CITY OF OREGON CITY
CITY COMMISSION WORK SESSION AGENDA

Commission Chambers, 625 Center Street, Oregon City
Tuesday, August 11, 2020 at 6:00 PM

WORK SESSION OF THE CITY COMMISSION

The public is strongly encouraged to relay concerns and comments to the Commission in one of three ways:

- *Email at any time up to 12 p.m. the day of the meeting to recorderteam@orcity.org.*
- *Phone call (Monday – Friday, 8 am – 5 pm) to 503-496-1505, all messages will be relayed and/or citizens can sign-up to be called during the meeting to provide over-the-phone testimony.*
- *Mail to City of Oregon City, Attn: City Recorder, P.O. Box 3040, Oregon City, OR 97045*

CONVENE WORK SESSION AND ROLL CALL

FUTURE AGENDA ITEMS

The Commission's adopted goals and available staff resources shall be considered when recommending future agenda items. The Commission may add an item to a future agenda with consensus of the Commission.

1. List of Future Work Session Agenda Items

DISCUSSION ITEMS

2. Additional Permitting and Notification Draft Policy for City Tree Removal

3. Small Cell Design and Construction Standards Review

CITY MANAGER'S REPORT

COMMISSION COMMITTEE REPORTS

A. **Beavercreek Employment Area Blue Ribbon Committee** - *Commissioner Frank O'Donnell*

B. **Brownfield Grant Committee** - *Mayor Dan Holladay*

C. **Citizen Involvement Committee Liaison** - *Commissioner Rachel Lyles Smith*

D. **Clackamas County Coordinating Committee (C4)** - *Mayor Dan Holladay and Commissioner Rachel Lyles Smith*

E. **Clackamas Heritage Partners** - *Commissioner Rocky Smith, Jr.*

F. **Downtown Oregon City Association Board** - *Commissioner Denyse McGriff*

G. **Metro Policy Advisory Committee (MPAC)** - *Commissioner Rachel Lyles Smith*

H. **Oregon Governor's Willamette Falls Locks Commission** - *Mayor Dan Holladay*

I. **South Fork Water Board (SFWB)** - *Mayor Dan Holladay, Commissioners Frank O'Donnell and Rocky Smith, Jr.*

J. **Willamette Falls and Landings Heritage Area** - *Commissioner Denyse McGriff*

K. **Willamette Falls Legacy Project Liaisons** - *Mayor Dan Holladay and Commissioner Frank O'Donnell*

ADJOURNMENT

PUBLIC COMMENT GUIDELINES

Complete a Comment Card prior to the meeting and submit it to the City Recorder. When the Mayor calls your name, proceed to the speaker table, and state your name and city of residence into the microphone. Each speaker is given three (3) minutes to speak. To assist in tracking your speaking time, refer to the timer on the table.

As a general practice, the City Commission does not engage in discussion with those making comments.

Electronic presentations are permitted but shall be delivered to the City Recorder 48 hours in advance of the meeting.

ADA NOTICE

The location is ADA accessible. Hearing devices may be requested from the City Recorder prior to the meeting. Individuals requiring other assistance must make their request known 48 hours preceding the meeting by contacting the City Recorder's Office at 503 657 0891

Agenda Posted at City Hall, Pioneer Community Center, Library, City Web site.

Video Streaming & Broadcasts: The meeting is streamed live on Internet on the Oregon City's Web site at www.orcity.org and available on demand following the meeting. The meeting can be viewed live on Willamette Falls Television on channel 28 for Oregon City area residents. The meetings are also rebroadcast on WFMC. Please contact WFMC at 503 650 0275 for a programming schedule

CITY OF OREGON CITY

Staff Report

625 Center Street
Oregon City, OR 97045
503-657-0891

To: City Commission **Agenda Date:** 08/11/2020

From: City Manager Tony Konkol

SUBJECT:

List of Future Work Session Agenda Items

BACKGROUND:

Next Month (These items may get moved depending upon various circumstances)

Pre-Application Request for Recording Follow-up

Mural Discussion from the Tourism Group

Beavercreek Road Concept Plan (Thimble Creek) Funding Discussion

Additional Upcoming Items (These items are in no particular order)

Abandoned Buildings

Canemah Area - Encroachments in the Right-of-Way Policy Discussion

Clackamas County Water Environmental Services (WES) Rate Differential

Clackamette Park Boat Ramp

Climate Action Plan Presentation (City of Milwaukie)

Code Enforcement Complaint Process

Construction Excise Tax (CET)

Cross Street and Utility Pole Banners

Marijuana Tax and Funds from the Tax Discussion

Metro Food Waste Program Requirements - Annual Review

Parks Special Event Fees and Application Process

Parking Rate Increase for Permitted Parking in Downtown Oregon City (Green, Purple, Orange, etc. Zones)

Policies for Non-Profits - Discussion

Relationship with the Willamette Falls Trust

South Fork Water Board - Mountain Line Easements Vacation

Transportation Demand Management (TDM) Plan Implementation Update

Water System Risk and Resiliency Review

Willamette Falls Legacy Project Operations and Maintenance Discussion

CITY OF OREGON CITY

Staff Report

625 Center Street
Oregon City, OR 97045
503-657-0891

To: City Commission **Agenda Date:** 08/11/2020

From: Community Development Director Laura Terway

SUBJECT:

Additional Permitting and Notification Draft Policy for City Tree Removal

STAFF RECOMMENDATION:

Provide comment on the proposed draft policy.

EXECUTIVE SUMMARY:

The City Manager directed staff to work together to draft new procedures or policies to avoid inappropriate tree removal by City staff. The Planning Division has been working with the Natural Resources Committee as well as Public Works and the Parks and Recreation Department on the draft. The latest draft policy incorporates the direction from the City Commission at their July 7th work session.

BACKGROUND:

In response to tree removal on City property, the City Manager directed staff to work together to draft code amendments and/or a policy including new procedures and policies to avoid inappropriate tree removal by City staff. Though the draft has been primarily discussed with the Natural Resources Committee, the Planning Commission and City Commission have also discussed the proposal. Highlights include:

- Primarily using the heritage tree list as the basis for requiring additional review.
- Exempting trees in certain situations, even if they meet the heritage tree requirements.
- Requiring the tree removal include an explanation as to why the tree is being removed as well as an analysis of the removal and alternatives to removal by an internal panel or an arborist. Arbor review is required for all trees over a certain size.
- Public notice of the qualifying trees for 14 days on the tree itself and online.
- Unresolved questions or concerns by the public would be elevated to the City Manager
- City Commission will review trees 50 inches D.B.H or greater

- The wood of healthy trees 25 inches or greater will be reused if feasible
- An annual budget will be established to support the tree retention with use of alternatives to tree removal and putting the wood of a removed tree to use.
- No fee-in-lieu will be allowed for mitigation plantings associated with the removal of trees 50 inches D.B.H or greater.

The draft policy is scheduled to go before the Natural Resources Committee as well as the Parks and Recreation Advisory Committee later this month.

OPTIONS:

1. Provide feedback and identify if the policy requires additional input; or
2. Provide feedback and identify if the policy is ready to be finalized and adopted by the City Commission via Resolution.

BUDGET IMPACT:

Amount: To Be Determined

FY(s):

Funding Source(s):

OREGON CITY

Community Development – Planning

698 Warner Parrott Road | Oregon City OR 97045
Ph (503) 722-3789 | Fax (503) 722-3880

Additional Permitting and Notification Process for City Tree Removal

Revised: August 4, 2020

The purpose of this policy is to reduce unnecessary tree removal by the City and provide public notification of such removal.

Step 1. Determine Applicability of the Policy

This policy applies to City removal of trees:

- On City or Urban Renewal owned property; or
- Within the right-of-way.

The process does not apply to the public removal of City trees.

The following policy is limited to trees which meet the species requirements *and* meet or exceed the minimum size in the table below. The policy does not apply for trees which are an identified species but do not meet the minimum size.

Common Name	Species	Minimum Size (d.b.h)*
Oregon White Oak	Quercus garrayana	8"
Fir	Pseudotsuga menziesii	18"
Western Red Cedar	Thuja plicata	12"
Ponderosa Pine	Pinus ponderosa	12"
Western Yew	Taxus brevifolia	6"
Douglas Pacific Dogwood	Cornus nuttallii	5"
Coastal Redwood	Sequoia sempervirens	12"
Giant Sequoia	Sequoiadendron giganteum	12"
Pacific Madrone	Arbutus menziesii	5”
Other deciduous tree species		20"
Other evergreen trees		18"

**d.b.h = Diameter at breast height, means a measurement of the trunk or stem diameter of a mature tree at a height four and one-half feet above the ground level at the base of the tree.*

Step 2. Exemptions

Trees which meet any of the following situations are exempt from the policy:

1. Trees within habitat restoration areas. The habitat restoration project must have been approved by the Planning Division.
2. Trees within or abutting water quality facilities.
3. Trees causing a trip hazard in a walkway or sidewalk with lifting greater than 0.25 inches or a conflict with Americans with Disabilities Act (ADA) standards.

4. Trees which are on the Oregon City Nuisance Plant List or otherwise classified as invasive or problem species in the region[1].
5. Imminent Hazard Trees. Imminent hazard trees, as defined in OCMC 17.04.1370 may be removed without notification before a permit is obtained due to the necessity to respond to the hazard and restore public safety as soon as possible. Examples include if the tree has fallen across the roadway or if it is leaning significantly due to a heavy windstorm and likely to fall within the next 72 hours, or when a tree is damaged by a vehicle collision. A determination of imminent hazard is made in the field by the City of Oregon City Public Works, or emergency personnel, a forester, or a certified arborist. Permits shall be obtained after the imminent hazard has been removed and any applicable replacement requirements shall be followed. The responding personnel shall provide details of the tree species, size and condition to the extent practicable. Photos and documentation of the hazardous conditions shall be provided with the permit application for tree removal to verify the tree was hazardous, but arborist reports would not be required.

   17.04.1370 - Tree, imminent hazard.
   "Imminent hazard tree" means a hazardous tree as defined in OCMC 12.32.020, all or more than thirty percent of which has already fallen or is estimated to fall within seventy-two hours into the public right-of-way or onto a target that cannot be protected, restricted, moved, or removed.

Step 3. Consideration of Alternatives to Removal

The department most responsible for the tree shall document the tree location, size, and species (if known), the reason for removal, and alternatives considered in a written justification memo. The memo will be reviewed by a department manager, who will send the memo to a third party (an arborist or a staff assessment team) for review. All trees 50 inches d.b.h or higher must be reviewed by a certified arborist. For trees less than 50 inches d.b.h, the department may choose to send the justification memo to either:

- Option #1: A Certified Arborist Report
  A certified arborist will analyze each tree proposed for removal and document the findings in a written report. The report will contain an analysis of alternatives to removal including a rough estimate of approximate cost and practicality of each alternative.

- Option #2: Staff Assessment Memorandum
  A group of staff including a minimum of two people from Public Works and Parks and one person from Planning who will analyze each tree proposed for removal and document the findings in a written conclusion memo. Staff with experience or an educational background in forestry or tree management is preferred. The memo must be authored by a staff member not in the department responsible for the tree and will contain an analysis of alternatives to removal including a rough estimate of approximate cost and practicality of each alternative.

Step 3. Submit a Permit for Removal of a Public Tree

A permit is generally always required to assure adequate mitigation for any tree the City is going to remove. However, if the tree meets the specifications of this policy, additional public notice will be

[1] Includes official noxious weed priority list as designated by the Oregon State Weed Board (OSWB) or the Clackamas Soil and Water Conservation District WeedWise Program.

required. The purpose of the notice is to inform the public of the proposal and direct them to a city website where they may review the application, arborist report or internal conclusion memo, and contact the applicant with any questions or concerns. Permits for public tree removal will not be issued until the notice period is complete.

Step 5. Notice of Tree Removal

Upon receipt of a permit application in Step 4, the Planning Division will administer the following notices:

- Website Notice
  Notice of all proposed removal of heritage eligible trees will be posted to a city website. The public as well as the City Commission, PRAC, NRC, CIC, Neighborhood Associations, etc. will have the ability to subscribe to the website to receive notifications each time a new posting occurs. The website notice will include copies of the permit application form, the arborist report (if applicable), and the internal panel memo.

- Physical Notice
  A physical notice is also required to be posted on the tree proposed for removal for a minimum of 14 calendar days. This period is intended to provide an opportunity for the public to contact the applicant with questions and comments about the proposed tree removal. Notices shall be provided by the Planning Division on 8.5 X 11 laminated paper with the words "NOTICE OF PROPOSED TREE REMOVAL" in bold, 48-point font and the website where the public may download the permits, arborist reports and associated documentation. Notices shall be tied to the tree with twine or wire. No screws or nails shall be used. The notice will be created by the Planning Division, but will be placed and monitored by the department proposing removal.

If there remain unresolved questions or concerns regarding the proposed tree removal after the public notice, the removal shall be referred to the City Manager for further review. The City Manager may decide to move forward with the tree removal or cease the tree removal process.

City Commission Approval for City Owned Trees Over 50 inches D.B.H

Trees greater than 50" d.b.h. shall be placed on a City Commission consent agenda and notification will be sent to the Natural Resources Committee, Parks and Recreation Committee, and the Transportation Advisory Committee. The City Commission may decide to move forward with the tree removal or cease the tree removal process.

Additional Requirements

The following shall also apply.

- Reuse of the Wood for City-Owned Trees 25 Inches or Greater
  Trees proposed for removal which are subject to this policy, free from infestation, and 25 inches d.b.h. or greater, shall be repurposed for use by the City and/or public if feasible. Depending on the quality of the wood, it may be utilized for environmental enhancement, furniture or crafts. The Natural Resources Committee recommends that in natural areas and next to streams, leaving large woody debris in place may help to improve fish and wildlife habitat, and that the use of wood for firewood should be allowed only if the wood cannot be repurposed any other way (e.g. cottonwood).

- Large Tree Mitigation.

Trees proposed for removal that are 50 inches or greater d.b.h. shall be mitigated with tree plantings within the city limits. No fee-in-lieu is allowed.

- Establishment of an Annual Budget for Supporting Fund
  The policy above includes provisions which will have unfunded financial impacts to the City. A fund dedicated to supporting tree retention with use of alternatives to tree removal (such as meandering a sidewalk) and putting the wood of a removed tree to use will be established for the Parks and Recreation Department as well as Public Works.

Next Steps:
The draft policy is scheduled to be reviewed by the Natural Resources Committee and Parks and Recreation Advisory Committee later this month. The City Commission is encouraged to provide feedback on the proposed policy and identify if the policy:

- Requires additional input; or
- If the policy is ready to be finalized and adopted by the City Commission via Resolution.

CITY OF OREGON CITY

Staff Report

625 Center Street
Oregon City, OR 97045
503-657-0891

To: City Commission **Agenda Date:** 08/11/2020

From: Public Works Director John Lewis

SUBJECT:

Small Cell Design and Construction Standards Review

STAFF RECOMMENDATION:

The Public Works and Community Development Departments continue to support Resolution 19-03 as the most appropriate local regulation of Small Cell in the ROW and continue to advocate for the recently proposed legislative code changes exempting Small Cells within the right of way from Chapter 17.80. Maintaining this regulatory path forward with Small Cell confirms the City's regulation is aligned with State law and Federal regulation and further complements OCMC Chapter 13.24 (Telecommunication Facilities).

EXECUTIVE SUMMARY:

This work session was scheduled to address City Commission concerns with another Work Session topic where staff presented a summary of proposed code changes that will be forthcoming. One of the items of concern was the proposed code change to exempt Small Cell approval from OCMC 17.80. This Work Session and Work Session packet provides some of the history associated with the City's 2019 adopted Small Cell regulation, and other applicable State and Federal regulations. When Resolution 19-03 was proposed for adoption, the Staff intent was to clear up duplication and/or differing regulation provided by OCMC 17.80 through a future code revision. Given the heavy lift associated with a Land Use Code revision and the awkwardness associated with adding a new item to a long list of code revisions that were well underway and facing the City Commission, staff held back this change and proceeded to package an Engineering-specific code change package which we are now seeking to move forward. This Work Session will help inform that code change package as it relates to Small Cell.

BACKGROUND:

The demand for data processing capacity has led the telecommunications industry to seek solutions in Small Cell deployments across the nation and more recently along

Oregon City's ROW. While this infrastructure has yet to be established, the recent stay at home orders have further challenged the communication and data processing networks, and the use of wireless communication devices has skyrocketed. Even prior to the COVID-19 pandemic, the industry was estimating a 275-billion-dollar investment in the deployment of 5G network capabilities.

With the interest in Oregon City looming, the topic of Small Cell management and deployment within Oregon City Rights-of-Way (ROW) was introduced during the September 19, 2018, City Commission meeting. At that time, staff was given the direction to pursue standards and fees for reasonable management of Small Cell facilities within City ROW.

Under the direction of the City Commission, staff studied the industry needs, state and federal regulations, other jurisdictional regulatory proposals, and Oregon City municipal code as related to utility use of City rights-of-way. During this time, the Federal Communication Commission (FCC) and the telecommunication industry were working diligently on guidelines and draft regulation, recognizing how Small Cell would become a vital part of building prosperous communities. On January 14, 2019, the FCC published new rulings regarding the management and deployment of Small Cell Facilities within City ROW. These new FCC regulations included a shot clock on local regulation adoption and trended toward limiting the City's local authority. The FCC rulings also required permit and user fees that allow for reasonable reimbursement but not over assessment of fees.

Considering the new FCC regulation and the industry demand for expanded Small Cell deployment, at the February 20, 2019 City Commission meeting the City Commission established:

- Resolution 19-02 Amend Right of Way usage fee rates (include Small Cell); and
- Resolution 19-03 Small Cell Management and Deployment Standards within the Oregon City Rights of Way. Public Notice and meeting materials have been included as Appendix A.

The purpose of established resolutions was to ensure that Small Cell wireless communication facilities within the public rights-of-way are designed and constructed in a manner that protects and preserves the physical capacity and aesthetic value of the public rights-of-way. These guidelines provide requirements and permitting processes that allow for reasonable access to the public rights-of-way for Small Cell facilities consistent with applicable federal, state, and applicable City ordinances. Finally, the standards seek to facilitate and streamline the rollout of Small Cell infrastructure while at the same time safeguard the public rights-of-way and prevent undue hazards to property, the environment, public health, welfare, and safety.

OCMC Chapter 17.80 Communication Facilities is the last chapter in the zoning code and was adopted on July 1, 2009. The Communications Chapter best applies to larger antenna support towers and monopole towers. However, as written, the

chapter applies to all wireless communication facilities and by virtue of being in Chapter 17 mandates a land use approval process for each and every Small Cell deployment. With the adoption of Resolution 19.03 in place and with the forthcoming Engineering code changes, staff is recommending that OCMC 17.80.030 – Applicability and Exemptions, be amended to include an exemption for Small Cell and utilize the Small Cell Management and Deployment Standards (Resolution 19-03).

This change honors the intention of OCMC 17.80 to protect Oregon City from the negative effects of larger scale towers but complies with State and Federal requirements and maintains the City's high regard for aesthetics and quality infrastructure. The Small Cell standards were written in consideration of OCMC 17.80 as related to site review, permitting, location, and design standards but more relevant to the new technology that OCMC 17.80 had not considered when it was written in 2009. Also, an exemption to 17.80 for Small Cell avoids the prolonged review time required for land use approval. The application would also be processed using the fee schedule adopted in Resolution 19-02 rather than under the Planning fee schedule. The Resolution 19-02 fee schedule complies with the FCC fee limitation mandates.

One concern with the exemption proposal that we have heard from the City Commission was that the Small Cell design and construction standards do not require a public involvement process. Public notification and public comment are not a requirement for the City under the authority provided by the State's ORS 221.510, Municipal Regulation of Telecommunication Carriers. In consideration of Resolution 19-02 and 03 adoption, the City's public noticing requirements were met. In consideration for moving forward with appropriate noticing requirements, staff examined the noticing requirements listed in OCMC Chapter 17.50 (Administrative Procedures) for a compatible decision making process and found that compatibility review for communications facilities as defined in OCMC 17.80 was a Type I land use decision. This decision-making process requires no noticing other than to notice the applicant. Comparable with the Community Development Director having the final decision under OCMC 17.80, the Public Works Director would have the final say on Small Cell permit approval.

For reference, a recent Small Cell design package submittal example has been included as Appendix B

OPTIONS:

1. Affirm City Commission desire to move forward with OCMC changes exempting Small Cells within the ROW from Chapter 17.80.
2. Affirm City Commission desire to move forward with OCMC changes exempting Small Cells within the ROW from Chapter 17.80 and provide more specific direction on additional language or clarity for the proposed code changes.
3. Refute the proposal to exempt Small Cell within the ROW from Chapter 17.80 and provide guidance on what the City should do about:

A) Allowable land use review timelines that exceed the Federal review shot clock limits
B) Land use and Small Cell fee requirements, both of which currently would be applicable but the land use fees would fall outside of what was approved under Resolution 19-02 and have not been analyzed and justified as reasonable and appropriate as required by the FCC rulings.

OREGON CITY

Public Works Department

625 Center Street | Oregon City OR 97045
Ph (503) 657-0891 | Fax (503) 657-7892

M E M O R A N D U M

TO: Oregon City Commissioners
FROM: Public Works and Community Development Directors
DATE: August 5, 2020
SUBJECT: Public Works Code Changes – Small Cell Regulatory Authority

At the June 9, 2020, City Commission Work Session, the Oregon City Public Works Department presented an informational update on proposed code changes including an exemption of Small Cell facilities from Oregon City Municipal Code chapter 17.80, Communication Facilities. The proposed code changes would include exemption 9, "small cell wireless telecommunication facilities within the right of way." The proposed code change aligns with the February 22, 2019, City Commission adoption of Resolution 19-02 and Resolution 19-03 establishing Small Cell Design Standards, management, and annual usage fees for being within Oregon City Rights of Way. In establishing right of way standards and fees, City staff seek to maintain the established Oregon City Right of Way program, ensure the citizens of Oregon City equitable use of the rights of way, maintain local authority over the use of the right of way, and minimize risk to violation of Federal Communications Commission Rulings. Below is a synopsis of:

1) Established Oregon City Municipal Code
2) Federal Communication Commission Ruling
3) ORS 221.510
4) Oregon City adopted resolutions allowing Oregon City to maintain local right of way authority/complying with federal regulations, state laws, and Oregon City Municipal Code
5) Oregon City adopted resolutions establishing standards and fees associated with Small Cell development

Oregon City Municipal Code (OCMC) Chapter 13.34 – Utility Facilities in Public Rights-of-Way, outlines the purpose and intent of rights of way management as to secure fair and reasonable compensation to the City and its residents for permitting use of the rights of way and to encourage the provision of advanced and competitive utility services on the widest possible basis to businesses and residents of the City.

Oregon City Municipal Code (OCMC) Chapter 13.24 – (13.24.010- chapter subject to provisions of Chapter 13.34) Telecommunication Facilities, outlines the purpose, intent, and regulation regarding telecommunication facilities within Oregon City right of way.

All utility installations are permitted through Right of Way License permits, public utility permits, or adopted Small Cell permit. The Oregon City Public Works Department processes permits according to established right of way standards review, within 2-30 days.

Oregon City Municipal Code (OCMC) Chapter 17.80 – Communication Facilities – Outlines the aesthetic, geolocation, and desire for best public interest. Chapter 17 requires a land use decision (may take 30-180 days)

A. Promoting maximum utilization and encourage collocation of new and existing wireless communication antennas to minimize the total number of support structures and towers throughout the city;

B. Encouraging careful consideration of topography, greenways, and historical significance of potential telecommunication sites and the use of camouflaging and screening to ensure development has minimal impacts on the community, views, and historical areas;

C. Encouraging the use of existing buildings, light or utility poles, or water towers as opposed to construction of new telecommunication towers; and

D. Encouraging the location of monopole telecommunication towers and antenna arrays in nonresidential areas.

The Federal Communication Commission Regulation—*Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment; Declaratory ruling and Third Report and Order*— published January 14, 2019 — The Federal Communication Commission Third Report and Order gives background. To meet rapidly increasing demand for wireless services and prepare our national infrastructure for 5G, providers must deploy infrastructure at significantly more locations using new, small cell facilities. Building upon streamlining actions already taken by state and local governments, this Declaratory Ruling and Third Report and Order is part of a national strategy to promote the timely buildout of this new infrastructure across the country by eliminating regulatory impediments that unnecessarily add delays and costs to bringing advanced wireless services to the public.

- Clarify the scope and meaning of the effective prohibition standard set forth in Sections 253 and 332(c)(7) of the Communications Act as they apply to state and local regulation of wireless infrastructure deployment.
- Provide guidance on certain state and local non-fee requirements, including aesthetic and undergrounding requirements.
- Establish two new shot clocks for small wireless facilities (60 days for collocation on preexisting structures and 90 days for new builds) and codify the existing 90 and 150 day shot clocks for non small wireless facility deployments that were established in the 2009 Declaratory Ruling.
- Make clear that all state and local government authorizations necessary for the deployment of personal wireless service infrastructure are subject to those shot clocks.
- Conclude that a failure to act within the new small wireless facility shot clock constitutes a presumptive prohibition on the provision of services. Accordingly, we would expect local governments to provide all required authorizations without further delay.

Oregon Revised Statutes 221.510 establishes local municipalities have statutory and constitutional authority to manage its rights of way. Oregon City has been managing utility use of the public right of way since 2013 with the adoption of City **Ordinance 13-1014**. In adopting the below resolutions regarding Small Cell within the right of way, the City Planning and Public Works Departments worked together to understand the established City Code requirements and minimize the risk to local authority and FCC rulings. Oregon City has a seven year history of telecommunication, gas, electric, and public utilities using the right of way. The City permits around 300 utility permits annually. In managing the right of way, Oregon City is ensuring safe, sustainable use of the rights of way and providing for economic, community development through the deployment of utility providers.

Resolution 19-02- Amend the Right of Way Fee Schedule to Include Small Cell – Establishes ROW Usage Fees by consolidating Resolution No.13-26 and Resolution No. 14-30; affirm established ROW usage fee

rates per utility service sector; and reduce attachment fees reflecting Federal Communication Commission ruling of reasonable approximation of costs for deployment and management of Small Cell attachments.

Resolution 19-03 – Establish Small Cell Management and Deployment standards for attachments within the City of Oregon City Rights of Way – Pursuant to ORS 221.510 and the Federal Communication Commission regulatory rulings, this resolution adopts Small Cell Design and Construction Standard Guidelines for the Public Rights-of-Way. These standards establish reasonable, nonburdensome, and published standards for the deployment and management of Small Cells within the Public Rights-of-Way.

The fees and standards established in Resolution 19-02 and Resolution 19-03 represent reasonable approximations of the cost the City undertakes and standards no more burdensome than any of the other established ROW standards that utility/telecom users must follow per OCMC 13.24/13.24. These efforts will help safeguard the public ROW, Oregon City resident public interest, and help to ensure advanced and competitive utility services.

OREGON CITY

Public Works

625 Center Street | Oregon City OR 97045
Ph (503) 657-0891 | Fax (503) 657-7892

City of Oregon City Public Notice
Proposed Resolution Adoption

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OREGON CITY

Public Works

625 Center Street | Oregon City OR 97045
Ph (503) 657-0891 | Fax (503) 657-7892

PROPOSED: Adopt New Resolutions, Amend Rights-of-Way Usage Fees, and Adopt Design and Construction Standards Specific to Small Cell in the Rights-of-Way

This is to notify you that the City of Oregon City will be discussing proposals for the adoption of Resolutions to amend current Rights-of-Way Usage Fees and adoption of new design and construction standard guidelines for Small Cell in the rights-of-way. City Commission adoption of Resolutions19-02, 19-03, and 19-05 will establish fees and standards regarding Small Cell deployment and management.

Public Works Department will present Resolutions 19-02, 19-03, and 19-05 to City Commission for consideration the adoption at their meeting on February 20, 2019, at City Hall, 625 Center Street, Oregon City, at 7 pm unless otherwise noticed. Any interested party may testify at the meeting or submit written comments at or prior to the meeting while the record is open. All meeting materials are available at *www.orcity.org* seven days prior to the public meeting. These documents may be revised during the review process until final adoption by the City Commission. For additional information, call the Oregon City Public Works Right-of-Way and Construction Manager, Dante Posadas, at 503.974.5521.

Clarification for licensing and term definitions should be directed to Oregon City Municipal Code (OCMC) Chapters 13.24 and 13.34 found here: https://www.orcity.org/RightOfWay and/or https://library.municode.com/or/oregon_city/codes/code_of_ordinances.

For your information, **"Small Cell Facility"** is equipment used to enhance cellular data capacity within the public ROW; comprised of an antenna no larger than 3 cubic feet and equipment no larger than 28 cubic feet; attached to infrastructure within the public ROW.

OREGON CITY
Public Works
625 Center Street | Oregon City OR 97045
Ph (503) 657-0891 | Fax (503) 657-7892

Resolution 19-03 to Establish Management and Deployment Standards for Small Cell within the City of Oregon City Rights-of-Way

RECOMMENDED ACTION (Motion):
Adopt Resolution 19-03 Small Cell Design and Construction Standards Guidelines for the Public Rights-of-Way.

Background

The topic of Small Cell management and deployment within Oregon City Rights-of-Way (ROW) was introduced during the September 19, 2018, City Commission meeting. At that time, staff was given the direction to pursue standards and fees for reasonable management of Small Cell facilities within City ROW.

Under the direction of the City Commission, City staff invested time into understanding industry needs, federal regulations, and Oregon City historical data compiled regarding utility use of City rights-of-way. City staff found the following information.

Industry projects a 50% increase in deployment of Small Cell facilities between 2018-2020. An estimation of 40% of telecommunication providers will have 100-350 Small Cells per square mile by 2020. The use of data processing and wireless communication devices has skyrocketed. Industry projects a $275 billion investment in the deployment of 5G network capabilities.

The telecommunication industry is a changing/advancing utility and has become a vital part of building prosperous communities. The demand for data processing capacity has led industry to seek solutions in Small Cell deployments along Oregon City's ROW. Pursuant to the changing demands of the telecommunication industry, the Federal Communication Commission published new rulings on January 14, 2019, regarding the management and deployment of Small Cell Facilities within City ROW. FCC regulations limit the City's local authority and require fees that allow for reasonable reimbursement but not over assessment of fees.

In consideration, City staff has reviewed the five years of history the City has with franchisees, licensees, and users of the Public Rights-of-Way. Staff reviewed compliance with established City Code, and State and Federal regulations. Staff have also been working with other Oregon Agencies including Oregon Association of Telecommunication Officers and Advisors, local agencies and other industry experts to develop standards that reflect Oregon City's local needs while respecting the direction of other adopted national, state, and local regulation.

The purpose of these recommended standards is to ensure that Small Cell wireless communication facilities within the public rights-of-way are designed and constructed in a manner that protects and preserves the physical capacity and aesthetic value of

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the public rights-of-way. These guidelines shall provide requirements and permitting processes that allow for reasonable access to the public rights-of-way for Small Cell w facilities consistent with applicable federal, state, and applicable City ordinances. Finally, the standards guidelines seek to facilitate and streamline the rollout of Small Cell infrastructure while at the same time safeguard the public rights-of-way and prevent undue hazards to property, the environment, public health, welfare, and safety.

The attached Small Cell Design and Construction Standard Guidelines for Public Rights-of-Way (Exhibit A) outlines Oregon City's standards for this quickly developing industry.

Staff recommend the adoption of these standards in compliance with both State and Federal regulations and for a reasonable management and deployment of Small Cells in Oregon City Public Rights-of-Way.

BUDGET IMPACT:
Amount: N/A

RESOLUTION NO. 19-03

A RESOLUTION TO ESTABLISH SMALL CELL MANAGEMENT AND DEPLOYMENT STANDARDS FOR ATTACHMENTS WITHIN THE CITY OF OREGON CITY RIGHTS-OF-WAY

WHEREAS, the City of Oregon City has statutory and constitutional authority to manage its Rights-of-Way ("ROW") in accordance with Oregon Revised Statutes 221.510 Municipal Regulation of Telecommunication Carriers, and

WHEREAS, on November 6, 2013, the City enacted Ordinance No. 13-1014 which established Chapter 13.34 of the Oregon City Municipal Code, Utility Facilities in Public Rights-of-Way, and exercised the City's authority to manage and to secure compensation to the City and its residents for utility use of the ROW ("Ordinance"), and

WHEREAS, on January 14, 2019, the regulatory rulings of the Federal Communication Commission became effective regarding the City's authority to regulate Small Cell facilities in the ROW; providing guidance on certain state and local non-fee requirements including aesthetic and underground requirements. FCC concludes aesthetics are not pre-emptive if (1) reasonable, (2) no more burdensome than those applied to other types of infrastructure deployments, and (3) published in advance.

NOW, THEREFORE, OREGON CITY RESOLVES AS FOLLOWS:

Section 1: Pursuant to ORS 221.510 and the Federal Communication Commission regulatory rulings, the City of Oregon City adopts Small Cell Design and Construction Standard Guidelines for the Public Rights-of-Way. These standards establish reasonable, nonburdensome, and published standards for the deployment and management of Small Cells within the Public Rights-of-Way.

Section 2: The resolution shall be in effect upon adoption by City Commission.

Approved and adopted at a regular meeting of the City Commission held on the 20th day of February 2019.

Dan Holiday, Mayor

Attested to this 20th day of February 2019:

Kattie Riggs, City Recorder

Approved as to legal sufficiency:

City Attorney

OREGON CITY

Public Works Department

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City of Oregon City

Small Cell Design and Construction Standard Guidelines for Public Rights-of-Way

Intent and Purpose

The purpose of these standards is to ensure that Small Cell wireless communication facilities within the public rights-of-way are designed and constructed in a manner that protects and preserves the physical capacity and aesthetic value of the public rights-of-way intended use. These guidelines shall provide requirements and permitting processes that allow for reasonable access to the public rights-of-way for Small Cell wireless communications facilities consistent with applicable federal, state, and applicable City ordinances. Oregon City seeks to facilitate and streamline the rollout of Small Cell infrastructure while at the same time safeguard the public rights-of-way and prevent undue hazards to property, the environment, public health, welfare, and safety.

These Standards and Guidelines are for Small Cell deployment in City Rights-of-Way. Oregon City Municipal Code 17.80 – Communication Facilities – outlines the deployment and land use considerations required for communication facilities other than Small Cells within Oregon City ROW. In the future, City staff will initiate amendments to OCMC 17.80.030 to exclude Small Cell Facilities meeting the Design standards established in the Small Cell Design and Construction Standard Guidelines for Public Rights-of-Way. OCMC 17.80.030 shall regulate Small Cell facilities deployed within private property.

Definitions

For purposes of these standards, the following definitions shall control:

"Alternative antenna structure" (monopole) means an existing pole or new proposed structure within the public rights-of-way that can be used to support an antenna and is not a City facility or third-party wood utility pole.
"Antenna" means communications equipment that transmits or receives electromagnetic radio signals used in the provision of any type of wireless communications services.
"Applicant" means any person or entity submitting an application to install Small Cell wireless telecommunication facilities or structures to support the facilities within a public rights-of-way.
"City" means the City of Oregon City, an Oregon municipal corporation, or individuals authorized and designated to act on behalf of the City.
"City Commission" means the elected governing body of the City of Oregon City, Oregon.
"City-owned infrastructure" means infrastructure in the public rights-of-way within the boundaries of the City public rights-of-way and/or public easement, including but not limited to street lights, traffic signals, towers, structures, buildings, and utilities that are owned, operated, and/or maintained by the City.
"Federal Communications Commission (FCC)" means the federal administrative agency, or its lawful successor, authorized to regulate and oversee telecommunication carriers, services, and providers on a national level.
"Landscape screening" means plantings, shrubbery, bushes or other foliage intended to screen the base of a wireless telecommunication facility from public view.

"Licensee" means a telecommunication utility registered with the City pursuant to Oregon City Municipal Code Chapter 13.24 Telecommunication Facilities and Chapter 13.34 Utility Facilities in Public Rights-of-Way.
"Macro-Site telecommunication" means a telecommunication facility designed to support multiple cell sites. Macro-Sites include an array of antennas, transmission equipment, and multiple coax and hybrid cable connections. Oregon City Municipal Code 17.80 Communication Facilities governs the deployment of Macro-Sites.
"Public Rights-of-Way" means and includes the space in, upon, above, along, across, over or under the public streets, roads, highways, lanes, courts, ways, alleys, boulevards, bridges, trails, paths, sidewalks, bicycle lanes, public utility easements, and all other public ways or areas, including the subsurface under and air space over these areas, excluding parks, parkland, municipal elevator or other City property that is not generally open to the public for travel. This definition applies only to the extent of the City's right, title, interest and authority to grant a license to occupy and use such areas for utility facilities.
"Small Cell wireless telecommunication antenna" means an antenna that is part of a private wireless telecommunications facility.
"Small Cell wireless telecommunication equipment" means equipment, exclusive of an antenna, that is part of a private wireless telecommunications facility.
"Small Cell wireless telecommunication facility" means a Small Cell wireless telecommunications facility consisting of an antenna and related equipment, either installed individually or as part of a network, to provide coverage or enhance capacity in a limited defined area. Generally, it is a single-service provider installation.
"Third party utility pole" means an upright pole designed and used to support electric cables, telephone cables, telecommunication cables, cable service cables, and other utility facilities and/or which is used to provide lighting, traffic control, signage, or a similar function. Third party utility poles specifically constitute Non-City owned infrastructure within the Public Rights-of-Way.
"Usable Space" means all the space on a pole except the portion below ground level, the twenty feet of safety clearance space above ground level, and the safety clearance space between communications and power circuits; there is a rebuttable presumption that six feet of a pole is buried below ground level.

General
Oregon Revised Statutes 221.510 (Municipal Regulation of Telecommunication Carriers) authorizes municipalities to:

(a) Determine by contract, or prescribe by ordinance or otherwise, the terms and conditions, including payment of privilege tax to the extent authorized by ORS 221.515 and other charges and fees, upon which any telecommunications carrier may be permitted to occupy the streets, highways, or other public property within such municipality and exclude or eject any telecommunications carrier therefrom.
(b) Require any telecommunications carrier, by ordinance or otherwise, to make such modifications, additions, and extensions to its physical equipment, facilities or plant, or service within such municipality as shall be reasonable or necessary in the interest of the public, and designate the location and nature of all additions and extensions, the time within which they must be completed, and all conditions under which they must be constructed.
(c) Provide for a penalty for noncompliance with the provisions of any charter provision, ordinance, or resolution adopted by the municipality in furtherance of the powers specified in this subsection.

The City established a Rights-of-way Ordinance 13-1014 in 2013 establishing registration, permitting, usage fees, and general management of the Public Rights-of-Way. Pertinent to the ordinance, Oregon City Municipal Code Chapter 13.24 Telecommunication Facilities and 13.34 Utility Facilities in the Public Rights-of-Way govern all telecommunication provider access to public rights-of-way, and Oregon City Municipal Code 17.80 Communication Facilities governs the deployment of Communication Facilities outside the City rights-of-way. The Small Cell Design and Construction Standard Guidelines are supplemental standards and processes regarding the installation of Small Cell wireless telecommunication equipment within the public rights-of-way. Provisions pertaining to Small Cell installations, in City rights-of-way not expressly stated within these standards, will default to Oregon City Municipal Code 13.24 and 13.34.

Permit Process
Small Cell facilities within the Public Rights-of-Way are reviewed by the City Engineer, or authorized designee, in accordance with the process below:

- **Small Cell Facility Minor Installation Permit** – installations on existing third-party infrastructure-applications shall comply with regulation and documentations/permissions as set forth by federal, state, and City standards. Applications shall clearly denote the below outlined requirements. The review period for applications will be 60 days following reception of completed application.

- **Small Cell Facility Major Installation Permit** – installations on existing City-owned infrastructure or proposed new infrastructure – applications for compliant sizes, locations, and aesthetics with necessary supportive documentation permissions as set forth by Federal, State, and City standards. The review period for applications will be 90 days following reception of completed application.

Application Requirements
Complete Licensee applications for both Small Cell Facility Minor and Small Cell Facility Major Installations shall include the following materials:

1. Aerial vicinity map showing the location of the existing and/or proposed wireless support structure to which the Small Cell facility will be attached.

2. Street view image or photographs showing existing and proposed site conditions including all proposed Small Cell facility infrastructure.

3. Scaled engineered plans or drawings, prepared by a professional engineer licensed in the State of Oregon, showing at a minimum:
   a. The height of a wireless support: Small Cell Facilities height as defined by the FCC
      i. The overall height of the wireless support structure and Small Cell facility, including shrouding and concealment.
      ii. Existing wireless support structure: the increase in height due to the collocated antenna, including shrouding and concealment, height at which all Small Cell wireless telecommunication facility equipment is placed, clearance requirements to other attached utilities denoting each clearance regulated by OJUA and NESC.
   b. The height from the base of the wireless support structure to the lowest point proposed Small Cell facility equipment to be installed on the structure.

c. The distance from the outer edge of the wireless support structure parallel to the outer edge of all equipment associated with the Small Cell facility to be installed on the structure.

4. Structural analysis, prepared and stamped by a professional engineer licensed in the State of Oregon, shall include evaluation of the existing and/or proposed wireless support structure and foundation structurally adequate to safely support the proposed Small Cell wireless facilities and comply with NESC for structural stability to determine whether the structure can carry the proposed Small Cell wireless facility and comply with applicable NESC and structural safety code.

5. Engineered plans shall show the right-of-way lines, property lines, proposed utilities (above and below grade), and existing curbs, driveways, sidewalks, streets, paths, buildings, and structures. Any conflicts with existing infrastructure shall be noted, along with a description of how the conflicts will be resolved.

6. Engineered details of proposed Small Cell facilities, including elevations/profiles, plans and sections, clearly indicating the following:
   a. Height, width, depth, and volume (in cubic feet) of all proposed antenna and exposed elements and/or proposed antenna enclosures.
   b. Height, width, depth, and volume (in cubic feet) of proposed wireless equipment associated with the facility Including electric meters, concealment elements, telecommunications demarcation boxes, grounding equipment, power transfer switches, cut-off switches, and vertical cable runs for the connection of power and other services as applicable.
   c. Method of installation/connection.
   d. Color specifications for proposed wireless support structures and associated exposed equipment, cabinets, and concealment elements.
   e. Electrical plans and wiring diagrams.
   f. Footing and foundation drawings and structural analysis, sealed and signed by a professional engineer licensed in the State of Oregon.

7. Permission to use utility pole or alternative antenna structure: The operator of a Small Cell wireless telecommunication facility shall submit to the City a copy of the written approval from the owner of an existing utility pole, monopole, or an alternative antenna structure, to mount the Small Cell wireless telecommunication facility on that specific pole, tower, or structure, prior to issuance of the City permit.

8. Manufacturer's specification sheets for proposed Small Cell facility equipment, including wireless support structures, equipment cabinets, shrouds or concealment devices, antennas, meters, radios, switches, telecommunications demarcation boxes, and grounding equipment.

9. For removal of wireless support structures or ground-mounted equipment, an engineered drawing that shows the item(s) being removed and the details of restoration to be completed. Restoration shall be completed in accordance with the applicable City of Oregon City Municipal Code and shall restore the site to pre-construction conditions.

10. Letter stating the Applicant has performed an analysis to verify that the Small Cell facility will not cause any interference with City public safety radios, traffic signal light system, or other communications equipment. It shall be the responsibility of the Operator to evaluate the

compatibility between the existing City infrastructure and the Operator's proposed infrastructure.

11. A traffic control plan, in accordance with the requirements of the *Manual of Uniform Traffic Control Devices*.

Applications shall include all materials as listed. Additionally, the City may require significant analysis of the impacts and/or replacement of Small Cell Major installations. The City reserves the right to deny, when in the public's best interest, the installation of Small Cell facilities attached to City infrastructure. Macro-Sites are not allowed within the City Public Rights-of-Way. The review period for Small Cell Facility Major installation applications will be 90 days following reception of completed application.

Standards

Licensees or other such entities shall obtain applicable City permit(s) and comply with applicable Oregon City Municipal Code.

1. *Number limitation:*
   a. maximum of one Small Cell wireless facility shall be attached to an alternative antenna structure.
   b. maximum of one Small Cell wireless antenna shall be installed as part of one Small Cell wireless facility.

2. *Separation and clearance requirements.* A Small Cell wireless telecommunications antenna shall be separated from:
   a. An existing residential structure by a minimum horizontal distance of the total above-ground height of the pole or structure that the antenna is attached to, and
   b. Small Cell wireless telecommunication antenna installed and maintained by the same licensee shall be a minimum of 300 horizontal feet apart.

3. *Locations*: The City reserves the right to deny, when in the public's best interest, the deployment of Small Cell wireless telecommunication facilities within the public rights-of-way. Providers shall provide engineered coverage maps showing coverage laps in areas where location priorities, set below, are bypassed. Small Cell installations triggering the bypass of the below priorities will be considered Small Cell Major Installations, and Licensees will be required to provide additional information justifying the need of facilities at proposed locations.

   Licensees shall install facilities according to priority sets below:
   a. Street Classification
      1. Expressway
      2. Major Arterial
      3. Minor Arterial
      4. Collector
      5. Local

   b. Support Structure
      1. Third Party Utility Pole
      2. Third Party Street Light

3. City-Owned Infrastructure

c. Prohibited locations
   1. Municipal Elevator
   2. City owned decorative street lighting
   3. City Scenic Views
   4. Street Frontage along Historical Points
   5. Signage support structures

If licensee requests to bypass Street Classification or Support Structure priorities, the City will take consideration of existing infrastructure and locations and will review requests and applications in compliance with Standards and FCC regulations. Small Cell Facility Major Installation review criteria shall apply.

4. *Attachment limitations:*
   a. ***Small Cell wireless telecommunication antenna –*** attached to a support structure within the public rights-of-way shall have a maximum surface area of 3 cubic feet.

   b. ***Small Cell wireless telecommunication facilities –*** total combined volume of all above-ground equipment comprising a Small Cell wireless telecommunication facility, exclusive of the antenna, shall be a maximum of 28 cubic feet.

   c. ***Small Cell Wireless telecommunication equipment –*** shall locate the base of the facilities at a height in compliance with National Electric Safety Code, Americans with Disabilities Act, and Oregon City Municipal Code. Equipment shall be placed in the usable space and shall not inhibit the use of the Right-of-Way by City residents in any way.

   d. ***Height –*** The highest point of the antenna shall extend no more than seven feet above the highest point of the utility pole, alternative antenna support structure, tower or City-owned infrastructure. A replacement or new utility pole, alternative support structure, third party utility pole, or City-owned infrastructure shall be no more than ten percent higher than an existing adjacent pole or a maximum of the zoning designated height allowance, in height above the ground surface, whichever height is the lesser of the two.

   e. ***Color –*** A Small Cell wireless telecommunication facility, including all related equipment and appurtenances, shall be a color that matches the pole, blends with the surroundings of the pole, structure tower, or infrastructure on which it is mounted, and uses non-reflective materials.

   f. **Wiring** – All connections and wiring shall be shrouded.

   g. Providers shall not attach or mount any Small Cell Wireless telecommunication equipment onto aerial cable spans.

   h. All Small Cell wireless telecommunication equipment shall be located to avoid any physical or visual obstruction to pedestrian or vehicle traffic, or in any manner create safety hazards to pedestrians, bicyclist, or motorists.

5. *Electrical Service*: Service providers shall be responsible for electrical service coordination to wireless facility. Providers shall not receive power via metered service used to supply power to any street light or other City-owned infrastructure. All electrical service equipment shall match the attaching structure. Electric meters and disconnects shall be located per NESC and NEC code. Providers shall not install generators in the public rights-of-way. All Communication Facilities installed on private property will require review per Oregon City Municipal Standards 17.80 Communication Facilities.

6. *Signage*: Small Cell wireless telecommunication equipment shall not have any signage other than required federal law identification markings.

7. *Noise Reduction*: Noise-generating equipment shall be baffled to reduce sound level measured at the property line to the following levels, except during short durations for testing and operations of generators in emergency situations:
   a. For any property where no adjacent parcel is zoned residential, the sound level at the property line shall not be greater than fifty dB;
   b. For all other cases, the sound level shall not be greater than forty dB when measured at the nearest residential parcel's property line.

8. Lighting: All lights shall be shrouded.

9. *Screening*: Shall be natural landscaping material subject to the approval of the City and shall comply with all codes, standards and regulations of the City. Provider shall shroud all wiring, connections, and Small Cell wireless telecommunication equipment.

10. *Abandonment and removal:* A Small Cell wireless telecommunication facility located within the corporate limits of the City that is not operated for a continuous period of 12 months, shall be considered abandoned and the owner of the facility, at the owner's sole expense, shall be responsible for the removal of the facility, including its antenna and equipment, within 30 days of receipt of written notice from the City notifying the owner of such facility abandonment. Such notice shall be sent by certified or registered mail, return-receipt-requested, by the City to such owner at the last known address of such owner.

11. Placement: No facilities shall be located on sidewalk, bike lane, or street pavement. Facilities shall not inhibit the transportation or access of Oregon City residents to any City-owned Rights-of -Way. Facilities shall be mounted to support structures.

12. Small Cell wireless telecommunication equipment and facilities shall comply with National Electric Safety Code, Americans with Disability Act, Oregon City Small Cell Design and Construction Guidelines for Public Rights-of-Way.

Small Cell Wireless/5G
An Oregon City Perspective

Presented by Dante Posadas

ROW and Construction Services

September 19, 2018

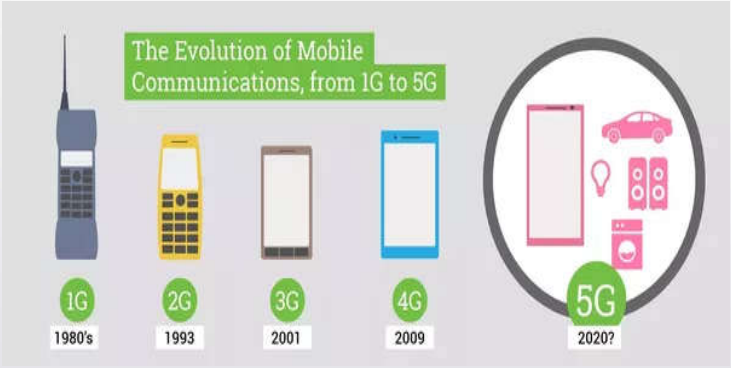
1

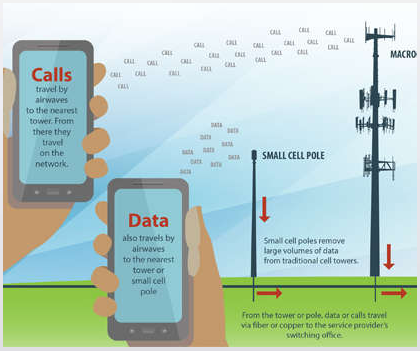
Major Points

- Telecommunication Industry Changes (5G)
- Wireless Networks – Small Cell and Macro Sites
- Governing Bodies and Legislation
- Impacts on Oregon City
- Planned Action

2

5G Capabilities and Needs





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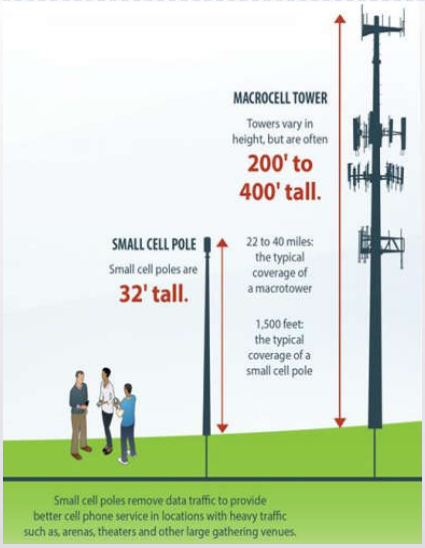
Macro Cells vs. Small Cell



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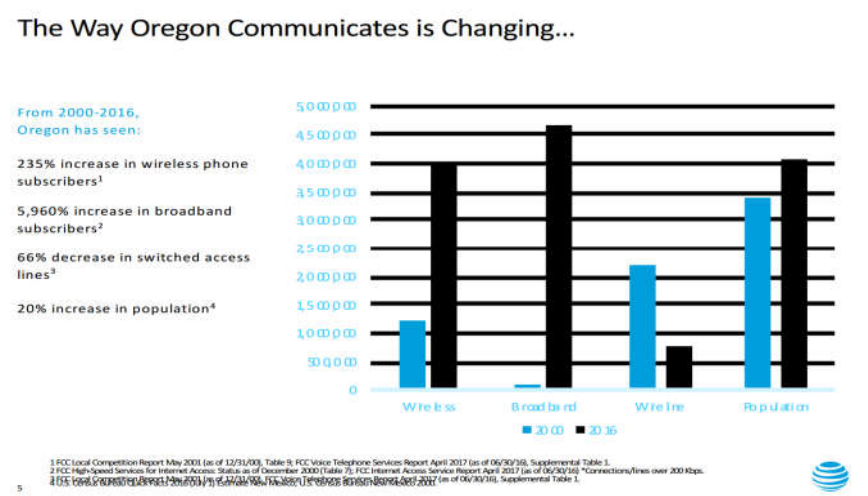
Wireless Network Growth



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Wireless Networks in Oregon City

Current ROW users

- AT&T
- Verizon
- Comcast
- CenturyLink

Current Private Property Macro site users

- AT&T
- Verizon
- Sprint
- T-Mobile
- Cricket Wireless

6

Small Cell Legislation

United States Congress

- June 28, 2018--S.3157-Streamline Small Cell Deployment Act

Federal Communications Commission

- January 31, 2017- Broadband Deployment Advisory Committee
- September 5, 2018- Accelerating Wireless Broadband deployment

National Conference of State Legislatures

- 20 States have enacted legislation

National Governors Association

- July 27, 2018--https://www.nga.org/letters-nga/streamline-small-cell-deployment/

National League of Cities

- Model code August 2018

National Association of Telecommunication Officers and Advisors

7

Oregon City Code

Oregon City Municipal Code 13.24 - Telecommunication Facilities

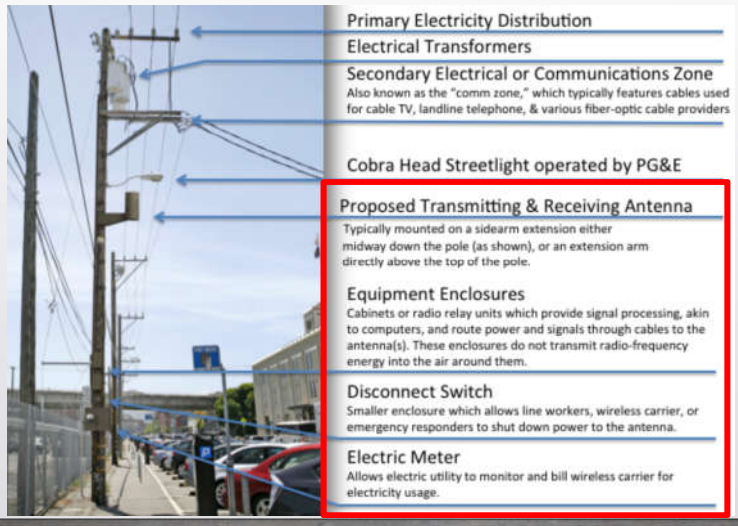
- Permit and manage access to City's ROW
- Fair and reasonable compensation
- Public safety, health and welfare
- Encourage competitive and advancing utility services
- Comply with Oregon City Code, State, and Federal Law

Oregon City Municipal Code 17.80 - Communication Facilities

- Promote maximum utilization and colocation
- Minimal impacts on community, views, and historical areas
- Existing infrastructure use
- Encourage location in non-residential areas

8

Small Cell Installations



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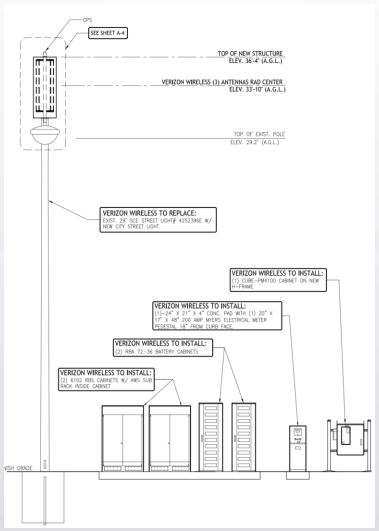
Standards

- Location
- Zoning
- Street classifications
- Infrastructure
- Permissions
- Permits
- Removal



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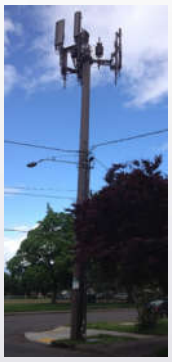
Typical Installations

Portland, Oregon

Antenna Canister

Monopole Shrouded



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Usage Fees

Oregon City Current
Communications
5% gross revenue
Attachment Fee $5,000

Other Agency Fees

San Jose, California
$2,600 - $17,750 annual; 3% annual escalation

Eugene, Oregon
$600 quarterly; 5 yr. term; 3% annual escalation

Portland General Electric – Attachment Fee

Oregon City Considerations for Future Fees
Communications 5% Gross Revenue

Attachment Fee
- Municipality Comparison
- Antenna & Ground Equipment Size
- Capacity Output
- Radio Frequency Propagation Maps
- Residential Zone Classification
- Review & Processing Permit Fee

12

Oregon City – Next Steps 6-12 months

- Implement Reasonable, Fair Management of the ROW
- Establish Small Cell Code
- Establish Small Cell Standards within ROW
- Establish Usage Fee Resolution Consistent with Neighboring Oregon Municipalities

13

Questions?

14

References

- Slide 1: graphic credit http://siouxfalls.business/data-service-slow-big-crowds-sdn-fixing/
- Slide 2: graphic credit: https://www.quora.com/Where-I-can-start-to-learn-about-2G-3G-4G-and-5G
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Resolution 19-02 Amending the Rights-of-Way Fee Schedule to include fee provisions for Small Cell Facilities installed in the Public Rights of Way and within the City of Oregon City

RECOMMENDED ACTION (Motion):
Amend Resolution 13-26 and Resolution 14-10 governing Rights-of-Way (ROW) usage fees and establish Resolution 19-02 ROW Usage Fees Schedule including fees for Small Cell facility Rights of Way usage.

Background

Small Cell management and deployment within Oregon City Public Rights-of-Way (ROW) was introduced during the September 19, 2018, City Commission meeting. At that time, staff provided an update to the establishment of standards and fees for reasonable management of Small Cell facilities within Oregon City ROW.

Under the direction of the City Commission, City staff invested time into understanding industry needs, federal regulations, and Oregon City historical data compiled regarding utility use of City rights-of-way. City staff found the following information.

Industry projects a 50% increase in deployment of Small Cell facilities between 2018-2020. An estimation of 40% of telecommunication providers will have 100-350 small cells per square mile by 2020. The use of data processing and wireless communication devices has skyrocketed. Industry projects a $275 billion investment in the nation's 5G network capabilities.

The telecommunication industry, a changing/advancing utility, has become a vital part of building prosperous communities. The demand for data processing capacity has led industry to seek solutions in Small Cell deployments along Oregon City's ROW. Pursuant to the changing demands of the telecommunication industry, the Federal Communication Commission published new rulings on January 14, 2019, setting guidelines for municipality public rights-of-way usage fees.

Oregon City staff has reviewed the industry needs and the federal regulations in a reasonable look at the impact of the utility industries within Oregon City ROW. Staff has reviewed the revenue, permitting, expenses, and resources allocated to the rights-of-way management and facility deployment over a five-year period.

Resolution 19-02 includes a new Usage Fee Schedule that retains the various utility service usage fees as previously established and establishes the Small Cell Facility usage fees as proposed in this recommended action. The Small Cell usage fee is $1,850 per year per attachment. Staff evaluated and determined the usage fee to be a reasonable approximation of impacts on City resources and the needs of the growing, changing industries within Oregon City Public Rights-of-Way.

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The attached Rights-of-Way Usage Fee Schedule (Exhibit A) outlines the changes in the usage fees for Small Cell deployments in City Public Rights-of-Way. In addition to the annual Small Cell ROW attachment fee, Resolution 19-05, also being presented for consideration by the City Commission, includes one-time construction permit fees to cover the cost of deployment of Small Cell installations. Oregon City staff recommends the adoption of Resolution 19-02 in compliance with both State and Federal regulations for Small Cell uses within the public rights of way.

BUDGET IMPACT:

Amount: Varies annually depending on industry deployment of Small Cell in Oregon City; General Fund and Engineering Fund.

RESOLUTION NO. 19-02

AMEND THE RIGHTS-OF-WAY USAGE FEE RATES WITHIN THE CITY OF OREGON CITY

WHEREAS, the City of Oregon City has statutory and constitutional authority to manage its Rights-of-Way ("ROW") in accordance with Oregon Revised Statutes 221.510 Municipal Regulation of Telecommunication Carriers, and

WHEREAS, on November 6, 2013, the City enacted Ordinance No. 13-1014 which established Chapter 13.34 of the Oregon City Municipal Code, Utility Facilities in Public Rights-of-Way, and exercised the City's authority to secure compensation to the City and its residents for utility use of the ROW ("Ordinance"), and

WHEREAS, on November 20, 2013, the City adopted Resolution No. 13-26, which set ROW registration, licensing, and usage fees for various utility use of the City's ROW including usage rates for electric utilities, natural gas utilities, communication utilities, cable utilities, water utilities, sanitary utilities, storm utilities and attachments; and

WHEREAS, on November 19, 2014, the City adopted Resolution No. 14-30, amending Resolution 13-26 Rights of Way usage rates for electric and natural gas utilities; and

WHEREAS, on January 14, 2019, the regulatory rulings of the Federal Communication Commission became effective regarding the City's authority to regulate Small Cell facilities in the ROW. These rulings established state and local government authority to adopt usage fees and aesthetic requirements for Small Cell deployment and management as a reasonable approximation of the cost for processing applications and managing deployments in the right-of-way; and

WHEREAS, City staff seeks to clarify the ROW Usage Fee by consolidating Resolution No.13-26 and Resolution No. 14-30; affirming established ROW usage fee rates per utility service sector; and reducing attachment fees reflecting Federal Communication Commission ruling of reasonable approximation of deployment and management of Small Cell attachments.

NOW, THEREFORE, OREGON CITY RESOLVES AS FOLLOWS:

Replace usage fee rates identified in Resolution No. 13-26 and Resolution No. 14-30 as follows:

Section 1. The City Commission of Oregon City authorizes the Rights of Way Usage Fee Schedule as attached pursuant to OCMC 13.34 and OCMC 13.24;

Section 2. Rights of Way usage minimum fees shall increase annually at 3% from minimum fees established and increased since January 1, 2015. Rights of Way annual attachment fees proposed in Resolution 19-02 shall increase 3% annually on January 1, 2020.

Section 3. This Resolution shall be in full force and effect upon its adoption by the Commission.

Approved and adopted at a regular meeting of the City Commission held on the 20th day of February 2019.

Dan Holiday, Mayor

Attested to this 20th day of February 2019:

Kattie Riggs, City Recorder

Approved as to legal sufficiency:

City Attorney

City of Oregon City

Public Works

Rights of Way Usage Fee Schedule

February 20, 2019

Registration		
Utility Service	**Rate**	**Fee Description**
License	5 year Term	$50
Registration	Annual	$50

Annual Usage Fee		
Utility Service	**Rate**	**Fee Description**
Electric	Annual	5% of Gross Revenue
Natural Gas	Annual	5% of Gross Revenue
Communications	Annual	5% of Gross Revenue
Cable	Annual	5% of Gross Revenue
Water	Annual	6% of Gross Revenue
Sanitary Sewer	Annual	6% of Gross Revenue
Storm Sewer	Annual	6% of Gross Revenue

Attachment Fee		
Utility Service	**Rate**	**Fee Description**
Small Cell Facility Minor **Small Cell Facility Major (installations)**	Annual/Per facility	$1,850
Attachment (non-small cell attachments)	Annual/Per facility	$5,000

Minimum Annual Licensee Fees	
Linear Feet of Utility Facilities in Public	**Minimum Annual Fee**
Up to 5,000	$5,796.37
5,001 to 10,000	$8,694.56
10,001 to 20,000	$11,592.74
More than 20,000	$17,389.11

*For any Utility Operator that does not earn gross revenue within the City: $2.75 per foot of Utility Facilities in the Right of Way (as these terms are defined in OCMC Chapter 13.34.050).

“Gross revenue” means any and all revenue, of any kind, nature or form, without deduction for expense, less net uncollectible, derived from the operation of utility facilities in the City, subject to all applicable limitations in federal or state law.

Utility Providers shall comply with OCMC Chapter 13.34 Utility Facilities Within Public Rights of Way and Chapter 13.24 Telecommunication Facilities.

RESOLUTION NO. 13-26

A RESOLUTION TO ESTABLISH THE RIGHT OF WAY USAGE FEE RATES AND APPLICATION FEES FOR PUBLIC UTILITIES OPERATING WITHIN THE CITY OF OREGON CITY RIGHTS OF WAY

OREGON CITY MAKES THE FOLLOWING FINDINGS:

WHEREAS, the City of Oregon City has statutory and Constitutional authority to manage its Right of Way ("ROW"), and

WHEREAS, on November 6, 2013, the City enacted Ordinance No. 13-1014 which establishes Chapter 13.34 of the Oregon City Municipal Code, Utility Facilities in Public Rights Of Way, and exercises the City's authority to secure compensation to the City and its residents for utility use of the ROW ("Ordinance"), and

WHEREAS, the Ordinance establishes certain application fees to cover the City's costs related to such applications; and

WHEREAS, the City finds that it is in the public interest to establish the rates and fees set forth below.

NOW, THEREFORE, OREGON CITY RESOLVES AS FOLLOWS:

Section 1. The Registration Fee established in OCMC 13.34.060.D shall be $50.00:

Section 2. The License Application Fee established in OCMC 13.34.070.C shall be $50.00.

Section 3. The rates of the Right of Way Usage Fee established in OCMC 13.34.130.A shall be as follows, to the extent permitted under applicable law:

Annual Fee Rate:

UTILITY SERVICE	ROW USAGE FEE RATE
Electric	3.5% of gross revenue
Natural Gas	3.0% of gross revenue
Communications	5% of gross revenue; For any Utility Operator that does not earn gross revenue within the City: $2.75 per foot of Utility Facilities in the Right of Way (as these terms are defined OCMC 13.34.050)
Cable	5% of gross revenue
Water	6% of gross revenue
Sanitary Sewer	6% of gross revenue
Storm Sewer	6% of gross revenue

"Gross revenue" means any and all revenue, of any kind, nature or form, without deduction for expense, less net uncollectibles, derived from the operation of utility facilities in the City, subject to all applicable limitations in federal or state law.

Minimum Annual Fee:

A utility operator shall pay the Minimum Annual Fee set forth below, based on the total linear feet of Utility Facilities in the Right of Way (as these terms are defined OCMC 13.34.050), instead of the Annual Fee Rate set forth above if the Minimum Annual Fee is greater than the fee calculated using the Annual Fee Rate.

TOTAL LINEAR FEET OF UTILITY FACILITIES IN RIGHT OF WAY	MINIMUM ANNUAL FEE
Up to 5,000	$5,000.00
5,001 to 10,000	$7,500.00
10,001 to 20,000	$10,000.00
More than 20,000	$15,000.00

The Minimum Annual Fee set forth above shall increase 3% annually on January 1st of each year beginning January 1, 2015.

Section 4. The rate of the Attachment Fee established in OCMC 13.34.130.B shall be $5,000 per attachment. The attachment fee shall increase 3% annually on January 1st of each year beginning January 1, 2015.

Section 5. This Resolution shall be in full force and effect upon its adoption by the Commission.

Approved and adopted at a regular meeting of the City Commission held on the 20th day of November 2013.

DOUG NEELEY, Mayor

Attested to this 20th day of November 2013.

Nancy Ide, City Recorder

Approved as to legal sufficiency:

City Attorney

RESOLUTION NO. 14-30

A RESOLUTION TO AMEND THE RIGHT OF WAY USAGE FEE RATES FOR CERTAIN PUBLIC UTILITIES OPERATING WITHIN THE CITY OF OREGON CITY RIGHTS OF WAY

OREGON CITY MAKES THE FOLLOWING FINDINGS:

WHEREAS, the City of Oregon City has statutory and constitutional authority to manage its Right of Way ("ROW"), and

WHEREAS, on November 6, 2013, the City enacted Ordinance No. 13-1014 which establishes Chapter 13.34 of the Oregon City Municipal Code, Utility Facilities in Public Rights Of Way, and exercises the City's authority to secure compensation to the City and its residents for utility use of the ROW ("Ordinance"), and

WHEREAS, on November 20, 2013, the City adopted Resolution No. 13-26, which set ROW usage fees for various utilities use of the City's ROW, including rates for electric utilities and natural gas utilities; and

WHEREAS, the City wishes to change the ROW of usage fees for certain utilities, in particular, electric utilities and natural gas utilities.

NOW, THEREFORE, OREGON CITY RESOLVES AS FOLLOWS:

Section 1. The ROW usage fee rate for electric utilities shall rise from 3.5% of gross revenue to 5.0 percent of gross revenue.

Section 2. The ROW usage fee rate for natural gas utilities shall rise from 3.0% of gross revenue to 5.0 percent of gross revenue.

Section 3. The ROW usage fee rates for all utilities other than the utilities identified in Sections 1 and 2 of this resolution shall remain the same as previously established in Oregon City Resolution No. 13-26. This resolution makes no other changes to any other portion of Resolution No. 13-26.

Section 4. The rates of the Right of Way Usage Fee, as amended by this resolution shall be as follows:

Annual Fee Rate:

UTILITY SERVICE	ROW USAGE FEE RATE
Electric	5% of gross revenue
Natural Gas	5% of gross revenue
Communications	5% of gross revenue; For any Utility Operator that does not earn gross revenue within the City: $2.75 per foot of Utility Facilities in the Right of Way (as these terms are defined OCMC 13.34.050)
Cable	5% of gross revenue
Water	6% of gross revenue
Sanitary Sewer	6% of gross revenue
Storm Sewer	6% of gross revenue

"Gross revenue" means any and all revenue, of any kind, nature or form, without deduction for expense, less net uncollectibles, derived from the operation of utility facilities in the City, subject to all applicable limitations in federal or state law.

Section 5. The revised ROW usage fee rate for electric utilities and natural gas utilities shall take effect 90 days from the adoption of this resolution.

Approved and adopted at a regular meeting of the City Commission held on the 19th day of November 2014.

DOUG NEELEY, Mayor

Attested to this 19th day of November 2014:

Nancy Ide, City Recorder

Approved as to legal sufficiency:

City Attorney

OREGON CITY

Public Works

Resolution No. 19-05 Modifying Public Works Engineering Fees Schedule and Amending Resolution No. 18-16

625 Center Street | Oregon City OR 97045
Ph (503) 657-0891 | Fax (503) 657-7892

RECOMMENDED ACTION (Motion):
Adopt Public Works Engineering Fees Schedule with additional new fees and amending Resolution No. 18-16

BACKGROUND:
The City adopted Resolution No. 18-16 establishing a schedule of permit fees for Public Works Engineering which included all engineering fees previously adopted by resolutions, and established a consistent method to adjust these fees on an annual basis to account for inflation. The previously adopted Resolution No. 18-16 and other resolutions established fees that are necessary to defray the Public Works Engineering Division's actual operational costs.

Staff recommends to modify the Public Works Engineering Fees schedule, Exhibit A, which includes all engineering fees previously adopted by resolutions; proposes additional fees as described in Exhibit B; and continues to include an adjustment provision to adjust these fees on an annual basis to account for inflation.

Staff recommends adopting this resolution to recover, to the extent practicable, the actual cost of providing Public Works Engineering Services to facilitate the issuing of permits for construction of various public and private infrastructure, including the private Small Cell Facility infrastructure, per the City of Oregon City standards.

With adoption of Exhibit A, the Public Works Engineering Fees schedule shall become effective February 20, 2019.

BUDGET IMPACT:
Amount: N/A
FY(s): N/A
Funding Source: N/A

A RESOLUTION MODIFYING THE PUBLIC WORKS ENGINEERING FEES SCHEDULE AND AMENDING RESOLUTION NO. 18-16

WHEREAS, the City of Oregon City adopted Resolution No. 18-16 establishing a schedule of permit fees for Public Works Engineering which included all engineering fees previously adopted by resolutions, and established a consistent method to adjust these fees on an annual basis to account for inflation; and

WHEREAS, the City of Oregon City has adopted Resolution No. 18-16 and other resolutions establishing fees that are necessary to defray the Public Works Engineering Division's actual operational costs; and

WHEREAS, the City of Oregon City desires to modify the Public Works Engineering Fees schedule, Exhibit A, which includes all engineering fees previously adopted by resolutions; proposes additional fees as described in Exhibit B, Fee Explanation; and continues to include an annual adjustment to adjust these fees to account for inflation; and

WHEREAS, the City of Oregon City, City Commission resolves that the City should recover to the extent practicable, the actual cost of providing Public Works Engineering Services to facilitate the issuing of permits for construction of various public and private infrastructure per the City of Oregon City standards.

NOW, THEREFORE, THE CITY OF OREGON CITY RESOLVES AS FOLLOWS:

Section 1. The City hereby adopts Exhibit A, Public Works Engineering Fees schedule, to become effective February 20, 2019, with the additional new fees as described in Exhibit B, Fee Explanation.

Section 2. The Public Works Engineering Fees Schedule, Exhibit A, shall continue to be adjusted annually to account for inflation on January 1st. The adjustment to account for inflation shall be based on changes in the CPI-W for the Pacific Division of the West Region.

Approved and adopted at a regular meeting of the City Commission held on the 20th day of February 2019.

DAN HOLLADAY, Mayor

Attested to this 20th day of February, 2019:

Kattie Riggs, City Recorder

Approved as to legal sufficiency:

City Attorney

Attachments: Exhibit A - Public Works Engineering Fees Schedule; Exhibit B - Description of Additional Fees

City of Oregon City
Public Works

Engineering Fee Schedule

Proposed Effective ~~**January 1, 2019**~~ **February 20, 2019**

Fee/Engineering Service/Permit Type	Fee Description	Rate	Fee
Erosion & Sediment Control SFR Permit (Application, Plan Review, Inspection)	Regular	Flat	$262
	Reduced w/ Certification	Flat	$201
Erosion & Sediment Control Non-SFR Permit (Application, Plan Review, Inspection)	Regular (1 acre or less)	Flat	$695
	Reduced w/ Certification (1 acre or less)	Flat	$385
	PLUS, each additional acre or fraction therof	Per Unit	$123
Engineering Services for Building Permits	Engineering Site Plan Review for Building Permit	Flat	$82
	Inspection for Public Sidewalk and Driveway Approach for single family subdivision lot Building Permit	Flat	$162
Public Utility Service Permit	Application for Public Water Service Line, Sanitary Sewer or Stormwater Service Laterals	Flat	$52
	Plan Review	Flat	$111
	Utility Inspection	Flat	$162
	Pavement Cut & Restoration Inspection	Flat	$27
	Utility Permit Sidewalk Repair Inspection	Flat	$27
	Utility Permit Driveway Approach Repair Inspection	Flat	$27
	Utility Re-Inspection	Flat	$82
	Sanitary Sewer Service Lateral Launch Video Inspection by City per Customer request	Flat	$228
	Sanitary Sewer Service Tap Video Inspection at Public Main Line Connection	Flat	$228
Public Street Driveway Approach Permit	Application	Flat	$52
	Plan Review	Flat	$111
	Inspection	Flat	$162
	Re-Inspection	Flat	$82
Public Street Sidewalk Permit	Application and Plan Review	Flat	$52
	Inspection	Flat	$111
	Re-Inspection	Flat	$82
Public Street Sidewalk Group Permit	Application (one contractor for multiple sidewalk panel replacements along one block of street frontage, block length shall be a maximum length of 500 feet)	Flat	$52
	Plan Review	Flat	$111
	Inspection	Flat	$162
	Re-Inspection	Flat	$82

Fee/Engineering Service/Permit Type	Fee Description	Rate	Fee
Grading Permit (Filling, Grading, Excavating, including temporary material stockpile)	Application, Plan Review and Site Monitoring (*Engineer's Final Cost Estimate when applicable)	Flat Fee Plus Percentage	$284 plus 2.5% of cost estimate*
Public Improvements Development Engineering Services (Street, Water, Sanitary Sewer, Stormwater)	5% of Engineer's Final Cost Estimate (2.5% Technical Plan Review Fee for First through Third Technical Plan Reviews plus 2.5% Inspection Fee)	Percentage	5% of cost estimate
	Additional Technical Plan Review Fee for every plan review beyond the third Technical Plan Review. 0.5% added to 2.5% Technical Plan Review Fee for each additional Plan Review after the Third Plan Review	Percentage	0.5% of cost estimate
Geotechnical Review	For Waiver Review Process	Flat	$642
	City Peer Review of Geotechnical Documents (Reports, Plans, Other)	Actual Cost	Actual Peer Review cost
Stormwater Management Peer Review	City Peer Review of Engineered Method to Calculate Size of Stormwater Management Facilities	Actual Cost	Actual Peer Review cost
Temporary Obstruction in ROW Permit	Application and Plan Review	Flat	$27
	Inspection	Flat	$27
Long Term Obstruction in ROW with Revocable ROW Permit	Application	Flat	$52
	Plan Review	Flat	$111
	City Resolution and Document Process	Flat	$217
	Revocable ROW Permit	Flat	$162
City Resolution and Document Processing	City Resolution and Document Processing	Flat	$217
Document Processing and Recording Fee	Record one document at one time	Flat	$296
	record each additional document at same time with first document	Flat	$168
Plat Review	Partition	Flat	$560
	Subdivision	Flat	$784
	Planned Development	Flat	$2,034
Vacation of Public Rights-of-Way or Public Easements	Public Right-of-Way	Flat	$1,081
	Public Easement	Flat	$638
Special Event ROW Permit	Application and Review	Flat	$162
	ROW Inspection for use of ROW during Special Event	Flat	$162
Renewable ROW Permit (outdoor seating, monitoring wells, other)	Application, Review and Inspection	Flat	$162
ROW Permit General - Minor - work outside of travel ways and no vehicular traffic control	Application, Review and Inspection	Flat	$162
ROW Permit General - Moderate work within travel ways and not requiring Technical Plan Review	Application and Plan Review	Flat	$162
	Inspection	Flat	$162

Fee/Engineering Service/Permit Type	Fee Description	Rate	Fee
ROW Permit General - Major - work in ROW requiring Technical Plan Review	Application, Technical Plan Review and ROW Inspection is Flat Fee plus 2.5% of Engineer's Final Cost Estimate	Flat Fee Plus Percentage	$284 plus 2.5% of cost estimate
Small Cell Facility - Minor Installation (on Existing Third Party Utility Structure)	Application, Review and Inspection	Flat	$750
Small Cell Facility - Major Installation (on City Utility Structure or Proposed New Structure) (requires Technical Plan Review)	Application, Technical Plan Review and Inspection - Flat Fee plus actual cost over Flat Fee plus 15% Administrative Fee	Flat Fee Plus Actual Cost over Flat Fee Plus Administrative Cost Percentage	$750 plus actual cost over Flat Fee Plus Administrative Fee
ROW Licensee Major Installation - Fiber, Cable, Natural Gas, Electric, Telecommunications (does not include Small Cell Facility) requires Technical Plan Review	5% of Engineer's Final Cost Estimate (2.5% Technical Plan Review Fee for First through Third Technical Plan Reviews plus 2.5% Inspection Fee)	Percentage	5% of cost estimate
	Additional Technical Plan Review Fee for every plan review beyond the third Technical Plan Review. 0.5% added to 2.5% Technical Plan Review Fee for each additional Plan Review after the Third Plan Review	Percentage	0.5% of cost estimate
Film Permit	ROW Inspection for use of ROW during filming	Flat	$162
	Usage fee for using City facilities' sanitary sewer during filming	Flat	$35
	Usage fee for using City facilities' water during filming	Flat	$35

OREGON CITY

Public Works Engineering Division

625 Center Street | Oregon City OR 97045

Exhibit B:
Fee Explanation for Public Works Engineering Fees, Resolution 19-05

The following provides brief explanation of proposed changes to the Public Works Engineering Fees.

Currently, the Public Works Engineering Development Services Group provides plan review services for Building Permits and Engineering Construction Services Group provides inspection services for public sidewalk and driveway approach for single family subdivision Building Permits.

- For Building Permits requiring the following Engineering plan review and/or inspection, then these fees apply:
  - $82 for Engineering Site Plan Review Fee for Building Permit
  - $162 for Inspection Fee for Public Sidewalk and Driveway Approach for single family subdivision lot Building Permit

Currently, the Public Works Operations Sanitary Sewer Group provides a sanitary sewer service lateral launch video inspection service to a customer requesting this service to be provided for their sanitary sewer service lateral.

- For Public Utility Service Permits that a customer requests the services from the City for a lateral launch video inspection, then this fee would apply:
  - $228 video inspection fee for Sanitary Sewer Service Lateral Launch Video Inspection by City per Customer request

Clarifications were made for the Public Improvements Development Engineering Services with adding some clarification language to the existing fee description (shown on Exhibit A in red text).

Currently there are Special Event Permits issued for events that require Public Works Engineering Construction Services to make Right-of-Way (ROW) inspections because the special event is using the ROW.

- For Special Event Permits that include use of the ROW that requires a ROW inspection, then this fee would apply:
  - $162 for ROW Inspection for use of ROW during Special Event

Currently, the Public Works Engineering Development Services and Construction Services Groups provide plan review and inspection services for ROW encroachments and/or work in the ROW that is not for construction of public infrastructure or permitted private infrastructure, and therefore is permitted as “General ROW” work that is identified as minor, moderate, or major depending on the proposed work in the ROW, the level of impact to the ROW, and the level of plan review and inspection services needed for the “General ROW” permit.

- For proposed projects in the ROW that are categorized as “General,” then a determination is made for whether the permit is minor, moderate, or major as follows and will have the following fees applied as follows:

- ROW Permit General – Minor: work outside of travel ways and no vehicular traffic control; Flat Fee of $162 for Application, Review, and Inspection
- ROW Permit General – Moderate: work within travel ways and not requiring Technical Plan Review; Flat Fee of $162 for Application and Plan Review and Flat Fee of $162 for Inspection
- ROW Permit General – Major: work in ROW requiring Technical Plan Review; Application, Technical Plan Review and ROW Inspection is Flat Fee of $284 plus 2.5% of Engineer's Final Cost Estimate for work in ROW

Currently, the Public Works Engineering Development Services and Construction Services Groups propose to provide plan review and inspection services for construction of private Small Cell Facilities in the ROW. “Small Cell Facility” work is identified as minor or major depending on the proposed “Small Cell Facility” work in the ROW, and the level of plan review and inspection services needed for the “Small Cell Facility” permit.

- For proposed “Small Cell Facility” projects in the ROW, the following determines whether the permit is minor or major and the applicable fees applied:
  - For Small Cell Facility - Minor Installation (on Existing Third Party Utility Structure): Flat Fee of $750 applies for Application, Plan Review and Inspection
  - For Small Cell Facility - Major Installation (on City Utility Structure or Proposed New Structure) (requires Technical Plan Review): Fee for Application, Technical Plan Review and Inspection includes the Flat Fee of $750 plus actual cost over Flat Fee of $750 plus 15% Administrative Fee

Currently, the Public Works Engineering Development Services and Construction Services Groups provide plan review and inspection services for construction of private ROW Licensee infrastructure in the ROW. “Private ROW Licensee infrastructure” work is identified as minor with currently no fee for a “minor” permit, or as major work in the ROW which requires a higher level of Technical Plan Review and inspection services for construction of the “Private ROW Licensee infrastructure.”

- For major “Private ROW Licensee infrastructure” projects for Fiber, Cable, Natural Gas, Electric, Telecommunications (does not include Small Cell Facility) that are in the ROW and require a high level of technical plan review and inspection services the following fees apply:
  - 5% of Engineer's Final Cost Estimate (2.5% Technical Plan Review Fee for First through Third Technical Plan Reviews plus 2.5% Inspection Fee)
  - Additional Technical Plan Review Fee for every plan review beyond the third Technical Plan Review. 0.5% added to 2.5% Technical Plan Review Fee for each additional Plan Review after the Third Plan Review

Currently, the Public Works Engineering Development Services and Construction Services Groups provide plan review and inspection services for Film Permits when the ROW and/or City facilities’ sanitary sewer and/or water are used during filming.

- For Film Permits when there is usage of the ROW, City facilities’ sanitary sewer and/or water, then the following fees shall apply:
  - Flat fee of $162 for ROW Inspection for use of ROW during filming
  - Flat fee of $35 for Usage fee for using City facilities' sanitary sewer during filming
  - Flat fee of $35 for Usage fee for using City facilities' water during filming

These fees shall be adjusted annually for inflation on January 1 as stated in the resolution and rounded to the nearest dollar.

APPENDIX B

January 17th, 2020

City of Oregon City
Public Works
625 Center St
PO Box 3040
Oregon City OR 97045

RE: Request to Construct Small Wireless Facility on Existing Structure
Subject to 60-day Federal Communications Commission ("FCC") Shot Clock

Dear Oregon City:

On behalf of New Cingular Wireless PCS, LLC ("**AT&T**") we are pleased to submit this request to construct a small wireless facility on an existing structure within the public right-of-way. This facility will enhance the capacity of AT&T's existing wireless network and provide critical service improvements to the surrounding area.

Project Description
This request includes a facility that meets the definition of "small wireless facilities" pursuant to 47 C.F.R. § 1.6002(l), constructed on a existing structure in the public right-of-way, without requiring structure replacement.

AT&T ID	Owner/Pole Type	Location	Proposed Height
20592-007 280427/ 14824052	PGE-owned wood pole # D3205B-52	798 Holmes Lane, Oregon City, OR 97045	37' 0"

List of Permits/Agreements Requested
AT&T has already entered into a Franchise Agreement. AT&T requests approval of the following permits and agreements, as well as any other authorizations necessary, for its proposed small wireless facility:

- Oregon City-Right of Way Permit Application

FCC Shot Clock for Small Wireless Facilities
We would also like to confirm the Oregon City will review AT&T's application pursuant to the FCC's new timelines, or "Shot Clocks," for small wireless facilities, which are outlined 47 C.F.R. § 1.6003. All authorizations related to facilities to be collocated on existing structures are required to be completed within 60 days after filing, as follows:

- This Application was filed on 1/17/2020.
- Absent tolling, the must take final action by 3/17/2020

If you determine one or more of these applications are incomplete, please notify us by 1/27/2020. Under 47 C.F.R. § 1.6003, the "Shot Clock" for incomplete applications resets if notice of incompleteness is provided to the applicant within ten days of submittal. If an application is deemed incomplete a second time, the shot clock does not reset; instead, it is tolled, and then after re-submittal, it continues to run until a decision is made.

Our goal is to work with you to obtain approval of these permits without delay. We will respond promptly to any requests for information you may have for our application. Please let us know how we can work with you to make the approval process easier for you. We look forward to working with you on this important project, which will significantly improve wireless communication services in your community. Should you have any questions or require additional information, please do not hesitate to contact me at the address below.

Sincerely,

Erin Osmus

Erin Osmus
Network Solutions

22263 68TH AVE S
KENT, WA 98032
Email: Erin.Osmus@mastec.com

www.mastecnetworksolutions.com

MINIMUM LENGTHS TABLE

SPEED (MPH)	"L VALUE FOR TAPERS (FT) W = Lane or Shoulder Width being closed or shifted				BUFFER "B" (Ft)
	W ≤ 10	W = 12	W = 14	W = 16	
25	105	125	145	165	75
30	150	180	210	240	100
35	205	245	285	325	125
40	265	320	375	430	150
45	450	540	630	720	180
50	500	600	700	800	210
55	550	660	770	880	250
60	600	720	840	960	285
65	650	780	910	1000	325
70	700	840	980	1000	365

TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE

SPEED (MPH)	SIGN SPACING (FT)			MAX. MAX. CHANNELIZING DEVICE SPACING (FT)
	A	B	C	
20-30	100	100	100	20
35-40	350	350	350	20
45-55	500	500	500	40
60-70	700	700	700	40
FREEWAY	1000	1500	2640	40

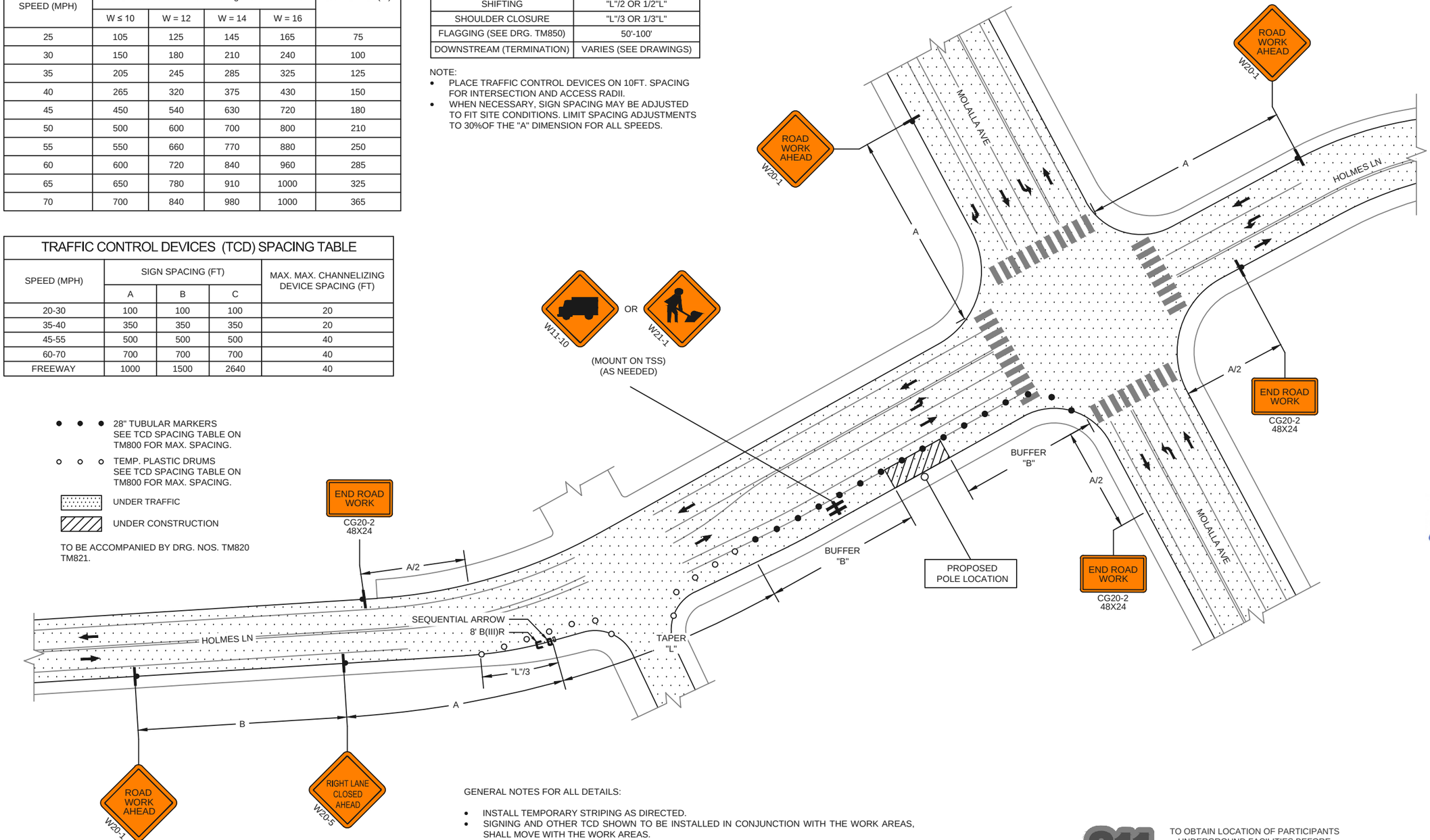
TAPER TYPES & FORMULAS

TAPER	FORMULA
MERGING (LANE CLOSURE)	"L"
SHIFTING	"L"/2 OR 1/2"L"
SHOULDER CLOSURE	"L"/3 OR 1/3"L"
FLAGGING (SEE DRG. TM850)	50'-100'
DOWNSTREAM (TERMINATION)	VARIES (SEE DRAWINGS)

NOTE:
- PLACE TRAFFIC CONTROL DEVICES ON 10FT. SPACING FOR INTERSECTION AND ACCESS RADII.
- WHEN NECESSARY, SIGN SPACING MAY BE ADJUSTED TO FIT SITE CONDITIONS. LIMIT SPACING ADJUSTMENTS TO 30%OF THE "A" DIMENSION FOR ALL SPEEDS.

- ● ● ● 28" TUBULAR MARKERS SEE TCD SPACING TABLE ON TM800 FOR MAX. SPACING.
- ○ ○ ○ TEMP. PLASTIC DRUMS SEE TCD SPACING TABLE ON TM800 FOR MAX. SPACING.
- UNDER TRAFFIC
- UNDER CONSTRUCTION

TO BE ACCOMPANIED BY DRG. NOS. TM820 TM821.



GENERAL NOTES FOR ALL DETAILS:

- INSTALL TEMPORARY STRIPING AS DIRECTED.
- SIGNING AND OTHER TCD SHOWN TO BE INSTALLED IN CONJUNCTION WITH THE WORK AREAS, SHALL MOVE WITH THE WORK AREAS.
- TO DETERMINE TAPER LENGTH ("L") AND BUFFER LENGTH ("B") USE THE "MINIMUM LENGTHS TABLE" ON DRG. NO. TM800.
- TO DETERMINE SIGN SPACING A, B, AND C, USE "TRAFFIC CONTROL DEVICES (TCD) SPACING TABLE" ON DRG. NO. TM800.
- CHANNELIZATION DEVICES MAY BE PLACED AT 10' SPACING AROUND THE WORK AREAS FOR EMPHASIS OR IF THE AREA IS EXPOSED TO TRAFFIC ON BOTH SIDES SIMULTANEOUSLY.
- INSTALL A "BICYCLES ON ROADWAY" (CW11-1) SIGN IN ADVANCE OF THE CLOSURE WHEN A BIKE LANE IS CLOSED AND BIKES ARE EXPECTED.

NORTH

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

TO OBTAIN LOCATION OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN OREGON, CALL OREGON UTILITY NOTIFICATION CENTER
TOLL FREE: 1-800-332-2344 OR
www.digsafelyoregon.com
OREGON STATUTE REQUIRES MIN OF 2 WORKING DAYS NOTICE BEFORE YOU EXCAVATE

CARRIER:
at&t
16221 NE 72ND WAY
REDMOND, WA 98052

PLANS PREPARED FOR:
MasTec Network Solutions
22263 68TH AVENUE SOUTH
KENT, WA 98032

PLAN PREPARED BY:
LETS
LETS America, Inc.
112 S. KYRENE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480-961-9151
LETS PROJ. #: M1_CRPNW_115

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
0	06/20/19	CONSTRUCTION SET	MDL

NOT FOR CONSTRUCTION UNLESS LABELED AS "CONSTRUCTION SET"

REGISTERED PROFESSIONAL ENGINEER
89971PE
OREGON
January 15, 2015
MADHAN KUMAR KANTHA SAMY
06/20/19
DATE
EXPIRES 06/30/2019

"I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OREGON"

CLMAS-007-B
798 HOLMES LANE
OREGON CITY, OR 97045
CLACKAMAS COUNTY

SHEET TITLE
TRAFFIC CONTROL PLANS

SHEET NUMBER
T-1

OREGON CITY

Public Wo

625 Center Street | PO Box 3040 | Oregon City OR 97045
Ph (503) 657-0891 | Fax (503) 657-7892

RIGHT-OF-WAY PERMIT APPLICATION

Application Date: 1/17/20

Work Site Information

Address:	798 Holmes Lane Oregon City	Cross Street:	Molalla Ave

Applicant

☑ Responsible for Project (Permittee) ☐ Primary Contact

Business Name/Property Owner:	New Cingular Wireless		
Contact Name:	Wendy Long	E-Mail:	wl729k@att.com
Mailing Address:	1025 Lenox Park BLVD NE, 3rd Floor	City, State & Zip:	Atlanta, GA 30319
Phone:	8772315447	Alt. Phone:	

Contractor

☐ Same as above ☐ Responsible for Project (Permittee) ☑ Primary Contact

Business Name:	Mastec Network Solutions	Contact Name:	Erin Osmus
Mailing Address:	22263 68th Ave South	Phone:	6303411982
City, State & Zip:	Kent, WA 98032	E-Mail:	Erin.Osmus@mastec.com
Oregon City Business License No. (or Metro Contractor's License No.):		License or CCB Number(s): CC MASTENS87	

Work Details

Proposed Start Date:	5/1/2020	Estimated Completion Date:	5/7/2020

DESCRIPTION OF WORK TO BE DONE IN ROW PER THIS PERMIT (check all boxes that apply):

UTILITY WORK:	☐ Sanitary Sewer	☐ Stormwater	☐ Pavement/Trench Cut
	☐ Electrical	☐ Water	☑ Other Telecommunication
SIDEWALK WORK:	☐ New	☑ Repair / Replace	☐ Curb and/or Gutter Work
	Length (ft): 3	Width (ft): 3	# of Panels (estimate): 1
MATERIAL STORAGE:	☐ Drop Box	☐ Storage Pod	☑ Other Truck
LANDSCAPING WORK:	☐ Tree Removal	☐ Tree Installation	☑ Other N/A
RESERVED PARKING:	# Spaces: 0	No. of Days: 0	Location: N/A

EVENT*:	Event Name: N/A	
	General location/route:	N/A

Provide paragraph description of event or work to be done:

Permission is hereby requested to encroach into public right-of-way to perform work as set forth below. It is understood that this application is limited to the work described herein and that all work shall be done in compliance with the provisions shown on the back of this application and with all other applicable rules, regulations and standards of the City; and that the permittee assumes full responsibility for said compliance, for acceptability of the work, and for repair or replacement thereof if defective, and for repair or replacement of any existing improvement damaged by this work.

SEE THE BACK (PAGE 2) OF THIS PERMIT FOR CONDITIONS AND PROVISIONS

I CERTIFY THE ABOVE INFORMATION IS CORRECT ☞ ☞	Applicant's Signature: Jonathan Baker

OFFICE USE ONLY

It is incumbent on the permittee to comply with all items checked and with the terms of any other City permits issued:

☐ Provide a traffic control plan to the City for review and approval.	☐ Coordinate work with all applicable utility companies.
☐ Barricade and sign sidewalks & parking spaces in advance of their use.	☐ Tree removal/replacement per City Planning Dept approval process.
☐ Contact the city inspector at 503.793.1630 for pre and post inspections, questions and/or pre-pour and final concrete inspections.	

Related City permits:

Expiration Date:	☐ 60 DAYS	☐ 90 DAYS	Other	ROW Permit No.	RW
Details given to customer:	☐ OC Std Dwg No. 504A	☐ OC Std Dwg No. 508	☐ OC Std Dwg No. 509	☐ Other	
Issued by:				Date:	

*Application for Special Event will be required simultaneously.

THIS PERMIT NUMBER _____ IS ISSUED AND ACCEPTED SUBJECT TO THE FOLLOWING PROVISIONS:

1. Permittee agrees to save, keep and hold harmless the City of Oregon City, its officers, agents and employees from all damages, costs or expenses in law or equity that may at any time arise or be set up because of damage to property, or of personal injury received by reason of or in the course of performing work authorized by this permit which may be occasioned by any act or omission of the permittee, his agents or employees. The City will not be liable for any accident, loss or damage to the work prior to its completion and acceptance.
2. Permit is void 60 days after date of issue unless otherwise noted. A time extension shall be requested not less than 24 hours prior to expiration.
3. Concrete curb, sidewalk, gutters, driveway approaches, alley entrances, paving repairs, etc. shall be constructed per City Standards (www.orcity.org/public-works/standards.htm).
4. A copy of this permit shall be kept at the work site.
5. Work authorized by this permit includes removal and replacement of improvements as necessary.
6. Oregon law requires that the rules adopted by Oregon Utility Notification Center be followed. Those rules are set forth in OAR 952-001-0010 to 0090. You may obtain copies of the rules by calling the center or online at www.callbeforeyoudig.org. Call before you dig - Portland Metro Area 811 or 503-246-6699.
7. Permittee shall adequately safeguard all excavations and obstructions with barricades, lights and/or other suitable safety devices per the current "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (mutcd.fhwa.dot.gov/), Federal Highway Administration and follow all OSHA rules and regulations. If the permittee fails to adequately safeguard the public, the City shall place barricades and lights at the expense of the permittee. Placement of safety devices by the City shall not relieve the permittee from liability.
8. Permittee shall coordinate **24 hours in advance of any street closure** with **Oregon City Code Enforcement at 503.496.1559** for each day any street is to be closed.
9. Fire Department access to fire hydrants shall be maintained at all times.
10. Permittee shall be responsible for preserving construction survey stakes and marks for the duration of their usefulness.
11. Construction water shall not be taken from a fire hydrant until a fire hydrant permit has been obtained from the Public Works Operations Center, 122 S. Center Street, 503.657.8241.
12. A minimum of **72 hours' advance notice** must be given for inspection requests (exclusive of Saturdays, Sundays and holidays).
13. Forms and subgrade must be inspected and approved before ordering Portland Cement Concrete or Asphaltic Concrete. Failure to obtain approval before proceeding with work may be cause for rejection. Any work to be done on a Saturday or holiday MUST be approved by the City at least 24 hours in advance.
14. Any work done without proper inspections will be subject to rejection. Permittee shall request inspections when: (1) forms are complete/ready for concrete; (2) subgrade is compacted and ready for pavement or concrete; (3) excavation is started; (4) sewers are ready for testing; (5) backfill compaction is in progress; (6) temporary resurfacing has been placed; (7) all work authorized by this permit has been completed; and (8) any time assistance is needed to assure compliance with City requirements. Reinspections required due to site or work not being ready for inspection when scheduled or for the replacement of defective work, shall be done at the expense of the permittee.
15. Asphalt pavement, including resurfacing, shall be constructed of Level 2, ½-inch dense HMAC ODOT asphalt concrete for the roadway.
16. Curbs with depressions for vehicular access will not be accepted until a standard driveway approach has been constructed at each depression. Where none exists, a sidewalk adjoining such driveway approaches shall be constructed.
17. Final approval of any work will not be given until construction debris and excess material is removed and parkways are graded to conform to the standard street section and planted as appropriate to match existing.
18. Failure to secure permits for previous work or failure to pay fees due on previous permits shall render the applicant, permittee or employees ineligible for any other City permit until such fees and penalties are paid.
19. Any applicant or contractor who has done work in public rights-of-way not in conformance with City Standard Specifications, Standard Drawings or Special Provisions, or who violates the City Code shall be ineligible to do work in public rights-of-way until such deficiency has been corrected to the satisfaction of the City Engineer.
20. Construction hours: Monday-Friday 7am to 6pm, Saturdays 9am to 6pm. NO work shall be done on Sundays.
21. Contractors shall have an Oregon City Business License and/or a Metro Contractor's License and required contractors' licenses.
22. Permittee shall remain responsible for satisfactory workmanship and material for two years after acceptance of improvements authorized by this permit.

I AGREE TO COMPLY WITH THE PERMIT AND ALL ABOVE-REFERENCED CONDITIONS	
Applicant's Signature: Jonathan Baker	Date: 1/17/2020
Applicant's Printed Name: Jonathan Baker	Title/Organization: Mastec Network Solutions

Portland General Electric Company
2213 S.W. 153rd Drive ● Beaverton, Oregon 97006

July 26, 2019

Attn: Clackamas County

Re: PGE Pole# D3205B-52 at 798 Holmes Lane. Oregon City, Or. 97045

To Whom It May Concern:

PGE has accepted an application for Small Cell collocation by AT&T on the above referenced pole. PGE has evaluated pole# D3205B-52 and determined that no Make-Ready preconstruction work is needed for this site. Please let me know if you have further questions.

Sincerely,
Scott Ziska

Scott Ziska Portland General Electric | Utility Asset Management
2213 SW 153rd Dr. Beaverton, Or. 97006
Cell: 541.232.2530 | Desk: 503.416.3554 Scott.ziska@pgn.com

SITE PHOTO

SITE NAME: CLMAS-007-B
POLE #: D3205B-52
SCIP ID #: 20592-007
SITE TYPE: WOOD COMM POLE
SITE ADDRESS: 798 HOLMES LANE OREGON CITY, OR 97045
COUNTY: CLACKAMAS
JURISDICTION: OREGON CITY

PROJECT INFORMATION

SITE INFORMATION

SITE NAME:	CLMAS-007-B
LATITUDE:	45° 20' 33.1" N (45.342528°)
LONGITUDE:	122° 35' 44.4" W (-122.595658°)
SITE ADDRESS:	798 HOLMES LANE OREGON CITY, OR 97045
COUNTY:	CLACKAMAS
JURISDICTION:	OREGON CITY
ZONING CLASSIFICATION:	N/A
CONSTRUCTION TYPE:	N/A
OCCUPANCY:	N/A
ADJACENT PARCEL #:	32E05BC00700
OVERLAY ZONE:	NONE
SPECIAL AREA SUBZONE:	NONE
A.D.A COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION

POLE OWNER

NAME:	PGE (PORTLAND GENERAL ELECTRIC)
ADRESS:	2213 SW 153RD DRIVE BEAVERTON, OR 97006
PHONE:	(800) 542-8818

APPLICANT INFORMATION

APPLICANT/CARRIER:	NEW CINGULAR WIRELESS PCS, LLC (DBA AT&T)
ADDRESS:	16221 NE 72ND WAY REDMOND, WA 98052
ELECTRIC PROVIDER:	PGE (PORTLAND GENERAL ELECTRIC)
PHONE:	(800) 542-8818
FRONT HAUL FIBER PROVIDER:	COMCAST: BARRY PRATT
BACK HAUL FIBER PROVIDER:	LNS: JOHN GROTH

PROJECT TEAM

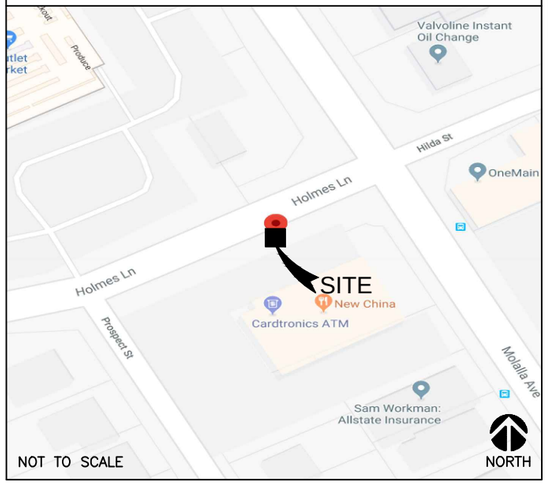
A&E FIRM

NAME:	LETS AMERICA, INC.
CONTACT:	112 S. KYRENE ROAD, SUITE 1 CHANDLER, AZ 85226
PHONE:	(480) 961-9151
EMAIL:	INFO@LETSINC.COM

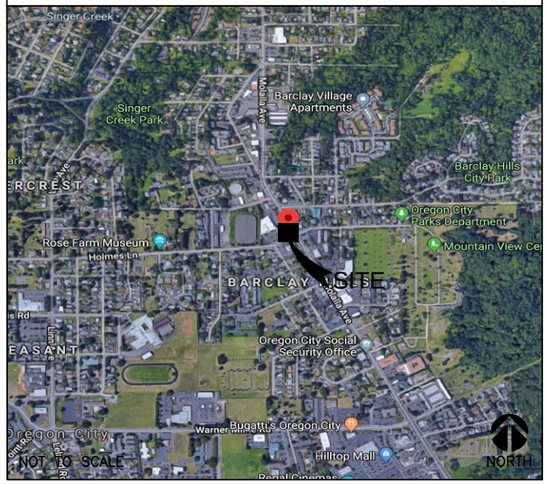
SITE DESIGN

NAME:	MASTEC NETWORK SOLUTIONS, INC.
ADDRESS:	22263 68TH AVE SOUTH KENT, WA 98032
PROJECT MANAGER:	JONATHAN BAKER
PHONE:	(630) 877-5828
CONSTRUCTION MANAGER:	CHAD ROOPER
PHONE:	(503) 969-5366
PERMITTING:	NOHELY MORENO
PHONE:	(562) 507-7881

LOCATION MAP



AERIAL MAP



INDEX OF DRAWINGS

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T-1	TITLE SHEET	2	12/10/19
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A-2	ENLARGED SITE PLAN	2	12/10/19
A-3	1A LETTER AND SURVEY	2	12/10/19
A-4	EXISTING AND PROPOSED SOUTHWEST POLE ELEVATION	2	12/10/19
A-5	EXISTING AND PROPOSED NORTHWEST POLE ELEVATION	2	12/10/19
A-6	EQUIPMENT DETAILS	2	12/10/19
A-7	EQUIPMENT DETAILS	2	12/10/19
A-8	EQUIPMENT DETAILS	2	12/10/19
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RF-1	RF WARNING SIGNS	2	12/10/19
E-1	PLUMBING DIAGRAM & POWER SCHEMATIC	2	12/10/19
G-1	GROUNDING DETAILS	2	12/10/19
G-2	GROUNDING DETAILS	2	12/10/19

SCOPE OF WORK

THIS IS NOT AN ALL INCLUSIVE LIST. CONTRACTOR SHALL USE SPECIFIED EQUIPMENT PART OR ENGINEER APPROVED EQUIVALENT. CONTRACTOR SHALL VERIFY ALL NEEDED EQUIPMENT TO PROVIDE A FUNCTIONAL SITE. THE PROJECT GENERALLY CONSISTS OF THE FOLLOWING:

- (1) PROPOSED AT&T POLE TOP EXTENSION
- (1) PROPOSED AT&T CANISTER ANTENNA
- (1) PROPOSED AT&T AIRSCALE RRH
- (1) PROPOSED AT&T DISCONNECT/SURGE SUPPRESSOR
- (3) PROPOSED AT&T CONDUITS
- (1) PROPOSED AT&T STAND-OFF MOUNT
- (1) PROPOSED AT&T EQUIPMENT ENCLOSURE

DIRECTIONS

DEPART FROM: PORTLAND INTERNATIONAL AIRPORT,
7000 NE AIRPORT WAY, PORTLAND, OR 97218

1. GET ON I-205 S
2. HEAD NORTHWEST ON NE AIRPORT WAY
3. USE THE RIGHT 2 LANES TO TURN SLIGHTLY RIGHT ONTO THE INTERSTATE 205 S RAMP TO INTERSTATE 84/PORTLAND/SALEM
4. FOLLOW I-205 S TO OR-99E S/MCLOUGHLIN BLVD IN OREGON CITY. TAKE EXIT 9 FROM I-205 S
5. MERGE WITH I-205 S
6. TAKE EXIT 9 FOR OR-99E TOWARD DOWNTOWN/GLADSTONE/OREGON CITY
7. CONTINUE ON OR-99E S/MCLOUGHLIN BLVD. TAKE 7TH ST AND MOLALLA AVE TO HOLMES LN
8. USE THE LEFT 2 LANES TO TURN LEFT ONTO OR-99E S/MCLOUGHLIN BLVD
9. TURN LEFT ONTO 10TH ST
10. CONTINUE ONTO SINGER HILL
11. 7TH ST TURNS SLIGHTLY RIGHT AND BECOMES MOLALLA AVE

ARRIVE AT: 798 HOLMES LANE, OREGON CITY, OR 97045

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PREFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCATION GOVERNING AUTHORITIES.NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITION OF THE FOLLOWING:

COMMERCIAL BUILDING CODE

OREGON STRUCTURAL SPECIALTY CODE(OSSC)-2014

COMMERCIAL ELECTRICAL CODE

OREGON ELECTRICAL SPECIALTY CODE(OESC)-2017

LEGAL DESCRIPTION

RIGHT-OF-WAY

DO NOT SCALE DRAWINGS

CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ARCHITECT OR ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

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

TO OBTAIN LOCATION OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN OREGON, CALL OREGON UTILITY NOTIFICATION CENTER
TOLL FREE: 1-800-332-2344 OR
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ARIZONA: 480-961-9151
LETS PROJ. #: M1-CRPNW-115

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
A	05/02/19	90% CD'S	SBP
B	06/21/19	95% CD'S	SBP
C	06/24/19	95% CD'S	GMC
0	06/28/19	CONSTRUCTION SET	GMC
1	08/15/19	CLIENT COMMENTS	GMC
2	12/10/19	CLIENT COMMENTS	SBP

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

REGISTERED PROFESSIONAL ENGINEER
89971PE
OREGON
January 15, 2015
MADHAN KUMAR KANTHA SAMY
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EXPIRES 06/30/2021

"I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OREGON"

CLMAS-007-B
798 HOLMES LANE
OREGON CITY, OR 97045
CLACKAMAS COUNTY

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

SITE WORK GENERAL NOTES:

1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES, SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION.
3. ALL SITE WORK TO COMPLY WITH QAS-STD-10068 "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON MASTEC TOWER SITE" AND LATEST VERSION OF TIA 1019 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."
4. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS.
5. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
6. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, OWNER AND/OR LOCAL UTILITIES.
7. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE.
8. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
9. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
10. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
11. THE AREAS OF THE OWNERS 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 AS SPECIFIED ON THE PROJECT SPECIFICATIONS.
12. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
13. NOTICE TO PROCEED- NO WORK TO COMMENCE PRIOR TO COMPANY'S WRITTEN NOTICE TO PROCEED AND THE ISSUANCE OF A PURCHASE ORDER.
14. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN AND SHALL MEET ANSI/TIA 1019 (LATEST EDITION), OSHA, AND GENERAL INDUSTRY STANDARDS. ALL RIGGING PLANS SHALL ADHERE TO ANSI/TIA-1019 (LATEST EDITION) INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION.

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:

CONTRACTOR-	MASTEC NETWORK SOLUTIONS
SUBCONTRACTOR-	GENERAL CONTRACTOR (CONSTRUCTION)
CARRIER-	AT&T
POLE OWNER-	PGE
OEM-	ORIGINAL EQUIPMENT MANUFACTURER

2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR AND AT&T.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
4. DRAWINGS PROVIDED HERE ARE NOT TO SCALE AND ARE INTENDED TO SHOW OUTLINE ONLY.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
6. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR AND AT&T PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWINGS.
10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

ELECTRICAL INSTALLATION NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC. HILTI EPOXY ANCHORS ARE REQUIRED BY AT&T.
4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
5. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
6. EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.
7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH PLASTIC TAPE PER COLOR SCHEDULE. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (I.E. PANEL BOARD AND CIRCUIT ID'S).
8. PANEL BOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
10. POWER, CONTROL AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET & DRY) OPERATION LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED UNLESS OTHERWISE SPECIFIED.
11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET AND DRY) OPERATION LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED UNLESS OTHERWISE SPECIFIED.
12. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90° C (WET AND DRY) OPERATION WITH OUTER JACKET LISTED OR LABELED FOR THE LOCATION USED UNLESS OTHERWISE SPECIFIED.
13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75° C (90° C IF AVAILABLE).
14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
15. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E. RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
16. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT) OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
17. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.
18. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.
20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
21. WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER).
22. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON-PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
23. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL; SHALL MEET OR EXCEED UL 50 AND RATED NEMA 1 (OR BETTER) INDOORS OR NEMA 3R (OR BETTER) OUTDOORS.
24. METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
25. NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
26. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
27. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.
28. INSTALL PLASTIC LABEL ON THE METER CENTER TO SHOW "####".
29. ALL CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

GREENFIELD GROUNDING NOTES:

1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
3. THE SUBCONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.
4. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
5. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
6. EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 AWG SOLID TINNED COPPER FOR OUTDOOR BTS.
7. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
15. APPROVED ANTIOXIDANT COATINGS (I.E. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
17. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 6 FT. OF MAIN GROUND WIRES WITH 1-#2 AWG TIN-PLATED COPPER GROUND CONDUCTOR.
19. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS, WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
20. ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 TINNED SOLID IN 3/4" LIQUID TIGHT CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD-WELD TERMINATION POINT. THE EXPOSED END OF THE LIQUID TIGHT CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).

STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL BE PAINTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN ACCORDANCE WITH ASTM A36 UNLESS OTHERWISE NOTED.
2. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4"ø) CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
3. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8"ø ASTM A307 BOLTS UNLESS NOTED OTHERWISE.
4. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS.

ABBREVIATIONS AND SYMBOLS:

ABBREVIATIONS:

AGL	ABOVE GRADE LEVEL
BTS	BASE TRANSCEIVER STATION
(E)	EXISTING
MIN.	MINIMUM
REF	REFERENCE
RF	RADIO FREQUENCY
T.B.D.	TO BE DETERMINED
T.B.R.	TO BE RESOLVED
TYP	TYPICAL
REQ	REQUIRED
EGR	EQUIPMENT GROUND RING
AWG	AMERICAN WIRE GAUGE
MGB	MASTER GROUND BAR
EG	EQUIPMENT GROUND
BCW	BARE COPPER WIRE
SIAD	SMART INTEGRATED ACCESS DEVICE
GEN	GENERATOR
IGR	INTERIOR GROUND RING (HALO)
RBS	RADIO BASE STATION

SYMBOLS:

#S/G#	SOLID GROUND BUS BAR
#S/N#	SOLID NEUTRAL BUS BAR
	SUPPLEMENTAL GROUND CONDUCTOR
	2-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
	SINGLE-POLE THERMAL-MAGNETIC CIRCUIT BREAKER
	CHEMICAL GROUND ROD
	TEST WELL
	DISCONNECT SWITCH
M	METER
	EXOTHERMIC WELD (CADWELD) (UNLESS OTHERWISE NOTED)
	MECHANICAL CONNECTION
	GROUNDING WIRE

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. SLAB FOUNDATION DESIGN ASSUMING ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF.
3. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

   CONCRETE CAST AGAINST EARTH.....3 IN.
   CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 AND LARGER.....2 IN.
   #5 AND SMALLER & WWF.....1 1/2 IN.
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
   SLAB AND WALLS.....3/4 IN.
   BEAMS AND COLUMNS.....1 1/2 IN.

5. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE. IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

NEC INSULATOR COLOR CODE

DESCRIPTION	PHASE/CODE LETTER	WIRE COLOR
240/120 1Ø	LEG 1	BLACK
	LEG 2	RED
AC NEUTRAL	N	WHITE
GROUND (EGC)	G	GREEN
VDC POS	+	*RED-POLARITY MARK AT TERMINATION
VDC NEG	-	*BLACK-POLARITY MARK AT TERMINATION
240V OR 208V, 3Ø	PHASE A	BLACK
	PHASE B	RED(ORG. IF HI LEG)
	PHASE C	BLUE
480V, 3Ø	PHASE A	BROWN
	PHASE B	ORANGE
	PHASE C	YELLOW

* SEE NEC 210.5(C)(1) AND (2)

CARRIER:
at&t
16221 NE 72ND WAY
REDMOND, WA 98052

PLANS PREPARED FOR:
MasTec Network Solutions
22263 68TH AVENUE SOUTH
KENT, WA 98032

PLAN PREPARED BY:
LETS
LETS America, Inc.
112 S. KYRENE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480-961-9151
LETS PROJ. #: M1-CRPNW-115

REVISIONS			
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2	12/10/19	CLIENT COMMENTS	SBP

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

REGISTERED PROFESSIONAL ENGINEER
89971PE
OREGON
January 15, 2015
MADHAN KUMAR KANTHA SAMY
12/10/19
EXPIRES 06/30/2021
DATE:

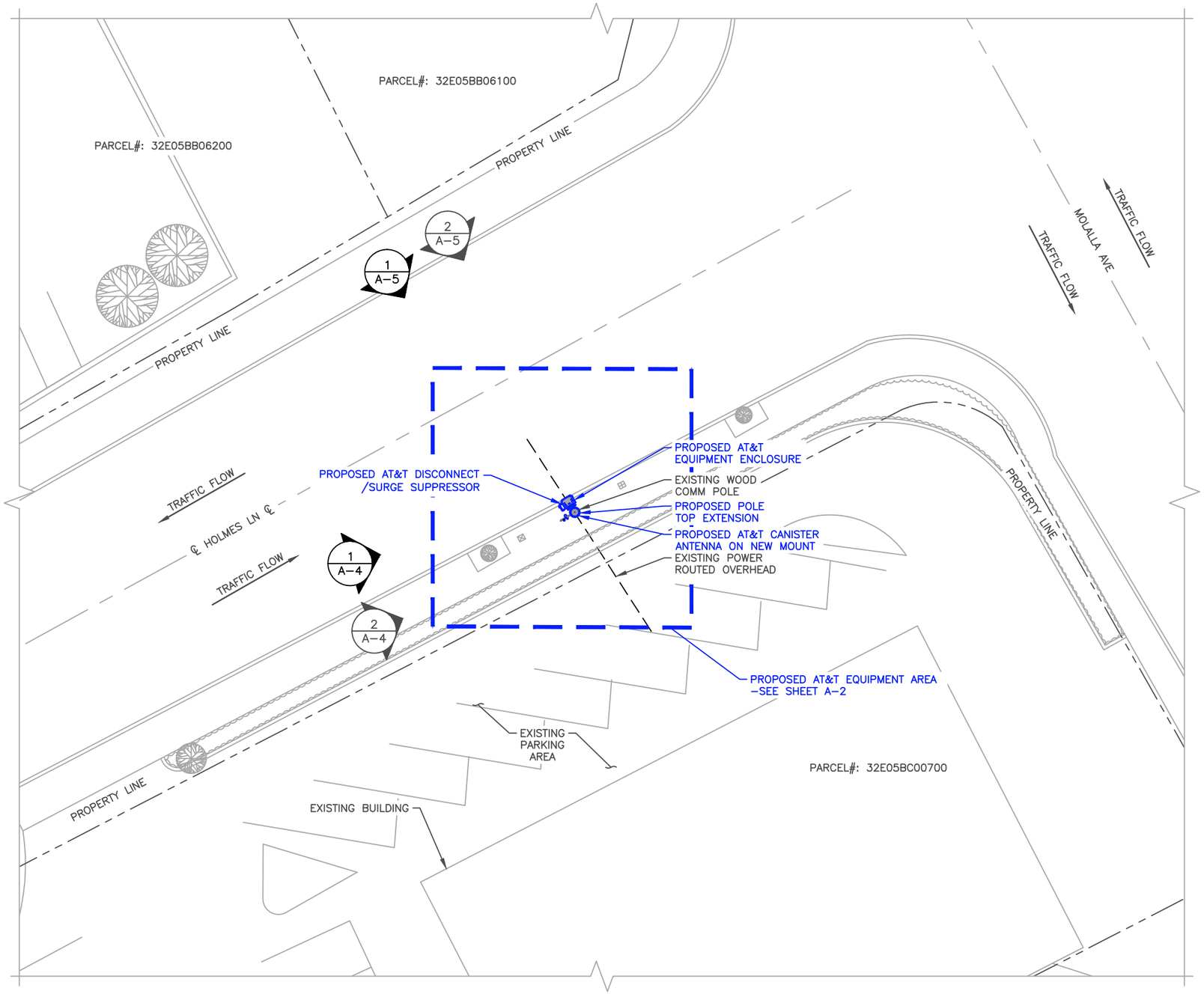
"I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OREGON"

CLMAS-007-B
798 HOLMES LANE
OREGON CITY, OR 97045
CLACKAMAS COUNTY

SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-1

PERMIT NOTE:
FIBER ROUTE PERMITTING BY OTHERS



OVERALL SITE PLAN

0 3' 6' 12'
SCALE: 3/32" = 1'-0" (24x36)
(OR) 3/64" = 1'-0" (11x17)

CARRIER:
at&t
16221 NE 72ND WAY
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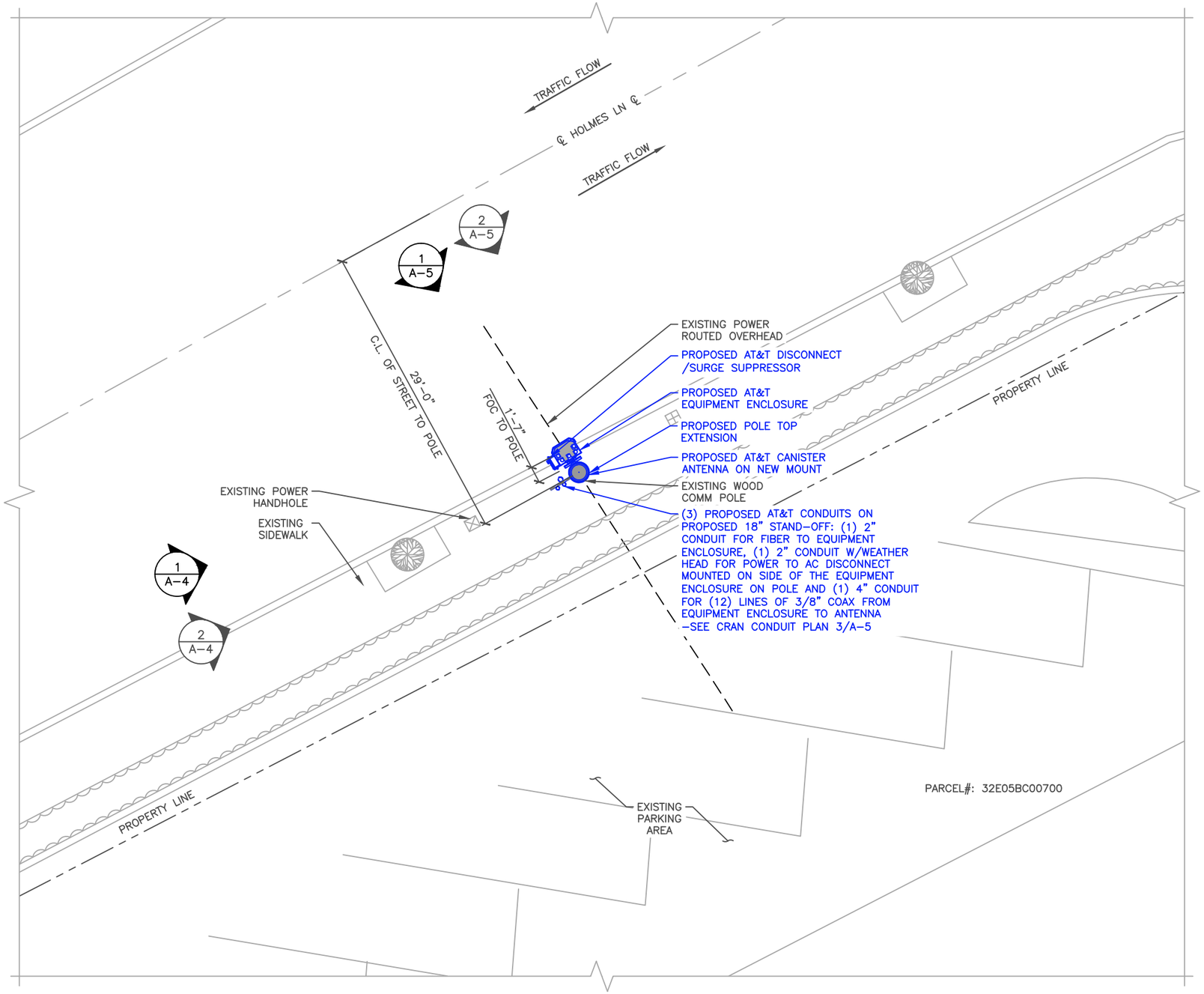
CLMAS-007-B
798 HOLMES LANE
OREGON CITY, OR 97045
CLACKAMAS COUNTY

SHEET TITLE
OVERALL SITE PLAN

SHEET NUMBER
A-1



NORTH

ENLARGED SITE PLAN

0 1.5' 3' 5'

SCALE: 3/16" = 1'-0" (24x36)
(OR) 3/32" = 1'-0" (11x17)

1

CARRIER:

at&t

16221 NE 72ND WAY
REDMOND, WA 98052

PLANS PREPARED FOR:

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Network Solutions

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KENT, WA 98032

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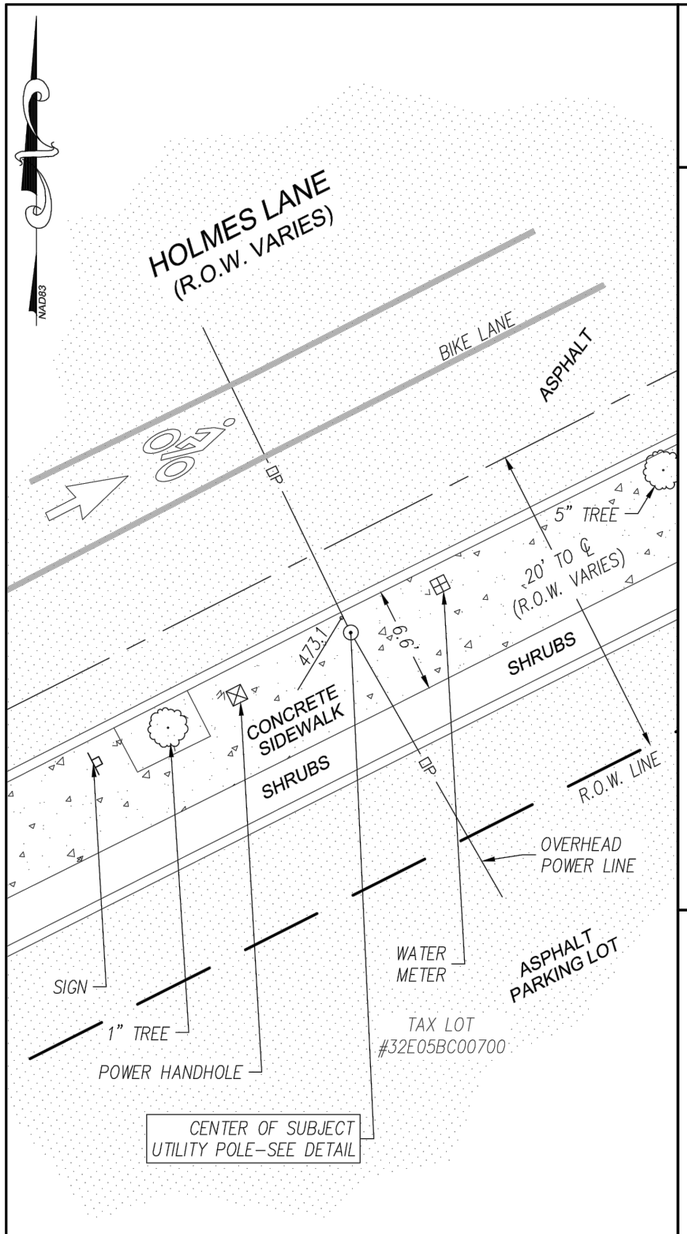
798 HOLMES LANE
OREGON CITY, OR 97045
CLACKAMAS COUNTY

SHEET TITLE

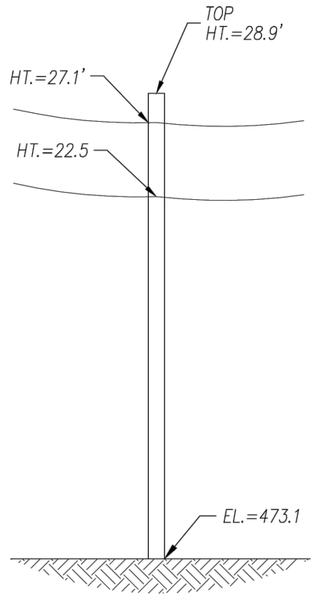
ENLARGED SITE PLAN

SHEET NUMBER

A-2



SUBJECT UTILITY POLE
NAD 83
LAT – 45.342528° N
LONG – 122.595658° W
ELEV.=473.1 NAVD 88



POLE DETAIL

– NOT TO SCALE –

REGISTERED PROFESSIONAL LAND SURVEYOR

APR 19, 2019

OREGON
MAY 10, 2011
JONATHAN MARLO BECKER
84870

RENEWS: 12/31/2019

DUNCANSON
Company, Inc.
CIVIL ENGINEERING · SURVEYING · LAND PLANNING
145 SW 155th Street, Ste. 102 - Seattle, Washington 98166
Phone: (206) 244-4141 Fax: (206) 244-4455

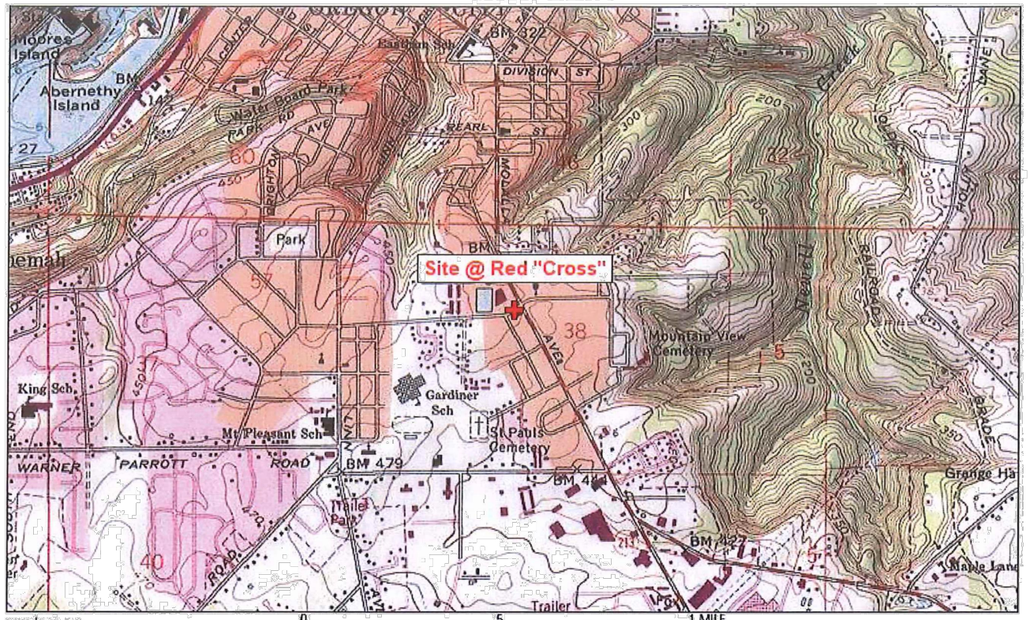
DRAWN: LAC	DATE: 4/19/19
SCALE: 1"=10'	JOB NO.: 01792.1603

at&t
Your world. Delivered.

SITE ID: CLMAS-007

SURVEY | SCALE N.T.S. | 2

1A SURVEY CERTIFICATION
Site: CLMAS-007



01792.1603

SCALE: 1"= 2000'±

Address: 798 Holmes Lane
Oregon City, OR 97045

Structure Type: Existing Utility Pole

GEOGRAPHIC COORDINATES

Latitude:	45° 20' 33.10" N	(NAD 83/91)
Longitude:	122° 35' 44.37" W	(NAD 83/91)
Latitude:	45.342528° N	(NAD 83/91)
Longitude:	122.595658° W	(NAD 83/91)
Elevation-Ground:	473.1 feet	(NAVD 88)
Height @ Top of Pole:	28.9 feet	(AGL)

Date of Survey: April 19, 2019

REGISTERED PROFESSIONAL LAND SURVEYOR

APR 19, 2019

OREGON
MAY 10, 2011
JONATHAN MARLO BECKER
84870

RENEWS: 12/31/2019

Jonathan M. Becker, # 84870PLS

I certify that the latitude and the longitude shown above are accurate to within ±15 feet horizontally and that the site elevation is accurate to within ±3 feet vertically, which meet 1A standards as defined on the FAA ASAC information sheet 91:003. The horizontal datum (Geographic Coordinates) are in terms of the North American Datum of 1983 (NAD 83) and are expressed as degrees (°), minutes ('), and seconds ("), to the nearest hundredth of a second and as decimal degrees (°) to the nearest millionth of a degree. The vertical datum (elevation AMSL) is in terms of the North American Vertical Datum of 1988 (NAVD 88).

1A LETTER | SCALE N.T.S. | 1

CARRIER:
at&t
16221 NE 72ND WAY
REDMOND, WA 98052

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OREGON
January 15, 2015
MADHAN KUMAR KANTHA SAMY

12/10/19
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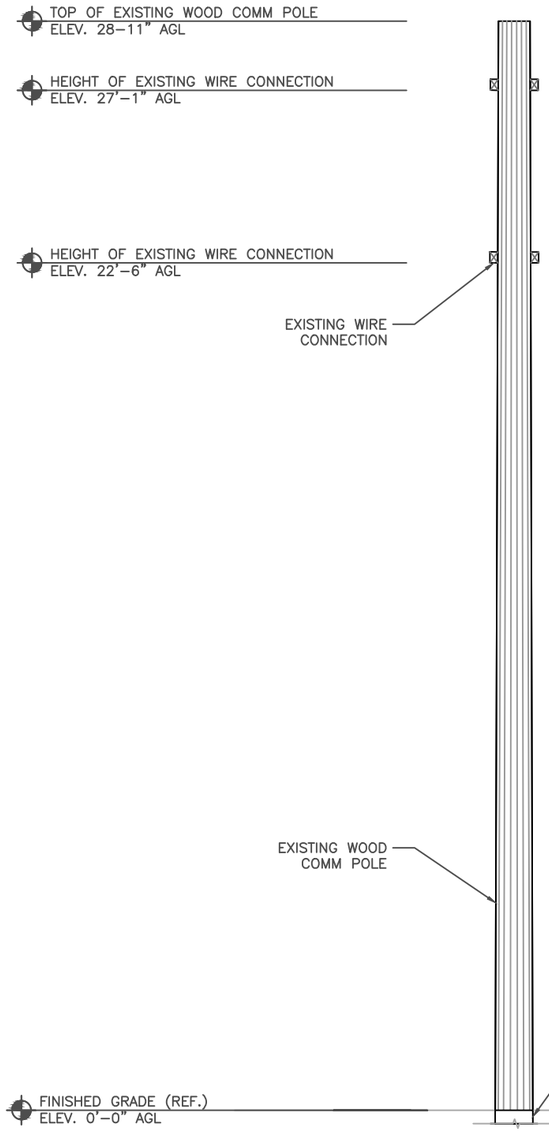
CLMAS–007–B
798 HOLMES LANE
OREGON CITY, OR 97045
CLACKAMAS COUNTY

SHEET TITLE
1A LETTER
AND SURVEY

SHEET NUMBER
A-3

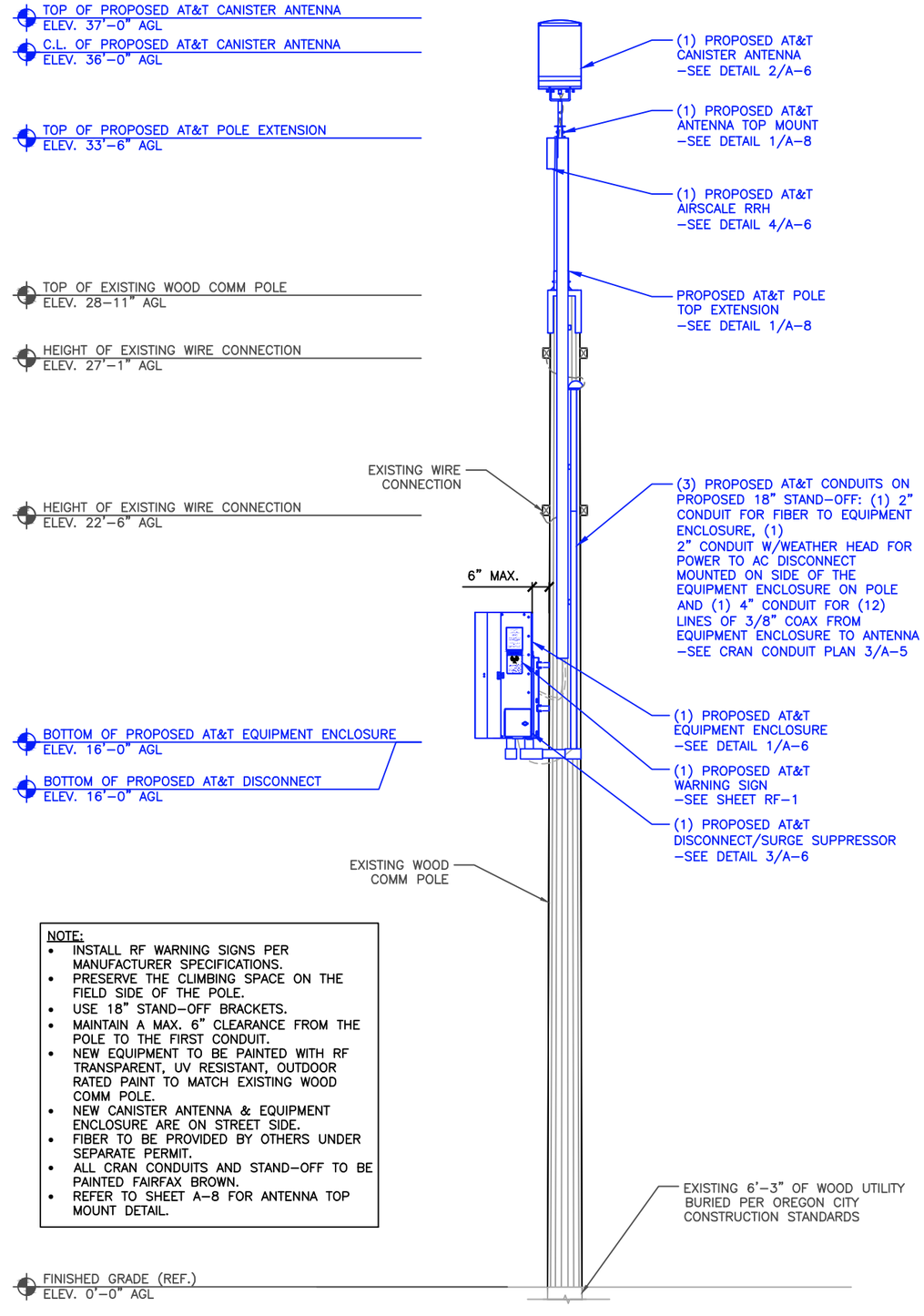


EXISTING SOUTHWEST POLE ELEVATION

0 6" 1' 2'

SCALE: 1/2" = 1'-0" (24x36)
(OR) 1/4" = 1'-0" (11x17)

2



NOTE:
- INSTALL RF WARNING SIGNS PER MANUFACTURER SPECIFICATIONS.
- PRESERVE THE CLIMBING SPACE ON THE FIELD SIDE OF THE POLE.
- USE 18" STAND–OFF BRACKETS.
- MAINTAIN A MAX. 6" CLEARANCE FROM THE POLE TO THE FIRST CONDUIT.
- NEW EQUIPMENT TO BE PAINTED WITH RF TRANSPARENT, UV RESISTANT, OUTDOOR RATED PAINT TO MATCH EXISTING WOOD COMM POLE.
- NEW CANISTER ANTENNA & EQUIPMENT ENCLOSURE ARE ON STREET SIDE.
- FIBER TO BE PROVIDED BY OTHERS UNDER SEPARATE PERMIT.
- ALL CRAN CONDUITS AND STAND–OFF TO BE PAINTED FAIRFAX BROWN.
- REFER TO SHEET A–8 FOR ANTENNA TOP MOUNT DETAIL.

PROPOSED SOUTHWEST POLE ELEVATION

0 6" 1' 2'

SCALE: 1/2" = 1'-0" (24x36)
(OR) 1/4" = 1'-0" (11x17)

1

CARRIER:

at&t

16221 NE 72ND WAY
REDMOND, WA 98052

PLANS PREPARED FOR:

MasTec Network Solutions

22263 68TH AVENUE SOUTH
KENT, WA 98032

PLAN PREPARED BY:

LETS

LETS America, Inc.
112 S. KYRENE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480–961–9151
LETS PROJ. #: M1–CRPNW–115

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
A	05/02/19	90% CD'S	SBP
B	06/21/19	95% CD'S	SBP
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0	06/28/19	CONSTRUCTION SET	GMC
1	08/15/19	CLIENT COMMENTS	GMC
2	12/10/19	CLIENT COMMENTS	SBP

NOT FOR CONSTRUCTION UNLESS LABELED AS "CONSTRUCTION SET"

REGISTERED PROFESSIONAL ENGINEER
89971PE
OREGON
January 15, 2015
MADHAN KUMAR KANTHA SAMY

12/10/19
DATE

EXPIRES 06/30/2021

"I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OREGON"

CLMAS–007–B
798 HOLMES LANE
OREGON CITY, OR 97045
CLACKAMAS COUNTY

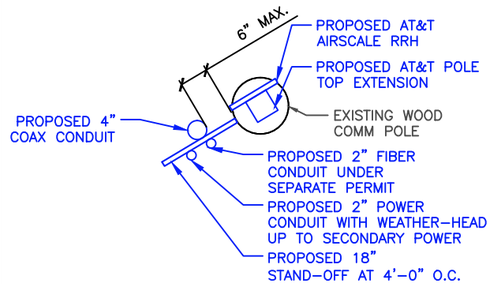
SHEET TITLE

EXISTING AND PROPOSED SOUTHWEST POLE ELEVATION

SHEET NUMBER

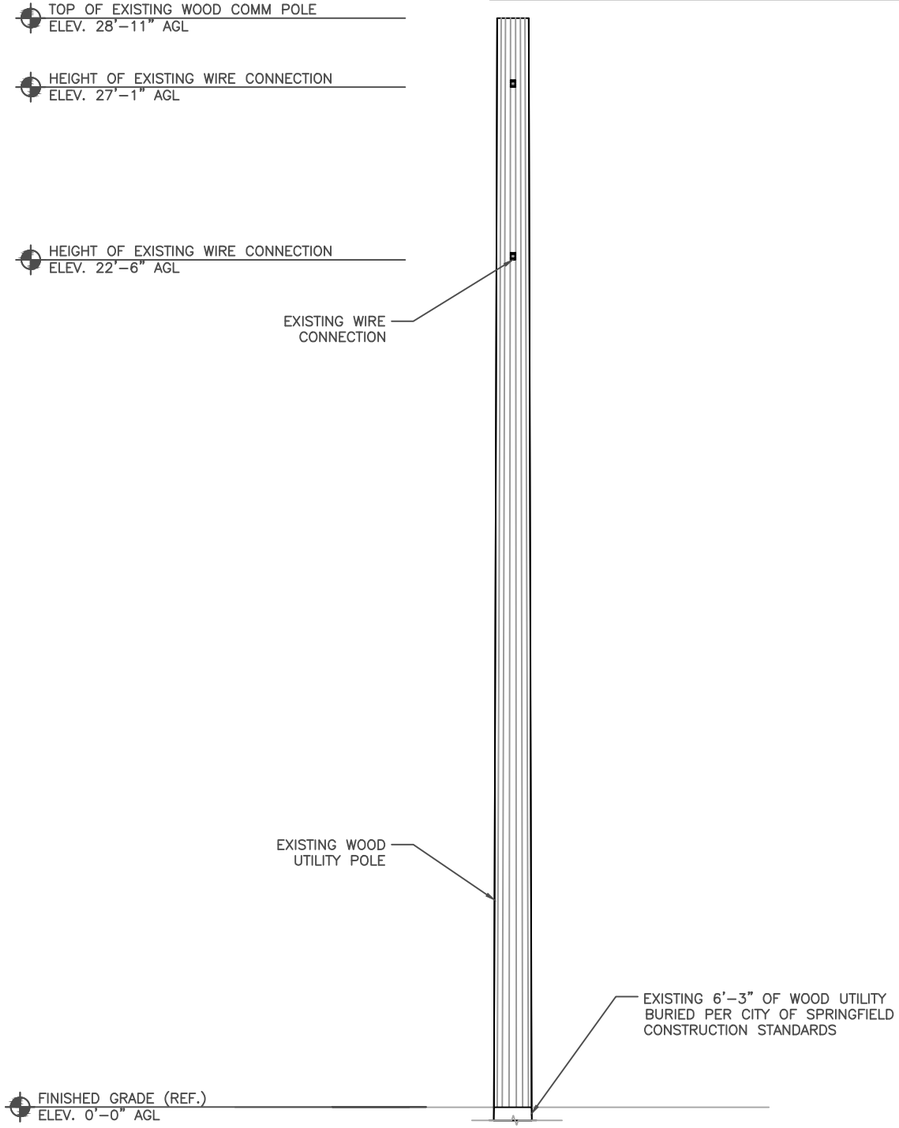
A-4

PROPOSED CRAN CONDUIT PLAN



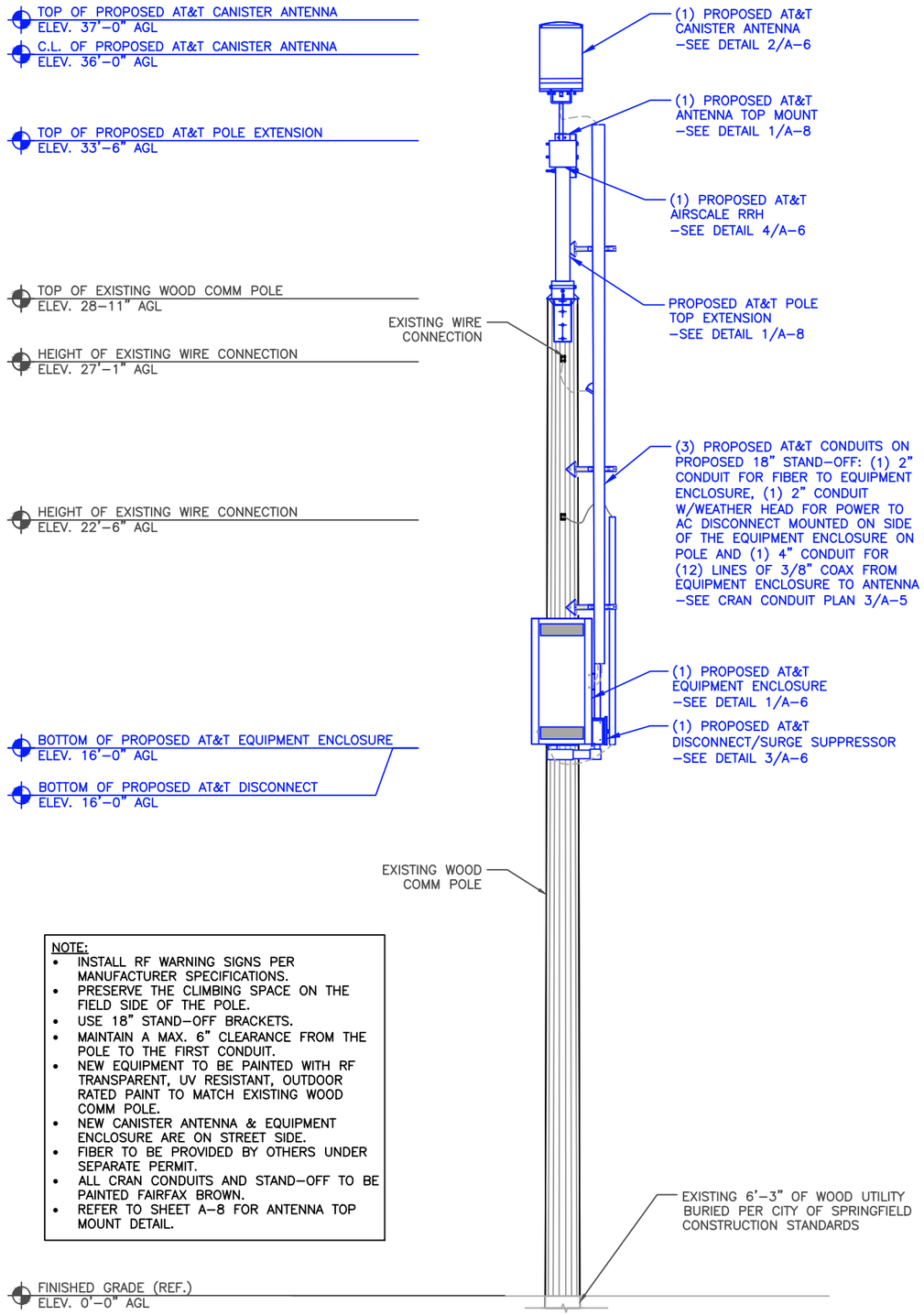
0 6" 1' 2' SCALE: 1/2" = 1'-0" (24x36) (OR) 1/4" = 1'-0" (11x17) — 3

EXISTING NORTHWEST POLE ELEVATION



0 6" 1' 2' SCALE: 1/2" = 1'-0" (24x36) (OR) 1/4" = 1'-0" (11x17) — 2

PROPOSED NORTHWEST POLE ELEVATION



NOTE:
- INSTALL RF WARNING SIGNS PER MANUFACTURER SPECIFICATIONS.
- PRESERVE THE CLIMBING SPACE ON THE FIELD SIDE OF THE POLE.
- USE 18" STAND-OFF BRACKETS.
- MAINTAIN A MAX. 6" CLEARANCE FROM THE POLE TO THE FIRST CONDUIT.
- NEW EQUIPMENT TO BE PAINTED WITH RF TRANSPARENT, UV RESISTANT, OUTDOOR RATED PAINT TO MATCH EXISTING WOOD COMM POLE.
- NEW CANISTER ANTENNA & EQUIPMENT ENCLOSURE ARE ON STREET SIDE.
- FIBER TO BE PROVIDED BY OTHERS UNDER SEPARATE PERMIT.
- ALL CRAN CONDUITS AND STAND-OFF TO BE PAINTED FAIRFAX BROWN.
- REFER TO SHEET A-8 FOR ANTENNA TOP MOUNT DETAIL.

0 6" 1' 2' SCALE: 1/2" = 1'-0" (24x36) (OR) 1/4" = 1'-0" (11x17) — 1

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at&t
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REDMOND, WA 98052

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KENT, WA 98032

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CLMAS-007-B
798 HOLMES LANE
OREGON CITY, OR 97045
CLACKAMAS COUNTY

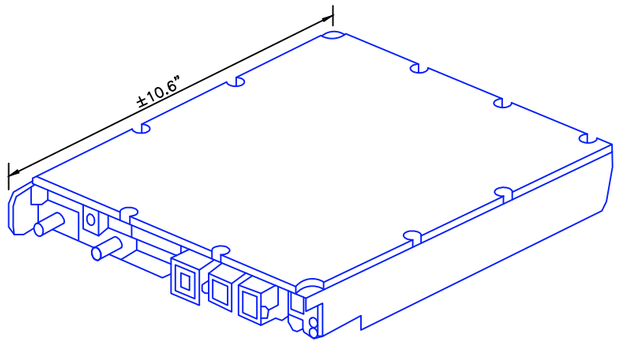
SHEET TITLE
EXISTING AND PROPOSED NORTHWEST POLE ELEVATION

SHEET NUMBER
A-5

B46 AIRSCALE RRH FOR LAA (AZRA)

MANUFACTURER:	NOKIA
PHYSICAL SIZE	DC: 4L/5 KG; AC 4.5L/5.7KG
INTERFACE:	2 CPRI PORTS FOR FRONT-HAUL (2X9.8 GB/S)
INPUT POWER:	DC: -40.5V YO -57V AC: 80V TO 276V
SRANDARD COLOR:	NOT TO BE PAINTED
VOLUME:	

(0.883 FT) X (0.967 FT) X (0.133 FT) = 0.114 CUBIC FEET VOLUME



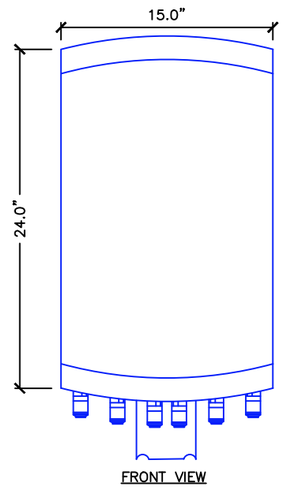
BOTTOM VIEW

RADIO DETAIL — SCALE N.T.S. — 4

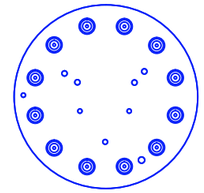
ACOM-2F15D-12P-R2 12-PORT QUASI-OMNI OUTDOOR CANISTER ANTENNA WITH GPS

MANUFACTURER:	ACE TECHNOLOGYA
ANTENNA WEIGHT:	33.7 LBS
ANTENNA DIAMETER:	15 IN
ANTENNA HEIGHT:	24.0 IN
STANDARD COLORE:	FAIRFAX BROWN
VOLUME:	

3.1416 (0.625 FT)² X 2FT = 2.45 CUBIC FEET VOLUME

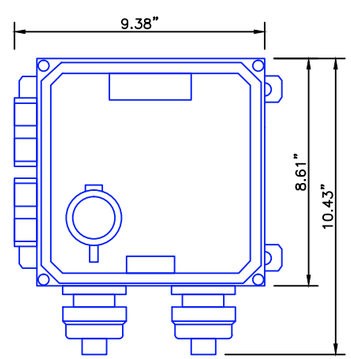


FRONT VIEW

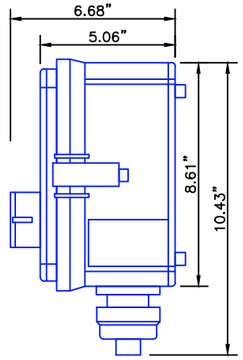


BOTTOM VIEW

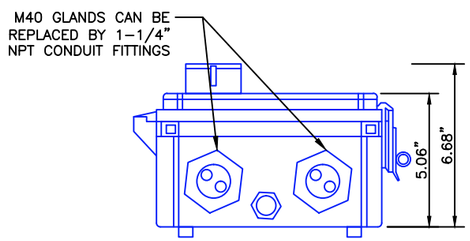
ANTENNA DETAIL — SCALE N.T.S. — 2



FRONT VIEW



SIDE VIEW



BOTTOM VIEW

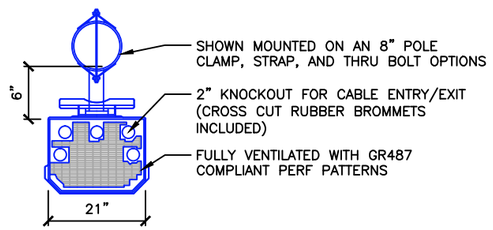
SURGE SUPPRESSOR BOX

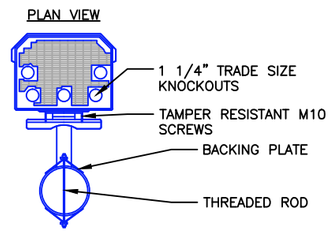
MANUFACTURER:	RAYCAP
PART NUMBER:	RSCAC-1333-PS-240-A
WEIGHT:	8.00 LBS
DIMENSIONS (LXWXH):	9.38" X 6.68" X 10.43"
STANDARD COLOR:	FAIRFAX BROWN
VOLUME:	

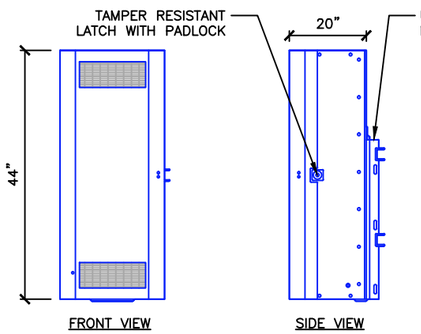
(0.782 FT) X (0.557 FT) X (0.869 FT) = 0.379 CUBIC FEET VOLUME

SURGE SUPPRESSOR DETAIL — SCALE N.T.S. — 3

EQUIPMENT ENCLOSURE
MANUFACTURER: COMMSCOPE
METRO CALL RADIO CONCEALMENT ENCLOSURE
PART NUMBER: SSC-760237600
DESCRIPTION: MICRO RADIO SOLUTION
STANDARD COLOR: FAIRFAX BROWN
VOLUME: (3.667 FT) X (1.75 FT) X (1.667 FT) = 10.69 CUBIC FEET

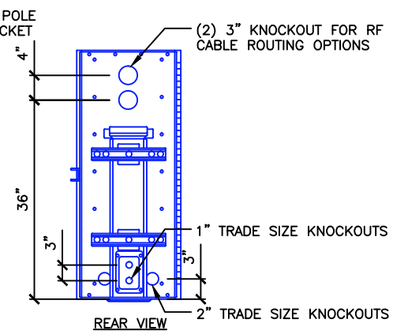






FRONT VIEW

SIDE VIEW



REAR VIEW

EQUIPMENT ENCLOSURE DETAIL — SCALE N.T.S. — 1

CARRIER:
at&t
16221 NE 72ND WAY
REDMOND, WA 98052

PLANS PREPARED FOR:
MasTec Network Solutions
22263 68TH AVENUE SOUTH
KENT, WA 98032

PLAN PREPARED BY:
LETS
LETS America, Inc.
112 S. KYRENE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480-961-9151
LETS PROJ. #: M1-CRPNW-115

REVISIONS

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CLMAS-007-B
798 HOLMES LANE
OREGON CITY, OR 97045
CLACKAMAS COUNTY

SHEET TITLE
EQUIPMENT DETAILS

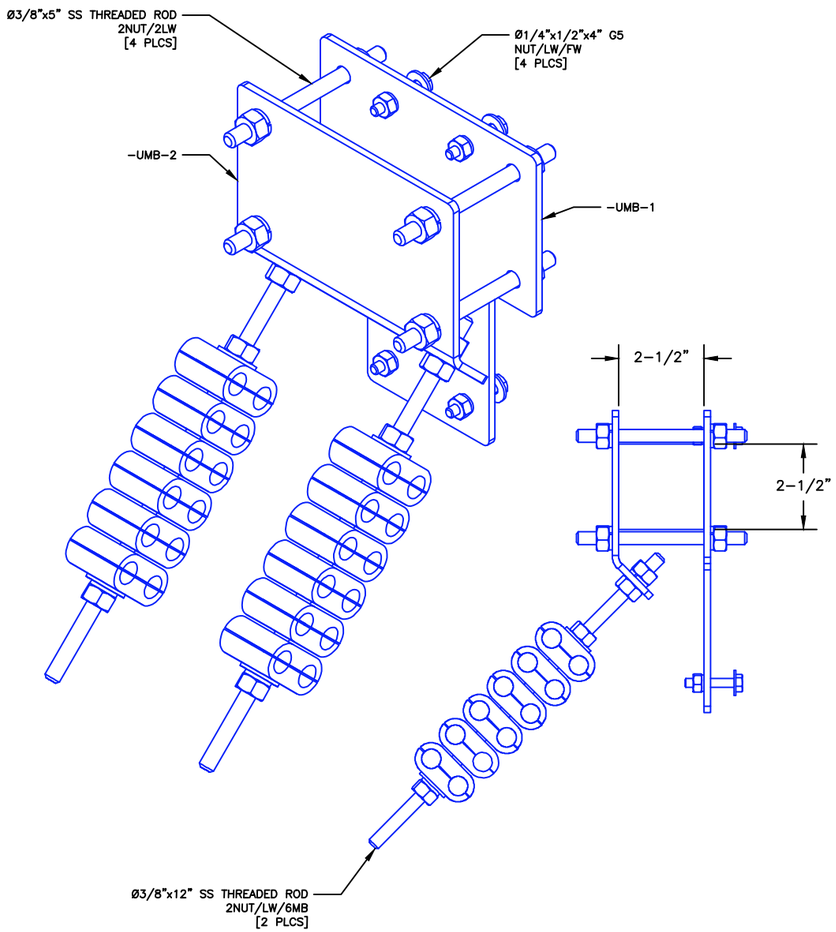
SHEET NUMBER
A-6

BILL OF MATERIALS

TOTAL SHIP WT = 8.3#

SHIP MARK	PC MARK	QTY.	DESCRIPTION	LENGTH	REMARKS	BLACK WT
AT-WP-OMNI-UMB-1	-	1	RADIO MOUNTING BRACKET	0'-8 7/8"	BURN/FORM	2.5
AT-WP-OMNI-UMB-2	-	1	BACKING PLATE	0'-7"	BURN/FORM	2.1
HARDWARE						
-	TRS-38-12	2	Ø3/8" STAINLESS STEEL THREADED ROD	1'-0"	-	-
-	NS-38	8	Ø3/8" S.S. NUT	-	-	-
-	WFS-38	4	Ø3/8" S.S. FLAT WASHER	-	-	-
-	WLS-38	4	Ø3/8" S.S. LOCK WASHER	-	-	-
-	MB-13	12	13mm MINI BLOCK DUAL HANGER COAX	-	-	-
-	TRG-38-5	4	Ø3/8" GALV. THREADED ROD	0'-5"	-	-
-	NG-38	8	Ø3/8" GALV. NUT	-	-	-
-	WLG-38	8	Ø3/8" GALV. LOCK WASHER	-	-	-
-	BG-14-150	4	Ø1/4" GALV. BOLT G5	0'-1 1/2"	-	-
-	NG-14	4	Ø1/4" GALV. NUT	-	-	-
-	WFG-14	4	Ø1/4 GALV. FLAT WASHER	-	-	-
-	WLG-14	4	Ø1/4" GALV. LOCK WASHER	-	-	-

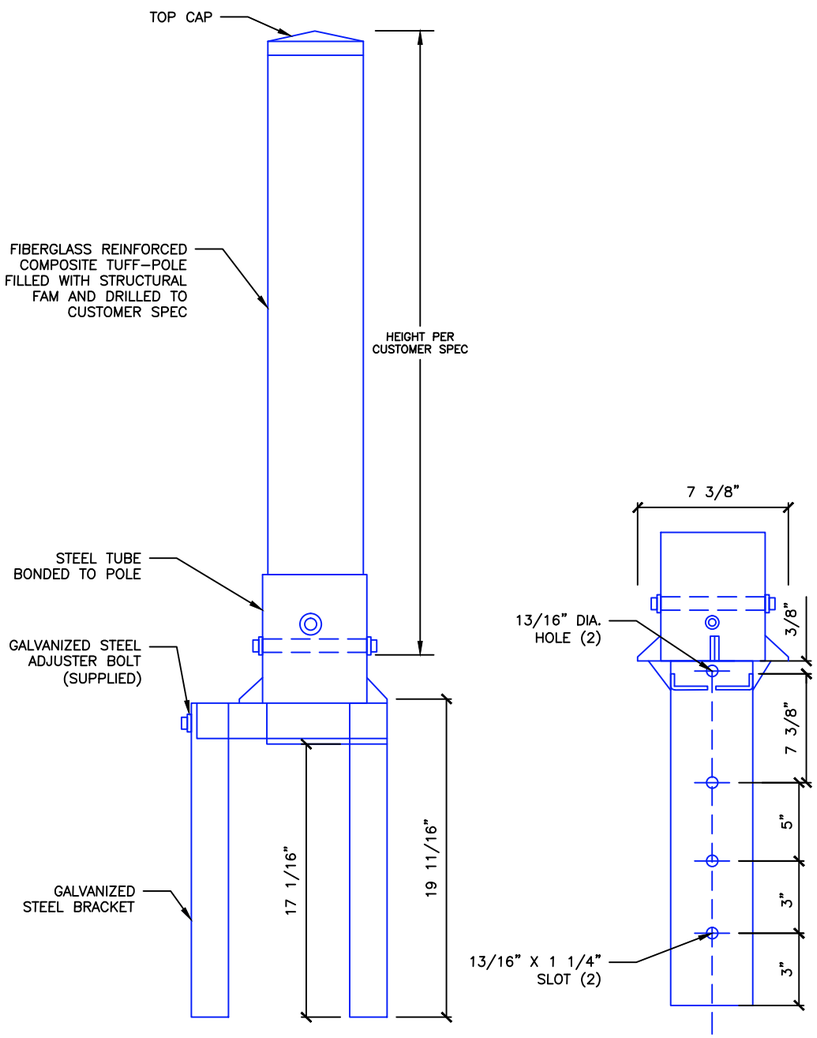
STANDARD COLOR: FAIRFAX BROWN



RADIO MOUNT DETAIL — SCALE N.T.S. — 2

SERIES	DUTY	POLE SECTION
S	STD	SQUARE 5"X5"
H	HD	SQUARE 5"X5" (PERFERRED)
X	XHD	SQUARE 5"X5"

STANDARD COLOR: FAIRFAX BROWN



SHAKESPEARE POLE TOP EXTENSION (PTXB-060-5C-UD) DETAIL — SCALE N.T.S. — 1

CARRIER:

at&t

16221 NE 72ND WAY
REDMOND, WA 98052

PLANS PREPARED FOR:

MasTec Network Solutions

22263 68TH AVENUE SOUTH
KENT, WA 98032

PLAN PREPARED BY:

LETS

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112 S. KYRENE RD. STE. 1
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ARIZONA: 480-961-9151
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CLMAS-007-B
798 HOLMES LANE
OREGON CITY, OR 97045
CLACKAMAS COUNTY

SHEET TITLE

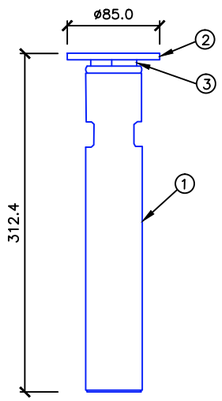
EQUIPMENT DETAILS

SHEET NUMBER

A-7

SPECIFICATIONS	
MODEL NUMBER	MK-06678
ENVIRONMENTAL CONDITIONS	OUTDOOR
WEIGHT	2.65lbs (1.2kg)
DIMENSIONS	Ø3.35" x L 12.30" (Ø85mm x 312.4mm)
MATERIAL	STEEL AND ALUMINIUM
WIND SPEED RESISTANCE	150mph (240kmh)

STANDARD COLOR: NOT TO BE PAINTED



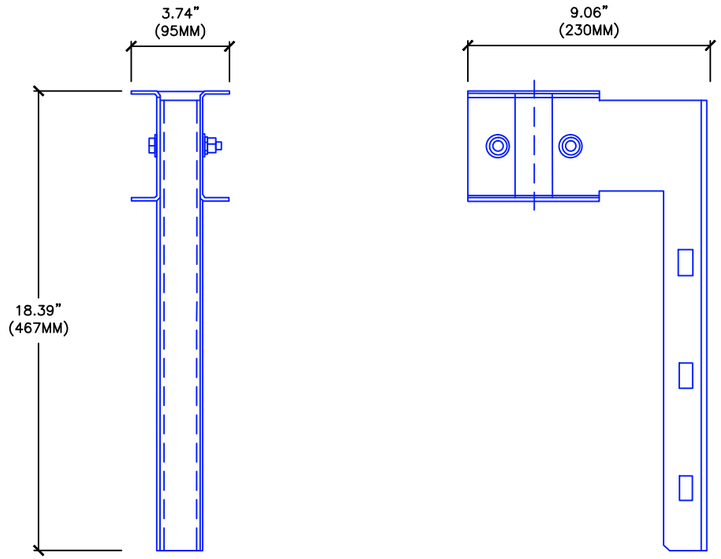
ROD ADAPTER KIT		
ITEM	QTY	DESCRIPITION
1	1	ROD ADAPTER
2	1	PLAIN WASHER 1"
3	1	STAINLESS STEEL SPLIT LOCK WASHER 1"

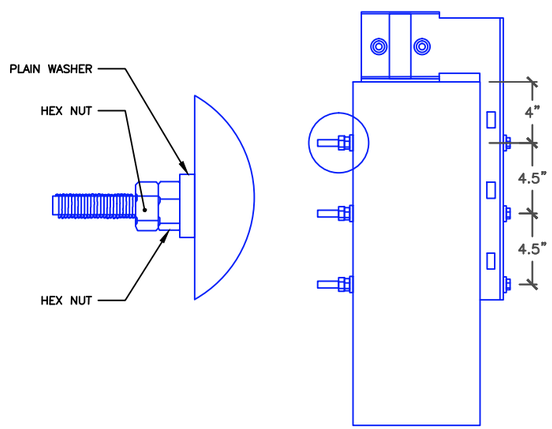
ROD ADAPTER DETAIL | SCALE N.T.S. | 2

SPECIFICATIONS

MODEL NUMBER	MK-06679
ENVIRONMENTAL CONDITIONS	OUTDOOR
WEIGHT	5.14LBS (2.33KG)
DIMENSIONS	L 9.06" X H 18.39" X W 3.74" (230MM X 467MM X 95MM)
MATERIAL	STEEL
WIND SPEED RESISTANCE	150 MPH (240KMH)
POLE DIAMETER RANGE	Ø4" (101MM) TO Ø12" (305MM)
MOUNTING STYLE	TOP POLE MOUNT
MOUNTING HARDWARE TO ANTENNA	SUPPLIED WITH BRACKET
MOUNTING HARDWARE TO POLE	NOT SUPPLIED WITH BRACKET

STANDARD COLOR: FAIRFAX BROWN





ANTENNA POLE TOP MOUNT DETAIL | SCALE N.T.S. | 1

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CLMAS-007-B
798 HOLMES LANE
OREGON CITY, OR 97045
CLACKAMAS COUNTY

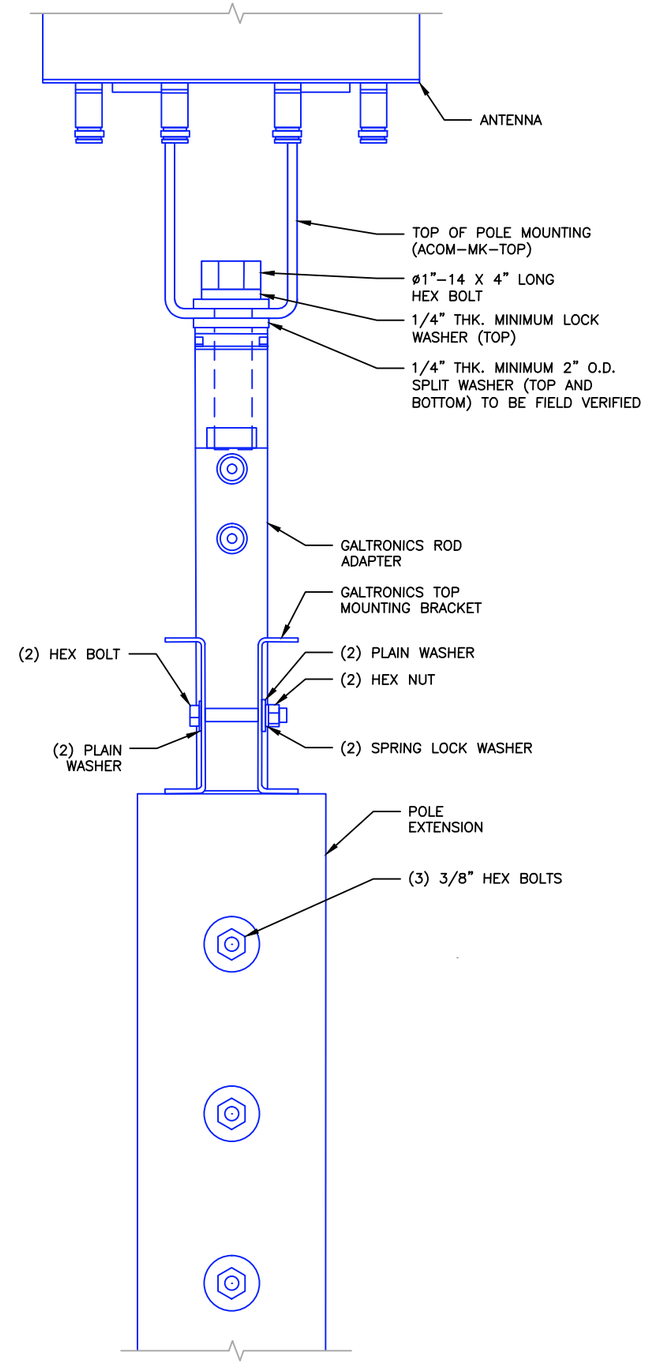
SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER
A-8

NOT USED

SCALE N.T.S. 2

NOTE:
GENERAL CONTRACTOR SHALL CONSIDER CUTTING THE POLE EXTENSION IN FIELD TO MAINTAIN A SPECIFIC ANTENNA RAD CENTER.



ANTENNA POLE TOP MOUNT DETAIL

SCALE N.T.S. 1

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at&t
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REDMOND, WA 98052

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ARIZONA: 480-961-9151
LETS PROJ. #: MT-CRPNW-115

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OREGON CITY, OR 97045
CLACKAMAS COUNTY

SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER
A-9

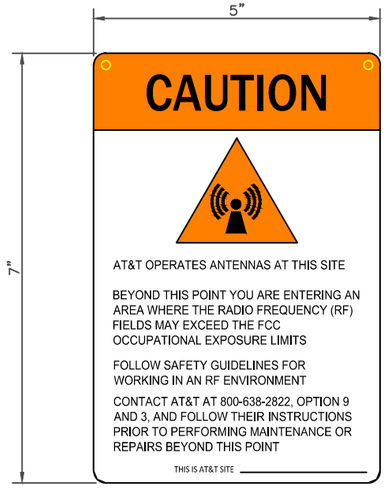
Available from Excel Sign and Decal:
https://www.weneedsigns.com/home.php?cat=1135 and click on AT&T
Ph: 510-651-0445

NO1-DC-16 1"X6" NOTICE DECAL

"For 1 Foot Distance" VINYL DECAL WITH ADHESIVE BACKING

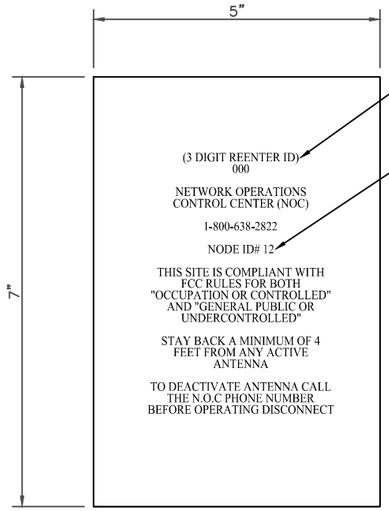
1 order comes in a pack of 25

Place three NOTICE stickers equally-spaced around the bottom of the antenna radome.



NOTE:
WARNING SIGNS TO BE MOUNTED, IN VIEW, ON EQUIPMENT ENCLOSURE

NOTE:
INSTALL PER MANUFACTURER SPECIFICATIONS AND FCC.



RENTER I.D NUMBER SHOWN IS FOR EXAMPLE PURPOSES ONLY. THE APPROPRIATE NODE I.D SHALL BE INDICATED AT EACH NODE

NODE NUMBER SHOWN IS FOR EXAMPLE PURPOSES ONLY. THE APPROPRIATE NODE I.D. SHALL BE INDICATED AT EACH NODE

NOTE:
WARNING SIGNS TO BE MOUNTED, IN VIEW, ON EQUIPMENT ENCLOSURE

NOTE:
INSTALL PER MANUFACTURER SPECIFICATIONS AND FCC.

RF WARNING SIGNS

SCALE N.T.S.

1

CARRIER:
at&t
16221 NE 72ND WAY
REDMOND, WA 98052

PLANS PREPARED FOR:
MasTec Network Solutions
22263 68TH AVENUE SOUTH
KENT, WA 98032

PLAN PREPARED BY:
LETS
LETS America, Inc.
112 S. KYRENE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480-961-9151
LETS PROJ. #: M1-CRPNW-115

REVISIONS

REV.	DATE	DESCRIPTION	INITIALS
A	05/02/19	90% CD'S	SBP
B	06/21/19	95% CD'S	SBP
C	06/24/19	95% CD'S	GMC
0	06/28/19	CONSTRUCTION SET	GMC
1	08/15/19	CLIENT COMMENTS	GMC
2	12/10/19	CLIENT COMMENTS	SBP

NOT FOR CONSTRUCTION UNLESS LABELED AS CONSTRUCTION SET

REGISTERED PROFESSIONAL ENGINEER
89971PE
OREGON
January 15, 2015
MADHAN KUMAR KANTHA SAMY
12/10/19
DATE
EXPIRES 06/30/2021

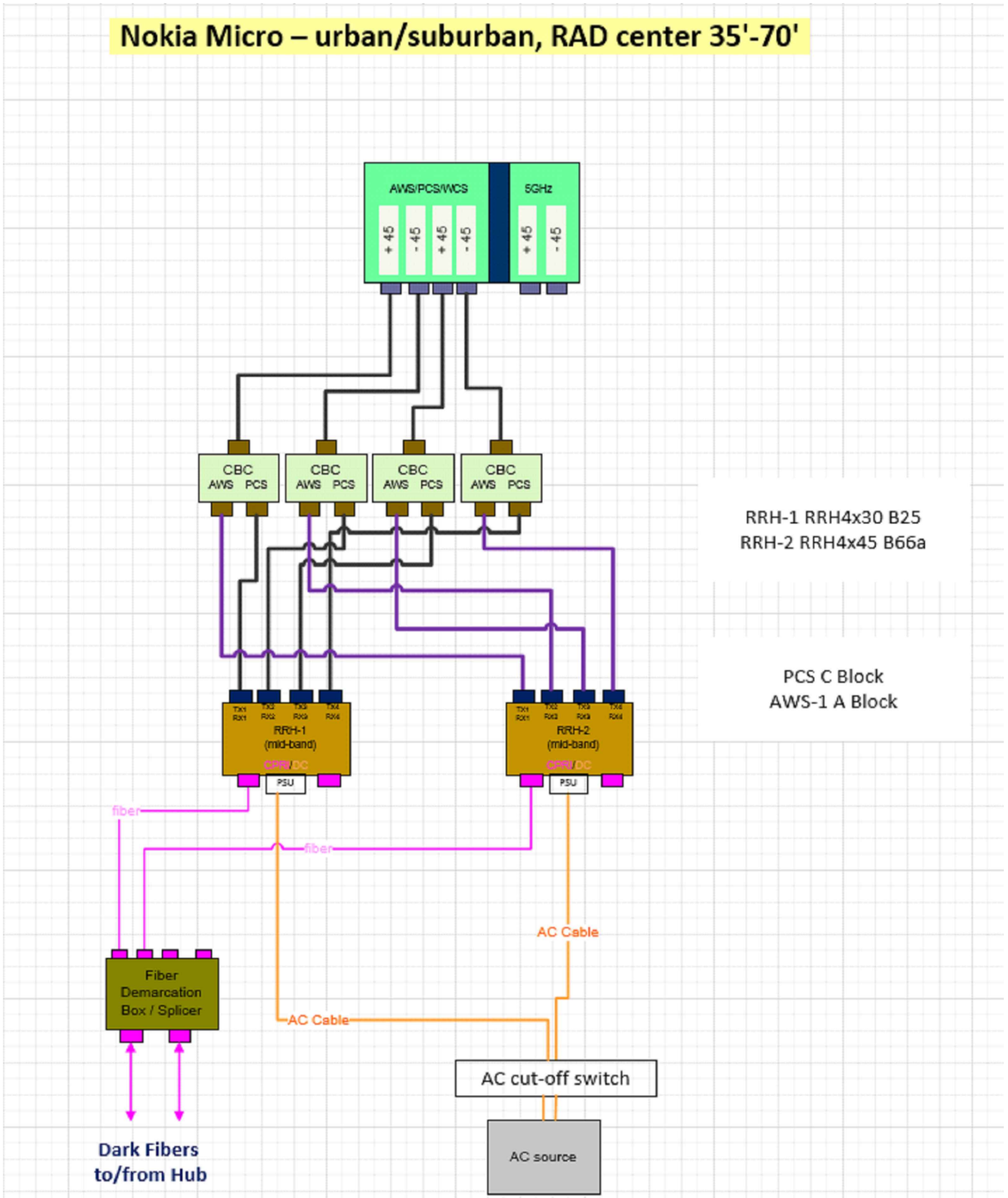
"I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF OREGON"

CLMAS-007-B
798 HOLMES LANE
OREGON CITY, OR 97045
CLACKAMAS COUNTY

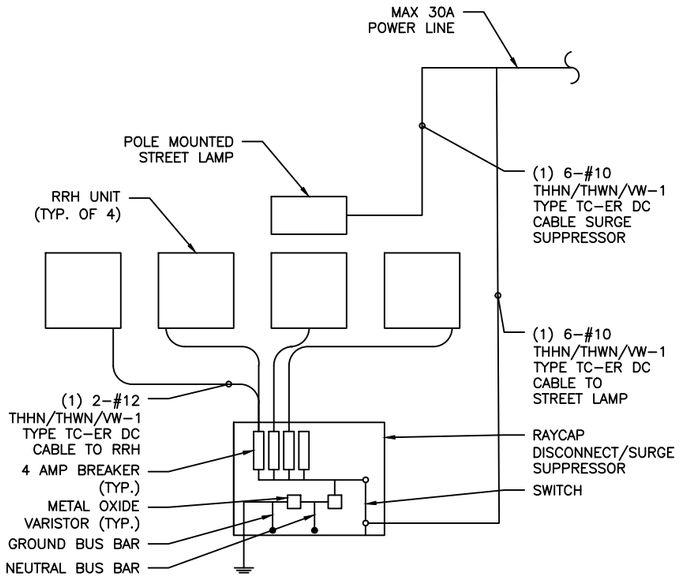
SHEET TITLE
RF WARNING SIGNS

SHEET NUMBER
RF-1

Nokia Micro – urban/suburban, RAD center 35'-70'



PLUMBING DIAGRAM | SCALE N.T.S. | 2



POWER SCHEMATIC | SCALE N.T.S. | 1

CARRIER:
at&t
16221 NE 72ND WAY
REDMOND, WA 98052

PLANS PREPARED FOR:
MasTec Network Solutions
22263 68TH AVENUE SOUTH
KENT, WA 98032

PLAN PREPARED BY:
LETS
LETS America, Inc.
112 S. KYRENE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480–961–9151
LETS PROJ. #: MT–CRPNW–115

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OREGON
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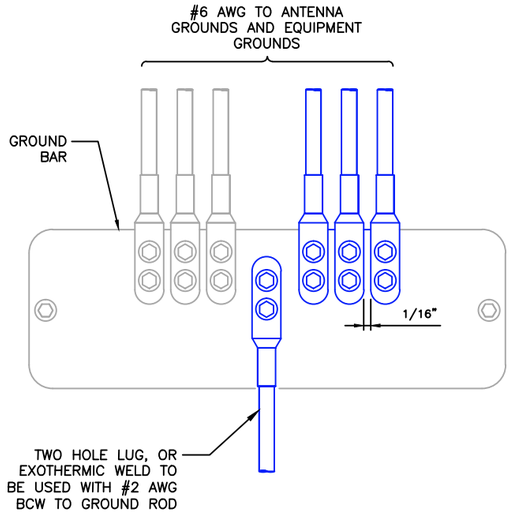
CLMAS–007–B
798 HOLMES LANE
OREGON CITY, OR 97045
CLACKAMAS COUNTY

SHEET TITLE
PLUMBING DIAGRAM
& POWER SCHEMATIC

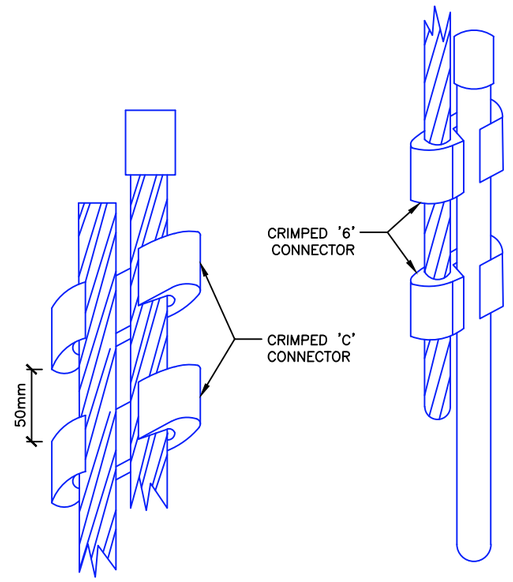
SHEET NUMBER
E-1

1. ALL METALLIC PARTS OF THE INSTALLATION ON THE POLE SHALL BE BONDED TOGETHER AND GROUNDED
2. A COPPER GROUND WIRE, #6 AWS MINIMUM SIZE SHALL BE INSTALLED FROM THE BASE OR FEEDLINE CONNECTION POINT OF THE ANTENNA TO A GROUND ROAD AT THE BASE OF THE POLE AND BE ADJACENT TO THE ANTENNA FEEDLINE CONDUIT. THE GROUND WIRE SHALL BE PERMANENTLY CONNECTED TO THE GROUND ROD
3. WHERE A PGE NEUTRAL CONDUCTOR EXISTS, THE GROUND WIRE SHALL BE PERMANENTLY BONDED TO THE PGE NEUTRAL CONDUCTOR AT THE NEUTRAL CONDUCTOR LEVEL BY PGE CREWS
4. A GROUND ROD, 8 FEET MINIMUM IN LENGTH SHALL BE INSTALLED (WHERE NO PGE GROUND ROD & INTACT GROUND WIRE EXISTS) AT THE BASE OF THE POLE. THIS INSTALLATION SHALL MEET OR EXCEED THE REQUIREMENTS OF CONSTRUCTION GUIDELINE D16–2.
5. THE GROUND WIRE SHALL BE COVERED BY A PROTECTIVE MOLDING FOR ITS ENTIRE LENGTH ON THE POLE EXCEPT AT THE POINT WHERE IT MUST BE EXPOSED FOR BONDING TO THE PGE NEUTRAL
6. THE PGE AND COMMUNICATION GROUND RODS SHALL BE BONDED TOGETHER USING COPPER #6 AWG WIRE

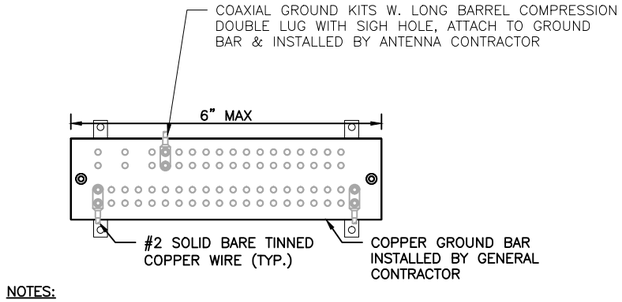
GROUNDING NOTES | SCALE N.T.S. | 7



WIRE TO GROUND BAR CONNECTION | SCALE N.T.S. | 4



C-CRIMP DETAIL | SCALE N.T.S. | 2



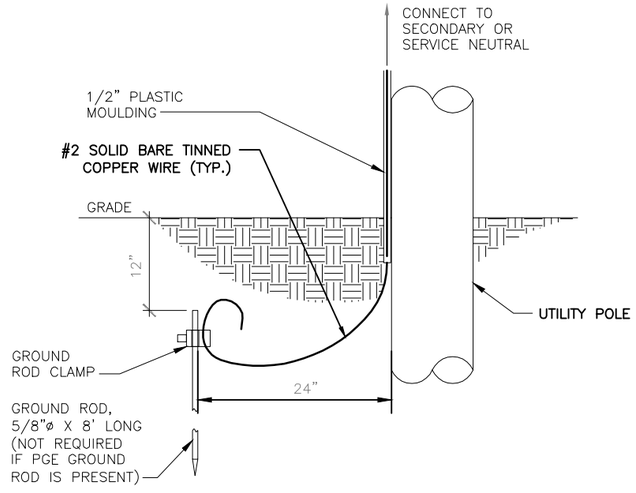
NOTES:

1. COAT ALL MECHANICAL CONNECTION WITH "NOOX" OR APPROVED EQUAL
2. ALL GROUND LUGES TO HAVE INSPECTION WINDOWS/SIGHT HOLES

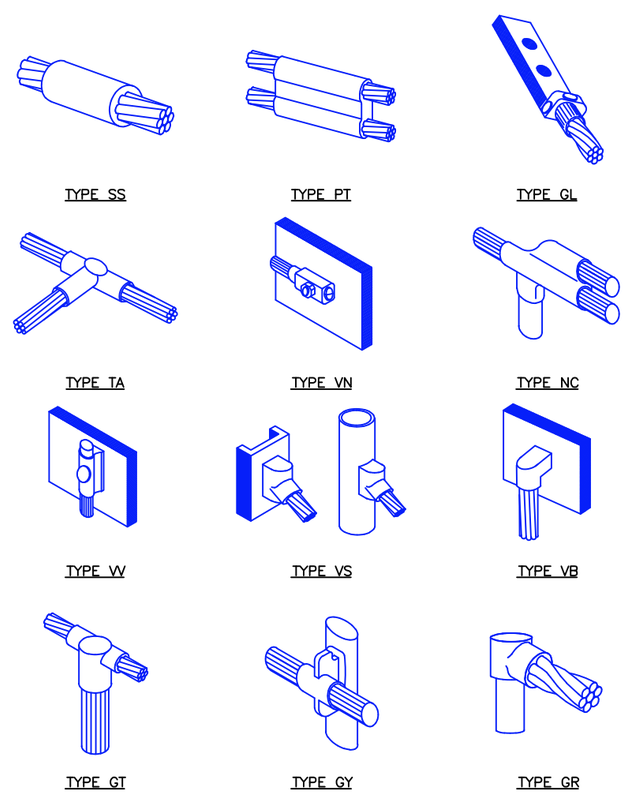
GROUNDING BAR | SCALE N.T.S. | 6

NOTES:

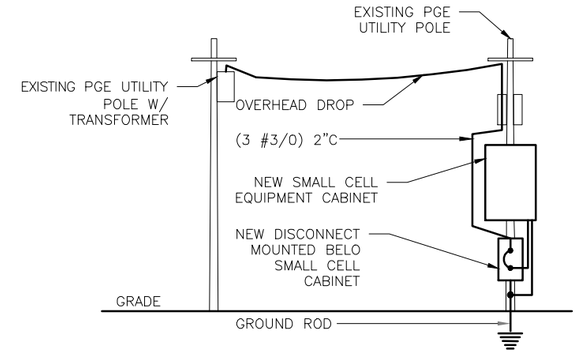
1. GROUND WIRE MOLDING SHALL BE INSTALLED OVER THE BARE GROUND WIRE TO PROTECT LINE WORKERS, THE WIRE, AND THE PUBLIC. EXTEND PLASTIC MOLDING AT LEAST TWO INCHES BELOW GRADE.
2. THE GROUND WIRE SHALL BE IN ONE CONTINUOUS LENGTH. INSERT GROUND WIRE FROM THE BOTTOM OF THE GROUND CLAMP AND BOND OVER CLAMP BEFORE TIGHTENING. CONNECT TO SECONDARY OR SERVICE NEUTRAL ON THE POLE. PLACE GROUND WIRE ON POLE BETWEEN FACE (NOTCH SIDE) AND SERVICE NEUTRAL.
3. DROVE GROUND ROD IN FORM UNDISTURBED EARTH
4. REFERENCE PGE STD



HARDWARE DETAIL FOR EXTERIOR CONNECTIONS | SCALE N.T.S. | 3



CADWELD DETAILS | SCALE N.T.S. | 1



ONE-LINE DIAGRAM | SCALE N.T.S. | 5

CARRIER:
at&t
16221 NE 72ND WAY
REDMOND, WA 98052

PLANS PREPARED FOR:
MasTec Network Solutions
22263 68TH AVENUE SOUTH
KENT, WA 98032

PLAN PREPARED BY:
LETS
LETS America, Inc.
112 S. KYRENE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480–961–9151
LETS PROJ. #: M1–CRPNW–115

REVISIONS

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REGISTERED PROFESSIONAL ENGINEER
89971PE
OREGON
January 15, 2015
MADHAN KUMAR KANTHA SAMY

12/10/19
DATE

EXPIRES 06/30/2021

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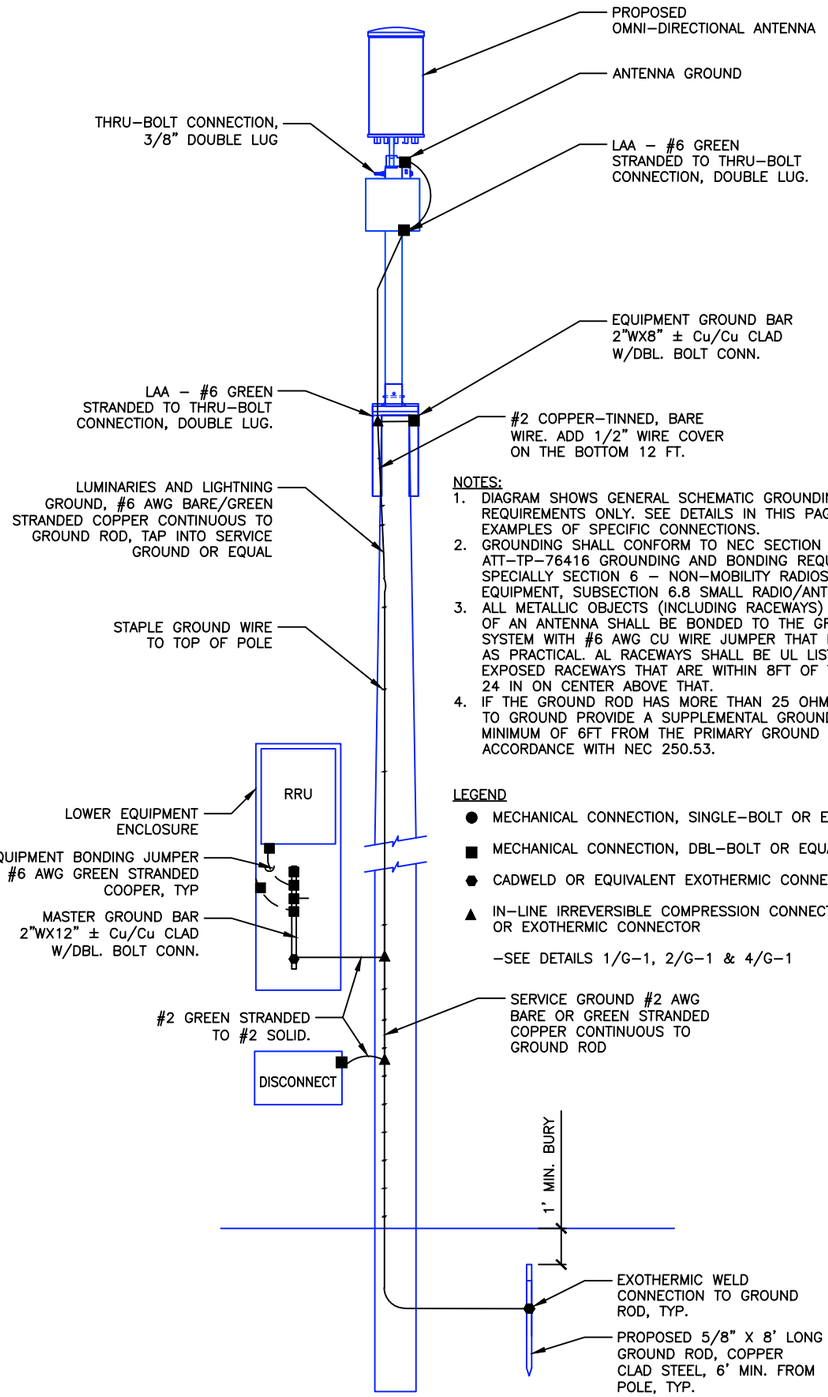
CLMAS–007–B
798 HOLMES LANE
OREGON CITY, OR 97045
CLACKAMAS COUNTY

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
G-1

NOT USED

SCALE N.T.S. 2



NOTES:

1. DIAGRAM SHOWS GENERAL SCHEMATIC GROUNDING REQUIREMENTS ONLY. SEE DETAILS IN THIS PAGE FOR EXAMPLES OF SPECIFIC CONNECTIONS.
2. GROUNDING SHALL CONFORM TO NEC SECTION 250 AND ATT–TP–76416 GROUNDING AND BONDING REQUIREMENTS, SPECIALLY SECTION 6 – NON–MOBILITY RADIOS SITES AND EQUIPMENT, SUBSECTION 6.8 SMALL RADIO/ANTENNA SYSTEMS.
3. ALL METALLIC OBJECTS (INCLUDING RACEWAYS) WITHIN 7 FEET OF AN ANTENNA SHALL BE BONDED TO THE GROUNDING SYSTEM WITH #6 AWG CU WIRE JUMPER THAT IS AS SHORT AS PRACTICAL. AL RACEWAYS SHALL BE UL LISTED. ALL EXPOSED RACEWAYS THAT ARE WITHIN 8FT OF THE GROUND, 24 IN ON CENTER ABOVE THAT.
4. IF THE GROUND ROD HAS MORE THAN 25 OHMS RESISTANCE TO GROUND PROVIDE A SUPPLEMENTAL GROUND ROD A MINIMUM OF 6FT FROM THE PRIMARY GROUND ROD, IN ACCORDANCE WITH NEC 250.53.

LEGEND

- ● MECHANICAL CONNECTION, SINGLE–BOLT OR EQUAL, MIN.
- ■ MECHANICAL CONNECTION, DBL–BOLT OR EQUAL
- ⬢ CADWELD OR EQUIVALENT EXOTHERMIC CONNECTION
- ▲ IN–LINE IRREVERSIBLE COMPRESSION CONNECTOR (Cu C–CRIMP), OR EXOTHERMIC CONNECTOR

–SEE DETAILS 1/G–1, 2/G–1 & 4/G–1

GROUNDING DIAGRAM

SCALE N.T.S. 1

CARRIER:
at&t
16221 NE 72ND WAY
REDMOND, WA 98052

PLANS PREPARED FOR:
MasTec Network Solutions
22263 68TH AVENUE SOUTH
KENT, WA 98032

PLAN PREPARED BY:
LETS
LETS America, Inc.
112 S. KYRENE RD. STE. 1
CHANDLER, AZ 85226
ARIZONA: 480–961–9151
LETS PROJ. #: M1–CRPNW–115

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REGISTERED PROFESSIONAL ENGINEER
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OREGON
January 15, 2015
MADHAN KUMAR KANTHA SAMY
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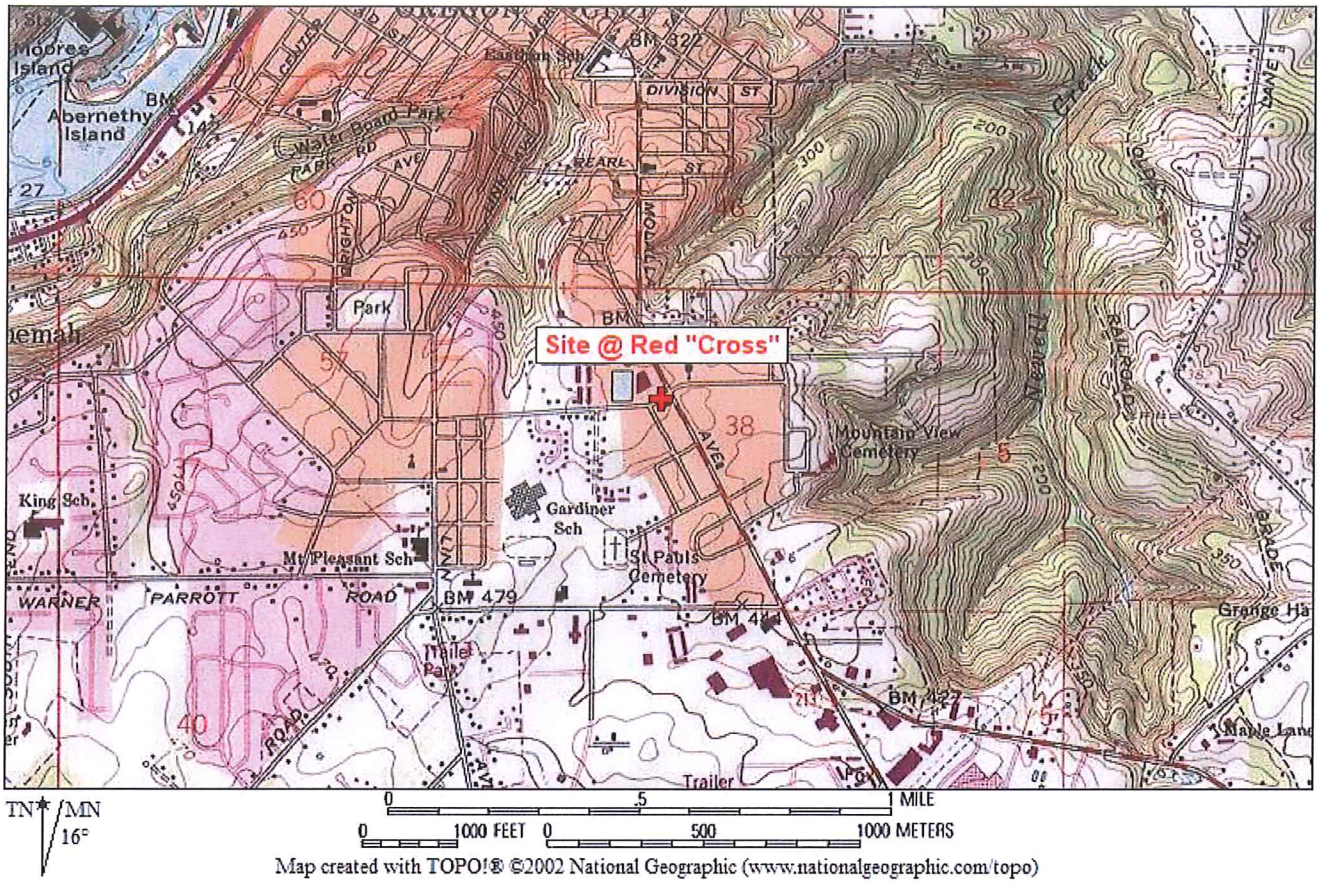
CLMAS–007–B
798 HOLMES LANE
OREGON CITY, OR 97045
CLACKAMAS COUNTY

SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER
G-2

1A SURVEY CERTIFICATION
Site: CLMAS-007



01792.1603

SCALE: 1"= 2000'±

Address: 798 Holmes Lane
Oregon City, OR 97045

Structure Type: Existing Utility Pole

GEOGRAPHIC COORDINATES

Latitude:	45° 20' 33.10" N	(NAD 83/91)
Longitude:	122° 35' 44.37" W	(NAD 83/91)
Latitude:	45.342528° N	(NAD 83/91)
Longitude:	122.595658° W	(NAD 83/91)
Elevation-Ground:	473.1 feet	(NAVD 88)
Height @ Top of Pole:	28.9 feet	(AGL)

Date of Survey: April 19, 2019

REGISTERED
PROFESSIONAL
LAND SURVEYOR

DEC 19, 2019

OREGON
MAY 10, 2011
JONATHAN MARLO BECKER
84870

RENEWS: 12/31/2019

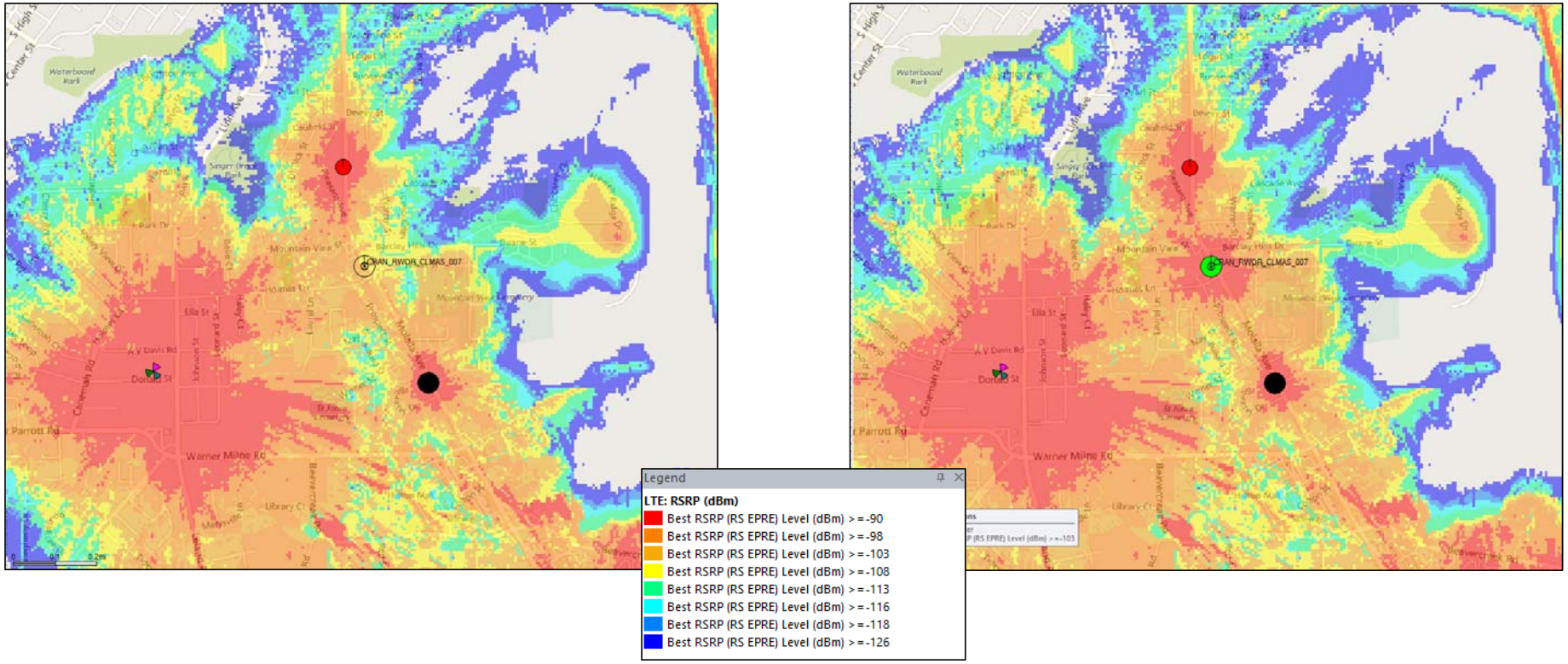
Jonathan M. Becker, # 84870PLS

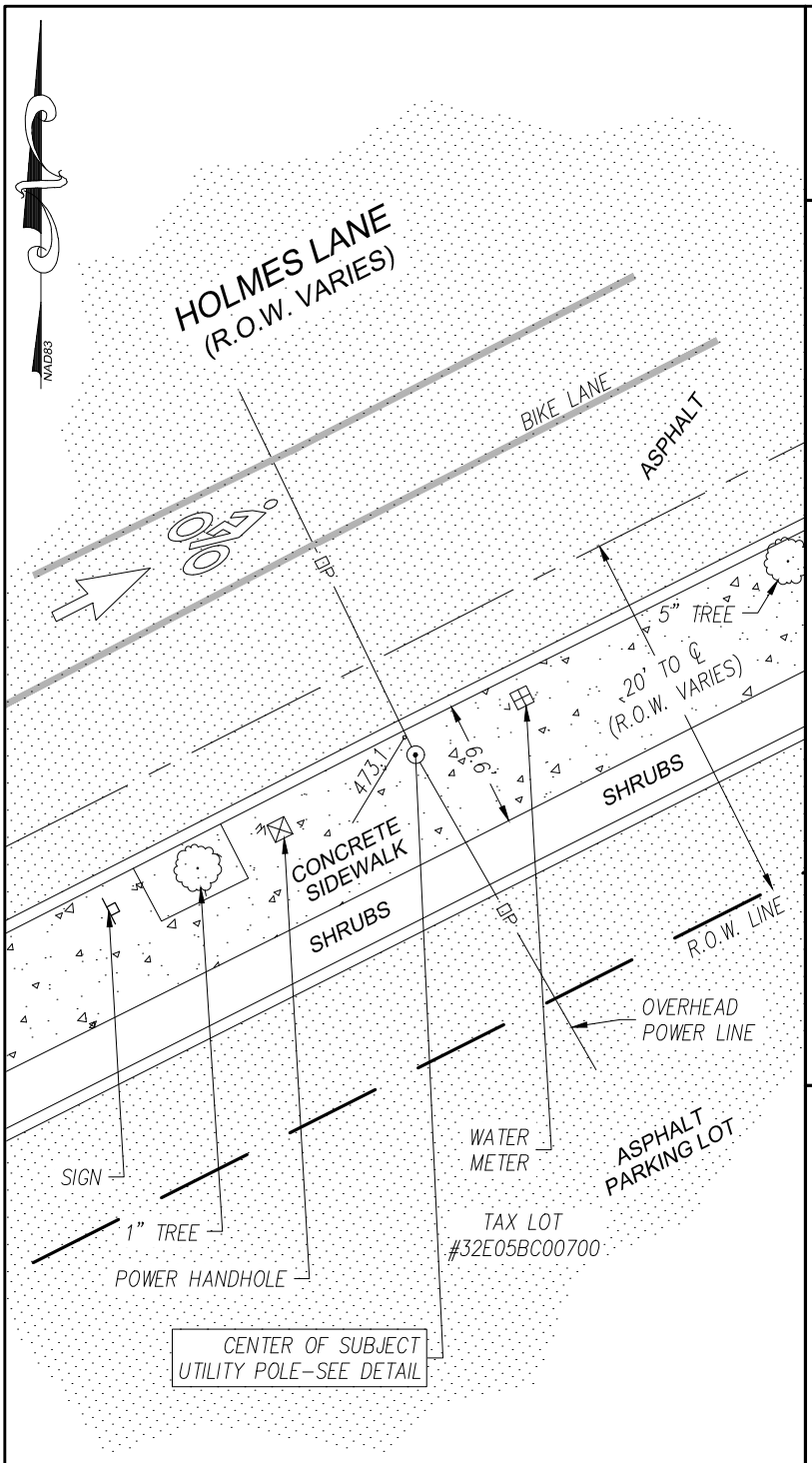
I certify that the latitude and the longitude shown above are accurate to within ±15 feet horizontally and that the site elevation is accurate to within ±3 feet vertically, which meet 1A standards as defined on the FAA ASAC information sheet 91:003. The horizontal datum (Geographic Coordinates) are in terms of the North American Datum of 1983 (NAD 83) and are expressed as degrees (°), minutes ('), and seconds ("), to the nearest hundredth of a second and as decimal degrees (°) to the nearest millionth of a degree. The vertical datum (elevation AMSL) is in terms of the North American Vertical Datum of 1988 (NAVD 88).

Portland, OR : Comparative Coverage – Band 2 Node 20592-007

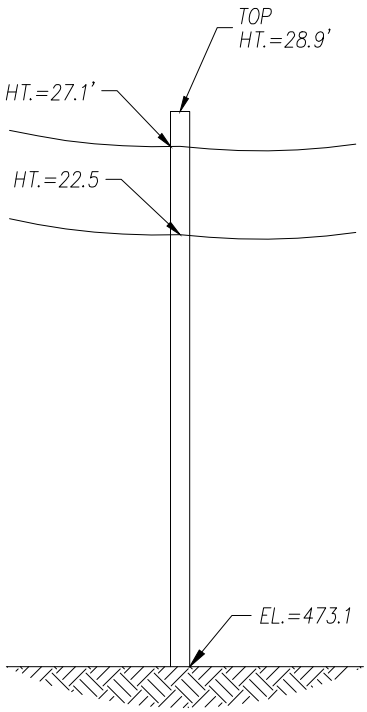
The comparative LTE: RSRP coverage map over the focus zone is provided below as an illustration. All the other coverage maps (RSRQ, dominance, etc.) are directly viewable in Atoll (with more detail) or can be provided as a snapshot similar to the illustration below upon request.

RSRP(Before)	RSRP(After)





SUBJECT UTILITY POLE
NAD 83
LAT – 45.342528° N
LONG – 122.595658° W
ELEV.=473.1 NAVD 88



POLE DETAIL

– NOT TO SCALE –

REGISTERED
PROFESSIONAL
LAND SURVEYOR

APR 19, 2019

OREGON
MAY 10, 2011
JONATHAN MARLO BECKER
84870

RENEWS: 12/31/2019

DUNCANSON
Company, Inc.
CIVIL ENGINEERING · SURVEYING · LAND PLANNING
145 SW 155th Street, Ste. 102 - Seattle, Washington 98166
Phone: (206) 244-4141 Fax: (206) 244-4455

at&t
Your world. Delivered.

DRAWN: LAC	DATE: 4/19/19
SCALE: 1"=10'	JOB NO.: 01792.1603

SITE ID: CLMAS-007

Radio Frequency Emissions Compliance Report For Mastec on Behalf of AT&T Mobility

Site Name:	**CRAN_RWOR_CLMAS01_007-B**	**Site Structure Type:**	**Utility Pole**
Address:	**798 Holmes Lane**	**Latitude:**	**N45-20-33.00**
	Oregon City, OR 97045	**Longitude:**	**W122-35-44.40**
Report Date:	**April 30, 2019**	**Project:**	**New Site Build**

Compliance Statement

Based on information provided by AT&T Mobility, information collected during the site visit and predictive modeling, the installation proposed by AT&T Mobility at 798 Holmes Lane, Oregon City, OR 97045 will be compliant with Radiofrequency Radiation Exposure Limits of 47 C.F.R. § 1.1307(b)(3) and 1.1310.

Certification

I, David C Cotton, am the reviewer and approver of this report and am fully aware of and familiar with the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation, specifically in accordance with FCC's OET Bulletin 65. I have reviewed this Radio Frequency Exposure Assessment report and believe it to be both true and accurate to the best of my knowledge.

Digital Signature

David Charles Cotton, Jr.
Registered Professional Engineer
State of Oregon, 82593PE
Expires: 2019-December-31
Date: 2019-May-01

General Summary

AT&T Mobility has contracted Waterford Consultants, LLC to conduct a Radio Frequency Electromagnetic Compliance assessment of the CRAN_RWOR_CLMAS01_007-B site located 798 Holmes Lane, Oregon City, OR 97045. This report contains information about the radio telecommunications equipment to be installed at this site and the surrounding environment with regard to RF Hazard compliance. The compliance assessment is based on installation designs, observational data collected on site and operational parameters provided by AT&T Mobility.

The compliance framework is derived from the Federal Communications Commission (FCC) Rules and Regulations for preventing human exposure in excess of the applicable Maximum Permissible Exposure ("MPE") limits. At any location at this site, the power density resulting from each transmitter may be expressed as a percentage of the frequency-specific limits and added to determine if 100% of the exposure limit has been exceeded. The FCC Rules define two tiers of permissible exposure differentiated by the situation in which the exposure takes place and/or the status of the individuals who are subject to exposure. General Population / Uncontrolled exposure limits apply to those situations in which persons may not be aware of the presence of electromagnetic energy, where exposure is not employment-related, or where persons cannot exercise control over their exposure. Occupational / Controlled exposure limits apply to situations in which persons are exposed as a consequence of their

employment, have been made fully aware of the potential for exposure, and can exercise control over their exposure.

Frequency (MHz)	*Limits for General Population/ Uncontrolled Exposure*		*Limits for Occupational/ Controlled Exposure*	
	Power Density (mW/cm^2)	Averaging Time (minutes)	Power Density (mW/cm^2)	Averaging Time (minutes)
30-300	0.2	30	1	6
300-1500	f/1500	30	f/300	6
1500-100,000	1.0	30	5.0	6

f=Frequency (MHz)

In situations where the predicted MPE exceeds the General Population threshold in an accessible area as a result of emissions from multiple transmitters, FCC licensees that contribute greater than 5% of the aggregate MPE share responsibility for mitigation.

Based on the computational guidelines set forth in FCC Office of Engineering and Technology, Bulletin 65 ("OET65"), Waterford Consultants, LLC has developed software to predict the overall Maximum Permissible Exposure possible at any particular location given the spatial orientation and operating parameters of multiple RF sources. The power density in the Far Field of an RF source is specified by OET-65 Equation 5 as follows:

$$S = \frac{EIRP}{4 \cdot \pi \cdot R^2} \ (\mathrm{mW/cm^2})$$

where EIRP is the Effective Radiated Power relative to an isotropic antenna and R is the distance between the antenna and point of study. Additionally, consideration is given to the manufacturers' horizontal and vertical antenna patterns as well as radiation reflection. At any location, the predicted power density in the Far Field is the spatial average of points within a 0 to 6 foot vertical profile that a person would occupy. Near field power density is based on OET-65 Equation 20 stated as

$$S = \left(\frac{180}{\theta_{BW}}\right) \cdot \frac{100 \cdot P_{in}}{\pi \cdot R \cdot h} \ (\mathrm{mW/cm^2})$$

where P_{in} is the power input to the antenna and h is the aperture length. These theoretical results represent worst-case predictions as emitters are assumed to be operating at 100% duty cycle.

Site Map

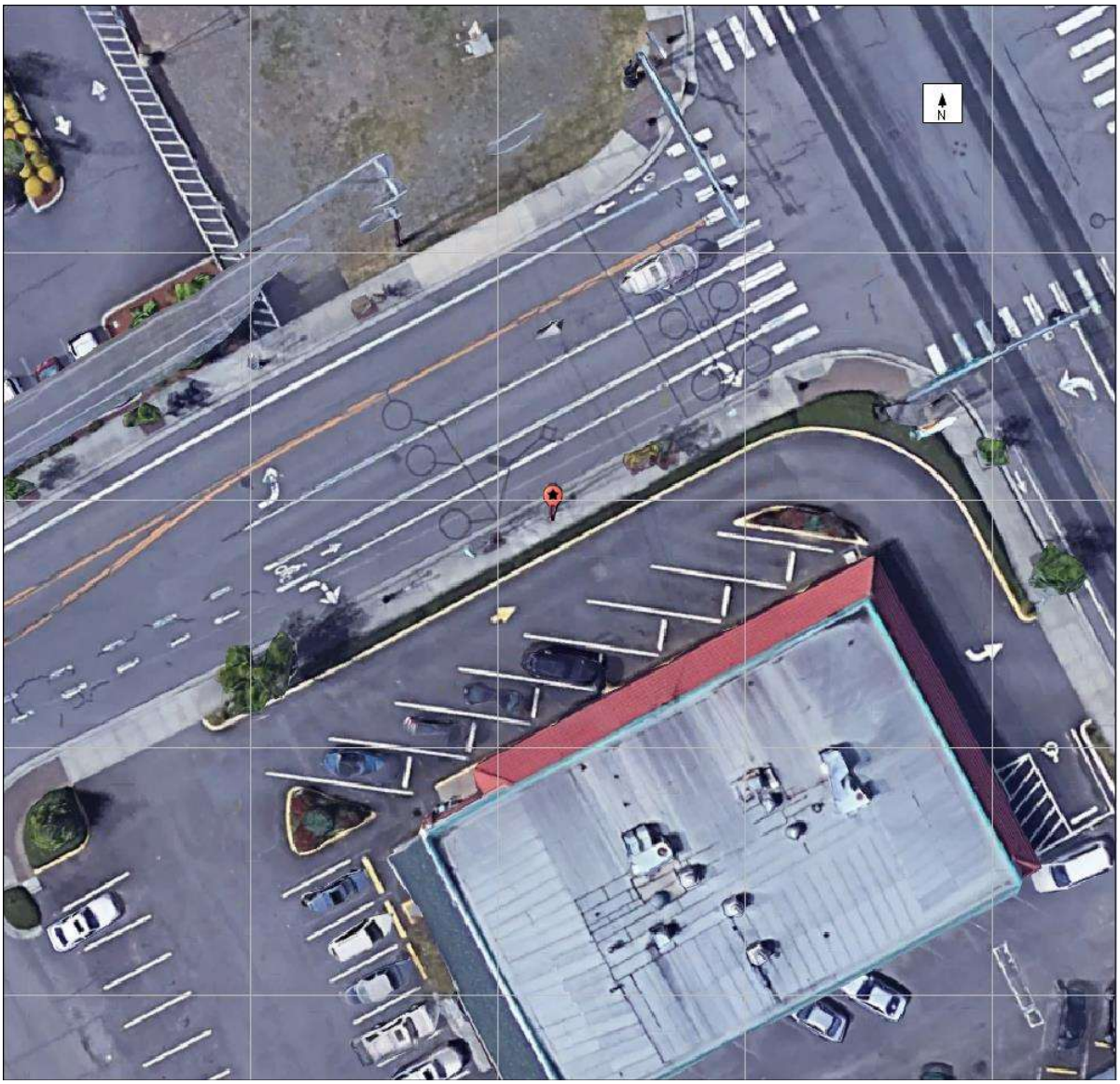
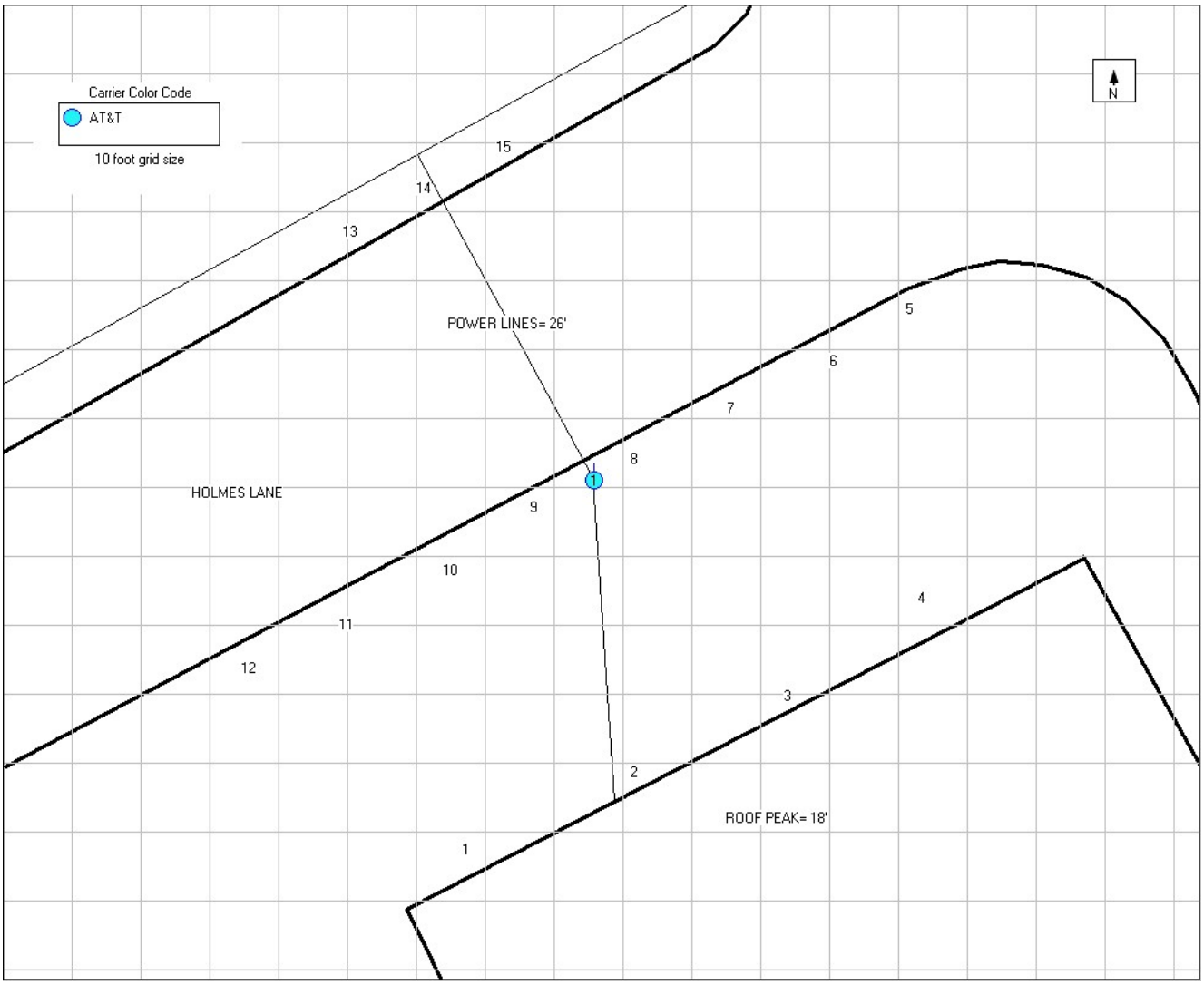


Image to show distance to surrounding buildings 50' Grid

On-Site Measurements

The site was surveyed at approximately 9:15 AM on April 29, 2019. The temperature at the time of visit was 58 degrees F with clear sky conditions. All accessible areas of the site were inspected. Measurement collection was performed using Narda Survey meter and broadband probe (300 kHz to 50 GHz) and was consistent with FCC and Narda procedures in making slow sweeping motions over the area that a person would occupy. In using this broadband instrument, the results represent the cumulative contributions of all RF sources at the measurement locations. Narda Radiation meter NBM 550 / F-0277 (Calibration Date: May 1, 2017) and probe EA-5091 / 01190 (Calibration Date: May 18, 2017) were used to record spatially averaged power density levels as a percentage of the FCC MPE General Population MPE limits.



The above site map shows the measurement locations

Measurement Readings are Spatial Average and Maximum as MPE % of the FCC General Population Limits

	Site Reading			Site Reading	
Loc#	**Avg**	**Max**	**Loc#**	**Avg**	**Max**
1	0.0005%	0.0005%	**2**	0.0040%	0.1185%
3	0.0105%	0.2370%	**4**	0.0015%	0.2960%
5	0.0005%	0.0005%	**6**	0.0590%	0.3255%
7	0.0035%	0.1480%	**8**	0.0090%	0.1480%
9	0.0055%	0.0560%	**10**	0.0620%	0.2795%
11	0.2070%	1.0060%	**12**	0.5510%	1.2020%
13	2.5620%	4.3320%	**14**	1.7025%	2.5430%
15	1.3460%	2.1800%			

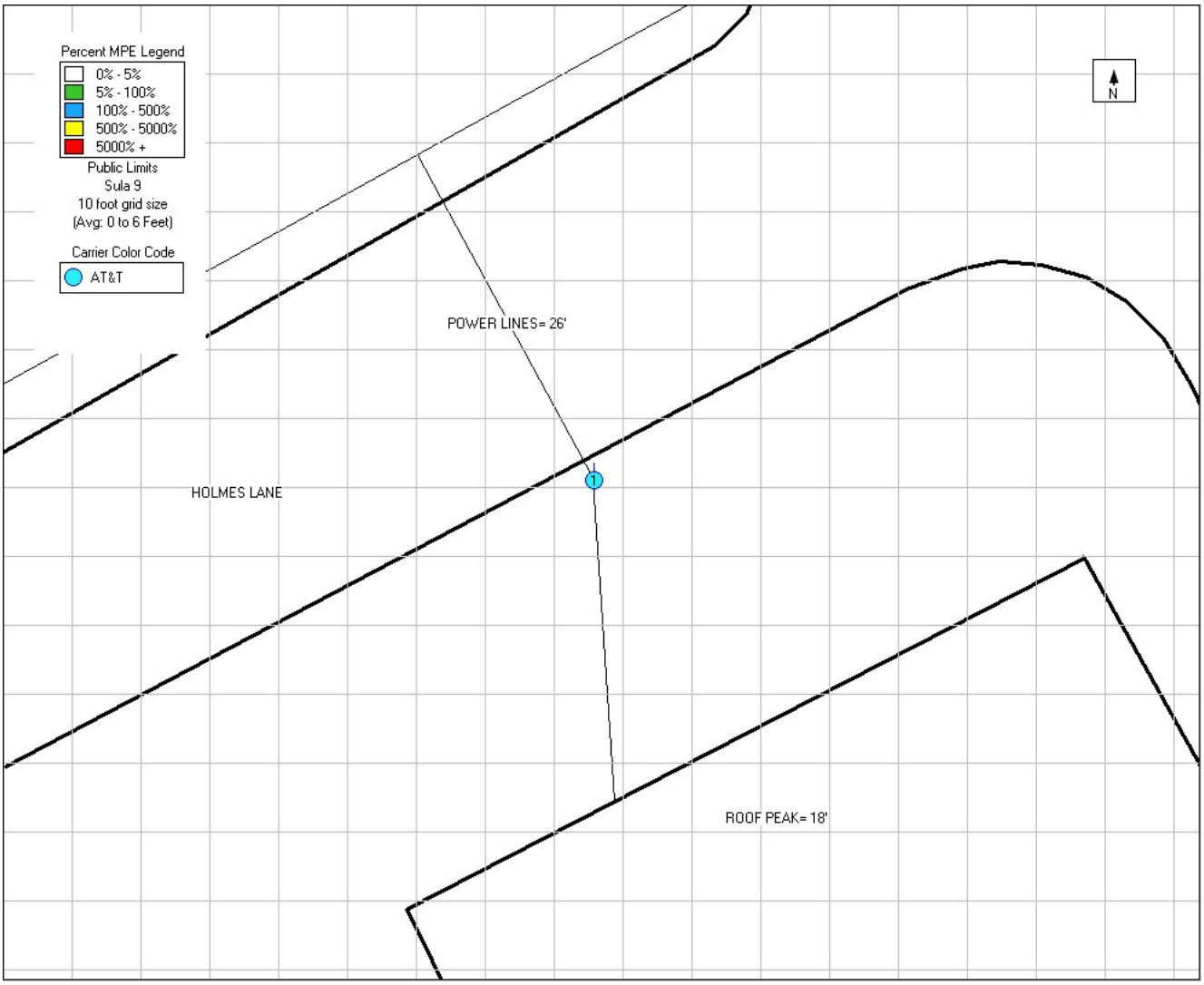
Summary: The maximum spatially averaged power density reading was 2.5620% of the FCC General Population limits

RF Configuration
The following parameters have been considered in modeling this configuration:

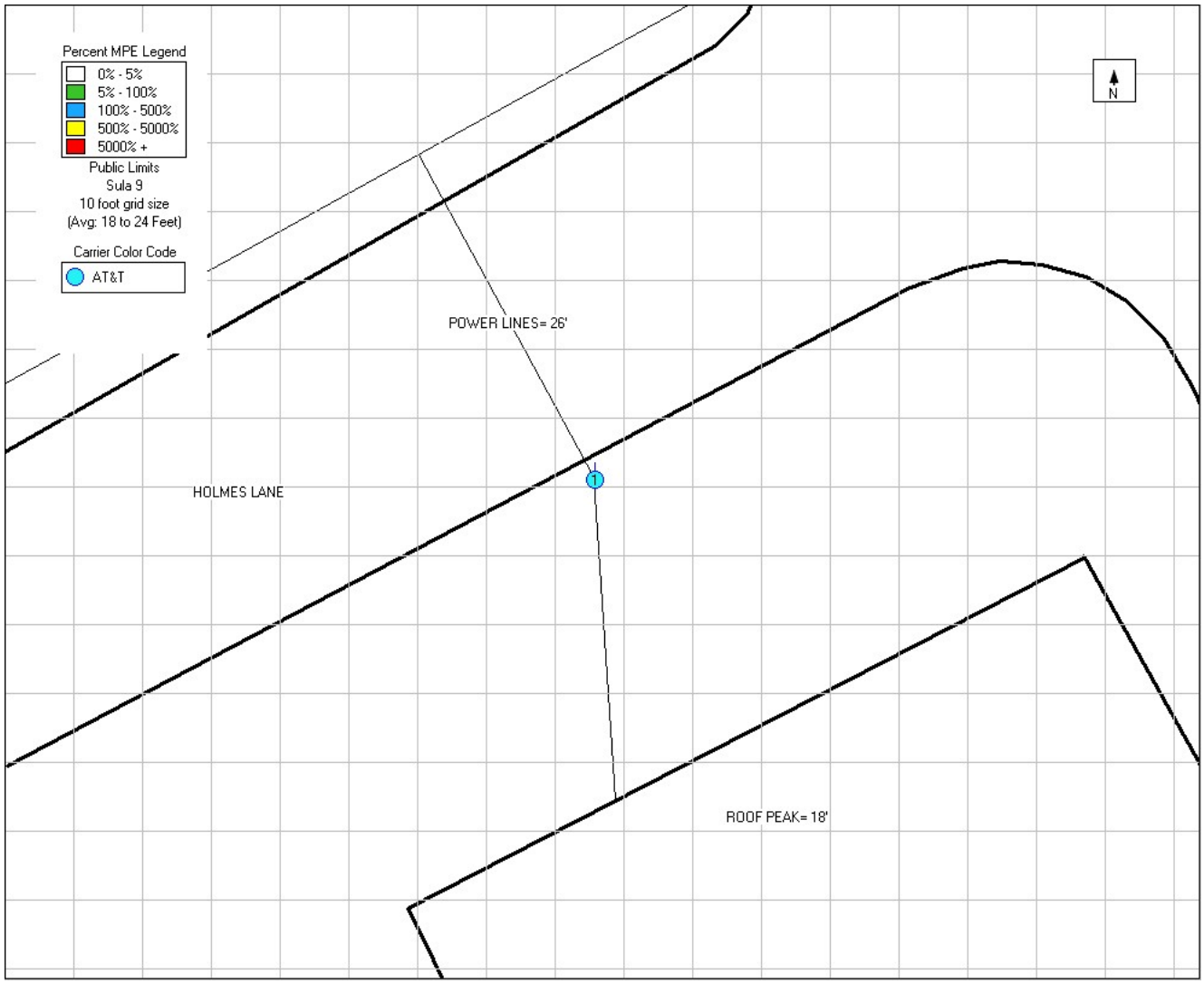
Ant #	Description	Antenna Model	Frequency (MHz)	Total ERP	Antenna Centerline Above Ground Level (ft)
1	Quasi-Omni	ACOM-2F15D-12P R3 00DT	1900	104	30
1	Quasi-Omni	ACOM-2F15D-12P R3 00DT	2100	75	30
1	Quasi-Omni	ACOM-2F15D-12P R3 00DT	5150	2	30

Predictive Analysis
For accessible areas at ground level, the maximum predicted power density level resulting from the simultaneous operation of all AT&T Mobility operations is 0.3194% of the FCC General Population limits. These theoretical results represent worst-case predictions as emitters are assumed to be operating at 100% duty cycle using isotopically radiating transmit antenna patterns. Additionally, reflection coefficient corresponding to a 1.6-fold increase in field strength has been considered.

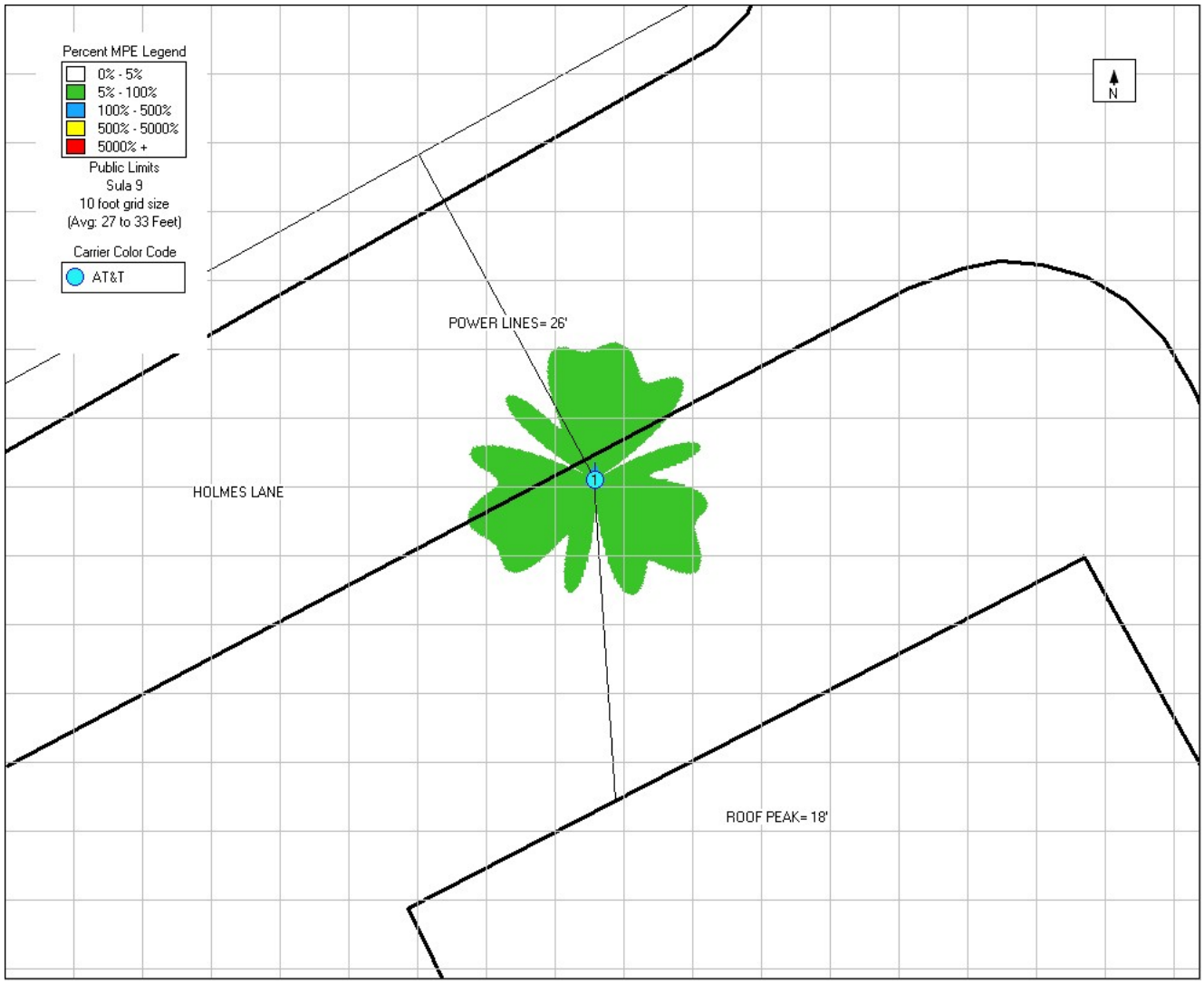
The following plots show the spatial average predicted power density levels in the reference plane indicated as a percentage of the FCC General Population MPE limits. The reference plane for the plot is the site level, as indicated in the caption. For example, “Avg 10 to 16 Feet” refers to the spatial average predicted power density level between 10 and 16 feet above the site level.



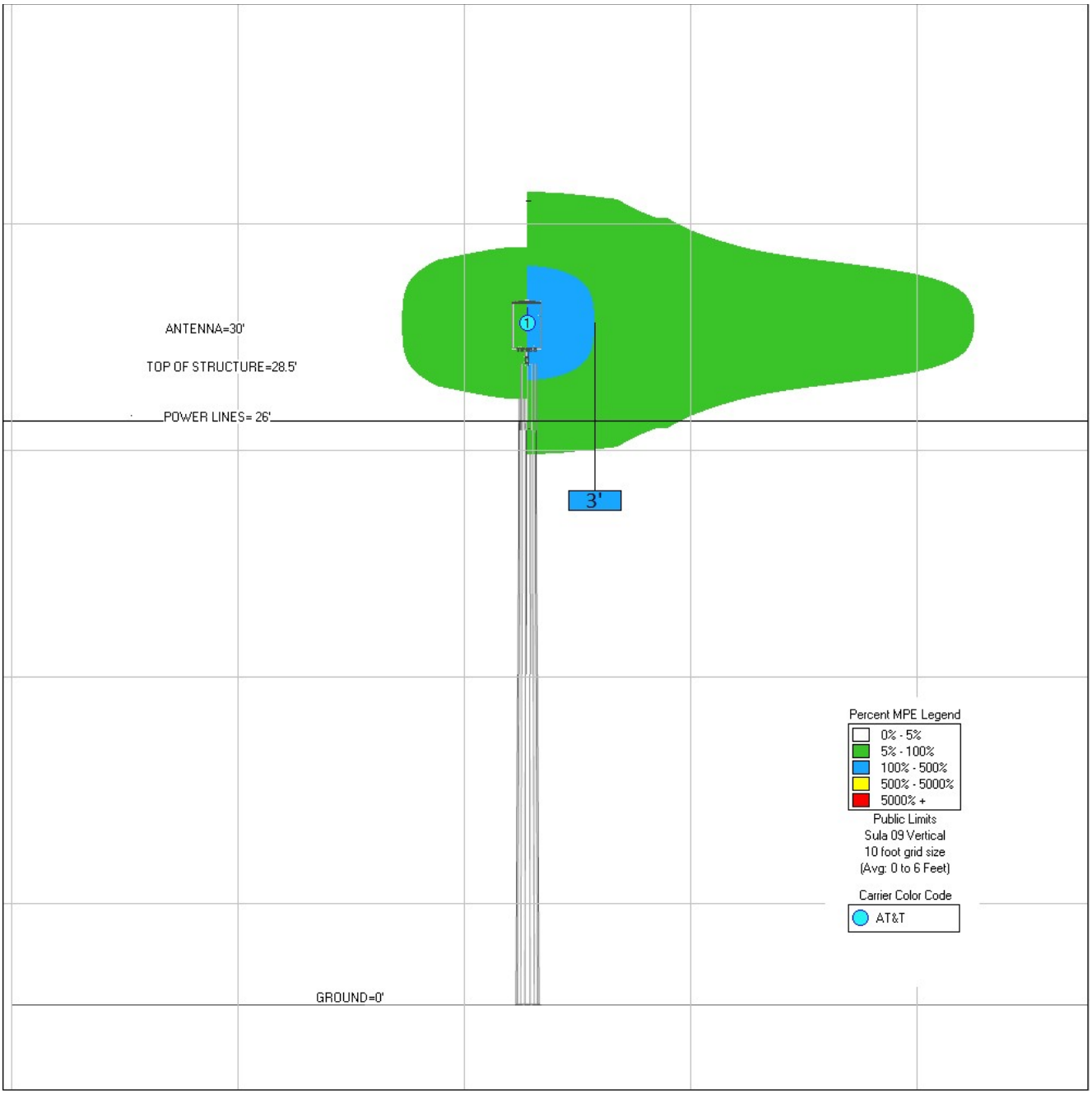
The reference plane for the plot is the ground level 0ft.



The reference plane for the plot is the adjacent building level 18ft.



The reference plane for the plot is the antenna level 27ft



Profile View: Predicted MPE depicted at the center of the 6 ft vertical zone that a person could occupy.

Compliance Requirement Diagram

Recommendations

Access Location
Notice sign posted at 27 feet above ground level

Materials
1 Notice Sign

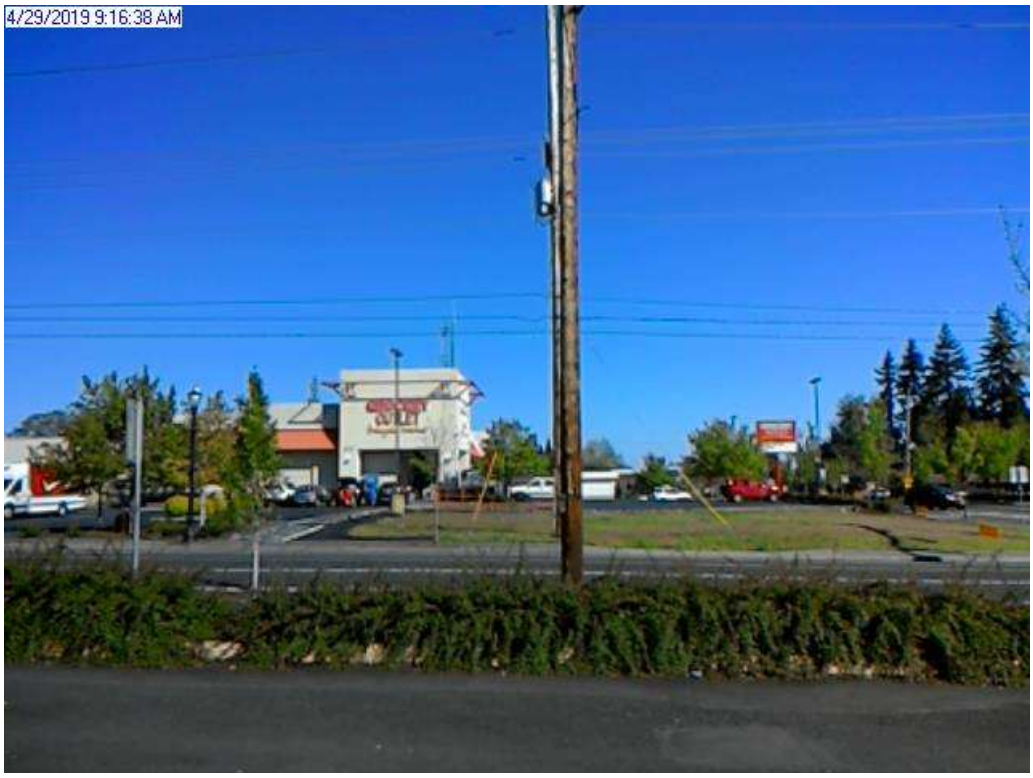
Site Photographs

Site Overview from North facing Southeast

Site Overview from North facing South

Site Overview from North facing Southwest

Site Overview from South facing Northwest



Site Overview from South facing North

Site Overview from South facing Northeast

Chapter 17.80 - COMMUNICATION FACILITIES[37]

Sections:

Footnotes:

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Editor's note— Ord. No. 08-1014, adopted July 1, 2009, repealed Chapter 17.80 in its entirety and enacted new provisions to read as herein set out. Prior to amendment, Chapter 17.80 pertained to similar subject matter. See Ordinance Disposition List for derivation.

17.80.010 - Purpose.

The provisions of this chapter are designed to protect the visual, aesthetic, and historical features of Oregon City, ensure that wireless communications services are located, designed, installed, maintained, and removed in an appropriate manner for the safety, health, and welfare of the citizens of Oregon City, and to provide for development consistent with the Oregon City Comprehensive Plan by:

A. Promoting maximum utilization and encourage collocation of new and existing wireless communication antennas to minimize the total number of support structures and towers throughout the city;

B. Encouraging careful consideration of topography, greenways, and historical significance of potential telecommunication sites and the use of camouflaging and screening to ensure development has minimal impacts on the community, views, and historical areas;

C. Encouraging the use of existing buildings, light or utility poles, or water towers as opposed to construction of new telecommunication towers; and

D. Encourage the location of monopole telecommunication towers and antenna arrays in nonresidential areas.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010)

17.80.030 - Applicability and exemptions.

A. Applicability. All wireless communication facilities that are not exempt pursuant to this section shall conform to the standards specified in this chapter.

B. Exemptions. The following are exempt from the provisions of this chapter and shall be allowed:

1. Wireless communication facilities that were legally established prior to the effective date of this chapter;
2. Temporary facilities used on the same property for sixty days or less;
3. Temporary wireless communications facilities of all types that are used by a public agency solely for emergency communications in the event of a disaster, emergency preparedness, or public health or safety purposes;
4. Any maintenance or repair of previously approved wireless communications facilities provided that such activity does not increase the height, width, or mass of the facility;
5. Dish antennas used for residential purposes;

6. VHF and UHF receive-only television antennas and radio transmitter antennas on public facilities used for public safety, provided they are fifteen feet or less above the existing or proposed roof;

7. Amateur Stations on properties zoned residential are exempt from the standards of this chapter. Amateur Stations on properties zoned nonresidential are exempt from the standards of this chapter, provided the antenna is fifteen (15) feet or less above the existing or proposed roof. Amateur Stations located on: (1) public facilities/property; or (2) properties zoned nonresidential with an antenna in excess of fifteen feet above the existing or proposed roof, shall be reviewed under the Compatibility Review process set forth in this chapter and shall be subject to the Design Standards of Section 17.80.110; and

8. Wireless Communication Facilities for public safety are exempt from the following Sections: Section 17.80.090.C.17, Section 17.80.090.D.2, Section 17.80.090.D.5, and Section 17.80.100.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010)

17.80.035 - Modifications to existing facilities.

All modifications and expansions to existing wireless communication facilities are permitted in every zone, subject to the requirements of this section. Certain modifications are deemed minor in nature and are deemed "eligible modifications." These modifications include the addition, removal, and/or replacement of transmission equipment that do not make a substantial change to the physical dimensions (height, mass, width) of the existing tower, support structure, or base station. Replacement of an existing tower may also be considered an eligible modification if such replacement meets the standards in paragraph D. below.

A. For the purpose of this section, "substantial change" means the following:

   1. The mounting of the proposed antenna on the tower would increase the existing height of the tower by more than ten percent, or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits set forth in this subsection by up to an additional five percent if necessary to avoid interference with existing antennas;

   2. The mounting of the proposed antenna would involve the installation of more than the standard number of new equipment cabinets for the technology involved (not to exceed four) or more than one new equipment shelter;

   3. The mounting of the proposed antenna would involve adding an appurtenance to the body of the tower that would protrude from the edge of the tower more than twenty feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits set forth in this subsection to the extent necessary to shelter the antenna from inclement weather or to connect the antenna to the tower via cable; or

   4. The mounting of the proposed antenna would involve excavation outside the current tower site, defined as the current boundaries of the leased or owned property surrounding the tower and any access or utility easements currently related to the site.

B. Increases to height allowed by this subsection above the existing tower shall be based on the existing height of the tower, excluding any tower lighting required in the original land use approval or in the proposed modification request.

C. To the extent feasible, additional equipment shall maintain the appearance intended by the original facility, including, but not limited to, color, screening, landscaping, mounting configuration, or architectural treatment.

D. To be considered an eligible modification, a replacement tower shall not exceed the height of the original tower by more than ten percent, or the diameter of the original tower by more than twenty-five percent at any given point.

(Ord. 18-1005, § 1(Exh. A), 5-2-2018)

17.80.040 - Collocation of additional antenna(s) on existing support towers.

Except for "eligible modifications" authorized in Section 17.80.035, the following standards shall apply for the placement of antenna(s) and auxiliary support equipment on an existing wireless communication facility support tower.

A. Compatibility Review. Required for property zoned GI, CI, I, C, HC, MUC-1, MUC-2, MUE, MUD or NC.

B. Site Plan and Design Review. Required for all cases other than those identified in Section 17.80.040A.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010; Ord. No. 18-1005, § 1(Exh. A), 5-2-2018)

17.80.050 - Collocation of additional antenna(s) on support structures.

Except for "eligible modifications" authorized in Section 17.80.035, the following standards shall apply for the placement of antenna(s) and auxiliary support equipment on a support structure.

A. Compatibility Review. Required if the following exist:

1. Property is zoned GI, CI, I, C, HC, MUC-1, MUC-2, MUE, MUD or NC; and

2. Property is not located in the McLoughlin or Canemah Historical Conservation Districts; and

3. Antenna(s) and auxiliary support equipment are setback a minimum of ten feet from each edge of the support structure and do not exceed a total height of twelve feet or a total width of eight feet, unless the antenna(s) is less than four inches in diameter and does not exceed a total height of twenty feet.

B. Site Plan and Design Review. Required if the property is zoned GI, CI, I, C, MUC-1, MUC-2, MUE, MUD or NC and does not meet all the criteria of Section 17.80.050A.

C. Conditional Use Review. Required for all cases other than those identified in Sections 17.08.050A. and 17.08.050B.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010; Ord. No. 18-1005, § 1(Exh. A), 5-2-2018)

17.80.060 - Collocation of additional antenna(s) on existing utility poles, light standards, and light poles.

The following standards shall apply for the collocation of additional antenna(s) on existing utility poles, light standards, and light poles that meet the following requirements:

A. Site Plan and Design Review. Required for property zoned GI, CI, I, C, HC, MUC-1, MUC-2, MUE, MUD or NC.

B. Conditional Use Review. Required for all cases other than those identified in Section 17.80.060.A.

C. Permits. The applicant shall apply for and obtain all permits necessary for the construction, installation, and operation of its facilities in the streets. The applicant shall pay all applicable fees due for city permits. All construction and maintenance of any and all of the applicant's Facilities within the streets incident to the applicant's provision of telecommunications services shall, regardless of who performs installation and/or construction, be and remain the responsibility of the applicant.

D. Installation of Equipment. The applicant's facilities shall be installed and maintained in accordance with the laws of the State of Oregon and the ordinances and standards of the city regulating such construction.

E. Common Users. The applicant's facilities shall be attached to utility poles, light standards, and light poles located within the streets. The applicant shall also allow and encourage other wireless carriers to collocate facilities on the utility poles, light standards, and light poles with the applicant's facilities, provided such collocation does not interfere with the applicant's facilities or jeopardize the physical integrity of the structure and provided the owner of the structure consents to such collocation.

F. Scale of Facilities. This section establishes standards for attaching facilities to utility poles, light standards, and light poles in the streets in a manner that minimizes the facilities' potential incompatibility with adjacent uses.

1. Facilities may be collocated on existing utility poles, light standards, and light poles, provided:

   a. Facilities do not jeopardize the physical integrity of the utility pole, light standard, or light pole;

   b. Triangular "top hat" style antenna mounts are prohibited;

   c. The device used to mount the facilities does not project more than ten feet above the utility pole, light standard, or light pole;

   d. Antennas will be mounted flush with the devised referenced in Section 17.80.060.F.1.c. or the existing utility pole, light standard, or light pole, within a unicell-style top cylinder, or on davit arms that are no greater than five feet in length as measured from the center of the utility pole, light standard, or light pole;

   e. The visual impact of any facilities located in the streets must by minimized by utilizing the smallest antennas, equipment, and equipment cabinets available that will satisfy engineering requirements and the service objectives of the site. Whenever possible, facilities shall be painted or otherwise treated architecturally so as to minimize visual impacts;

   f. All antennas, cabling, mounting hardware, and associated microcell/equipment cabinets mounted on an existing utility pole, light standard, or light pole must be painted to match the color of the utility pole, light standard, or light pole. If cabinets require a special heat-reducing paint finish, they must be a neutral color such as beige, off-white, or light gray; and

   g. The existing utility pole, light standard, or light pole is not replaced with a taller utility pole, light standard, or light pole, except as authorized in Section 17.80.060.F.2.

2. Replacement Utility Poles, Light Standards, and Light Poles. For purposes of this section, "replacement utility poles, light standards, and light poles" shall mean a utility pole, light standards, or light pole that a) replaces an existing or original utility pole, light standard, or light pole to accommodate facilities; and b) does not result in an increase in the total number of utility, guy, or support poles in the streets. Facilities may be attached to replacement utility poles, light standards, and light poles in the streets, provided:

   a. The replacement utility poles, light standards, and light poles are of sufficient integrity to support the facilities;

b. The replacement utility poles, light standards, and light poles, and any subsequent replacements, are no more the twenty feet taller than the original utility pole, light standard, or light pole; and

c. The utility pole, light standard, or light pole the replacement utility pole, light standard, or light pole replaces is promptly removed.

3. The applicant shall not locate any facilities, such as cabinets, at grade within the streets, but may connect its facilities in the streets to facilities located on property adjacent to the streets in accordance with applicable city codes and with the permission of the adjacent property owner.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010)

17.80.070 - Construction or modification of a support tower.

Except for "eligible modifications" authorized in OCMC 17.80.035:

A. Site Plan and Design Review. Required if the following exists:

1. Property is zoned GI, CI, I, C, MUC-2 or MUE; and

2. No adjacent parcel is zoned for residential use.

B. Conditional Use Review. Required for all cases other than those identified in Section 17.80.070A.

C. Prohibited Zoning Districts and Locations. No new support towers shall be permitted within the Canemah Historic Neighborhood, McLoughlin Conservation District, The Oregon Trail-Barlow Road Historic Corridor, five hundred feet of the Willamette Greenway Corridor, or any new Historic Districts unless the applicant can demonstrate that failure to allow the support tower would effectively prevent the provision of communication services in that area. If the applicant makes such a demonstration, the minimum height required to allow that service shall be the maximum height allowed for the tower.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010; Ord. No. 18-1005, § 1(Exh. A), 5-2-2018)

17.80.080 - Site review process.

No wireless communications facilities, as defined in Section 17.80.020, may be constructed, collocated, modified to increase height, installed, or otherwise located within the city except as provided in this section or unless otherwise authorized by Section 17.80.035. Depending on the type and location of the wireless communication facility, the facility shall be subject to the following review unless collocation or an increase in height was granted through a prior land use process. A conditional use review shall require site plan and design review to occur concurrently with the conditional use review process.

A. Compatibility Review. A wireless communication facility that, pursuant to Sections 17.80.030—17.80.050, is subject to a compatibility review shall be processed in accordance with Standards of Section 17.80.110. The criteria contained in Section 17.80.110 shall govern approval or denial of the compatibility review application. No building permit shall be issued prior to completion of the compatibility review process.

B. Site Plan and Design Review. A wireless communication facility that, pursuant to Sections 17.80.040—17.80.070, is subject to site plan and design review shall be processed in accordance with the standards of Section 17.80.110 and Chapter 17.62, as applicable. The criteria contained in Section 17.80.110 and Chapter 17.62 shall govern approval or denial of the site plan and design review application. In the event of a conflict in criteria, the criteria contained

in this chapter shall govern. No building permit shall be issued prior to completion of the site plan and design review process, including any local appeal.

C. Conditional Use Review. A wireless communication facility that, pursuant to Sections 17.80.050—17.80.070, is subject to conditional use review, shall be processed in accordance with the Standards of Section 17.80.110 and Chapter 17.56, as applicable. The criteria contained in Section 17.80.110 and Chapter 17.56 shall govern approval or denial of the conditional use review application. In the event of a conflict in criteria, the criteria contained in this chapter shall govern. No building permit shall be issued prior to completion of the Conditional Use Review process, including any local appeal.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010; Ord. No. 18-1005, § 1(Exh. A), 5-2-2018)

17.80.090 - Permit application requirements.

A. Eligible Modification Requirements. For an application under Section 17.80.035, the following information is required:

1. Application fee;
2. Planning division land use application form;
3. Description of the project design and dimensions;
4. A written response demonstrating compliance with each criterion listed in OCMC Chapter 17.80.035;
5. Signature of the property owner(s) on the application form or a statement from the property owner(s) granting authorization to proceed with building permit and land use process; and
6. Elevations showing all improvements and connections to utilities.

B. Compatibility Review Requirements — For an application under Sections 17.80.030B.7, 17.80.040A. or 17.80.050A., the following information is required:

1. Application fee(s).
2. Planning Division land use application form;
3. A narrative of the proposed project that includes a description of the following:
   i. Need for the project;
   ii. Rationale and supporting evidence for the location; and
   iii. Description of the project design and dimensions.
   iv. A written response demonstrating compliance with each criterion listed in OCMC Chapter 17.80.110
4. Documentation demonstrating compliance with non-ionizing electromagnetic radiation (NIER) emissions standards as set forth by the Federal Communications Commission (FCC) particularly with respect to any habitable areas within the structure on which the antenna(s) are collocated on or in structures directly across from or adjacent to the antenna(s);
5. Documentation that the auxiliary support equipment shall not produce sound levels in excess of standards contained in Section 17.80.110G., or designs showing how the sound is to be effectively muffled to meet those standards;
6. Signature of the property owner(s) on the application form or a statement from the property owner(s) granting authorization to proceed with building permit and land use process;

7. Documentation of the integrity of the support tower, support structure, utility pole, light standard, or light pole to safely handle the load created by the collocation;
8. Elevations showing all improvements and connections to utilities; and
9. Color simulations of the site after construction demonstrating compatibility.

C. Site Plan and Design Review. For an application under Sections 17.80.040B., 17.80.050B., 17.80.060A., or 17.80.070A. the following information is required:

1. The information required in OCMC Chapter 17.80.90A.;
2. Pre-application notes;
3. A written response demonstrating compliance with each criterion listed in the Site Plan and Design Review Standards of Chapter 17.62.050 and all other applicable criterion as defined by the community development director; and
4. Supplemental requirements listed in OCMC Chapter 17.80.90D. as needed.

D. Conditional Use Review. For an application under Sections 17.80.050C., 17.80.060B., or 17.80.070B. the following information is required:

The information required in OCMC Chapter 17.80.90.A;

1. Pre-application notes;
2. A written response demonstrating compliance with each criterion listed in the Site Plan and Design Review Standards of Chapter 17.62.050, 17.56, and all other applicable criterion as defined by the community development director as applicable
3. For an application under Section 17.80.070. Construction of Modification of a Support Tower, the requirements listed under Section 17.80.090D. Supplemental Information are required;
4. Responses to conditional use review criteria under Chapter 17.56.010;
5. For an application under Section 17.80.050C. Collocation of Additional Antenna(s) on Support Structures, rationale for being unable to collocate in areas identified in Sections 17.80.050A. and 17.80.050B. shall be provided;
6. For an application under Section 17.80.060B. Collocation of Additional Antenna(s) on Utility Poles, Light Standards, and Light Poles, rationale for being unable to collocate in areas identified in Section 17.80.060A. shall be provided; and
7. For an application under Section 17.80.070B. Construction or Modification of a Support Tower, rationale for being unable to collocate in areas identified in Section 17.80.070A. shall be provided.
8. Supplemental information listed in OCMC Chapter 17.80.90D.

E. Supplemental Information. The applicant shall submit the following information for all applications subject to conditional use and site plan and design review:

1. The capacity of the support tower in terms of the number and type of antennas it is designed to accommodate;
2. A signed agreement, as supplied by the city, stating that the applicant shall allow collocation with other users, provided all safety, structural, technological, and monetary requirements are met. This agreement shall also state that any future owners or operators will allow collocation on the tower.
3. Documentation demonstrating that the Federal Aviation Administration has reviewed and approved the proposal, and Oregon Aeronautics Division has reviewed the proposal. Alternatively, a statement documenting that notice of the proposal has been submitted to the Federal Aviation Administration and Oregon Aeronautics Division may be submitted. The review process may proceed and approval may be granted for the proposal as submitted, subject to

Federal Aviation Administration approval. If Federal Aviation Administration approval requires any changes to the proposal as initially approved, then that initial approval shall be void. A new application will need to be submitted, reviewed, and approved through an additional site plan and design review or conditional use review process. No building permit application shall be submitted without documentation demonstrating Federal Aviation Administration review and approval and Oregon Aeronautics Division review.

4. A visual study containing, at a minimum, a graphic simulation showing the appearance of the proposed tower, antennas, and auxiliary support equipment from at least five points within a one-mile radius. Such points shall be chosen by the provider with a review and approval by the community development director to ensure that various potential views are represented.
5. Documentation that one or more wireless communications service providers will be using the support tower within sixty days of construction completion.
6. A site plan, drawn to scale, that includes:
    a. Existing and proposed improvements;
    b. Adjacent roads;
    c. Parking, circulation, and access;
    d. Connections to utilities, right-of-way cuts required, and easements required;
    e. A landscape plan describing the maintenance plan and showing areas of existing and proposed vegetation to be added, retained, replaced, or removed; and
    f. Setbacks from property lines or support structure edges of all existing and proposed structures. Plans that have been reduced, but have not had their scale adjusted, will not be accepted as satisfying this requirement.
7. An alternatives analysis for new support towers demonstrating compliance with the Support Tower Location Requirements of Chapter 17.80.100.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010; Ord. No. 18-1005, § 1(Exh. A), 5-2-2018)

17.80.100 - Support tower location requirements.

No new support tower shall be permitted under the provisions of Chapter 17.80.070 unless the applicant demonstrates to the satisfaction of the community development director, and the results are verified by a State of Oregon certified professional engineer, that no existing collocation or modification possibility can accommodate the service needs of the applicant's proposed support tower. All proposals for new support towers must be accompanied by a statement and documentation from a qualified engineer, as determined by the community development director, that the necessary service cannot be provided by collocation on, or modification to, an existing support tower or structure for one or more of the following reasons:

A. No existing support towers or support structures are located within the geographic area required to meet the applicant's engineering requirements;
B. Existing support towers or support structures are not of sufficient height to meet the applicant's engineering requirements;
C. Existing support towers or support structures do not have sufficient structural strength to support the applicant's proposed antenna(s) and related equipment.
D. The applicant's proposed antenna would cause electromagnetic interference with the antenna(s) on the existing support tower or support structure, or the existing antenna would cause interference with the applicant's proposed antenna(s);

E. The applicant demonstrates that there are other limiting factors that render existing support towers and support structures unsuitable; or

F. That fees, costs, or contractual provisions required by the owner in order to share or adapt to an existing support tower or support structure for collocation are unreasonable.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010)

17.80.110 - Design standards.

Installation, collocation, construction, or modification of all support towers, structures, and antennas shall comply with the following standards, unless it qualifies as an "eligible modification" under Section 17.80.035 or an adjustment is obtained pursuant to the provisions of Section 17.80.120:

A. Support Tower. The support tower shall be self-supporting.

B. Height Limitation. Support tower and antenna heights shall not exceed the maximum heights provided below.

1. If the property is zoned GI, CI or I; and no adjacent parcel is zoned residential the maximum height of a support tower, including antennas, is one hundred twenty feet.

2. If the property is zoned: a. GI, CI or I, and an adjacent parcel is zoned residential; or b. C, MUC-2 or MUE; the maximum height of a support tower, including antennas, is one hundred feet.

3. If the property is zoned MUC-1, MUD or NC; the maximum height of a support tower, including antennas, is seventy-five feet.

4. For all cases other than those identified in Section 17.80.110B.1—3 above, the maximum height of a support tower, including antennas, is seventy-five feet.

C. Collocation. New support towers shall be designed to accommodate collocation of additional providers.

1. New support towers of a height greater than seventy-five feet shall be designed to accommodate collocation of a minimum of two additional providers either outright or through future modification of the tower.

2. New support towers of a height between sixty feet and seventy-five feet shall be designed to accommodate collocation of a minimum of one additional provider either outright or through future modification of the tower.

D. Setbacks. The following setbacks shall be required from property lines, not the lease area, for support towers, auxiliary support equipment, and perimeter fencing.

1. Support towers not designed to collapse within themselves shall be setback from all property lines a distance equal to the proposed height of the support tower.

2. Support towers designed to collapse within themselves shall be setback from the property line a distance equal to the following:

a. If the property is zoned GI, CI, I, C, MUC-2 or MUE; and no adjacent parcel is zoned for a residential use the underlying zone setback shall apply;

b. If the property is zoned:

i. GI, CI, I, C, MUC-2 or MUE and an adjacent parcel is zoned residential; or

ii. MUC-1, MUD or NC; the setback shall be a minimum of twenty-five feet from all adjacent residentially zoned property lines and the underlying zoning setback for all other adjacent property lines; or

c. For all cases other than those identified in Section 17.80.110D.2.a. and b. above, the setback shall be a minimum of twenty-five feet from all adjacent property lines.

E. Auxiliary Support Equipment. The following standards shall be required.

1. If the property is zoned:

a. For GI, CI, I, MUC-1, MUC-2, C, MUD, MUE or NC, the auxiliary support equipment footprint shall not exceed an area of three hundred forty square feet and fifteen feet in height at the peak;

b. For all cases other than those identified in Section 17.80.110E.1.a. above, the auxiliary support equipment shall be:

i. Located underground or completely screened by landscaping or an architecturally significant masonry wall. The wall shall be finished with brick, stone, or stucco. The community development director may approve an alternate screening material if it is compatible with adjacent development and is architecturally significant. No exposed CMU is allowed on the exterior of the wall.

2. Only one auxiliary accessory cabinet shall be allowed per service provider located on a support structure.

F. Landscaping. In all zoning districts, existing vegetation shall be preserved to the maximum extent practicable. Screening of a site is mandatory.

1. If the property is zoned:

a. GI or CI, and no adjacent parcel is zoned residential, landscaping may not be required if water quality issues are addressed and appropriate screening around the facility is proposed;

b. For all cases other than those identified in Section 17.80.110F.1.a. above, landscaping shall be placed completely around the perimeter of the wireless communication facility, except as required to gain access. The minimum planting height shall be a minimum of six feet at the time of planting, densely placed so as to screen the facility. The landscaping shall be compatible with vegetation in the surrounding area, and shall be kept healthy and well maintained as long as the facility is in operation. Failure to maintain the site will be grounds to revoke the ability to operate the facility.

c. The community development director may approve an alternative landscaping plan that visually screens the facility and is consistent with the intent of this standard.

G. Noise Reduction. Noise generating equipment shall be baffled to reduce sound level measured at the property line to the following levels except during short durations for testing and operation of generators in emergency situations:

1. For any property where no adjacent parcel is zoned residential, the sound level at the property line shall not be greater than fifty dB;

2. For all other cases, the sound level shall not be greater than forty dB when measured at the nearest residential parcel's property line.

H. Lighting.

1. Unless required by the Federal Aviation Administration or the Oregon Aeronautics Division, artificial lighting of wireless communication towers and antennas shall be prohibited.

2. Strobe lighting is prohibited unless required by the Federal Aviation Administration.

3. Security lighting for equipment shelters or cabinets and other on-the-ground auxiliary equipment shall be initiated by motion detecting lighting. The lighting shall be the minimal necessary to secure the site, shall not cause illumination on adjacent properties in excess

of a measurement of 0.5 footcandles at the property line, and shall be shielded to keep direct light within the site boundaries.

I. Color.

Unless otherwise required by the Federal Aviation Administration, all support towers and antennas shall have a non-glare finish and blend with the natural background.

J. Signage.

Support towers and antenna(s) shall not be used for signage, symbols, flags, banners, or other devices or objects attached to or painted on any portion of a wireless communication facility.

K. Access Drives.

1. On a site with an existing use, access shall be achieved through use of the existing drives to the greatest extent practicable. If adequate intersection sight distance is unavailable at the existing access intersection with a city street, an analysis of alternate access sites shall be required.
2. Site shall be serviced by an access adequate to ensure fire protection of the site.
3. New access drives shall be paved a minimum of twenty feet deep from the edge of the right-of-way (though the use of pervious paving materials such as F-mix asphalt, pavers, or geotech webbing is encouraged) and designed with material to be as pervious as practicable to minimize stormwater runoff.
4. New access drives shall be reviewed for adequate intersection sight distances.

L. Informing the city. All service providers with facilities within the city of Oregon City shall be required to report in writing to the community development director any changes in the status of their operation.

1. An annual written statement shall be filed with the Planning Manager verifying continued use of each of their facilities in the city's jurisdiction as well as continued compliance with all state and federal agency regulations.
2. The report shall include any of the following changes:
   a. Changes in or loss of Federal Communication Commission license from the Federal Communication Commission to operate;
   b. Receipt of notice of failure to comply with the regulations of any other authority over the business or facility;
   c. Change in ownership of the company that owns wireless communication facility or provides telecommunications services; or
   d. Loss or termination of lease with the telecommunications facility for a period of six months or longer.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010; Ord. No. 18-1005, § 1(Exh. A), 5-2-2018)

17.80.120 - Adjustments.

Adjustments to the standards of this chapter may be approved by the planning commission at a duly noticed public hearing. The planning commission may grant an adjustment under either of the following circumstances:

1. The planning commission may grant an adjustment when a gap in the applicant's service exists and the gap can only be alleviated through the adjustment of one of more of the standards in

this section. If an adjustment is to be approved, the applicant must demonstrate each of the following:

a. A gap in coverage or capacity exists in the wireless communication provider's service network that results in network users being regularly unable to connect with the provider's network, or maintain connection;

b. The proposed facility will fill the existing service gap. The gap would be filled if the proposed facility would substantially reduce the frequency with which users of the network are unable to connect, or maintain connection, with the provider's network; and

c. The gap cannot be filled through collocation on existing facilities, or establishment of facilities that are consistent with the standards of this section on properties other than the proposed site or on the proposed site in a manner which does not require an adjustment under this subsection.

2. The planning commission may grant an adjustment to a standard when the proposed adjustment would utilize existing site characteristics to minimize demonstrated or potential impacts on the use of surrounding properties. For the purposes of this subsection, site characteristics shall include, but need not be limited to, the suitability of the proposed use considering size, shape, location, topography, existence of improvements, and natural features. Applicants for an adjustment under this provision must demonstrate that the adjustment will result in a lower level of impact on surrounding properties than would be generated if the standard were not adjusted. In considering the requested adjustment, the planning commission may consider the following:

a. Visual impacts;

b. Impacts on views;

c. Impacts on property values; and

d. Other impacts that the planning commission finds can be mitigated by an adjustment so that the proposed use will have greater compliance in not altering the character of the surrounding area in a manner which substantially limits, impairs, or precludes the use of surrounding properties for the primary use listed in the underlying district.

3. Requests for adjustments under this subsection shall only be considered concurrently with the applicable Site Review Process as required by Section 17.80.080. If the Site Review Process required by Section 17.80.080 is a Compatibility Review or a Site Plan and Design Review, the inclusion of an adjustment will require that the application be subject to a Conditional Use Review under Section 17.80.090.C.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010)

17.80.130 - Temporary facilities.

In order to facilitate continuity of services during maintenance or repair of existing installations, or prior to completion of construction of a new wireless communication facility, temporary wireless communication facilities shall be allowed subject to a Type I administrative review. Temporary wireless communication facilities shall not be in use in excess of six-month period. Temporary wireless communication facilities shall not have a permanent foundation, and shall be removed within thirty days of suspension of service they provide.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010)

17.80.140 - Removal for discontinuance of service.

Any wireless communication facility that has not provided service for six months shall be deemed a nuisance and subject to removal as provided in Oregon City Municipal Code Chapter 8.08. The planning manager may grant a six-month extension where a written request has been filed, within the initial six months period, to reuse the support tower or antenna(s).

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010)

17.80.150 - Fees.

Notwithstanding any other provisions of this code, the community development director may require, as part of the application fees for land use permits, an amount sufficient to recover all of the city's costs in retaining consultants to verify statements made in conjunction with the permit application, to the extent that verification requires telecommunication experts.

(Ord. No. 08-1014, §§ 1—3(Exhs. 1—3), 7-1-2009; Ord. No. 10-1003, § 1(Exh. 1), 7-7-2010)