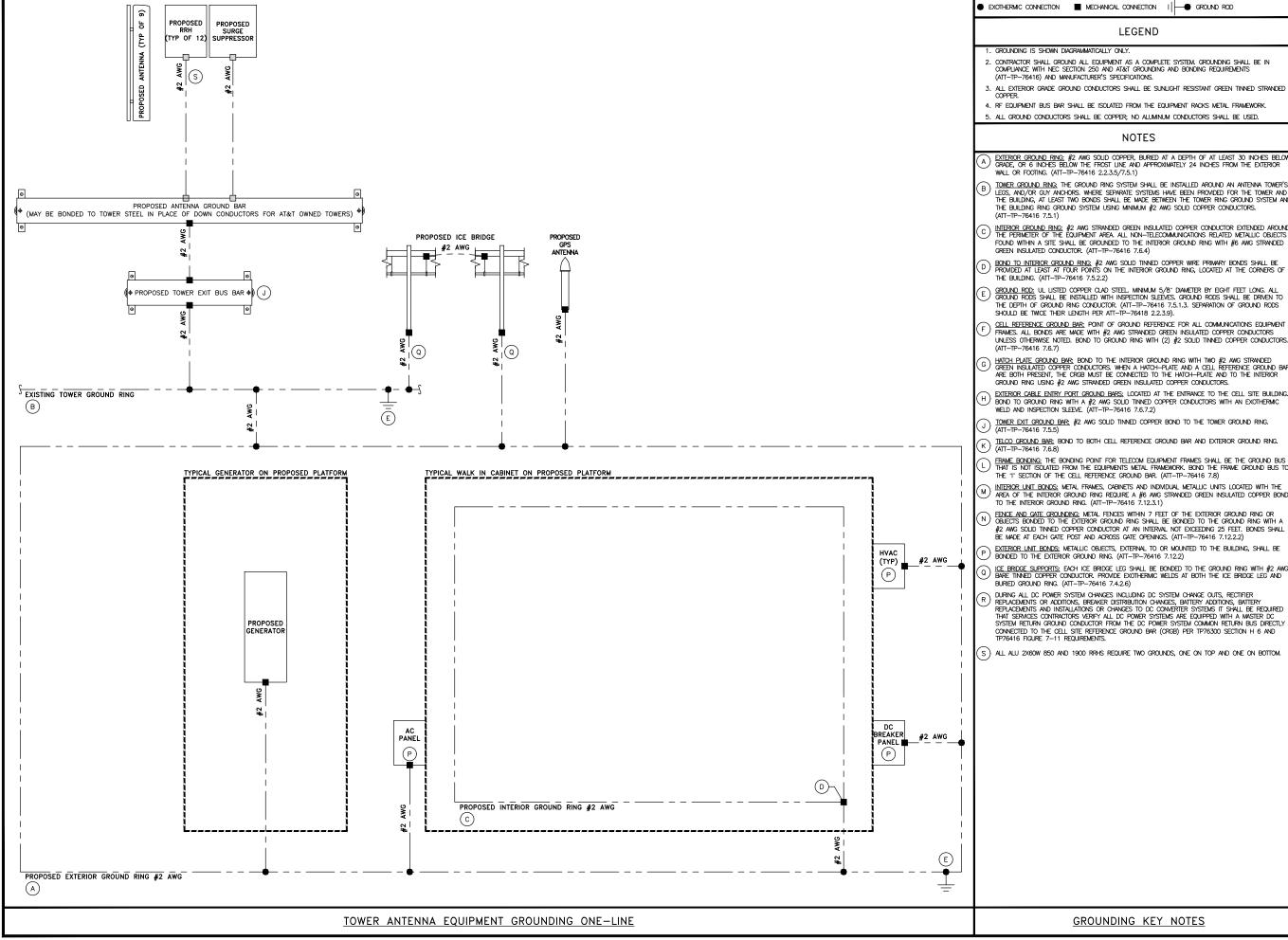
<u>NOTES</u> UGE /F - UGE / UGE /F



DRAWING NUMBER:

E-2

LEGEND



ANICAL CONNECTION	- 1	•	GROUND	ROD	
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LEGEND

2. CONTRACTOR SHALL GROUND ALL EQUIPMENT AS A COMPLETE SYSTEM. GROUNDING SHALL BE IN COMPLIANCE WITH NEC SECTION 250 AND AT&T GROUNDING AND BONDING REQUIREMENTS

5. ALL GROUND CONDUCTORS SHALL BE COPPER: NO ALUMINUM CONDUCTORS SHALL BE USED.

NOTES

A <u>EXTERIOR GROUND RINS</u> #2 AWG SOLID COPPER, BURIED AT A DEPTH OF AT LEAST 30 INCHES BELOW GRADE, OR 6 INCHES BELOW THE FROST LINE AND APPROXIMATELY 24 INCHES FROM THE EXTERIOR

B <u>IOMER GROUND RING</u>: THE GROUND RING SYSTEM SHALL BE INSTALLED AROUND AN ANTENNA TOWER'S LEGS, AND/OR GUY ANCHORS. WHERE SEPARATE SYSTEMS HAVE BEEN PROVIDED FOR THE TOWER AND THE BUILDING, AT LEAST TWO BONDS SHALL BE MADE BETWEEN THE TOWER RING GROUND SYSTEM AND THE BUILDING RING GROUND SYSTEM USING MINIMUM #2 AWG SOLID COPPER CONDUCTORS.

C INTERIOR GROUND RINS: #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTOR EXTENDED AROUND THE PERIMETER OF THE EQUIPMENT AREA. ALL NON-TELECOMMUNICATIONS RELATED METALLIC OBJECTS FOUND WITHIN A STIE SHALL BE GROUNDED TO THE INTERIOR GROUND RING WITH #6 AWG STRANDED

D BOND TO INTERIOR GROUND RING: #2 AWG SOLID TINNED COPPER WIRE PRIMARY BONDS SHALL BE PROVIDED AT LEAST AT FOUR POINTS ON THE INTERIOR GROUND RING, LOCATED AT THE CORNERS OF

E) <u>GROUND ROD:</u> UL USTED COPPER CLAD STEEL. MINIMUM 5/8" DAMETER BY EIGHT FEET LONG. ALL GROUND RODS SHALL BE INSTALLED WITH INSPECTION SLEEVES. GROUND RODS SHALL BE DRIVEN TO THE DEPTH OF GROUND RING CONDUCTOR. (ATT-TP-76416 7.5.1.3. SEPARATION OF GROUND RODS SHOULD BE TWICE THEIR LENGTH PER ATT-TP-76418 2.2.3.9).

CELL REFERENCE GROUND BAR: POINT OF GROUND REFERENCE FOR ALL COMMUNICATIONS EQUIPMENT FRAMES. ALL BONDS ARE MADE WITH #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTORS UNLESS OTHERWISE NOTED. BOND TO GROUND RING WITH (2) #2 SOLID TINNED COPPER CONDUCTORS.

 HATCH PLATE GROUND BAR:
 BOND TO THE INTERIOR GROUND RING WITH TWO #2 AWG STRANDED

 GREEN INSULATED COPPER CONDUCTORS.
 WHEN A HATCH-PLATE AND A CELL REFERENCE GROUND BAR

 ARE BOTH PRESENT, THE CRGB MUST BE CONNECTED TO THE HATCH-PLATE AND TO THE INTERIOR
 GROUND RING USING #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTORS.

H) EXTERIOR CABLE ENTRY PORT GROUND BARS: LOCATED AT THE ENTRANCE TO THE CELL STE BUILDING. BOND TO GROUND RING WITH A #2 AWG SOLID TINNED COPPER CONDUCTORS WITH AN EXOTHERMIC WELD AND INSPECTION SLEEVE. (ATT-TP-76416 7.6.7.2)

<u>FRAME BONDING</u>. THE BONDING POINT FOR TELECOM EQUIPMENT FRAMES SHALL BE THE GROUND BUS THAT IS NOT ISOLATED FROM THE EQUIPMENTS METAL FRAMEWORK. BOND THE FRAME GROUND BUS TO

M <u>INTERIOR UNT BONDS:</u> METAL FRAMES, CABINETS AND INDVIDUAL METALLIC UNTS LOCATED WITH THE AREA OF THE INTERIOR GROUND RING REQUIRE A #6 AWG STRANDED GREEN INSULATED COPPER BOND TO THE INTERIOR GROUND RING. (ATT-TP-76416 7.12.3.1)

PENCE AND GATE GROUNDING: METAL FENCES WITHIN 7 FEET OF THE EXTERIOR GROUND RING OR OBJECTS BONDED TO THE EXTERIOR GROUND RING SHALL BE BONDED TO THE GROUND RING WITH A #2 AWG SOLD TINNED COPPER CONDUCTOR AT AN INTERVAL NOT EXCEEDING 25 FEET. BONDS SHALL BE WADE AT EACH GATE POST AND ACROSS GATE OPENINGS. (ATT-TP-76416 7.12.2.2)

P EXTERIOR UNIT BONDS: METALLIC OBJECTS, EXTERNAL TO OR MOUNTED TO THE BUILDING, SHALL BE BONDED TO THE EXTERIOR GROUND RING. (ATT-TP-76416 7.12.2)

ICE BRIDGE SUPPORTS: EACH ICE BRIDGE LEG SHALL BE BONDED TO THE GROUND RING WITH #2 AWG BARE TINNED COPPER CONDUCTOR. PROVIDE EXCITHERMIC WELDS AT BOTH THE ICE BRIDGE LEG AND BURED GROUND RING. (ATT-TP-76416 7.4.2.6)

DURING ALL DC POWER SYSTEM CHANGES INCLUDING DC SYSTEM CHANGE OUTS, RECTIFIER REPLACEMENTS OR ADDITIONS, BREAKER DISTRIBUTION CHANGES, BATTERY ADDITIONS, BATTERY REPLACEMENTS AND INSTALLATIONS OR CHANGES TO DC CONVERTIER SYSTEMS AT SHALL BE REQUIRED THAT SERVICES CONTRACTORS VERIFY ALL DC POWER SYSTEM ACK EQUIPPED WITH A WASTER DC SYSTEM RETURN GROUND CONDUCTOR FROM THE DC POWER SYSTEM ACK COMPANY BUS DIRECTLY CONNECTED TO THE CELL SITE REFERENCE GROUND BAR (ORGB) PER TP76300 SECTION H 6 AND TP76416 FIGURE 7-11 REQUIREMENTS.

S) ALL ALU 2X60W 850 AND 1900 RRHS REQUIRE TWO GROUNDS, ONE ON TOP AND ONE ON BOTTOM.

APPLICANT/OWNER:



16025 NORTHLAND DR SOUTHFIELD, MI 48075

PREPARED BY:



BLACK&VEATCH

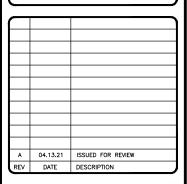
6800 W. 115TH ST, SUITE 2292 OVERLAND PARK, KANSAS 66211 (913) 458–2000

PROJECT NUMBER: 129391



IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

LANDLORD/PROPERTY OWNER SIGNATURE



PROJECT LOCATION: USID (295762)

CITY OF FARMINGTON HILLS WATERTANI

27245 HALSTED ROAD FARMINGTON HILLS, MI 48331

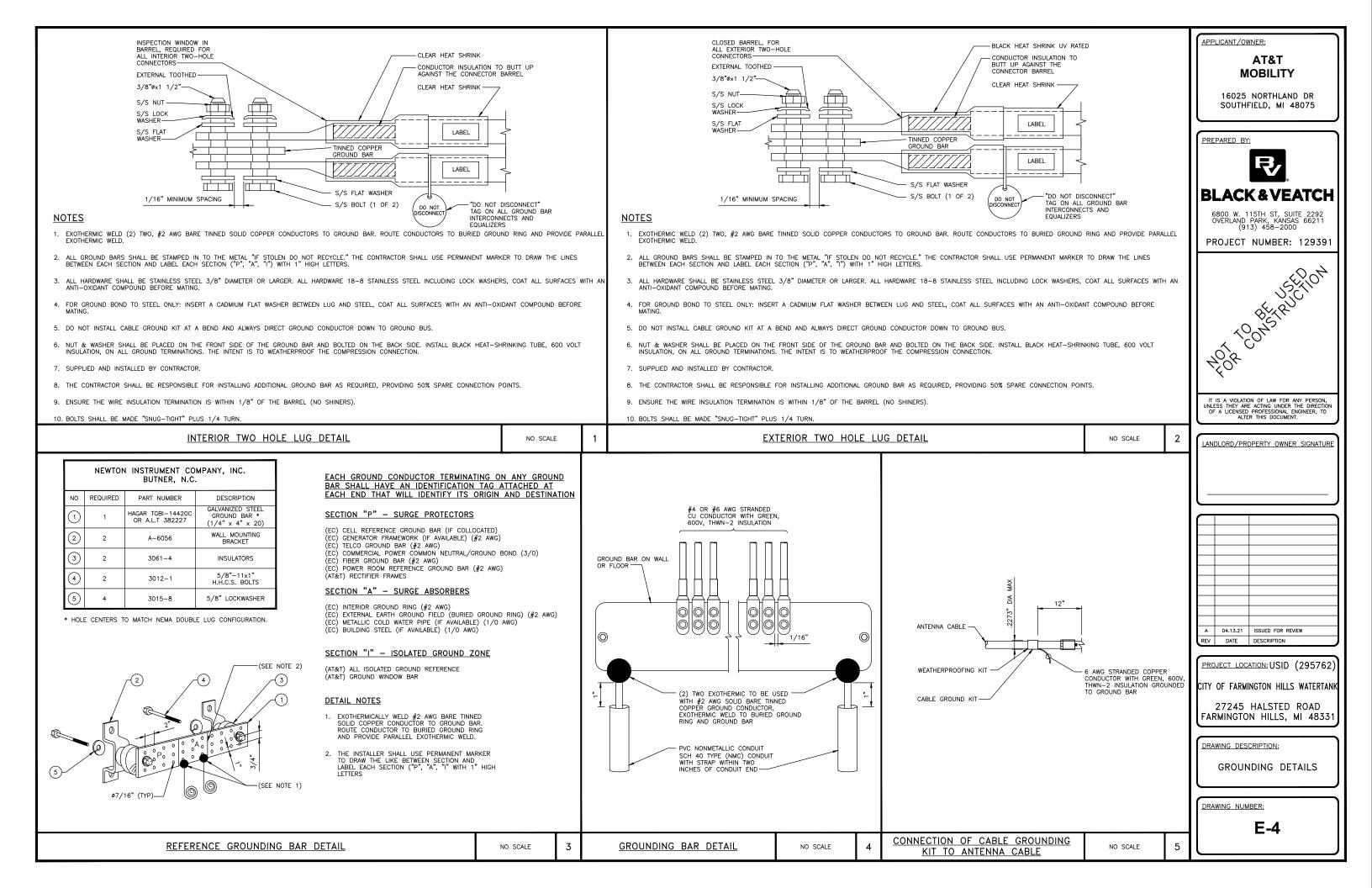
DRAWING DESCRIPTION:

ONE-LINE GROUNDING DIAGRAM

E-3

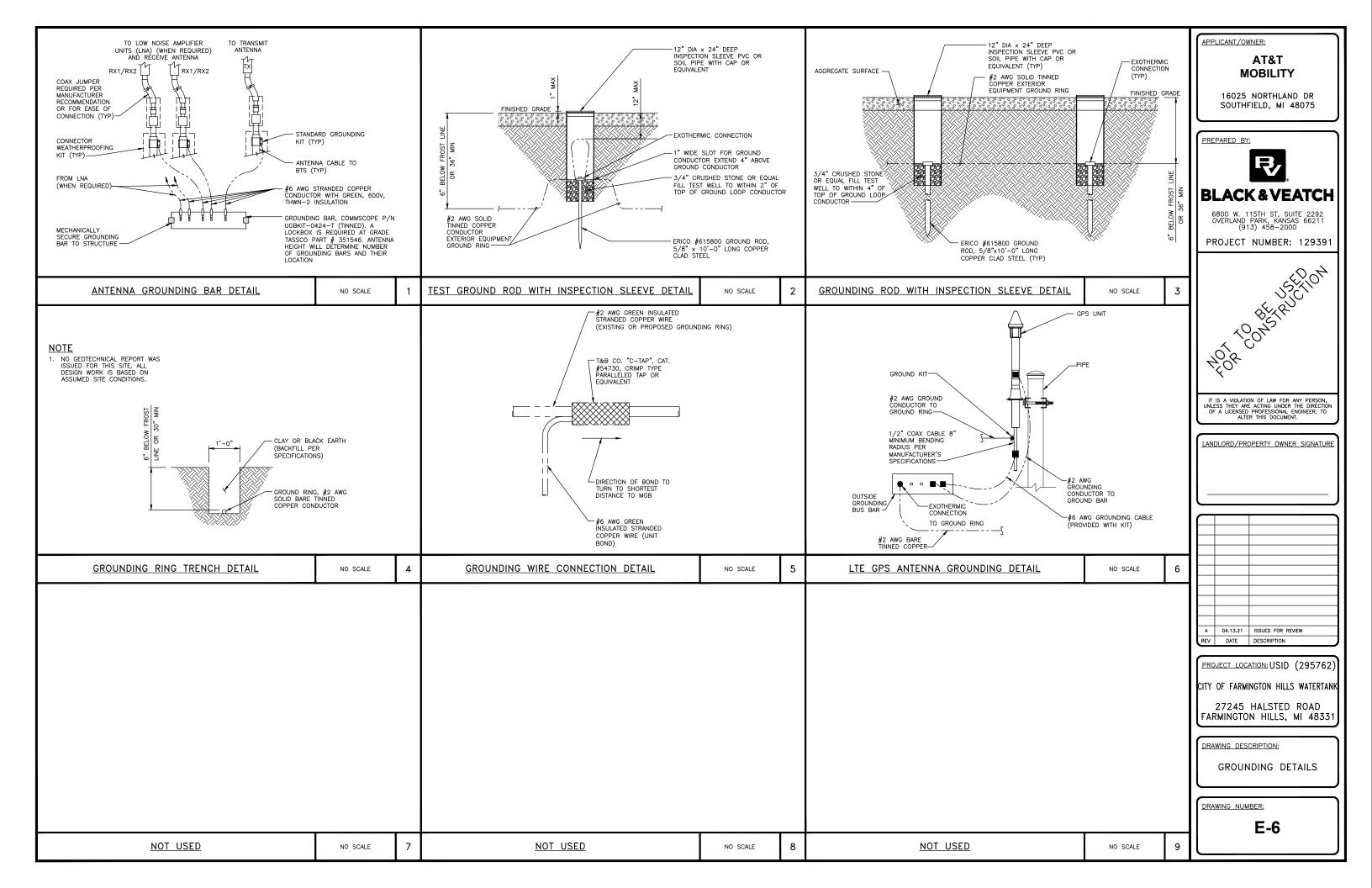
DRAWING NUMBER:

GROUNDING KEY NOTES

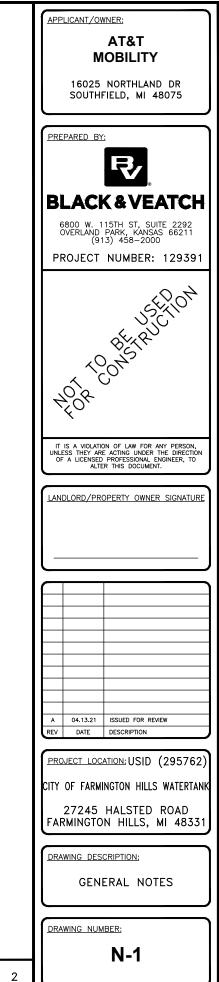


									 NUMBE THE TY CONNEL RESPOI AS REC POINTS DO NO' ALWAYS BAR. GROUN SUPPLI WEATHE AS SUI MANUF/ PROVID TOWER WHEN A GROUN CONTR/ OWNER TOWER. WHEN A GROUN NEW TO
NOT USED	NO SCALE	1	NOT USED	NO SCALE	2	NOT USED	NO SCALE	3	
ICE BRIDGE DETALL			4			NOT USED			

			APP	LICANT/O	WNER:
JMBER OF GROUND BARS LE TYPE OF TOWER, ANTEN DNNECTION ORIENTATION. T SPONSIBLE FOR INSTALLIN & REQUIRED, PROVIDING 50 DINTS.	INA LOCATION, AND HE CONTRACTOR SHALL B IG ADDITIONAL GROUND BA	E		N	AT&T IOBILITY
) NOT INSTALL CABLE GRC WAYS DIRECT GROUND CO R.					NORTHLAND DR FIELD, MI 48075
ROUND KIT SHALL BE TYPE JPPLIED OR RECOMMENDED		ER.	\sum		
EATHER PROOFING SHALL I S SUPPLIED OR RECOMMEN ANUFACTURER.		ER	<u>PRE</u>	PARED BY	
ROVIDE GROUND KIT 6" BE WER TO ICE BRIDGE.	FORE TURN TRANSITION F	ROM			
HEN THE SCOPE OF WORK GROUND BAR TO AN EXIS ONTRACTOR SHALL OBTAIN WNER PRIOR TO MOUNTING WWER.	TING TOWER, THE APPROVAL FROM THE TOW	VER			K & VEATCH 15TH ST, SUITE 2292 PARK, KANSAS 66211 13) 458-2000
TEND TWO (2) #2 AWG TI JRIED GROUND RING AND WER. FOLLOW MANUFACTU ROUND CONNECTIONS TO T TW TOWERS ONLY.)	CONNECT TO THE PROPOS RERS RECOMMENDATIONS	SED FOR			NUMBER: 129391
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<u>N01</u>	<u>res</u>			`	
				ESS THEY AR A LICENSED ALTI	ON OF LAW FOR ANY PERSON, E ACTING UNDER THE DIRECTION PROFESSIONAL ENGINEER, TO CR THIS DOCUMENT. OPERTY OWNER SIGNATURE
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			A	04.13.21	ISSUED FOR REVIEW
			REV	DATE	DESCRIPTION
			PRC	JECT LOC	ATION: USID (295762)
			СІТҮ	OF FARM	INGTON HILLS WATERTANK
					HALSTED ROAD ON HILLS, MI 48331
			DRA	WING DES	CRIPTION:
				GROUN	NDING DETAILS
				WING NUM	
				MUN BUIL	E-5
	NO SCALE	5			⊑-Э



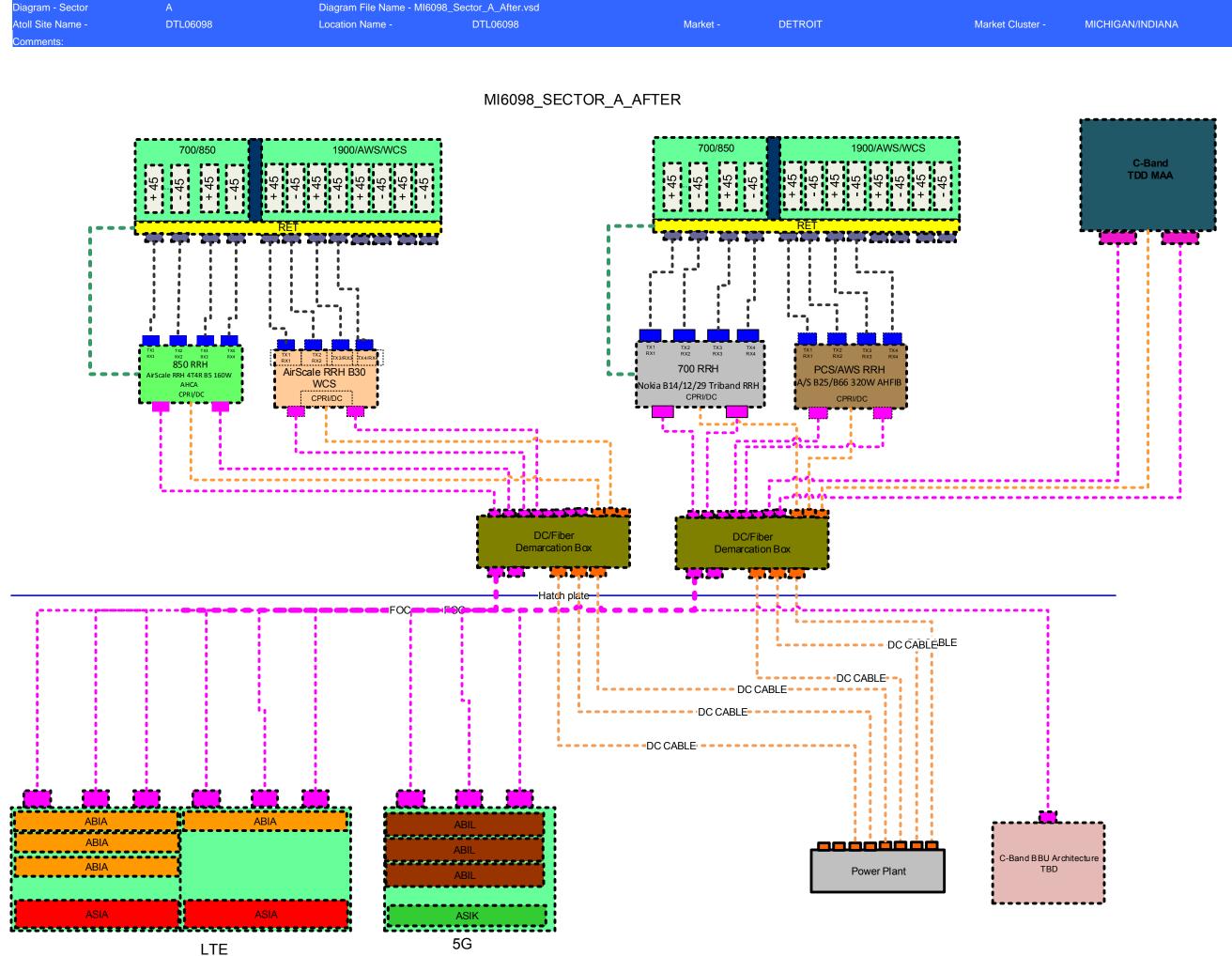
	_					
EXOTHERMIC CONNECTION	0	AB ABV	ANCHOR BOLT ABOVE	INT LB(S)	INTERIOR POUND(S)	
MECHANICAL CONNECTION		AC	ALTERNATING CURRENT	LF	LINEAR FEET	
CHEMICAL ELECTROLYTIC GROUNDING SYSTEM	•	ADDL AFF		LTE	LONG TERM EVOLUTION	
TEST CHEMICAL ELECTROLYTIC GROUNDING SYST	EM 😝 T	AFF	ABOVE FINISHED FLOOR ABOVE FINISHED GRADE	MAS MAX	MASONRY MAXIMUM	
EXOTHERMIC WITH INSPECTION SLEEVE		AIC	AMPERAGE INTERRUPTION CAPACITY	MB	MACHINE BOLT	
GROUNDING BAR		ALUM ALT	ALUMINUM ALTERNATE	MECH MFR	MECHANICAL MANUFACTURER	
GROUND ROD	ı⊫●	ANT	ANTENNA	MGB	MASTER GROUND BAR	
TEST GROUND ROD WITH INSPECTION SLEEVE		APPROX ARCH	APPROXIMATE ARCHITECTURAL	MIN MISC	MINIMUM MISCELLANEOUS	
SINGLE POLE SWITCH	\$	ATS	AUTOMATIC TRANSFER SWITCH	MISC	MISCELLANEOUS METAL	
DUPLEX RECEPTACLE	- 	AWG BATT	AMERICAN WIRE GAUGE BATTERY	MTS	MANUAL TRANSFER SWITCH	
DUFLEX RECEPTACLE	\bigcirc	BLDG	BUILDING	MW (N)	MICROWAVE NEW	
DUPLEX GFCI RECEPTACLE	(FD)	BLK	BLOCK	NEC	NATIONAL ELECTRIC CODE	
FLUORESCENT LIGHTING FIXTURE		BLKG BM	BLOCKING BEAM	NO.(#)	NUMBER	
(2) TWO LAMPS 48-T8	F	BTC	BARE TINNED COPPER CONDUCTOR	NTS OC	NOT TO SCALE ON CENTER	
		BOF CAB	BOTTOM OF FOOTING CABINET	OPNG	OPENING	
SMOKE DETECTION (DC)	(SD)	CANT	CANTILEVERED	(P)	PROPOSED	
EMERGENCY LIGHTING (DC)		CEC CHG	CALIFORNIA ELECTRIC CODE CHARGING	P/C PCS	PRECAST CONCRETE PERSONAL COMMUNICATION SERVICES	
SECURITY LIGHT W/PHOTOCELL LITHONIA ALXW		CLG	CEILING	PCU	PRIMARY CONTROL UNIT	
LED-1-25A400/51K-SR4-120-PE-DDBTXD		CLR	CLEAR	PRC PP	PRIMARY RADIO CABINET POLARIZING PRESERVING	
		COL COMM	COLUMN COMMON	PSF	POUNDS PER SQUARE FOOT	
CHAINLINK FENCE	X X X X	CONC	CONCRETE	PSI	POUNDS PER SQUARE INCH	
WOOD/WROUGHT IRON FENCE		CONSTR DBL	CONSTRUCTION DOUBLE	PT PWR	PRESSURE TREATED POWER CABINET	
WALL STRUCTURE		DC	DIRECT CURRENT	QTY	QUANTITY	
LEASE AREA		DEPT		RAD RECT	RADIUS RECTIFIER	
PROPERTY LINE (PL)		DF DIA	DOUGLAS FIR DIAMETER	REF	REFERENCE	
SETBACKS		DIAG	DIAGONAL	REINF	REINFORCEMENT	
PROPOSED ICE BRIDGE		DIM DWG	DIMENSION DRAWING	REQ'D RET	REQUIRED REMOTE ELECTRIC TILT	
EXISTING ICE BRIDGE		DWL	DOWEL	RMC	RIGID METALLIC CONDUIT	
EXISTING CABLE TRAY	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	(E)	EXISTING	RRH RRU	REMOTE RADIO HEAD REMOTE RADIO UNIT	
WATER LINE		EA EC	EACH ELECTRICAL CONDUCTOR	RWY	RACEWAY	
UNDERGROUND POWER	UGP	EL	ELEVATION	SCH	SCHEDULE	
UNDERGROUND TELCO	UGT	ELEC EMT	ELECTRICAL ELECTRICAL METALLIC TUBING	SHT SIAD	SHEET SMART INTEGRATED DEVICE	
OVERHEAD POWER	OHP OHP OHP	ENG	ENGINEER	SIM	SIMILAR	
OVERHEAD TELCO	ОНТ ОНТ ОНТ	EQ	EQUAL	SPEC SQ	SPECIFICATION SQUARE	
UNDERGROUND TELCO/POWER		EXP EXT	EXPANSION EXTERIOR	SS	STAINLESS STEEL	
ABOVE GROUND POWER	AGP AGP AGP AGP	FAB	FABRICATION	STD STL	STANDARD STEEL	
ABOVE GROUND TELCO	AGT AGT AGT	FF FG	FINISH FLOOR FINISH GRADE	STRUCT	STRUCTURAL	
ABOVE GROUND TELCO/POWER	— AGT/P — AGT/P — AGT/P — AGT/P —	FIF	FACILITY INTERFACE FRAME	TEMP	TEMPORARY	
		FIN	FINISH(ED)	ТНК ТМА	THICKNESS TOWER MOUNTED AMPLIFIER	
WORKPOINT	⊕ _{w.p.}	FLR FDN	FLOOR FOUNDATION	TN	TOE NAIL	
		FOC	FACE OF CONCRETE	TOA TOC	TOP OF ANTENNA TOP OF CURB	
		FOM FOS	FACE OF MASONRY FACE OF STUD	TOF	TOP OF CORB	
SECTION REFERENCE	x-x	FOS	FACE OF WALL	TOP	TOP OF PLATE (PARAPET)	
		FS	FINISH SURFACE	TOS TOW	TOP OF STEEL TOP OF WALL	
	\sim	FT FTG	FOOT FOOTING	TVSS	TRANSIENT VOLTAGE SUPPRESSION SYSTEM	
DETAIL REFERENCE		GA	GAUGE	TYP		
	-	GEN GFCI	GENERATOR GROUND FAULT CIRCUIT INTERRUPTER	UG UL	UNDERGROUND UNDERWRITERS LABORATORY	
		GECI	GROUND FAULT CIRCUIT INTERRUPTER GLUE LAMINATED BEAM	UNO	UNLESS NOTED OTHERWISE	
PHOTO REFERENCE	PHOTO TILE PAGE	GLV	GALVANIZED	UMTS	UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM	
	\sim	GPS GND	GLOBAL POSITIONING SYSTEM GROUND	UPS	UNINTERRUPTIBLE POWER SYSTEM	
		GSM	GLOBAL SYSTEM FOR MOBILE		(DC POWER PLANT)	
		HDR	HEADER HANGER	VIF W	VERIFIED IN FIELD WIDE	
		HGR HVAC	HANGER HEAT/VENTILATION/AIR CONDITIONING	w/	WITH	
		HT	HEIGHT	WD	WOOD	
		IGR IN	INTERIOR GROUND RING	W.P. WP	WORK POINT WEATHERPROOF	
		iin .		WT	WEIGHT	
	LEGEND & ABBI	REVIATION	IS			1 <u>NOT_USED</u>
			<u></u>			



- GENERAL CONSTRUCTION 1. FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY: GENERAL CONTRACTOR - OVERLAND CONTRACTING INC. (B&V) CONTRACTOR: (CONSTRUCTION) OWNER - AT&T
- 2. ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS AND AT&T PROJECT SPECIFICATIONS.
- GENERAL CONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING 3. THE PROPOSED WORK AND SHALL MAKE PROVISIONS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS, DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GENERAL CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF WOR
- ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES, AND APPLICABLE REGULATIONS. 5.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OF CONTRACTOR AND A CLARIFICATION FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ENGINEER PRIOR TO PROCEEDING WITH WORK.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE ENGINEER PRIOR TO PROCEEDING. 9.
- 10. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFIRM TO ALL OSHA REQUIREMENTS AND THE LOCAL JURISDICTION.
- 11. GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINES.
- ERECTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMAN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE. ALL MEMBERS SHALL BE LAID PLUMB AND TRUE 12. AS INDICATED ON THE DRAWINGS.
- 13. SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH UL LISTED MATERIALS APPROVED BY LOCAL JURISDICTION. CONTRACTOR SHALL KEEP AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DEBRIS.
- WORK PREVIOUSLY COMPLETED IS REPRESENTED BY LIGHT SHADED LINES AND NOTES. THE SCOPE OF WORK FOR THIS PROJECT IS REPRESENTED BY DARK SHADED LINES AND NOTES. CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR OF ANY EXISTING CONDITIONS THAT DEVIATE FROM THE DRAWINGS PRIOR TO BEGINNING
- 15. CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. 16. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- 18. GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND CONTRACTORS TO THE SITE AND/OR BUILDING.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION. 19.
- 20. THE GENERAL CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES.
- THE GENERAL CONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 21. 2-A OT 2-A:10-B:C AND SHALL BE WITHIN 25 FEET OF TRAVEL DISTANCE TO ALL PORTIONS OF WHERE THE WORK IS BEING COMPLETED DURING CONSTRUCTION.
- 22. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS SHALL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, AND D) TRENCHING & EXCAVATION.
- ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE RESPONSIBLE ENGINEER, 23. AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
- THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION. 24.
- 25. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. FROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.
- 26. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUNDING. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- 27. THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH UNIFORM GRADE AND COMPACTED TO 95 PERCENT STANDARD PROCTOR DENSITY UNDER PAVEMENT AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR DENSITY IN OPEN SPACE. ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL PRE-APPROVED BY THE LOCAL JURISDICTION.
- ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER. 28.
- 29. ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER TO THE GENERAL CONTRACTOR AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT
- 30. CONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.

- 31. CONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION
- 32. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE, AND IS NOT FOR HUMAN HABITAT (NO HANDICAP ACCESS REQUIRED).
- 33. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH, BY AT&T TECHNICIANS
- 34. NO OUTDOOR STORAGE OR SOLID WASTE CONTAINERS ARE PROPOSED.
- 35. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST REVISION AT&T MOBILITY GROUNDING STANDARD "TECHNICAL SPECIFICATION FOR CONSTRUCTION OF GSM/GPRS WIRELESS SITES" AND "TECHNICAL SPECIFICATION FOR FACILITY GROUNDING". IN CASE OF A CONFLICT BETWEEN THE CONSTRUCTION SPECIFICATION AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.
- 36. CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION. IF CONTRACTOR CANNOT OBTAIN A PERMIT, THEY MUST NOTIFY THE GENERAL CONTRACTOR MMEDIATELY
- 37. CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
- 38. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER, CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- 39. NO WHITE STROBE LIGHTS ARE PERMITTED. LIGHTING IF REQUIRED, WILL MEET FAA STANDARDS AND REQUIREMENTS.
- 40. ALL COAXIAL CABLE INSTALLATIONS TO FOLLOW MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS
- 41. CONTRACTOR WILL REFER TO LATEST RFDS SHEET PRIOR TO CONSTRUCTION COMMENCING.

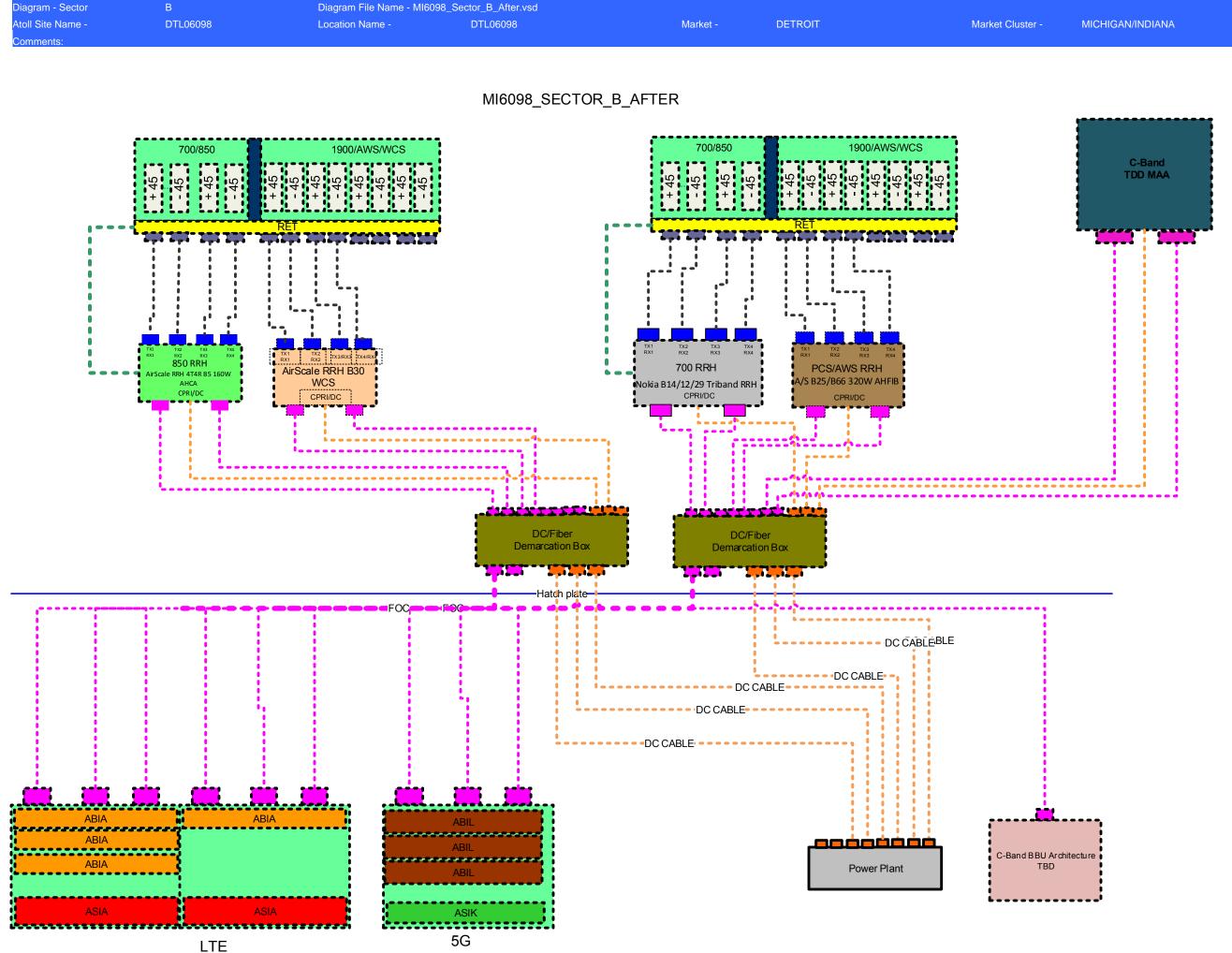




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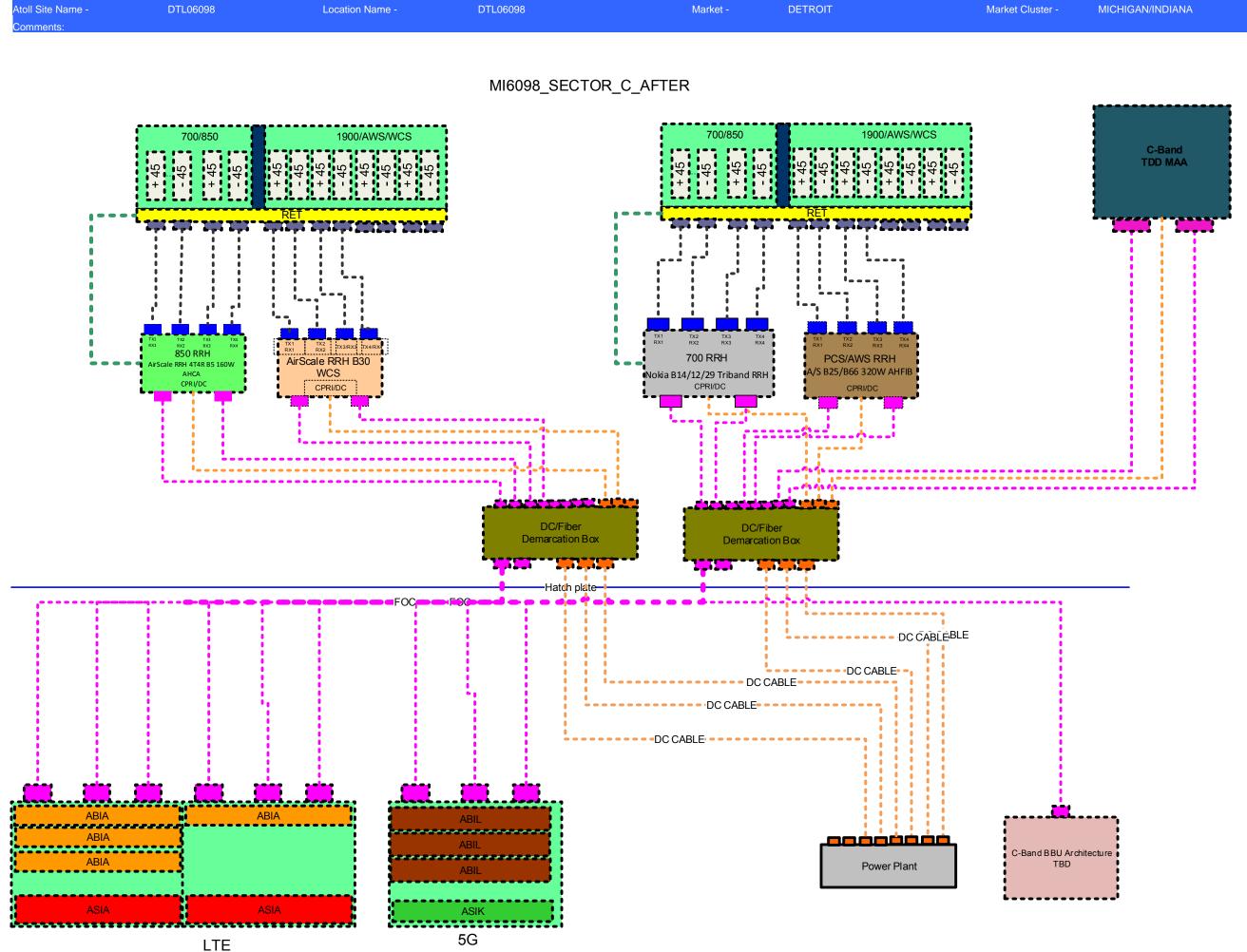
Diagram - Sector

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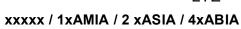


Diagram - Sector

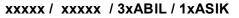


Diagram File Name - MI6098_Sector_C_After.vsd

EXHIBIT C

Exhibit C shall include and consist of any plans, drawings and specifications that are submitted to and approved by the City Building Department in connection with permit application and issuance that are not part of Exhibit B. Those plans, drawings and specifications shall be filed with the City of Farmington Hills Building Department and thereafter considered to be part of this Lease as Exhibit C.

EXHIBIT D SCHEDULE OF RENTS

PERIOD			ANNUAL RENT
, 2021	to	January 11, 2022	\$38,181.00(Prorated)
January 12, 2022	to	January 11, 2023	\$39,326.43
January 12, 2023	to	January 11, 2024	\$40,506.22
January 12, 2024	to	January 11, 2025	\$41,721.41
January 12, 2025	to	January 11, 2026	\$42,973.05
1 st Five Year Exten	sion Ter	m	
January 12, 2026	to	January 11, 2027	\$44,262.24
January 12, 2027	to	January 11, 2028	\$45,590.11
January 12, 2028	to	January 11, 2029	\$46,957.81
January 12, 2029	to	January 11, 2030	\$48,366.55
January 12, 2030	to	January 11, 2031	\$49,817.54
2 nd Five Year Exter	ision Te	rm	
January 12, 2031	to	January 11, 2032	\$51,312.07
January 12, 2031	to	January 11, 2033	\$52,851.43
January 12, 2032	to	January 11, 2034	\$54,436.98
January 12, 2034	to	January 11, 2035	\$56,070.09
January 12, 2035	to	January 11, 2036	\$57,752.19
3 rd Five Year Exten	sion Te	rm	
10 0000		11 2025	
January 12, 2036	to	January 11, 2037	\$59,484.75
January 12, 2037	to	January 11, 2038	\$61,269.30
January 12, 2038	to	January 11, 2039	\$63,107.38
January 12, 2039	to	January 11, 2040	\$65,000.60
January 12, 2040	to	January 11, 2041	\$66,950.61
4 th Five Year Exten	sion Tei	m	
January 12 2041	to	Innuary 11, 2042	\$68.050.12
January 12, 2041	to to	January 11, 2042 January 11, 2043	\$68,959.13 \$71,027.91
January 12, 2042	to to	January 11, 2043 January 11, 2044	\$71,027.91 \$73,158.74
January 12, 2043	to to	•	\$75,138.74 \$75,353.50
January 12, 2044	to to	January 11, 2045	
January 12, 2045	to	January 11, 2046	\$77,614.11

EXHIBIT E RULES AND REGULATIONS FOR ACCESS TO SITE AND PREMISES

These Rules and Regulations establish the conditions and requirements for access by authorized representatives of Tenant, New Cingular Wireless, PCS, LLC, to the portions of the Landlord's DPW/Water Tower Site at 27245 Halsted Road leased to Tenant as the Premises under the Lease Agreement this Exhibit is attached to and part of. Violation of these Rules and Regulations is a breach of the Lease.

1. Access to the Site shall only be by previously identified employees of Tenant and Tenant's identified contractors. Identification shall be by prior written notice to Landlord's DPW Superintendent and Director of Central Services. Tenant shall identify its employees by providing name, titles, and photo identifications. Tenant shall identify contractors by providing all contractor names, addresses, phone numbers, email addresses, contact persons, type of work performed, vehicles used, and the names, titles, and photo identifications for each contractor employee. Tenant shall be responsible for updating information as contractors or employees change.

2. Employees of Tenant and Tenant's contractors shall not enter the Site without having photo identification on their person and shall show that identification to any employee of Landlord's DPW or Police Departments on request.

3. Vehicles entering the Site shall have signage identifying them as vehicles of Tenant or a Tenant contractor whose information has been provided under Section 1.

4. The regular business hours of Landlord's DPW at the Site, of 7:30 AM to 4:30 PM, Monday through Friday, excluding legal holidays, may be changed by Landlord providing written notice to Tenant.

5. During regular business hours, employees of Tenant and Tenant's contractors shall not enter the Site without first entering the DPW office and advising DPW personnel of the persons and vehicles that will be entering the Site and the purposes and approximate times for those persons and vehicles to be on the Site.

6. Before or after regular business hours, employees of Tenant and Tenant's contractors shall not enter the Site without first notifying the Landlord's Police Department Dispatch by phone or in person of the persons and vehicles that will be entering the Site and the purposes and approximate times for those persons and vehicles to be on the Site.

7. Access to the Site is controlled by an electronic card access gate. To facilitate use of that gate, Tenant has been provided with two (2) access cards for use by employees of Tenant and its contractors. The provision of the access cards does not waive the notice requirements in Sections 5 and 6. Tenant shall be strictly liable and responsible for the safe-keeping of those access cards and assuring they are

not lost, stolen, duplicated, tampered with, or used to access the Site by persons that are not authorized representatives. If any of those things occur, Tenant shall immediately notify Landlord's DPW Superintendent by phone and in writing and Police Department Dispatch by phone.

8. The gate is programmed to automatically close before and after vehicles enter or exit the Site. Tenant's authorized representatives shall immediately notify DPW personnel and Police Department Dispatch if the gate malfunctions and does not close and shall remain at the gate until DPW or Police Department personnel are present.

9. Tenants' authorized representatives shall immediately report any suspicious behavior, or non-DPW personnel observed on the Site to DPW personnel and the Police Department Dispatch.

10. Access to the Site shall only be to exercise Tenant's rights under the Lease Agreement and shall be limited and restricted to the leased Premises and easements described in Exhibit B of that Lease Agreement.

11. Notices and reports shall be provided as follows:

Telephone Notices to DPW:	(248)	871-2850
Telephone Notices to Police Department Dispatch:	(248)	871-2600
Telephone Notices to DPW Superintendent:	(248)	871-2858

Written Notices to DPW Superintendent:

Mail or delivery:	27245 Halsted Road, Farmington Hills, MI 48331
Fax:	(248) 871-2851
Email:	kmccarthy@fhgov.com

Written Notices to Director of Central Services:

Mail or delivery:	Attn: Kelly Monico, Director of Central Services
	31655 West Eleven Mile Road, Farmington Hills, MI 48336
Fax:	(248) 871-2431
Email:	kmonico@fhgov.com

12. Landlord reserves the right to change these notice provisions by written notice to Tenant.

REPORT FROM THE CITY MANAGER TO CITY COUNCIL November 8, 2021

SUBJECT: EXTENSION OF AWARD OF AGREEMENT FOR MASS NOTIFICATION (FH ALERT) AND EMPLOYEE ENGAGEMENT SUBSCRIPTION

ADMINISTRATIVE SUMMARY

- The City utilizes Everbridge for general alerts & emergency notification via text & email. The services that are offered are a subscription based service based on population size. The Everbridge platform allows for mass, as well as targeted community communication for City events, general information alerts and emergency alerts. It includes mapping & geo-targeting by specific location and can link directly to other social media sites (like Facebook). The platform allows users at all levels (with secured access) to send communications quickly and easily. It allows the City to send notifications to individuals or groups to keep them informed before, during and after important & critical events.
- In addition to the community engagement piece the Everbridge platform includes targeted City staff notification of events and emergency alerts. Multiple groups can be set-up which could include, for example EOC & CERT team members, snow plow drivers, detective bureau, traffic bureau, etc. The emergency alert notification service will provide instantaneous notification during natural disasters, environmental emergencies or dangerous workplace incidents. It is a valuable tool to enhance workplace safety.
- Sealed bids were solicited by the State of Michigan for this type of software as part of their Master Computing contract segment. The awarded contract with SHI, Inc. is offered to the City through the MIDeal Cooperative Purchasing Program Participating in cooperative agreements provides cost savings for the City due to the buying power of a larger group. This cooperative purchasing strategy offers lower costs, time, and resource savings to participating agencies.
- The platform continues to be a subscription based service based on population. The yearly cost is \$20,9999.99 per year for five (5) years. Funding for this expense is available in the General Fund Support Services budget.

RECOMMENDATION

In view of the above, it is recommended that City Council authorize the City Manager to approve purchase orders to SHI, Inc. for Everbridge for five (5) years at \$20,999.99 per year.

Prepared by: Kelly Monico, Director of Central Services

Reviewed by: Joseph Valentine, Assistant City Manager

Approved by: Gary Mekjian, City Manager

REPORT FROM THE CITY MANAGER TO CITY COUNCIL

November 8, 2021

SUBJECT: AUTHORIZATION OF AGREEMENT FOR STADIUM TURF ARCHITECTUAL & ENGINEERING SERVICES

ADMINISTRATIVE SUMMARY:

- City staff reached out to Farmington Public Schools regarding their turf field replacement strategies and found that the Hawk turf field had been slated for replacement as part of their on-going bond initiatives. In fact, in 2017, design was completed, and bids were solicited for said project. At the time it was determined by FPS that they would forgo replacing the field at Harrison and only move forward with replacing the fields at North Farmington & Farmington High Schools.
- City staff then engaged with Turfix Synthetic Sports Field Specialists to provide a Condition Assessment Report which yielded results that were "well below average". The City also discussed the field conditions with Shaw Sports Turf. Comprehensive repairs were made to the turf and Capital Funds requested and approved during the City's 2021-22 budget process for full replacement.
- City staff met with the architectural firm that designed & engineered the project for FPS, Wakely Associates from Warren, MI to discuss current conditions and design options. The current estimated cost of the field replacement project is \$1,200,000 and after meeting Wakely Associates, the firm formerly proposed to provide the services below for \$69,000.00.
 - Preliminary Design Services Evaluate current needs and desires, prepare preliminary schematic layout and site usage plans, Review usage plans with owner and other appropriate departments & develop a preliminary project budget and alternate costs.
 - Construction Documents Services -Review final usage plan with appropriate personnel & refine final drawings to cover full construction details and prepare bidding documents.
 - Bidding Services-Develop bidder list of contractors & assist the owner in advertising project and distributing bid documents to bidders, monitor bidding period to screen bidder information and questions, assist in receiving bids, review the bids & conduct post-bid interviews & make award recommendation.
 - Construction Administration Services Prepare AIA contract (Owner / Contractor) for awarded contractor, conduct pre-construction conference on site with all contractors and subcontractors who will be performing the work, review and comment on all shop drawings and submittals from contractor, perform periodic inspections on site for project conformance with the project documents, review payment applications from the contractor and review for percentage of work completed, assemble project closeout documents such as warranties, etc. & perform punch list prior to completion of project.
- City staff from Special Services & Central Services evaluated the proposal from Wakely Associates and have determined that accepting the offer from Wakely Associates is the best option. They have specific knowledge & understanding of the field engineering, they have historical specifications & drawings to aid in the current evaluation, their offer was extremely competitive in the current market (at less than 6% of the estimated project cost) and they have excellent references. Staff is confident in the ability of Wakely Associates to provide this service.
- The City Charter requires sealed competitive bidding of commodities that individually or aggregately exceed \$10,000 in one fiscal year. The Charter also requires a waiver if it is in the best interest of the City to not competitively bid a product or service. Bid waivers are requested for various reasons. This includes: The vendor is a sole source and bidding may actually increase prices paid, the most competitive price is already being received which is verified through price surveys and comparisons and the vendor was awarded the project in another forum

and has historical knowledge or proprietary information that benefits the City.

• The award recommendation below includes an \$11,000 contingency in order to address unseen issues as the project progresses. Funding for this service is provided in the Citywide Capital Improvement fund. Please note this award is only for the services listed above. It is anticipated that the bid for construction will be brought before City Council in early Spring of 2022.

RECOMMENDATION:

It is therefore recommended that the City Council authorize the City Manager to enter into an agreement with Wakely Associates to provide Architectural & Engineering Services for the Hawk Stadium field replacement project in the amount of \$80,000 (\$69,000 + \$11,000 Contingency).

- Prepared by: April Heier, Parks Supervisor
- Reviewed by: Brian Moran, Deputy Director of Special Services
- Reviewed by: Kelly Monico, Director of Central Services
- Reviewed by: Ellen Schnackel, Director of Special Services

Approved by: Gary Mekjian, City Manager

REPORT FROM THE CITY MANAGER TO CITY COUNCIL November 8, 2021

SUBJECT: AWARD OF BID FOR LASER CUTTER SYSTEM

ADMINISTRATIVE SUMMARY

Sealed bids were solicited, posted on the MITN e-procurement system, and after one postponement to encourage additional bids, opened and read aloud on October 14, 2021, for the purchase of a Laser Cutter System for the Cultural Arts Division of the Department of Special Services. Bid notification was sent to over fifty-six (56+) vendors with three (3) responding & and zero (0) "No-Bids".

• A Laser Cutter is a tool for precisely cutting and etching plastics, wood, coated metal, and organic materials using a focused laser beam. The included software allows the user to design parts on a personal computer, then have the machine cut them out very efficiently with the laser.

The Laser Cutter will be housed inside a ventilated room in the Makerspace at the Farmington Hills Community Center (The Hawk) The Makerspace is a place for hands-on learning with all the tools for creativity.

- The most qualified Laser Cutter is the Epilog Fusion Edge 24 CO2 60W. The Universal and Trotec models require the purchase of an additional computer, which would increase the total price of those systems by several hundred dollars. Additionally, the small size of the Trotec model does not meet specifications of the equipment.
- Funding for the project is available from a Cultural Arts Grant funded by Bosch.

Company Name	City/State	Model	Total Bid including Discharge Chute
Fairway Laser Systems	Valparaiso, IN	Epilog Fusion Edge 24 CO2 60W	\$23,945
Midwest Laser	Sylvania, OH	Universal Laser VLS 6.75	\$23,517
Trotec Laser Inc.	Plymouth, MI	Trotec Speedy 100	\$23,340

BID TABULATION

RECOMMENDATION

In view of the above, it is recommended that City Council authorize the City Manager to issue a purchase order for an Epilog Fusion Edge 24 CO2 60W to Fairway Laser Systems in the amount of \$23,945.

- Prepared by: Rachel Timlin, Cultural Arts Supervisor
- Reviewed by: Michelle Aranowski, Buyer
- Reviewed by: Ellen Schnackel, Director of Special Services
- Reviewed by: Kelly Monico, Director of Central Services
- Approved by: Gary Mekjian, City Manager

REPORT TO THE CITY COUNCIL FROM THE CITY CLERK – NOVEMBER 8, 2021

SUBJECT: Consideration of approval of Special Event Permit for the Anthology of Farmington Hills Family Fun Event to be held on Thursday, November 11, 2021

ADMINISTRATIVE SUMMARY:

- On October 11, 2021, the city received an application from Ellen Byrne, representing Anthology of Farmington Hills for a Special Event Permit in order to hold their Family Fun Event on Thursday, Thursday November 11, 2021 from 4pm-7pm.
- The event will include a petting zoo, music, food trucks and smores. Invitees are family and friends of potential residents and surrounding neighborhoods.
- The application was reviewed by all appropriate Departments and the Departments had no objections subject to the following conditions:
 - There will be approximately 150 attendees during the three-hour event
 - A DJ will be on site for announcements and music
 - Ample onsite parking
 - The applicant is not requesting assistance from the Police Department at this time
 - No one shall be allowed inside the building prior to the final Certificate of Occupancy being issued from the Building Department
 - Egress shall be maintained
 - Fire lanes shall not be blocked
 - Food trucks shall operate according to the NFPA and Fire Prevention Code standards, specifically:
 - Ensure that fuel tanks are filled to the capacity needed for uninterrupted operation for the duration of the event
 - All connections/piping shall be checked for leaks prior to operating
 - Any cooking system which produces grease laden vapors shall be protected by listed fire extinguishing equipment
 - Fire extinguishers shall be installed and maintained according to NFPA 10
 - The applicant must contact Fire Prevention to schedule an inspection prior to the beginning of the event
 - The event shall comply with minimum Fire Code Requirements
 - Use of the generator is subject to approval of an electrical permit and approved inspection prior to the event

RECOMMENDATION:

IT IS RESOLVED, that City Council hereby approves a Special Event Permit for the Anthology of Farmington Hills Family Fun Event to be held on Thursday, November 11, 2021 from 4pm-7pm, subject to the conditions outlined in the City Clerk's report of November 8, 2021.

Respectfully submitted,

Pamela B. Smith, City Clerk

APPLICATION FOR SPECIAL EVENT/TEMPORARY OUTDOOR SALES

CITY OF FARMINGTON HILLS 31555 ELEVEN MILE ROAD, FARMINGTON HILLS MI 48336

(248) 871-2410 FAX (248) 871-2411

ALL FEES ARE NON-REFUNDABLE

Fees: \$50.00 Application Review Fee (fee is waived for non profit companies) Carnivals are \$ 150.00

A **Clean Up Deposit** of \$300 is required for special events and temporary outdoor sales (involving the use of any temporary outdoor structures or equipment – tents, tables, etc.). This deposit is refundable when the site is cleared.

A Liability Insurance Certificate naming the City as an additional insured in the amount of \$1,000,000 is required for special events or temporary outdoor sales as determined by the City.

Temporary Outdoor Sales: (Sales event held on the same property as the business and accessory to the use of the business) Temporary Outdoor Sales are limited to 14 consecutive days and a total of 28 days in any 12 month period.

NOTE: A COMPLETE AND DETAILED SITE PLAN/SITE MAP OF THE PROPERTY SHOWING THE EVENT AREA IS REQUIRED. PLAN MUST SHOW LOCATIONS OF SIGNS, TENTS OR ANY STRUCTURES, AMUSEMENT RIDES, FOOD SERVICES, PARKING AREA, THE LOCATION OF EXISTING BUILDINGS, ETC. REQUEST WILL NOT BE REVIEWED UNTIL THIS PLAN IS RECEIVED. IF A TENT IS TO BE ERECTED, SPECIFICATIONS ARE REQUIRED - SEE page 2)

APPLICANT'S NAME: (If partnership or corporation, please include all names & residential address of officers on separate sheet)

Ellen Byrne

APPLICANT' S RESIDENTIAL ADDRESS:			
39547 Village Run Drive Northville MI 48168			
	CITY	ST	ZIP
APPLICANT'S PHONE: Office: 248-983-4780	Cell:	-1371	
RELATION OF APPLICANT TO BUSINESS/EVENT:	wner <u>X</u> Manager	Representative	Other
IS ORGANIZATION A FOR PROFIT OR NON PROFIT BUSI	NESS: X PRC		ROFIT
ADDRESS OF THE PROPERTY AT WHICH THE EVENT W	ILL BE CONDUCTE	D:	
Anthology of Farmington Hills 30637 W. 14 Mile Rd Farmignton	Hills MI 48334		
DOES APPLICANT OWN OR OCCUPY THE PROPERTY AT YES NO IF NO, WRITTEN CONSENT REQUIRED WITHIN SEVEN(7) DAYS OF THE DATE OF SU ALL OTHER TENANTS ON THE PROPERTY OF THE PROP GIVE A DETAILED DESCRIPTION OF THE EVENT PROPO Family fun event with a petting zoo, music, 2 food trucks, smores. and the surrounding neighborhoods (approx 150 people)	T FROM THE PROP IBMISSION OF APP POSED EVENT. PI SED:	ERTY OWNER FOR T LICATION TO THE CI LEASE ATTACH.	TY AND TO
DATE OF THE EVENT: <u>11-11-2021</u> TIME OI NOTE: Special events/temporary outdoor sales are pe			m and 10pm
IS THE EVENT OPEN TO THE GENERAL PUBLIC?	X YES	NO	
WILL ANY GOODS OR MERCHANDISE BE OFFERED FOR	SALE TO THOSE A	NO	
MAXIMUM NUMBER OF PEOPLE PROPOSED TO ATTEND	OR PARTICIPATE	EACH DAY: 150	

HAS THE APPLICANT, PARTNERS, OFFICERS OR DIRECTORS EVER BEEN CONVICTED OF A FELONY?

PERMANENT STRUCTURES ARE NOT ALLOWED TO	BE ERECTED.	DO YOU PLA	AN ANY TEMPORARY
STRUCTURES (TENT, TRAILER, STAGE, ETC)?	YES	X NO	IF YES, PLEASE DESCRIBE
WHAT THOSE ARE AND INCLUDE ON MAP:		-	

IF A TENT IS PROPOSED, INDICATE THE SIZE AND NAME AND ADDRESS OF THE COMPANY PROVIDING THE TENT:

NOTE: A certificate of Flame Resistance for the Tent must be provided 10 days prior to the date of event/sales.

IF THE REQUEST IS TO HOLD A BLOCK PARTY, ARE YOU REQUESTING TO CLOSE ANY ROADS FOR THE EVENT? _____YES _____NO (If yes, please submit signatures of abutting property owners who would be directly affected by the road closure indicating that they have no objections-form attached).

WILL ELECTRICAL EQUIPMENT BE USED FOR THIS EVENT? YES NO IF YES, DESCRIBE IN DETAIL WHAT TYPE OF ELECTRICAL EQUIPMENT WILL BE USED. CONTACT BUILDING DEPARTMENT at 248.871-2450 TO DETERMINE IF A PERMIT IS REQUIRED. The band will be located on the 3rd floor balcony of the building and will use Building power.

	IGNAGE PROPOSED?	YES SED ON THE PLAN PROVID	NO DED WITH TH		TE SIZE AND ION.
IS THE E	VENT FOR PROFIT?	NON-			
IS THIS E	EVENT TO TAKE PLACE IN A	A CITY OWNED PARK		YES	NO NO
IF YES, H REGULA	IAVE YOU RECEIVED AND A	AGREE TO ABIDE BY THE (NO ANY DEVIATIONS REC	CITY'S PARKS QUESTED? <u>N</u>	S AND RECRI	EATION RULES AND
		a			
		Ap	plicant's signa	ature	
DATE:	10-11-21	Eller	Bul	ure	-

Printed Name of Applicant

Note: Section 22-119 of the City Code stipulates that other permits and/or inspections <u>MAY</u> be required along with permission to conduct the special event. This could be for health facilities (food), electric services, fire issues, or a certificate of use from the city's Building Department

FOR OFFICE USE ONLY:

Application and fee Complete Site Plan/Map

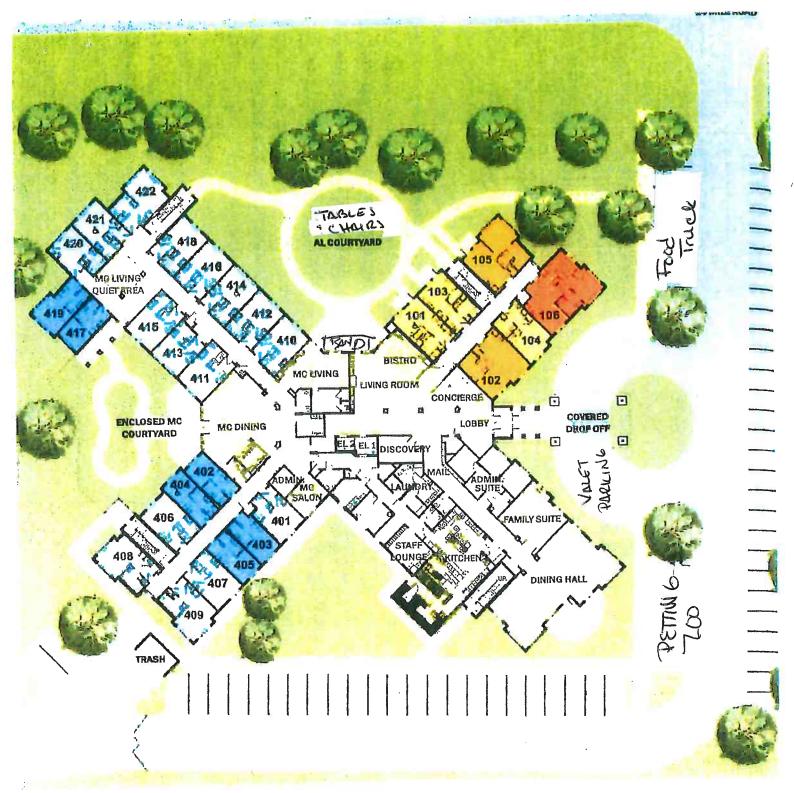
IF APPLICABLE: Insurance Certificate (If required by city) Clean Up Deposit (if required by city) N/A Tent Certificate of Flame Resistance N/A Tent Co. Information (see above) N/ANames/Addresses of Corporation N/ANeighborhood Signatures (block parties closing a road) N/A Carnivals Only (State of MI Certificate)

PPROVALS: Police Fire Planning/Bld/Zoning **Engineering**



First Floor

"FOLL IN LOVE WITH ANTHOLOGY" THURSDAY NOV 11, 2021 4:00 PM - 7:00 PM





OFFICE OF CITY CLERK

INTEROFFICE CORRESPONDENCE

- **TO:** Mayor and City Council
- **FROM:** Pamela B. Smith, City Clerk
- DATE: November 8, 2021
- **SUBJECT:** Canceling the December 27, 2021 City Council Meeting

It is requested that City Council consider canceling the regular City Council meeting scheduled for December 27, 2021 due to the holidays.

The regular City Council meeting schedule would resume January 10, 2022.

RECOMMENDATION:

IT IS RESOLVED, that City Council hereby cancels the regular City Council meeting of December 27, 2021.

MINUTES CITY OF FARMINGTON HILLS CITY COUNCIL STUDY SESSION MEETING COMMUNITY ROOM OCTOBER 25, 2021 – 6:00PM

The study session meeting of the Farmington Hills City Council was called to order by Mayor Barnett at 6:04pm.

Council Members Present:	Barnett, Boleware, Bridges, Knol, Massey, Newlin and Strickfaden
Council Members Absent:	None
Others Present:	City Manager Mekjian, City Clerk Smith, Assistant City Manager Valentine, and City Attorney Joppich

DTE POWER PLANNING FOR FARMINGTON HILLS

Jennifer Whitteaker, DTE Regional Manager for Oakland County, introduced her team present this evening to discuss power outages in Farmington Hills.

Joe Musallam, DTE Representative, discussed with Council what DTE is doing globally as well as what they are doing in Farmington Hills to improve service. He reviewed weather patterns and spoke of the recent storms, frequency of the storms and how that has impacted electrical service in the area and their ability to get power back up for residents in a timely matter.

Mr. Musallam discussed various projects including tree-trimming and infrastructure upgrades within the community and a timeline for completion of those projects.

Comments/suggestions of Council included the following:

- The area has the highest rates with the worst service
- Need to maintain a tree-trimming plan and to keep on schedule as that has been a reason used by DTE for frequent power outages yet there has been no improvement over the years
- Prioritize reliable service over renewables. Not that Council is opposed to renewables but priority should be reliable service
- Questioned if the utility poles structurally sound and is there a replacement program in place for utility poles
- More attention to infrastructure needs and not just relying on tree-trimming
- Plans for underground cabling and/or cable replacement
- Concern with neglecting existing infrastructure needs to build out
- Improvements to reimbursement program for residents who have lost power and assistance for low-income residents. Residents should not have to ask for reimbursement with the Smart Meter system in place
- Council will continue to push DTE for action, particularly as they move forward with Smart City initiatives
- A commitment and plan for improvements Farmington Hills will see now and not 5 years from now

Mr. Musallam spoke to new technologies for use of pressure treated or steel poles. He stated that DTE is making infrastructure improvements in Farmington Hills. He added that poles are tested for quality and safety every 5-10 years. DTE has an underground cable replacement program. It takes longer to locate the cables and it is more disruptive when they have to replace underground cables but he could follow up with Council on any specific plans if Council wished.

Mayor Barnett stated that she spoke to DTE about coordinating underground cable efforts with the city's future road improvements so that it could be done at the time the roads are being repaired. This would result in lower costs for DTE.

In response to Council comments, Mr. Musallam reported that DTE is aligned with wanting to assist lowincome residents. He added that they will be 70% complete with the tree-trimming program by the end of the year towards the 5 -year cycle and that work should be good for that 5-year cycle.

Shannen Hartwick, DTE Director for Tree Trim, explained the tree-trimming program and funding, including the increase in employees. She stated that their biggest challenges at this time are resources and funding. DTE has started an academy and are trying to be creative in order to continue to grow their work force to meet the needs of the communities.

Mr. Musallam spoke to underground cabling and mentioned that some difficulties with that include finding a location for the transformer box that is required, older homes could require the homeowner to make some upgrades and other utilities that may be on the poles that DTE has no authority over.

Further discussion was held on accountability and seeing action and not just promises. Council questioned how DTE knows what areas require tree-trimming.

Mr. Musallam commented that the projects and timelines discussed tonight are not promises but work that is taking place now.

Ms. Hartwick explained that they first survey areas and have a system that can detect trees in lines to prioritize tree-trimming.

It was noted that DTE has been more aggressive with tree removals where needed and has a system that shows growth cycles so they know what areas may need attention more often and provides baseline data.

Mr. Musallam is confident that the CEO of DTE is committed to make improvements now and that they can fix the current issues.

It was suggested that the project timelines are shared with residents as well as future projects and timelines as every time DTE completes a project and hits that milestone, that develops trust.

Ms. Whitteaker stated that she will circle back with City management on the project timelines and milestones reached so that can be shared with staff and residents.

City Manager Mekjian stated that he would also like a contact at DTE to further discuss infrastructure needs as it relates to city-wide broadband and Smart City initiatives going forward.

City Council Study Session Minutes October 25, 2021 Page 3 of 3

SARAH FISHER DISCUSSION

Councilmember Knol stated that the developer for the Sarah Fisher property was trying to get on the agenda for the next Historic District Commission meeting on November 10, 2021 to request more flexibility with the requirements for maintaining the historical buildings on the site. She stated that the cost involved in maintaining and rehabilitating all of the historical buildings when they have no use for all of them is severely impacting their ability to develop the property and the city may lose this opportunity for having the site developed. She stated that Council has been clear they want a reduction in density for the site but that the city needs to consider other options that may be available such as a commercial rehabilitation district. She stated that the developer would like to come to the HDC meeting with some revised proposals that include a reduction in density but would like prior Council input so that he doesn't come to Council at a later date with a new proposal only to be denied again.

Discussion was held on the role of HDC and Council as it relates to the designation of historical sites.

It was suggested that a work group is formed to include a couple members of City Council and the HDC to meet with the developer prior to the Historic District Commission meeting to discuss development concepts for the site. It was noted that no decisions would be made and there would not be quorum present of either group.

Attorney Joppich suggested that the ad hoc work group meet in an open public meeting to be posted and that the establishment of the ad hoc work group is added to tonight's regular agenda for consideration to be as transparent as possible.

ADJOURNMENT

The study session meeting adjourned at 7:30pm.

Respectfully submitted,

Pamela B. Smith, City Clerk

MINUTES CITY OF FARMINGTON HILLS CITY COUNCIL MEETING OCTOBER 25, 2021 – 7:30 PM

The regular session meeting of the Farmington Hills City Council was called to order by Mayor Barnett at 7:33pm

Council Members Present:	Barnett, Boleware, Bridges, Knol, Massey, Newlin and Strickfaden
Council Members Absent:	None
Others Present:	City Manager Mekjian, City Clerk Smith, Assistant City Manager Valentine, Directors Mondora, Monico and Skrobola, and City Attorney Joppich

PLEDGE OF ALLEGIANCE

Mayor Barnett led the pledge of allegiance.

APPROVAL OF REGULAR SESSION MEETING AGENDA

MOTION by Boleware, support by Strickfaden, to approve the agenda as amended, with the addition of item #5a Consideration of approval of appointments to Ad Hoc Committee for the Sarah Fisher Property.

Roll Call Vote:

Yeas: BARNETT, BOLEWARE, BRIDGES, KNOL, MASSEY, NEWLIN AND STRICKFADEN Nays: NONE Absent: NONE Abstentions: NONE

MOTION CARRIED 7-0.

PROCLAMATION RECOGNIZING NOVEMBER 1, 2021 AS EXTRA MILE DAY

The following Proclamation was read by Council Member Bridges:

PROCLAMATION Extra Mile Day November 1, 2021

- **WHEREAS**, Farmington Hills is a city which acknowledges that a special vibrancy exists within the entire community when its individual citizens collectively "go the extra mile" in personal effort, volunteerism, and service; and
- **WHEREAS**, the City of Farmington Hills encourages its citizens to maximize their personal contributions to society by giving of themselves wholeheartedly and with total effort, commitment, and conviction to their individual ambitions, family, friends, and community; and

- WHEREAS,Farmington Hills chooses to shine a light on and celebrate individuals and
organizations who "go the extra mile" in order to make a difference and lift up
fellow members of their community; and
- WHEREAS, the City of Farmington Hills acknowledges the mission of Extra Mile America to create more than 500 Extra Mile cities in our country and is proud to support "Extra Mile Day" on November 1, 2021.

NOW, THEREFORE, BE IT RESOLVED, that I, Vicki Barnett, Mayor of the City of Farmington Hills, on behalf of the City Council, do hereby proclaim November 1, 2021 to be **Extra Mile Day** and urge all members of the community to not only "go the extra mile" in their own lives, but also to acknowledge those individuals who are inspirational in their efforts and commitment to make their organizations, families, communities, country or world a better place.

INTRODUCTION OF NEW ECONOMIC DEVELOPMENT DIRECTOR TIA BROCKWAY

City Manager Mekjian introduced the new Economic Development Director, Tia Brockway

CORRESPONDENCE

The following correspondence was acknowledged regarding the following:

- Flooding concerns, which were forwarded to the City Manager's Office
- Blight and noise concerns with an industrial site that was also sent on to the City Manager's Office
- Power outages

CONSENT AGENDA

MOTION by Bridges, support by Newlin, to approve consent agenda as read.

Roll Call Vote:

Yeas: BARNETT, BOLEWARE, BRIDGES, KNOL, MASSEY, NEWLIN AND STRICKFADEN

Nays: NONE Absent: NONE Abstentions: NONE

MOTION CARRIED 7-0.

PUBLIC QUESTIONS AND COMMENTS

Jon Aldred, resident, commented on the Power outages and DTE accountability and suggested that City Council declare the problem that it is trying to solve to have a clear goal with statistics to track performance.

Brian Elles, Holsworth Ct, commented on an incident with a dog in his neighborhood and the need to revisit the Dangerous Animal ordinance that was over 10 years old for updates. He also spoke to considering a ban on certain dog breeds and stated that he hopes to be able to work with the city on this issue.

Deb Farris, resident, expressed concern over water draining from her neighbors yard into hers. City Manager Mekjian asked that she leave her name and address with the Director of Public Services in attendance this evening and staff will determine if the city can help alleviate the issue.

COUNCIL MEMBERS COMMENTS AND ANNOUNCEMENTS

The following announcements were made:

- Election Day is November 2, 2021 voters were encouraged to come out and vote
- Cares Trunk or Treat is scheduled for October 30th from 3-6pm
- City Manager Mekjian was the recipient of the Harold M. Hultquist award from the American Public Works Association (APWA)
- Article and comments made regarding the City's Diversity, Equity and Inclusion Director

CITY MANAGER UPDATE

City Manager Mekjian provided the following update:

- Veteran's Day Celebration honoring local veterans to be held November 11, 2021 at 11am at the Costick Center
- Car seat safety inspections are being conducted by the Fire Department
- Thank you to the Mayor and Council for recognition on his award from APWA

PUBLIC HEARING

PUBLIC HEARING AND CONSIDERATION OF AUTHORIZING THE CONVERSION OF BIDDESTONE LANE FROM GRAVEL TO HARD SURFACE. CMR 10-21-97

Karen Mondora, Director of Public Services, outlined the petitioning process for converting gravel roads to hard surface per the city's policy. She noted that it was determined that the first petitioning effort to hold an information meeting had 75% of the homes in favor of that meeting; and following the informational meeting, the 2nd petition required to bring the issue to a public hearing before City council received 72.41% in favor of the hearing to move forward with the gravel road conversion.

Mayor Barnett opened the public hearing.

Robert McGinty, 33114 Biddestone, commented that he had signed the petition with his middle name and thought that was why his vote was not counted but he wanted to be on record as a yes vote in favor of the project.

Doug Green, Biddestone, stated that he doesn't feel the project is necessary and he is concerned with drainage and the timeline for getting the work done once the project started.

Ron Acho, Biddestone, commented that every year he has seen deterioration of the road that he feels is dangerous and causes vehicle damage. He is hopeful the project can begin soon.

Kimberly Petro, Biddestone, stated that she did not feel all residents were contacted and had a vote and that some have changed their mind as residents were misinformed about the project. She also commented that she did not believe all residents received notification of this meeting. She moved here for the ambience and country setting and is concerned with speeding and people cutting through the subdivision if the roads were paved. She mentioned several residents provided letters to the Clerk in opposition of the project this evening.

Stephanie Tartoni, 32665 Biddestone, stated that he has suffered car damage due to the roads and feels that the paving with improve safety.

Brian Esterberg, 32981 Biddestone, concern with speeding if the roads are paved and suggested if the project is approved to lower the speed limit and enforce upon the stops signs in the neighborhood.

Walter Quarles, Biddestone, started petition drive in 2019. He has not seen speeding within the subdivision but believed it would be address if a problem by the local Police Department. He believes there are still a sufficient number of votes in favor to get the project passed.

Matt and Kristen Dunker, 32621, they have been in the subdivision now for 10 years and grew up on gravel roads but agreed that the road is in horrible condition. Mr. Dunker inquired if the roads were paved to consider speed bumps to slow traffic for those concerned about speeding.

Mayor Barnett mentioned there is a city program for speed bumps if the subdivision were interested and staff could provide that information. She also mentioned that on November 8, 2021, the City Council would be discussing this program and speeding within subdivisions at their study session meeting.

Sandra Secrest, 33085 Biddestone, stated that she originally signed and has now changed her mind. She is also concerned with losing the ambience of the neighborhood.

Ken Weikel, Biddestone, stated that he owns 3 lots in the neighborhood and he did not vote in favor of the paving. He stated that if the project goes through, he would like to work with the Engineering Division to discuss storm drainage, narrowing the paved road in order to save trees and maintain the width of the current bridge.

Barry Miller, 32863 Biddestone, commented on the quick response of the Fire Department he has at his home recently and how respectful they were of his property. He also enjoys the ambience and the wildlife but he does feel that it is time to pave the roads after seeing the deterioration. He wants the subdivision to come together to make the decision as they have a great subdivision where the residents get along.

Jamie McGinty, 33114 Biddestone, questioned when more details would come forward as far as having to remove the cul-de-sac and relocating mailboxes so that the residents could make a more intelligent vote.

The following letters were received by the City Clerk this evening in opposition of the project:

Thomas Rack, 32998 Biddestone Sarkis and Michael Manavdjian, 33158 Biddestone Sandra Secrest, 33085 Biddestone Robert Vincent, 32901 Biddestone Brian Esterberg and Patti Roman, 32981 Biddestone Kathrerine Hanaway, 32882 Biddestone

There being no further comments, Mayor Barnett closed the public hearing.

Mayor Barnett asked staff to address some of the questions raised during the public hearing.

Jim Cubera, City Engineer, stated that there are road standards for safety purposes and the city would be sensitive to areas where there are trees but they don't have all of the answers until they do preliminary engineering and until the project is started. The city wants to improve the cul-de-sac for access but exactly what needs to be done is not yet known and the relocation of mailboxes may be needed. In response to council, he spoke to the replacement of any trees that would need to be removed.

Councilmember Knol inquired about the notification process since it was stated that notifications were not received.

Mr. Cubera outlined the gravel road conversion policy and petitioning and notification process.

City Clerk Smith commented that there were many letters received this evening just prior and during the meeting so if there is going to be any recalculation of the percentage still in favor of the project, the letters received should be reviewed by staff.

City Council took a break at this time to allow staff to recalculate the percentage still in favor of this project based on the information received this evening.

Director Mondora reported to council that based on the additional information received during the public hearing and assuming they are all valid "no" votes from the owner of record (2 were unable to be verified at this time), there were still 17 homes in favor of the project out of 29 homes or 58% in favor.

MOTION by Massey, support by Strickfaden, that the City Council of Farmington Hills hereby authorizes the conversion of Biddestone Lane from gravel to hard surface; and

IT IS FURTHER RESOLVED, that the City Council directs City staff to identify a specific project schedule for this conversion consistent with the Capital Improvement Program and within the City's Local Road budget and also accounting for any specific issues presented by this conversion.

MOTION CARRIED 7-0.

NEW BUSINESS

CONSIDERATION OF APPROVAL OF APPOINTMENTS TO THE ECONOMIC DEVELOPMENT CORPORATION AND HISTORIC DISTRICT COMMISSION.

MOTION by Massey, support by Boleware, that the City Council of Farmington Hills hereby confirms the Mayor's recommendation to appoint the following individuals to various City Boards and Commissions:

Economic Development Corporation - Member			
Mark Brucki	Length of Term: Unexpired term	Term ending: February 1, 2025	
Historic District Commission - Member			

Marleen Tulas

Length of Term: Unexpired term

Term ending: February 1, 2023

MOTION CARRIED 7-0.

Lew Cantor, Economic Development Corporation,

CONSIDERATION OF ESTABLISHING AN AD HOC COMMITTEE REGARDING THE DEVELOPMENT OF THE SARAH FISHER PROPERTY.

MOTION by Boleware, support by Knol, that the City Council of Farmington Hills hereby appoints Mayor Barnett and Councilmembers Knol and Massey, with Councilmember Strickfaden as an alternate, to participate in one meeting as an ad hoc committee regarding the Sarah Fisher property at the northwest corner of Twelve Mile Road and Inkster Road for purposes

of meeting with the property owner, potential developer, City Manager and staff, and up to two members of the Historic District Commission, if available, solely to discuss development concepts for the property, but this committee is not to make any decisions, recommendations, or promises regarding approval of any development proposals or concepts, and the meeting shall be noticed as a public meeting with the City Attorney or a representative from his office to attend.

MOTION CARRIED 7-0.

<u>CONSENT AGENDA</u> <u>RECOMMENDED AUTHORIZATION TO ENTER INTO AN AGREEMENT WITH DAVID</u> <u>WALSH TO PROVIDE MICHIGAN INDIGENT DEFENSE COMMISSION (MIDC) GRANT</u> ADMINISTRATION SERVICES IN AN AMOUNT NOT TO EXCEED \$28,560. CMR 10-21-98

MOTION by Bridges, support by Newlin, that the City Council of Farmington Hills hereby authorizes the City Manager to enter into an agreement with David Walsh to provide MIDC program and grant administration services as described in the grant application. The contractors pay will be \$35/hour, not to exceed \$28,560 with the contract valid from October 1, 2021 through September 30, 2022 or upon completion of all grant requirements.

Roll Call Vote:

Yeas: BARNETT, BOLEWARE, BRIDGES, KNOL, MASSEY, NEWLIN AND STRICKFADEN Nays: NONE Absent: NONE Abstentions: NONE

MOTION CARRIED 7-0.

RECOMMENDED ADOPTION OF A RESOLUTION ESTABLISHING THE VERDUN STREET WATER MAIN PAYBACK DISTRICT AND THE FINAL PAYBACK COSTS. CMR 10-21-99

CITY OF FARMINGTON HILLS OAKLAND COUNTY, MICHIGAN

RESOLUTION R-191-21

AMENDED AND RESTATED RESOLUTION FOR THE VERDUN STREET WATER MAIN PAYBACK DISTRICT

At a regular meeting of the City Council of the City of Farmington Hills, County of Oakland, State of Michigan, held in the City Council Chambers on October 25, 2021 at 7:30 p.m., with those present and absent being:

PRESENT: BARNETT, BOLEWARE, BRIDGES, KNOL, MASSEY, NEWLIN AND STRICKFADEN

ABSENT: NONE

the following preamble and resolution were offered by Councilperson Bridges and supported by Councilperson Newlin:

- WHEREAS, Article VII of Chapter 33 of the City Code (referred to in this Resolution as the "Payback Ordinances") authorizes the City to construct and establish charges for benefitted properties to contribute to the cost of water main construction; and
- WHEREAS, the City of Farmington Hills has completed the extension of a water main that provides public water services to and for the benefit of the properties listed in this resolution below (such extension being referred to in this resolution as the "Water Main Extension"), and Council has been advised of the costs incurred for said Water Main Extension; and
- WHEREAS, pursuant to the Payback Ordinances, City Council desires to approve the costs of construction, identify the benefited properties as being within a payback district, specify the proportionate share of the cost of construction attributable to each of the benefited properties in the payback district, declare that such benefited properties shall pay such proportionate share, address the timing for such payment, and establish a limited installment payment option for the benefitted property owners within the payback district; and

NOW, THEREFORE, BE IT RESOLVED that the costs for the Water Main Extension are approved and it is determined that the following properties benefit from the completed Water Main Extension, which properties are referred to in this resolution as the "Benefitted Properties" and are within what shall be known as the "Verdun Street Payback District":

22-23-36-253-023 21535 VERDUN T1N, R9E, SEC 36 J M COX ESTATE SUB S ½ OF LOT 6 & N ½ OF LOT 7

1 Unit/\$12,506.60

 22-23-36-253-017
 21565 VERDUN
 1 Unit/\$12,506.60

 T1N, R9E, SEC 36 J M COX ESTATE SUB LOT 5
 1

 22-23-36-254-001
 27815 SHIAWASSEE
 3 Unit/\$37,519.80

 T1N, R9E, SEC 36 THAT PART OF E ½ OF W ½ OF NE ¼ LYING
 SWLY OF SHIAWASSEE RD 10 A

BE IT FURTHER RESOLVED that, pursuant to the Payback Ordinances, the amount listed next to each of the above-described Benefitted Properties (referred to in this resolution as the "Payback Amount") is hereby determined to be the proportionate share of the costs for the Water Main Extension attributable to each of the Benefited Properties and such Benefitted Properties shall pay the Payback Amount to the City pursuant to Section 33-201 of the City Code, as presently written or as said Code Section may be amended from time to time in the future or as such Code Section may be rewritten in another section of the Code in the future.

BE IT FURTHER RESOLVED that, pursuant to the Payback Ordinances, each of the above-described Benefitted Properties are not entitled and shall not be permitted to connect to the City's public water main until such time as the Payback Amount established for such property has been paid to the City or as directed by the City.

BE IT FURTHER RESOLVED, that any of the Benefitted Properties that are subdivided or split into more units than identified above, then the Payback Amount listed above for such property shall be paid in accordance with the requirements of City Code Section 33-201(b), as presently written or as said Code Section may be amended from time to time in the future or as such Code Section may be rewritten in another section of the Code in the future; and

BE IT FURTHER RESOLVED, that if a benefitted property connects to the Water Main Extension within five (5) years of the date of adoption of this resolution and that property is not being subdivided or split, then such property shall have the option to pay its Payback Amount in installments that coincide with the quarterly water service billings (or other water service billing interval that may be established by the City) over a period of up to ten (10) years after the date of such connection with per annum interest to be charged at the rate of 10-year Treasury Bonds plus one (1%) percent, but such installment payment option is subject to and contingent on the benefited property owner executing an installment pay back agreement prepared by the City Attorney and recording of such agreement with the Oakland County Register of Deeds against the benefited property.

BE IT FURTHER RESOLVED, that if a property does not connect to the Water Main Extension within five (5) calendar years of the adoption of this resolution, that property must pay its Payback Amount in one lump sum at the time of connection thereafter.

AYES: BARNETT, BOLEWARE, BRIDGES, KNOL, MASSEY, NEWLIN AND STRICKFADEN NAYS: NONE ABSTENTION: NONE ABSENT: NONE

RESOLUTION DECLARED ADOPTED ON OCTOBER 25, 2021.

RECOMMENDED ADOPTION OF A PERFORMANCE RESOLUTION FOR CITY PROJECTS IN THE MICHIGAN DEPARTMENT OF TRANSPORTATION (MDOT) RIGHT-OF-WAY. CMR 10-21-100

Michigan Department of Transportation 2207B (05/21)

PERFORMANCE RESOLUTION FOR MUNICIPALITIES

Page 1 of 2

This Performance Resolution (Resolution) is required by the Michigan Department of Transportation for purposes of issuing to a Municipality an "Individual Permit for Use of State Highway Right of Way", and/or an "Annual Application and Permit for Miscellaneous Operations within State Highway Right of Way".

RESOLVED WHEREAS, the _____ City of Farmington Hills

(County, City, Village, Township, etc.)

hereinafter referred to as the "MUNICIPALITY," periodically applies to the Michigan Department of Transportation, hereinafter referred to as the "DEPARTMENT," for permits, referred to as "PERMIT," to construct, operate, use and/or maintain utilities or other facilities, or to conduct other activities, on, over, and under State Highway Right of Way at various locations within and adjacent to its corporate limits;

NOW THEREFORE, in consideration of the DEPARTMENT granting such PERMIT, the MUNICIPALITY agrees that:

- Each party to this *Resolution* shall remain responsible for any claims arising out of their own acts and/or omissions during the performance of this *Resolution*, as provided by law. This *Resolution* is not intended to increase either party's liability for, or immunity from, tort claims, nor shall it be interpreted, as giving either party hereto a right of indemnification, either by Agreement or at law, for claims arising out of the performance of this Agreement.
- 2. If any of the work performed for the MUNICIPALITY is performed by a contractor, the MUNICIPALITY shall require its contractor to hold harmless, indemnify and defend in litigation, the State of Michigan, the DEPARTMENT and their agents and employee's, against any claims for damages to public or private property and for injuries to person arising out of the performance of the work, except for claims that result from the sole negligence or willful acts of the DEPARTMENT, until the contractor achieves final acceptance of the MUNICIPALITY Failure of the MUNICIPALITY to require its contractor to indemnify the DEPARTMENT, as set forth above, shall be considered a breach of its duties to the DEPARTMENT.
- 3. Any work performed for the MUNICIPALITY by a contractor or subcontractor will be solely as a contractor for the MUNICIPALITY and not as a contractor or agent of the DEPARTMENT. The DEPARTMENT shall not be subject to any obligations or liabilities by vendors and contractors of the MUNICIPALITY, or their subcontractors or any other person not a party to the PERMIT without the DEPARTMENT'S specific prior written consent and notwithstanding the issuance of the PERMIT. Any claims by any contractor or subcontractor will be the sole responsibility of the MUNICIPALITY.
- 4. The MUNICIPALITY shall take no unlawful action or conduct, which arises either directly or indirectly out of its obligations, responsibilities, and duties under the PERMIT which results in claims being asserted against or judgment being imposed against the State of Michigan, the Michigan Transportation Commission, the DEPARTMENT, and all officers, agents and employees thereof and those contracting governmental bodies performing permit activities for the DEPARTMENT and all officers, agents, and employees thereof, pursuant to a maintenance contract. In the event that the same occurs, for the purposes of the PERMIT, it will be considered as a breach of the PERMIT thereby giving the State of Michigan, the DEPARTMENT, and/or the Michigan Transportation Commission a right to seek and obtain any necessary relief or remedy, including, but not by way of limitation, a judgment for money damages.
- The MUNICIPALITY will, by its own volition and/or request by the DEPARTMENT, promptly restore and/or correct physical or operating damages to any State Highway Right of Way resulting from the installation construction, operation and/or maintenance of the MUNICIPALITY'S facilities according to a PERMIT issued by the DEPARTMENT.

MDOT 2207B (05/21)

Page 2 of 2

- 6. With respect to any activities authorized by a PERMIT, when the MUNICIPALITY requires insurance on its own or its contractor's behalf it shall also require that such policy include as named insured the State of Michigan, the Transportation Commission, the DEPARTMENT, and all officers, agents, and employees thereof and those governmental bodies performing permit activities for the DEPARTMENT and all officers, agents, and employees thereof, pursuant to a maintenance contract.
- The incorporation by the DEPARTMENT of this *Resolution* as part of a PERMIT does not prevent the DEPARTMENT from requiring additional performance security or insurance before issuance of a PERMIT.
- 8. This *Resolution* shall continue in force from this date until cancelled by the MUNICIPALITY or the DEPARTMENT with no less than thirty (30) days prior written notice provided to the other party. It will not be cancelled or otherwise terminated by the MUNICIPALITY with regard to any PERMIT which has already been issued or activity which has already been undertaken.

BE IT FURTHER RESOLVED that the following position(s) are authorized to apply to the DEPARTMENT for the necessary permit to work within State Highway Right of Way on behalf of the MUNICIPALITY.

)

I HEREBY CERTIFY that the foregoing is a true copy of a resolution adopted by

the City Council		
	(Name of Board, etc.)	
of the City of Farmington Hills	of	Oakland
(Name of MUNICIPALITY)		(County)
at aRegular		meeting held on the <u>25th</u> day
of October A.D. 2021 Signed City Clerk Title Pamela B. Smith Print Signed Name	· · · · · · · · · · · · · · · · · · ·	

RECOMMENDED APPROVAL OF AWARD OF PROPOSAL FOR 2021 AUTOMOTIVE FLUIDS PURCHASE TO ROWLEY'S WHOLESALE IN THE AMOUNT OF \$40,000; WITH POSSIBLE EXTENSIONS. CMR 10-21-101

MOTION by Bridges, support by Newlin, that the City Council of Farmington Hills hereby authorizes the City Manager to issue a purchase order on behalf of the City to Rowley's Wholesale for 2021 Automotive Fluids in the amount of \$40,000, with possible extensions.

Roll Call Vote:

Yeas: BARNETT, BOLEWARE, BRIDGES, KNOL, MASSEY, NEWLIN AND STRICKFADEN Nays: NONE Absent: NONE Abstentions: NONE

MOTION CARRIED 7-0.

<u>RECOMMENDED AUTHORIZATION FOR REPAIRS TO THE FUEL SYSTEMS AT THE</u> <u>DPW FACILITY, THE POLICE DEPARTMENT AND THE PARKS AND GOLF FACILITY TO</u> OSCAR W. LARSON COMPANY IN THE ABOUT OF \$48,810. CMR 10-21-102

MOTION by Bridges, support by Newlin, that the City Council of Farmington Hills hereby authorizes the City Manager to issue a purchase order to Oscar Larson Company in the amount of \$48,810.00 which includes a \$4,467.00 contingency and \$3,600.00 equipment trade-in for repairs to the fuel systems at the DPW facility, the Police Department and the Parks and Golf facility.

Roll Call Vote:

Yeas: BARNETT, BOLEWARE, BRIDGES, KNOL, MASSEY, NEWLIN AND STRICKFADEN Nays: NONE Absent: NONE Abstentions: NONE

MOTION CARRIED 7-0.

RECOMMENDED APPROVAL OF AWARD OF BID FOR THE PURCHASE AND INSTALLATION OF THREE PICK-UP TRUCK SNOW PLOWS TO TRUCK & TRAILER SPECIALTIES IN THE AMOUNT OF \$19,404. CMR 10-21-103

MOTION by Bridges, support by Newlin, that the City Council of Farmington Hills hereby authorizes the City Manager to approve a purchase order with Truck & Trailer Specialties in the amount of \$19,404.00 for the purchase and installation of three (3) pick-up truck snowplows.

Roll Call Vote:

Yeas: BARNETT, BOLEWARE, BRIDGES, KNOL, MASSEY, NEWLIN AND STRICKFADEN Nays: NONE Absent: NONE

Abstentions: NONE

MOTION CARRIED 7-0.

RECOMMENDED APPROVAL OF AWARD OF CONTRACT TO REFURBISH THE SALT DOME CONVEYOR SYSTEM TO KIMCO USA IN AN AMOUNT NOT TO EXCEED \$28,843. CMR 10-21-104

MOTION by Bridges, support by Newlin, that the City Council of Farmington Hills hereby authorizes the City Manager to sign a contract with Kimco USA in an amount not to exceed \$28,843.00 which includes the 10% contingency, for the purchase and installation of replacement of the conveyor belt, pulleys, and other maintenance items.

Roll Call Vote:

Yeas: BARNETT, BOLEWARE, BRIDGES, KNOL, MASSEY, NEWLIN AND STRICKFADEN Nays: NONE Absent: NONE Abstentions: NONE

MOTION CARRIED 7-0.

ACKNOWLEDGEMENT OF FIRST QUARTER FINANCIAL SUMMARY AND INVESTMENT REPORTS AND FOURTH QUARTER PRELIMINARY YEAR-END FINANCIAL SUMMARY REPORT.

MOTION by Bridges, support by Newlin, that the City Council of Farmington Hills hereby acknowledges the first quarter financial summary and investment reports and fourth quarter preliminary year-end financial summary report.

Roll Call Vote:

Yeas: BARNETT, BOLEWARE, BRIDGES, KNOL, MASSEY, NEWLIN AND STRICKFADEN Nays: NONE Absent: NONE Abstentions: NONE

MOTION CARRIED 7-0.

<u>RECOMMENDED APPROVAL OF THE CITY COUNCIL REGULAR SESSION MEETING</u> <u>MINUTES OF OCTOBER 11, 2021.</u>

MOTION by Bridges, support by Newlin, that the City Council of Farmington Hills hereby approves the City Council regular session meeting minutes of October 11, 2021.

Roll Call Vote:

Yeas: BARNETT, BOLEWARE, BRIDGES, KNOL, MASSEY, NEWLIN AND STRICKFADEN

Nays: NONE Absent: NONE

Abstentions: NONE

MOTION CARRIED 7-0.

ADDITIONS TO AGENDA

None.

City of Farmington Hills-City Council Regular Session Meeting October 25, 2021 Page 13 of 13

13 DRAFT

ADJOURNMENT

MOTION by Massey, support by Boleware, to adjourn the regular session City Council meeting at 9:33pm.

MOTION CARRIED 7-0.

Respectfully submitted,

Pamela B. Smith, City Clerk