



DEVELOPMENT SERVICES DEPARTMENT  
 ENVIRONMENTAL COORDINATOR  
 450 110<sup>th</sup> Avenue NE, P.O. BOX 90012  
 BELLEVUE, WA 98009-9012

**DETERMINATION OF NON-SIGNIFICANCE**

**PROPONENT:** T-Mobile – Tom Johnson, Lexcom Development

**LOCATION OF PROPOSAL:** 4624 164<sup>th</sup> Avenue SE

**DESCRIPTION OF PROPOSAL:** Request for Administrative Conditional Use (ACU) approval to modify an existing Wireless Communication Facility (WCF). Modifications include upgrading an existing antenna array through the replacement of two existing antennas, and installation of new ancillary equipment. Minor modifications to the existing equipment within the adjacent equipment enclosure are also proposed. There will be no increase in height to the existing utility pole. The purpose of these modifications is for network upgrades related to the transition to LTE-4G.

**FILE NUMBERS:** 14-125792-LA      **PLANNER:** Laurie Tyler, Associate Planner

The Environmental Coordinator of the City of Bellevue has determined that this proposal does not have a probable significant adverse impact upon the environment. An Environmental Impact Statement (EIS) is not required under RCW 43.21C.030(2)(C). This decision was made after the Bellevue Environmental Coordinator reviewed the completed environmental checklist and information filed with the Land Use Division of the Development Services Department. This information is available to the public on request.

- There is no comment period for this DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's office by 5:00 p.m. on \_\_\_\_\_.
- This DNS is issued after using the optional DNS process in WAC 197-11-355. There is no further comment period on the DNS. There is a 14-day appeal period. Only persons who submitted written comments before the DNS was issued may appeal the decision. A written appeal must be filed in the City Clerk's Office by 5 p.m. on **8/14/2014**
- This DNS is issued under WAC 197-11-340(2) and is subject to a 14-day comment period from the date below. Comments must be submitted by 5 p.m. on \_\_\_\_\_. This DNS is also subject to appeal. A written appeal must be filed in the City Clerk's Office by 5:00 p.m. on \_\_\_\_\_.

This DNS may be withdrawn at any time if the proposal is modified so as to have significant adverse environmental impacts; if there is significant new information indicating a proposals probable significant adverse environmental impacts (unless a non-exempt license has been issued if the proposal is a private project); or if the DNS was procured by misrepresentation or lack of material disclosure.

Carol Vitell  
 Environmental Coordinator

7/28/14  
 Date

**OTHERS TO RECEIVE THIS DOCUMENT:**

- State Department of Fish and Wildlife / [Stewart.Reinbold@dfw.gov](mailto:Stewart.Reinbold@dfw.gov); [Christa.Heller@dfw.wa.gov](mailto:Christa.Heller@dfw.wa.gov);
- State Department of Ecology, Shoreline Planner N.W. Region / [Jobu461@ecy.wa.gov](mailto:Jobu461@ecy.wa.gov); [sepaunit@ecy.wa.gov](mailto:sepaunit@ecy.wa.gov)
- Army Corps of Engineers [Susan.M.Powell@nws02.usace.army.mil](mailto:Susan.M.Powell@nws02.usace.army.mil)
- Attorney General [ecyolyef@atg.wa.gov](mailto:ecyolyef@atg.wa.gov)
- Muckleshoot Indian Tribe [Karen.Walter@muckleshoot.nsn.us](mailto:Karen.Walter@muckleshoot.nsn.us); [Fisheries.fileroom@muckleshoot.nsn.us](mailto:Fisheries.fileroom@muckleshoot.nsn.us)

**ENVIRONMENTAL CHECKLIST**

10/9/2009

Thank you in advance for your cooperation and adherence to these procedures. If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call Development Services (425-452-6800) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Assistance for the hearing impaired: Dial 711 (Telecommunications Relay Service).

**INTRODUCTION****Purpose of the Checklist:**

The State Environmental Policy Act (SEPA), Chapter 43.21c RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the City of Bellevue identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the City decide whether an EIS is required.

**Instructions for Applicants:**

This environmental checklist asks you to describe some basic information about your proposal. Answer the questions briefly, with the most precise information known, or give the best description you can. You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer or if a question does not apply to your proposal, write "do not know" or "does not apply." Giving complete answers to the questions now may avoid unnecessary delays later.

Some questions ask about governmental regulations such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the Planner in the Permit Center can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. Include reference to any reports on studies that you are aware of which are relevant to the answers you provide. The City may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impacts.

**Use of a Checklist for Nonproject Proposals:** *A nonproject proposal includes plans, policies, and programs where actions are different or broader than a single site-specific proposal.*

For nonproject proposals, complete the Environmental Checklist even though you may answer "does not apply" to most questions. In addition, complete the Supplemental Sheet for Nonproject Actions available from Permit Processing.

For nonproject actions, the references in the checklist to the words *project*, *applicant*, and *property* or *site* should be read as *proposal*, *proposer*, and *affected geographic area*, respectively.

**Attach an 8 ½" x 11 vicinity map which accurately locates the proposed site.**

*Sam Tyler*

**ENVIRONMENTAL CHECKLIST**

4/11/2013

If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call Development Services (425-452-6800) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Assistance for the hearing impaired: Dial 711 (Telecommunications Relay Service).

**BACKGROUND INFORMATION**

Property Owner:

Proponent:

Contact Person:

(If different from the owner. All questions and correspondence will be directed to the individual listed.)

Address:

Phone:

Proposal Title:

Proposal Location:

(Street address and nearest cross street or intersection) Provide a legal description if available.

Please attach an 8 1/2" x 11" vicinity map that accurately locates the proposal site.

Give an accurate, brief description of the proposal's scope and nature:

1. General description:
2. Acreage of site:
3. Number of dwelling units/buildings to be demolished:
4. Number of dwelling units/buildings to be constructed:
5. Square footage of buildings to be demolished:
6. Square footage of buildings to be constructed:
7. Quantity of earth movement (in cubic yards):
8. Proposed land use:
9. Design features, including building height, number of stories and proposed exterior materials:
10. Other

LT  
7/16/14

Estimated date of completion of the proposal or timing of phasing:

Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.

List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for, list application date and file numbers, if known.

#14-130311-CA

Please provide one or more of the following exhibits, if applicable to your proposal. (Please check appropriate box(es) for exhibits submitted with your proposal):

- Land Use Reclassification (rezone) Map of existing and proposed zoning
- Preliminary Plat or Planned Unit Development  
Preliminary plat map
- Clearing & Grading Permit  
Plan of existing and proposed grading  
Development plans
- Building Permit (or Design Review)  
Site plan  
Clearing & grading plan
- Shoreline Management Permit  
Site plan

A right-of-way (TJ) and a building permit (CA) shall be submitted following LA approval.

A. ENVIRONMENTAL ELEMENTS

1. Earth

- a. General description of the site:  Flat  Rolling  Hilly  Steep slopes  Mountains  Other
- b. What is the steepest slope on the site (approximate percent slope)?
- c. What general types of soil are found on the site (for example, clay, sand, gravel, peat, and muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
  
- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
  
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
  
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?
  
- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

## 2. AIR

- a. What types of emissions to the air would result from the proposal (i.e. dust, automobile odors, and industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.
  
- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.
  
- c. Proposed measures to reduce or control emissions or other impacts to the air, if any:

### 3. WATER

#### a. Surface

- (1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.
  
- (2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If Yes, please describe and attach available plans.
  
- (3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.
  
- (4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.
  
- (5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.
  
- (6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

#### b. Ground

- (1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description.
  
- (2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.) Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

c. Water Runoff (Including storm water)

(1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

(2) Could waste materials enter ground or surface waters? If so, generally describe.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

**4. Plants**

a. Check or circle types of vegetation found on the site:

- deciduous tree: alder, maple, aspen, other
- evergreen tree: fir, cedar, pine, other
- shrubs
- grass
- pasture
- crop or grain
- wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

c. List threatened or endangered species known to be on or near the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

## 5. ANIMALS

- a. Check or circle any birds and animals which have been observed on or near the site or are known to be on or near the site:
  - Birds: hawk, heron, eagle, songbirds, other:
  - Mammals: deer, bear, elk, beaver, other:
  - Fish: bass, salmon, trout, herring, shellfish, other:
- b. List any threatened or endangered species known to be on or near the site.
- c. Is the site part of a migration route? If so, explain.
- d. Proposed measures to preserve or enhance wildlife, if any:

## 6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy need? Describe whether it will be used for heating, manufacturing, etc.
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
- c. What kinds of energy conservation features are included in the plans of the proposal? List other proposed measures to reduce or control energy impacts, if any:

## 7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

(1) Describe special emergency services that might be required.

(2) Proposed measures to reduce or control environmental health hazards, if any.

### b. Noise

- (1) What types of noise exist in the area which may affect your project (for example, traffic, equipment, operation, other)?

(2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example, traffic, construction, operation, other)? Indicate what hours noise would come from the site.

(3) Proposed measures to reduce or control noise impacts, if any:

Construction noise impacts mitigated by noise standards found in BCC 9.18.

## 8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

Single-Family Residential

b. Has the site been used for agriculture? If so, describe.

c. Describe any structures on the site.

d. Will any structures be demolished? If so, what?

e. What is the current zoning classification of the site?

City of Bellevue classifies as R-5. County zoned as R-6.

f. What is the current comprehensive plan designation of the site?

Single-Family High (SF-H)

g. If applicable, what is the current shoreline master program designation of the site?

N/A

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

i. Approximately how many people would reside or work in the completed project?

j. Approximately how many people would the completed project displace?

k. Proposed measures to avoid or reduce displacement impacts, if any:

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

## 9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
  
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
  
- c. Proposed measures to reduce or control housing impacts, if any:

## 10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?
  
- b. What views in the immediate vicinity would be altered or obstructed?
  
- c. Proposed measures to reduce or control aesthetic impacts, if any:

## 11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
  
- b. Could light or glare from the finished project be a safety hazard or interfere with views?
  
- c. What existing off-site sources of light or glare may affect your proposal?
  
- d. Proposed measures to reduce or control light or glare impacts, if any:

## 12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?
- b. Would the proposed project displace any existing recreational uses? If so, describe.
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

## 13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.
- b. Generally describe any landmarks or evidence of historic, archeological, scientific, or cultural importance known to be on or next to the site.
- c. Proposed measures to reduce or control impacts, if any:

## 14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.
- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
- c. How many parking spaces would be completed project have? How many would the project eliminate?
- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).
- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.
- g. Proposed measures to reduce or control transportation impacts, if any:

**15. Public Services**

a. Would the project result in an increased need for the public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.  
No.

b. Proposed measures to reduce or control direct impacts on public services, if any.  
None.

**16. Utilities**

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

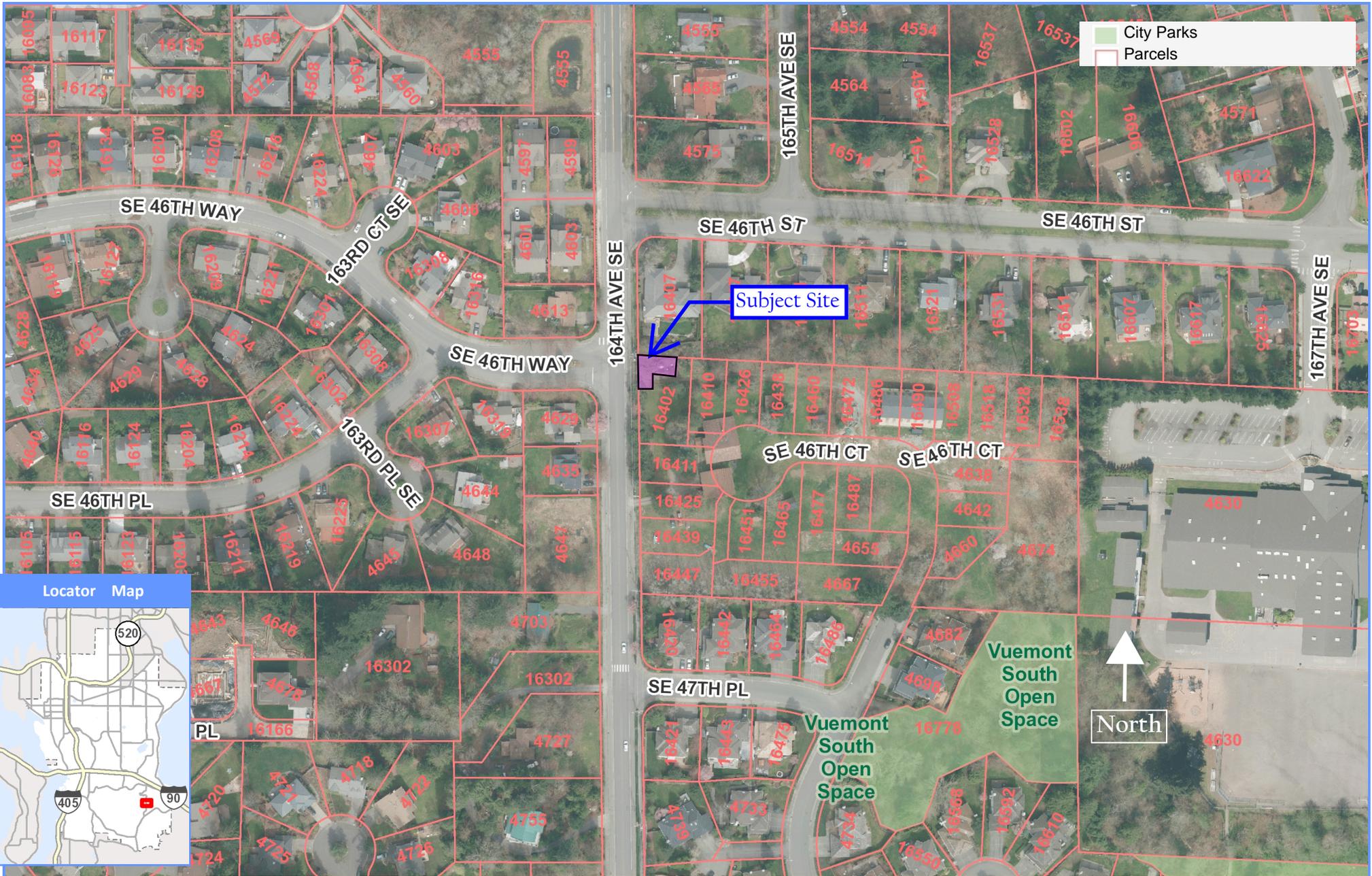
Electricity, telephone

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.  
None.

**Signature**

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature.....  
Date Submitted.....3-25-2014.....





**City of Bellevue  
Development Services Department  
Land Use Staff Report**

---

Proposal Name: T-Mobile - SE01914A - Solvang

Proposal Address: 4624 164<sup>th</sup> Avenue SE

Proposal Description: Request for Administrative Conditional Use (ACU) approval to modify an existing Wireless Communication Facility (WCF). Modifications include upgrading an existing antenna array through the replacement of two existing antennas, and installation of new ancillary equipment. Minor modifications to the existing equipment within the adjacent equipment enclosure are also proposed. There will be no increase in height to the existing utility pole. The purpose of these modifications is for network upgrades related to the transition to LTE-4G.

File Number: **14-125792-LA**

Applicant: T-Mobile, c/o Lexcom Development  
Tom Johnson

Decisions Included: Administrative Conditional Use, Process II  
Land Use Code 20.30E

Planner: Laurie Tyler, Associate Planner

State Environmental Policy Act  
Threshold Determination: **Determination of Non-Significance (DNS)**  
  
Carol V. Helland  
Environmental Coordinator

Director's Recommendation: **Approval with Conditions**  
Michael A. Brennan, Director  
Development Services Department

By:   
Carol V. Helland, Land Use Director

*Notice of Application:* April 10, 2014  
*14-day Comment Period:* April 24, 2014  
*Decision Publication Date:* July 31, 2014  
*Appeal Deadline:* August 14, 2014

For information on how to appeal the project, visit the Permit Center at City Hall or call (425) 452-6864. Appeal of the decision must be received in the City Clerk's office by 5 p.m. on the date noted for the appeal deadline.

**I. Request/Proposal Description**

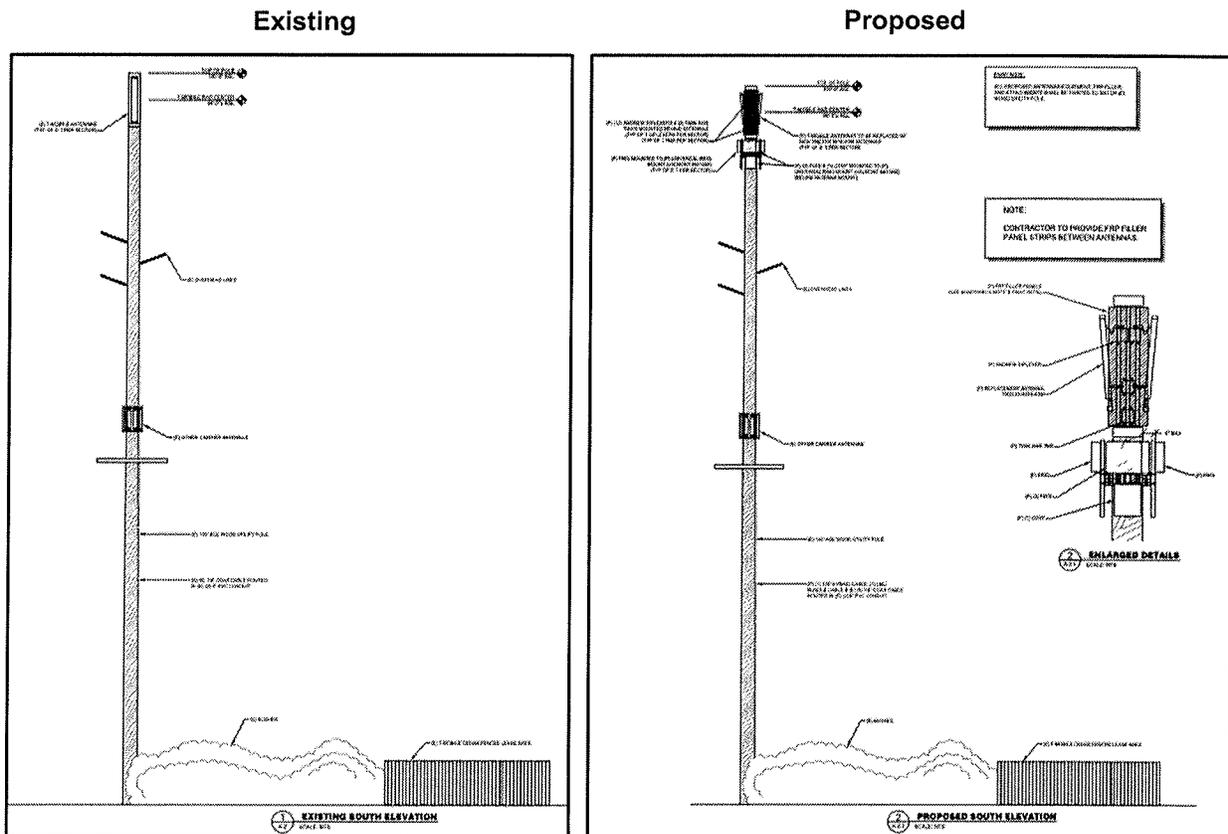
T-Mobile, in care of Lexcom Development, is requesting Administrative Conditional Use (ACU) approval to modify an existing wireless communications facility (WCF). The applicant is proposing to replace two existing antennas at the top of an existing 100' Puget Sound Energy (PSE) utility pole, and install additional ancillary equipment behind each antenna and below the antennas. There will be no increase in the overall number of antennas; however, the proposed replacement antennas will no longer be flush mounted to the utility pole, as they currently exist today.

The ancillary equipment proposed to be mounted behind each new antenna will include two amplifiers and twelve diplexers. This equipment will not be visible due to its location behind the antennas. However, the ancillary equipment proposed to be mounted below the antennas will include three radios and one surge protector. As this equipment is new, it will modify the overall appearance of the wireless communication facility at this location.

In addition, a new 175 foot hybrid cable will be routed in an existing underground PVC conduit between the new antennas and the existing equipment enclosure. The only modification proposed to the existing equipment enclosure will be the installation of a new surge protector for the hybrid cable. No expansions to the equipment enclosure or increase in fence height surrounding the equipment are proposed.

The purpose of this modification is to support network upgrades related to the transition to LTE-4G.

**Figure 1 – Existing & Proposed South Elevations**



## II. Site Description and Context

The property is located at the intersection of 164<sup>th</sup> Avenue SE and SE 46<sup>th</sup> Way. The subject site was previously part of unincorporated King County, and was recently annexed to the City of Bellevue in 2013. Therefore, the previous permit approval for the existing wireless facility was under the jurisdiction of King County.

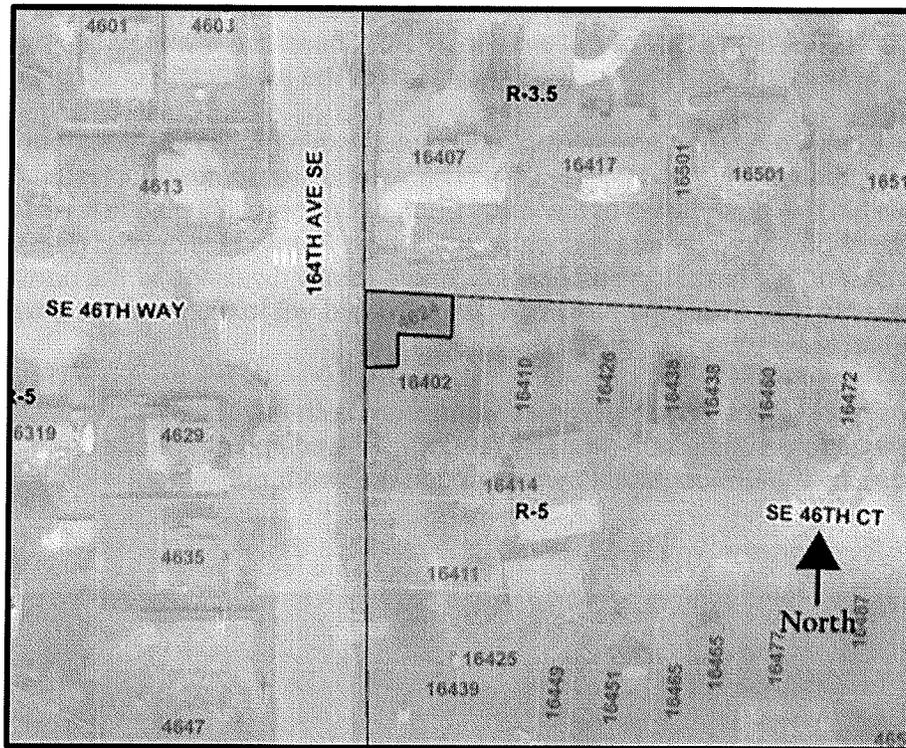
The subject site is a 1,824 square foot utility tract within the 26-lot, Vuemont South Division II subdivision (#13-124103-LG). The existing equipment enclosure is located within the boundaries of the utility tract, while the utility pole is located within the City right-of-way. The site lies within the Single Family Residential (R-5) land use district, and is surrounded by existing single-family dwellings to the north, east and west. No new dwellings have been constructed yet to the south as part of the recent 26-lot subdivision.

The topography of the site slopes downward from both the street level (west) and from the adjacent subdivision property (south). The equipment enclosure is surrounded by mature vegetation which conceals it from public right of way.

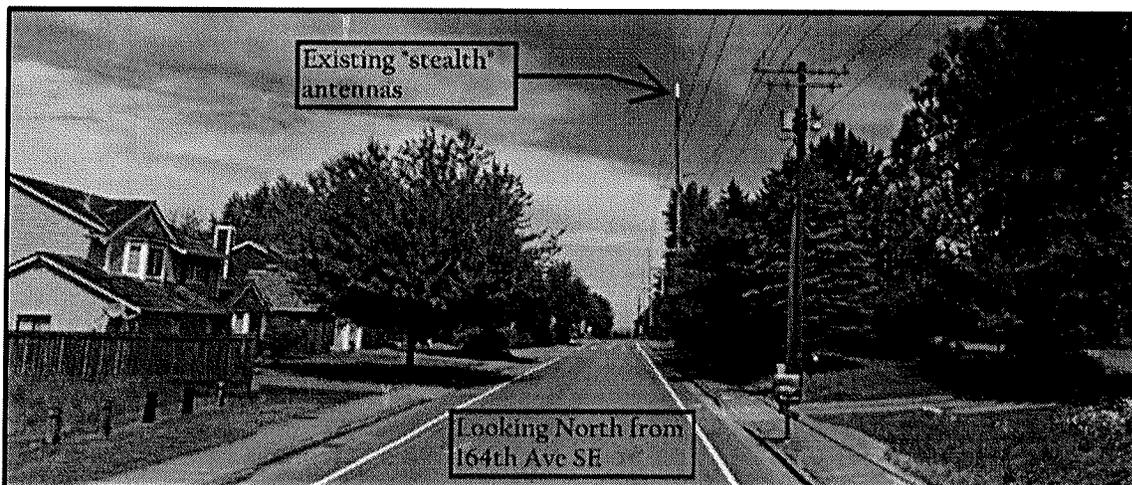
**Figure 2 – Aerial**



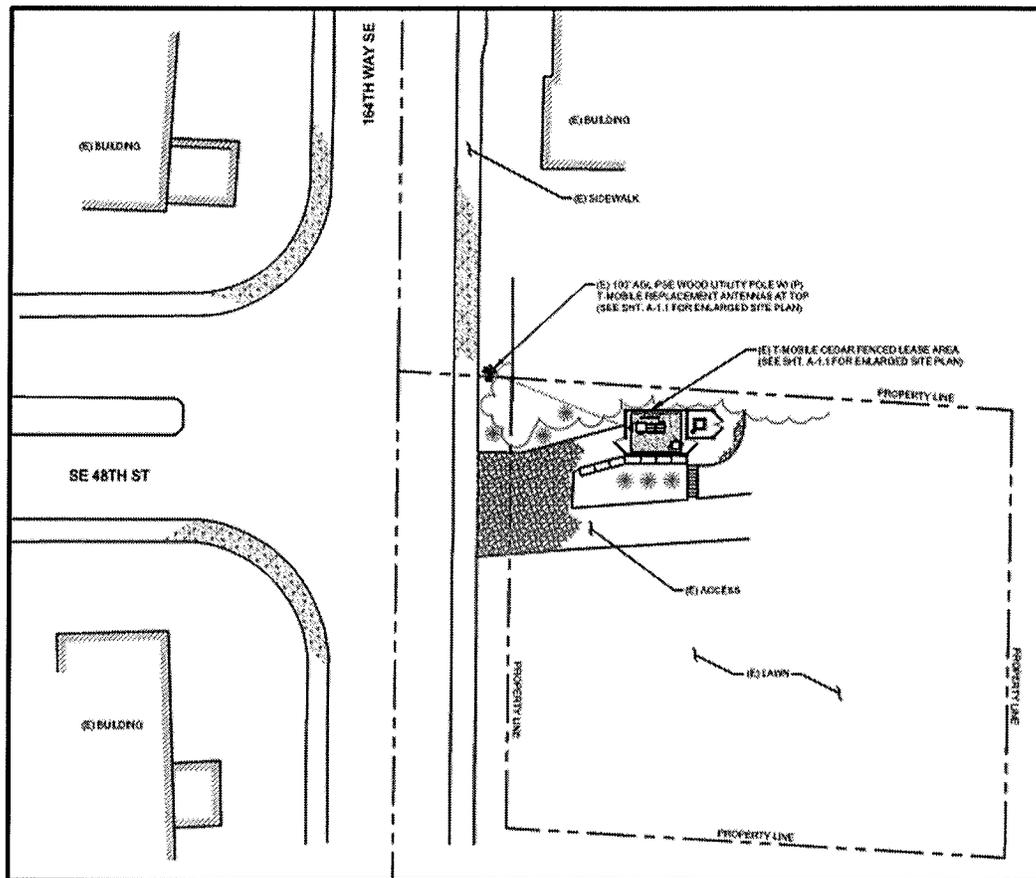
**Figure 3 – Zoning Map**



**Figure 4 – Site Photograph – Existing Conditions**



**Figure 5 – Site Plan**



### III. Environmental Impacts of the Proposal

The environmental review (refer to project file, City Hall Records Office) indicates no probability of significant adverse environmental impacts occurring as a result of the proposal. The Environmental Checklist submitted with the application adequately discloses expected environmental impacts associated with the project. The City codes and requirements, including the Clear and Grade Code, Utility Code, Land Use Code, Noise Ordinance, Building Code and other construction codes adequately mitigate expected environmental impacts. Therefore, issuance of a Determination of Non-Significance is the appropriate threshold determination under the State Environmental Policy Act requirements.

### IV. Public Comment and Response

The City initially notified the public of this proposal on April 10, 2014 with mailed notice and publication in the Weekly Permit Bulletin. One, double-sided public information sign was installed at the site on the same day. As of the date of this staff report, no comments have been received.

#### IV. Applicable Decision Criteria / Findings and Conclusions

Compliance with the decision criteria of Land Use Code Section 20.30E.140 (Administrative Conditional Use) is discussed below.

##### A. The administrative conditional use is consistent with the Comprehensive Plan.

As conditioned, the proposal is consistent with the City of Bellevue's Comprehensive Plan regarding wireless communications facilities. The Comprehensive Plan Utilities Policies listed below are especially relevant to the City's decision on this application:

***Policy UT-40: Requires the reasonable screening and/or architecturally compatible integration of all new above-ground facilities.***

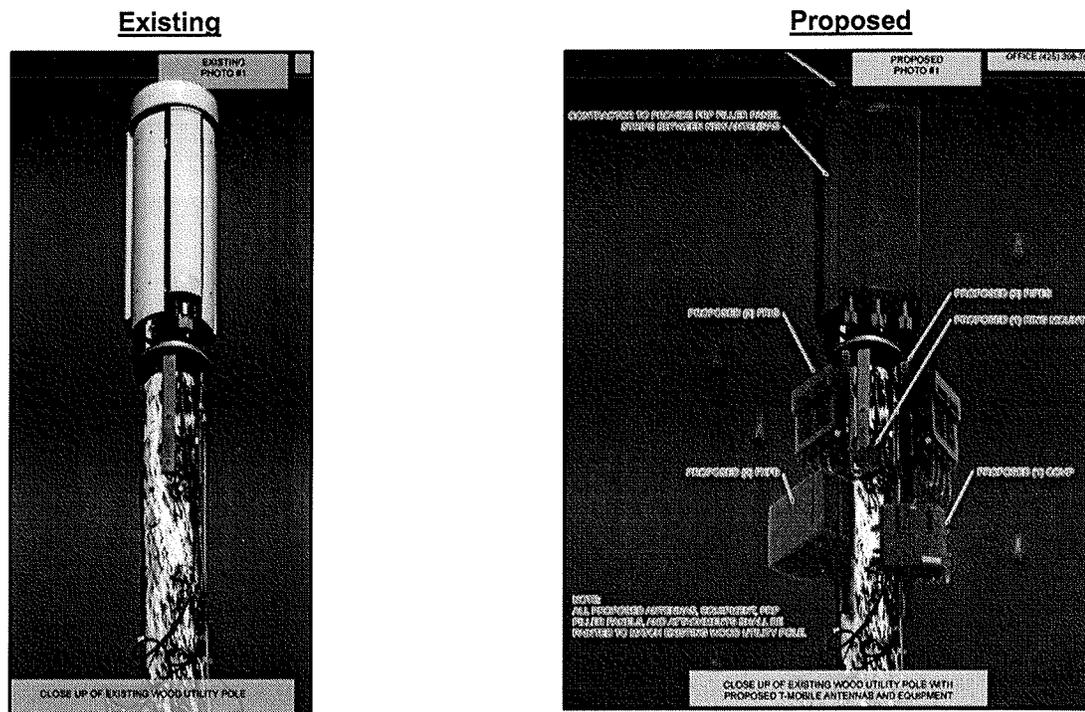
***Policy UT-41: Protect Bellevue's aesthetic quality and infrastructure investment from unnecessary degradation caused by the construction of telecommunication infrastructure.***

***Policy UT-53: Requires all utility equipment support facilities to be aesthetically compatible with the area in which they are placed by using landscape screening and/or architecturally compatible details and integration.***

***Policy UT-55: Requires the placement of personal wireless communication facilities in a manner that minimizes the adverse impacts on adjacent land uses.***

***Finding:*** The replacement antennas will be located in the same position as the existing antennas, but will tilt outward, approximately 6 inches from the support structure. Although the antennas will no longer be flush mounted, their overall appearance will not be drastically different than the stealth antennas which currently exist. The most noticeable change to the wireless facility will be the addition of the ancillary equipment below the antennas, which does not currently exist. In an effort to help conceal the wireless facility, the applicant intends to paint both the antennas and ancillary equipment to match the existing support structure. By painting all of the components, the overall wireless facility will be less visually prominent than it would if it was not painted to match. No modifications to the height of the utility pole or to the existing equipment enclosure are proposed. Therefore, the resulting wireless facility would remain aesthetically compatible with the existing site and surroundings, as there would be very little visible change.

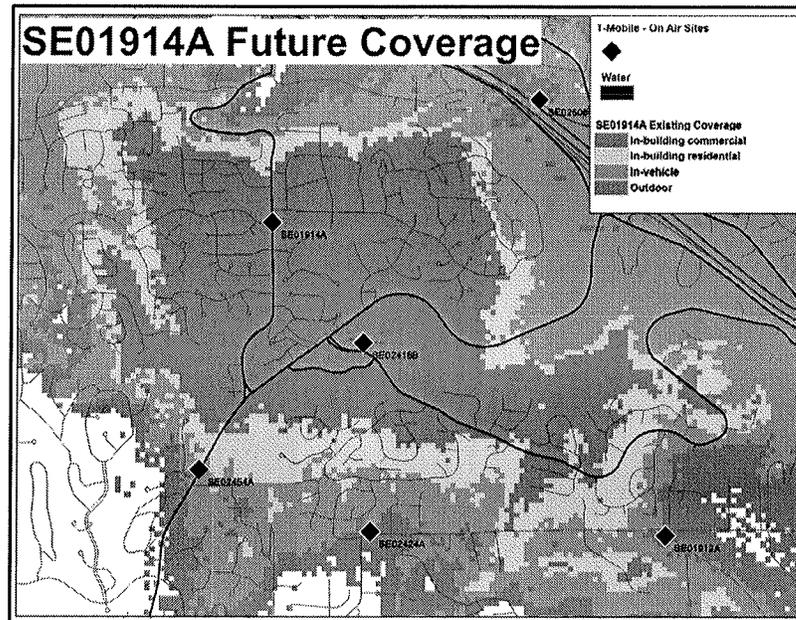
**Figure 6 – Photo Simulations (before and after)**



**Policy UT-60:** *Minimize visual impact of personal wireless communication facilities by encouraging deployment in land use districts in the following preferred and descending order when possible, considering the provider's coverage needs: 1) Non-residential land use districts, except Transition Areas; 2) Transition Areas; 3) Multifamily (R-20 and R-30) districts; and 4) and Park site and Residential districts.*

**Finding:** The existing utility pole and wireless facility was previously approved within the residential land use district under King County jurisdictional authority. Currently, the existing facility provides for Global System for Mobile communications (GSM) and Universal Mobile Telecommunications System (UMTS) technology, which is not proposed to change. With the proposed upgrade in antennas and addition of ancillary equipment, the proposal would incorporate the new Long Term Evolution (LTE) coverage which does not currently exist at the subject site. LTE is a wireless broadband technology designed to support roaming Internet access via cell phones and handheld devices. Once the upgraded antennas are installed, a majority of the residential properties, as shown in Figure 7 below, would benefit from this upgraded technology. It should be noted that the coverage area does not change, but instead is enhanced due to the new technology.

**Figure 7 – Coverage Map**



**Policy UT-61:** *Minimize visual impact of personal wireless communication facilities by encouraging system designs in the following preferred and descending order: 1) attached to public facility structures, building mounted, or integrated with utility poles, light standards, and signal supports; 2) co-located on utility poles, light standards, signal supports; and 3) free standing towers.*

**Finding:** The proposed upgraded antennas and ancillary equipment will be collocated on an existing 100' utility pole, which currently supports additional wireless facilities and electrical lines. Collocation on an existing utility pole is preferable to construction of an entirely new WCF in a separate location.

**B. The design is compatible with and responds to the existing or intended character, appearance, quality of development and physical characteristics of the subject property and immediate vicinity.**

**Finding:** With the exception of the new ancillary equipment located below the antennas, the overall appearance of the wireless facility will not appear significantly different than what currently exists. As there are no modifications proposed to the height of the existing utility pole, or to the size of the existing equipment enclosure, and the proposed equipment will be painted to match the existing pole to which it will be attached, the design of the wireless facility will remain compatible with the existing character, appearance, and physical characteristics of the subject property and immediate vicinity.

**C. The administrative conditional use will be served by adequate public facilities including streets, fire protection, and utilities.**

*Finding:* The proposed WCF is located on a site that is already served by adequate public facilities, including streets, fire protection and utilities.

**D. The administrative conditional use will not be materially detrimental to uses or property in the immediate vicinity of the subject property.**

*Finding:* The proposed replacement antennas and ancillary equipment will not substantially modify the impact of the existing WCF. A condition of approval will require the replacement antennas and ancillary equipment to be painted to match the existing utility pole. Therefore, this Administrative Conditional Use will not be detrimental to uses or property in the immediate vicinity of the subject property, as no substantial visible change would result from this application.

In addition, the facility will be removed when it ceases to be operational or falls into disrepair and is not maintained, or if the utility support structure is removed or placed underground. **Refer to Conditions of Approval in Section VI regarding Paint to Match, Flush Mount and Removal of Abandoned Sites.**

**E. The administrative conditional use complies with the applicable requirements of this Code.**

*Finding:* As conditioned, the proposed WCF complies with the location and design preferences as detailed in LUC 20.20.195. Further, the proposal meets all specific Land Use Code requirements applicable to non-exempt wireless communications facilities per LUC 20.20.195.D.

**V. Decision**

After conducting the various administrative reviews associated with this proposal, including applicable land use consistency, SEPA, and City Code and Standard compliance reviews, the Development Services Department does hereby **APPROVE** the proposal subject to the following conditions:

**VI. CONDITIONS OF APPROVAL:**

The following conditions are imposed under authority referenced:

**Compliance with Bellevue City Codes and Ordinances**

The applicant shall comply with all applicable Bellevue City Codes, Standards, and Ordinances, including but not limited to:

**Applicable Codes, Standards & Ordinances**

Clearing & Grading Code – BCC 23.76  
Construction Codes – BCC Title 23  
Fire Code – BCC 23.11  
Land Use Code – BCC Title 20  
Noise Control – BCC 9.18  
Sign Code – BCC Title 22

**Contact Person**

Janney Gwo, (425) 452-6190  
Building Division, (425) 452-6864  
Adrian Jones, (425) 452-6032  
Laurie Tyler, (425) 452-2728  
Laurie Tyler, (425) 452-2728  
Laurie Tyler, (425) 452-2728

Right-of-Way Use Code 14.30  
Utility Code – BCC Title 24

Tim Stever, (425) 452-4294  
Arturo Chi, (425) 452-4119

### **1. Noise & Construction Hours**

The proposal will be subject to normal construction hours of 7 a.m. to 6 p.m., Monday through Friday and 9:00 a.m. to 6:00 p.m. on Saturdays, except for Federal Holidays and as further defined by the Bellevue City Code. Proximity to existing residential uses will be given special consideration. Upon written request to the Development Services Department (DSD), work hours may be extended to 10:00 p.m. if the criteria for extension of work hours as stated in BCC 9.18 can be met and the appropriate mitigation employed. The use of best available noise abatement technology consistent with feasibility is required during construction to mitigate construction noise impacts to surrounding uses.

REVIEWER: Laurie Tyler, Development Services Department  
AUTHORITY: Bellevue City Code 9.18.020.C & 9.18.040

### **2. Disturbance**

The applicant shall fully restore, to the satisfaction of the City of Bellevue, any areas disturbed and or damaged during construction or future maintenance of the proposed facility.

REVIEWER: Laurie Tyler, Development Services Department  
AUTHORITY: Land Use Code 20.20.195D.4.c

### **3. Removal of Abandoned Sites**

The owner of this facility shall provide the Director with copies of any notice of intent to cease operations that is provided to the Federal Communications Commission. The entire facility shall be removed by the facility owner within 90 days of the date it ceases to be operational, or if the facility falls into disrepair and is not maintained. Disrepair includes structural features, paint, or general lack of maintenance, which could result in safety or visual impacts.

REVIEWER: Laurie Tyler, Development Services Department  
AUTHORITY: Land Use Code 20.20.195.D.8

### **4. Paint to Match**

The antennas and all ancillary components shall be painted to match the existing utility pole support structure.

REVIEWER: Laurie Tyler, Development Services Department  
AUTHORITY: Land Use Code 20.20.195.D.4.a

### **5. Flush-Mount**

The lateral projection of the antennas shall be minimized to the greatest extent technically feasible.

REVIEWER: Laurie Tyler, Development Services Department  
AUTHORITY: Land Use Code 20.20.195.D.4.b

**6. Cabling**

All cable connections to each antenna shall be mounted to the ringmount and pulled tight. The cabling shall also be painted to minimize visual impacts from the right-of-way and surrounding properties.

REVIEWER: Laurie Tyler, Development Services Department  
AUTHORITY: Land Use Code 20.20.195.D.4.b

**7. Right-of-Way Permit**

A right-of-way permit (TJ) for installation of the new antennas and ancillary equipment within the City right-of-way is required, prior to issuance of building permits.

REVIEWER: Tim Stever, Transportation (ROW) Department  
AUTHORITY: Transportation Code 14.30.070.A

**Exhibits:**

- A. Project Plans
- B. SEPA Checklist

# T-Mobile

## SOLVANG/PSE

4624 164TH AVE SE  
BELLEVUE, WA 98006

# SITE NUMBER: SE01914A

LATITUDE 47.562722 LONGITUDE -122.121417



**PROJECT INFORMATION:**

**SOLVANG/PSE  
SE01914A**

4624 164TH AVE SE  
BELLEVUE, WA 98006

**ISSUED FOR:**

**BUILDING PERMIT**

**REVISION HISTORY:**

NO.	DATE:	DESCRIPTION:	CHK. BY:	APPV. BY:
4	4/11/2014	REV. PER CITY COMMENTS	BJT	LL
3	9/4/2013	UPDATE CODE COMPLIANCE, STYLE SHEET, & ADD FRP FILLER NOTE	BJT	LL
2	8/13/2012	REV PER REDLINES	BJT	KC
1	8/7/2012	ISSUED DESIGN REVIEW	BJT	KC

**PLANS PREPARED BY:**

**B. J. THOMAS, P.E.**  
7607 80TH AVE NE  
MARYSVILLE, WA 98270  
206-851-1106

**DRAWN BY: CHK. BY: APPV. BY:**

**JL BJ LL**

**LICENSURE:**



**EQUIPMENT:**

REPLACE (E) (2) ANTENNAS W/ (2) NEW TMZXX-6516-A3M ANTENNAS. ADD (2) FXFB, (2) FRIG, (2) COVP (1 AT TOP & 1 AT BOTTOM), (12) ANDREW DIPLEXERS, (2) TWIN AWS TMA'S, (1) LMU BUNDLE CABLE & (1) HYBRID CABLE.

**DRAWING INFORMATION:**

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS AND OMISSIONS. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN WHICH IS RELATED TO NAMED CLIENT IS STRICTLY PROHIBITED.

**DRAWING TITLE:**

**TITLE SHEET**

**DRAWING NUMBER:**

**T-1**

GENERAL LOCATION MAP	DRIVING DIRECTIONS	PROJECT TEAM	PROJECT DESCRIPTION	DRAWING INDEX																																																				
	<p>FROM T-MOBILE BOTHELL 4 OFFICE:</p> <ol style="list-style-type: none"> <li>MERGE ONTO I-405 S VIA THE RAMP ON THE LEFT TOWARD RENTON. 12.9 MILES</li> <li>MERGE ONTO I-90 E VIA EXIT 11 TOWARD SPOKANE. 1.5 MILES</li> <li>TAKE THE 150TH AVE SE EXIT-EXIT 11A- TOWARD 156TH AVE SE. 0.3 MILES</li> <li>TAKE THE 150TH AVE SE / SE 37TH ST RAMP. 0.2 MILES</li> <li>TURN RIGHT ONTO 150TH AVE SE. 0.6 MILES</li> <li>150TH AVE SE BECOMES 148TH PL SE. 0.1 MILES</li> <li>TURN LEFT ONTO SE 45TH PL. 0.1 MILES</li> <li>TURN RIGHT ONTO 150TH AVE SE. 0.1 MILES</li> <li>TURN LEFT ONTO SE 46TH WAY. 0.5 MILES</li> <li>TURN LEFT TO STAY ON SE 46TH WAY. 0.4 MILES</li> <li>TURN RIGHT ONTO 164TH AVE SE. 0.1 MILES</li> </ol> <p>ARRIVE AT 4634 164TH AVE SE</p> <p>DISTANCE: 17.58 MILES APPROXIMATE TRAVEL TIME: 25 MINUTES</p>	<p><b>CONTACT TITLE</b> CONTACT INFORMATION</p> <p><b>PROPERTY OWNER:</b> DONALD SOLVANG 4634 164TH AVE SE ISSAQUAH, WA 98027</p> <p><b>PROGRAM MANAGER:</b> LEXCOM DEVELOPMENT LOUIS LEVY 615 8TH AVE S SEATTLE, WA 98104 PHONE #: 206-669-6967</p> <p><b>CONSTRUCTION PROJECT MANAGER:</b> TELCOPACIFIC PAUL LONG 19807 NORTH CREEK PKWY N BOTHELL, WA 98011 PHONE #: 425-442-2839</p> <p><b>CONSULTING ENGINEER:</b> B.J. THOMAS, P.E. 7607 80TH AVE NE MARYSVILLE, WA 98270 MOBILE #: 206-851-1106</p> <p><b>SITE ACQUISITION:</b> LEXCOM DEVELOPMENT LEEANNE MCMANUS 615 8TH AVE S SEATTLE, WA 98104 PHONE #: 509-679-5830</p> <p><b>ZONING:</b> JEFFREY SMITH 615 8TH AVE S SEATTLE, WA 98104 PHONE #: (425) 773-6884</p> <p><b>RF ENGINEER:</b> T-MOBILE DARRYL SALK 19807 NORTH CREEK PKWY N BOTHELL, WA 98011 MOBILE# 425-770-0006</p>	<p><b>PROJECT DESCRIPTION</b></p> <p>T-MOBILE PROPOSES TO REPLACE EXISTING (3) ANTENNAS W/ (2) NEW TMZXX-6516-A3M ANTENNAS. ADD (2) FXFB, (2) FRIG, (2) COVP (1 AT TOP &amp; 1 AT BOTTOM), (12) ANDREW DIPLEXERS, (2) TWIN AWS TMA'S, (1) LMU BUNDLE CABLE &amp; (1) HYBRID CABLE. REMOVE ALL EXISTING TMA'S &amp; DIPLEXERS.</p> <p><b>PROJECT INFORMATION</b></p> <p>THIS IS UNSTAFFED AND RESTRICTED EQUIPMENT AND WILL BE USED FOR THE TRANSMISSION OF RADIO SIGNALS FOR THE PURPOSE OF PROVIDING PUBLIC CELLULAR SERVICE.</p> <p>T-MOBILE CERTIFIES THAT THIS TELEPHONE EQUIPMENT FACILITY WILL BE SERVICED ONLY BY T-MOBILE EMPLOYEES AND THE WORK ASSOCIATED WITH ANY EQUIPMENT CANNOT BE PERFORMED BY HANDICAPPED PERSONS. THIS FACILITY WILL BE FREQUENTED ONLY BY SERVICE PERSONNEL FOR REPAIR PURPOSES. PURSUANT TO THE AMERICANS WITH DISABILITIES ACT (ADA), APPENDIX B SECTION 4.11. (5)(b), THIS FACILITY IS EXEMPT FROM THAT ACT.</p> <p>NO POTABLE WATER SUPPLY IS TO BE PROVIDED AT THIS LOCATION.</p> <p>NO WASTE WATER OR SOLID WASTE WILL BE GENERATED AT THIS LOCATION.</p> <p>T-MOBILE MAINTENANCE CREW (ONE PERSON) WILL MAKE AN AVERAGE OF ONE TRIP PER MONTH AT ONE HOUR PER TRIP.</p> <p><b>CODE COMPLIANCE</b></p> <p>ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING ON THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES:</p> <p>2012 INTERNATIONAL BUILDING CODE 2009 INTERNATIONAL MECHANICAL CODE 2012 INTERNATIONAL FIRE CODE 2012 NFPA 54 - NATIONAL FUEL GAS CODE 2012 NFPA 58 - LIQUEFIED PETROLEUM GAS CODE (PROPANE INSTALLATIONS ONLY) 2011 NFPA 58 - LIQUEFIED PETROLEUM GAS CODE (PROPANE INSTALLATIONS ONLY) 2012 INTERNATIONAL FIRE CODE 2012 INTERNATIONAL FIRE CODE 2012 UNIFORM PLUMBING CODE 2011 NATIONAL ELECTRICAL CODE 2007 NATIONAL ELECTRIC SAFETY CODE LOCAL BUILDING CODE ORDINANCES ANSI / TIA / EIA - 222 - G NFPA-101 - LIFE SAFETY CODE</p>	<p><b>DRAWING INDEX</b></p> <table border="1"> <thead> <tr> <th>DWG:</th> <th>DRAWING DESCRIPTION:</th> <th>DWG:</th> <th>DRAWING DESCRIPTION:</th> </tr> </thead> <tbody> <tr> <td>T-1</td> <td>TITLE SHEET &amp; PROJECT DATA</td> <td></td> <td></td> </tr> <tr> <td>G-1</td> <td>GENERAL NOTES</td> <td></td> <td></td> </tr> <tr> <td>A-1</td> <td>PARCEL PLAN</td> <td></td> <td></td> </tr> <tr> <td>A-1-1</td> <td>ENLARGED SITE PLAN</td> <td></td> <td></td> </tr> <tr> <td>A-2</td> <td>EXISTING SITE ELEVATION</td> <td></td> <td></td> </tr> <tr> <td>A-2-1</td> <td>PROPOSED SITE ELEVATION</td> <td></td> <td></td> </tr> <tr> <td>A-3</td> <td>GENERAL DETAILS</td> <td></td> <td></td> </tr> <tr> <td>A-4</td> <td>GENERAL DETAILS</td> <td></td> <td></td> </tr> <tr> <td>E-1</td> <td>ELECTRICAL GROUNDING PLAN</td> <td></td> <td></td> </tr> <tr> <td>E-2</td> <td>ELECTRICAL GROUNDING DETAILS</td> <td></td> <td></td> </tr> <tr> <td>RF-1</td> <td>RF DETAILS</td> <td></td> <td></td> </tr> <tr> <td>RF-2</td> <td>RF DETAILS</td> <td></td> <td></td> </tr> </tbody> </table>	DWG:	DRAWING DESCRIPTION:	DWG:	DRAWING DESCRIPTION:	T-1	TITLE SHEET & PROJECT DATA			G-1	GENERAL NOTES			A-1	PARCEL PLAN			A-1-1	ENLARGED SITE PLAN			A-2	EXISTING SITE ELEVATION			A-2-1	PROPOSED SITE ELEVATION			A-3	GENERAL DETAILS			A-4	GENERAL DETAILS			E-1	ELECTRICAL GROUNDING PLAN			E-2	ELECTRICAL GROUNDING DETAILS			RF-1	RF DETAILS			RF-2	RF DETAILS		
DWG:	DRAWING DESCRIPTION:	DWG:	DRAWING DESCRIPTION:																																																					
T-1	TITLE SHEET & PROJECT DATA																																																							
G-1	GENERAL NOTES																																																							
A-1	PARCEL PLAN																																																							
A-1-1	ENLARGED SITE PLAN																																																							
A-2	EXISTING SITE ELEVATION																																																							
A-2-1	PROPOSED SITE ELEVATION																																																							
A-3	GENERAL DETAILS																																																							
A-4	GENERAL DETAILS																																																							
E-1	ELECTRICAL GROUNDING PLAN																																																							
E-2	ELECTRICAL GROUNDING DETAILS																																																							
RF-1	RF DETAILS																																																							
RF-2	RF DETAILS																																																							
	<p><b>ZONING INFORMATION</b></p> <p><b>SITE NUMBER:</b> SE01914A <b>SITE NAME:</b> SOLVANG/PSE <b>SITE ADDRESS:</b> 4624 164TH AVE SE BELLEVUE, WA 98006 <b>PARCEL #:</b> 1324059020 <b>CURRENT ZONING:</b> R-6 <b>JURISDICTION:</b> KING COUNTY <b>GOVERNING CODE:</b> 2012 IBC <b>BUILDING TYPE:</b> -- <b>SITE TYPE:</b> UNSTAFFED TELECOMM FACILITY <b>PREVIOUS PERMIT APPROVALS:</b> B99C3053</p> <p><b>UTILITY PURVEYOR</b></p> <p><b>POWER COMPANY:</b> PSE <b>TELCO COMPANY:</b> CENTURYLINK</p> <p><b>LEGAL DESCRIPTION</b></p> <p>ABBREVIATED PER ASSESSOR RECORDS: W 1/2 OF S 1/2 OF N 1/2 OF SW 1/4 OF SW 1/4 LESS CO RD</p>	<p><b>APPROVAL/SIGN OFF OF CONSTRUCTION DRAWINGS</b></p> <p>REVIEWERS SHALL CLEARLY PLACE INITIALS ADJACENT TO EACH REDLINE NOTE AS DRAWINGS ARE BEING REVIEWED.</p> <p>CONSULTANT GROUP SIGN OFF</p> <table border="1"> <tr> <td>LANDLORD'S REPRESENTATIVE:</td> <td>DATE:</td> </tr> <tr> <td>CONSTRUCTION MANAGER:</td> <td>DATE:</td> </tr> <tr> <td>CONSTRUCTION COORDINATOR:</td> <td>DATE:</td> </tr> <tr> <td>PROJECT MANAGER:</td> <td>DATE:</td> </tr> <tr> <td>SITE ACQUISITION:</td> <td>DATE:</td> </tr> <tr> <td>ZONING:</td> <td>DATE:</td> </tr> <tr> <td>RF ENGINEER:</td> <td>DATE:</td> </tr> </table>	LANDLORD'S REPRESENTATIVE:	DATE:	CONSTRUCTION MANAGER:	DATE:	CONSTRUCTION COORDINATOR:	DATE:	PROJECT MANAGER:	DATE:	SITE ACQUISITION:	DATE:	ZONING:	DATE:	RF ENGINEER:	DATE:	<p>CALL TWO WORKING DAYS BEFORE YOU DIG</p> <p>811 NATIONAL UTILITIES UNDERGROUND LOCATE</p> <p>ELECTRIC - RED SEWER - GREEN GAS/OIL - YELLOW SURVEY - PINK TELCATV - ORANGE</p> <p>PROPOSED - WHITE WATER - BLUE</p> <p></p> <p>SAFETY PRECAUTION SHALL BE IMPLEMENTED BY CONTRACTORS IN ALL TRENCHING IN ACCORDANCE WITH CURRENT OSHA STANDARDS</p>																																							
LANDLORD'S REPRESENTATIVE:	DATE:																																																							
CONSTRUCTION MANAGER:	DATE:																																																							
CONSTRUCTION COORDINATOR:	DATE:																																																							
PROJECT MANAGER:	DATE:																																																							
SITE ACQUISITION:	DATE:																																																							
ZONING:	DATE:																																																							
RF ENGINEER:	DATE:																																																							

**GENERAL NOTES:**

- DRAWINGS ARE NOT TO BE SCALED, WRITTEN DIMENSIONS TAKE PRECEDENCE, THIS SET OF DOCUMENTS IS INTENDED TO BE USED FOR DIAGRAMMATIC PURPOSES ONLY, UNLESS NOTED OTHERWISE. THE GENERAL CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE FURNISHING ALL MATERIALS, EQUIPMENT, LABOR AND ANY REQUIREMENTS DEEMED NECESSARY TO COMPLETE INSTALLATION AS DESCRIBED IN THE DRAWINGS AND OWNER'S PROJECT MANUAL.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL DIMENSIONS AND STANDARDIZED DETAILS THAT REQUIRE MODIFICATIONS DUE TO ACTUAL FIELD CONDITIONS AND REQUIREMENTS MUST BE SUBMITTED TO AND APPROVED BY T-MOBILE WIRELESS REPRESENTATIVE PRIOR TO START OF WORK.
- PRIOR TO THE SUBMISSION OF BIDS, CONTRACTORS INVOLVED SHALL VISIT THE JOB SITE TO FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED PROJECT. CONTRACTORS SHALL VISIT THE CONSTRUCTION SITE WITH THE CONSTRUCTION/CONTRACT DOCUMENTS TO VERIFY FIELD CONDITIONS AND CONFIRM THAT THE PROJECT WILL BE ACCOMPLISHED AS SHOWN. PRIOR TO PROCEEDING WITH CONSTRUCTION, ANY ERRORS, OMISSIONS, OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER VERBALLY AND IN WRITING.
- THE GENERAL CONTRACTOR SHALL RECEIVE WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, SAFETY, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- ALL WORK PERFORMED ON THE PROJECT AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK.
- GENERAL CONTRACTOR SHALL PROVIDE, AT THE PROJECT SITE, A FULL SET OF CONSTRUCTION DOCUMENTS UPDATED WITH THE LATEST REVISIONS INVOLVED WITH THE PROJECT. THIS SET IS A VALID CONTRACT DOCUMENT ONLY IF THE TITLE SHEET IS STAMPED IN RED INK "FOR CONSTRUCTION" AND EACH SUCCESSIVE SHEET BEARS THE ARCHITECT'S/ENGINEER'S SIGNED WET STAMP.
- THE CONTRACTOR IS RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, ETC. ACCORDING TO APPLICABLE CODES, STANDARDS, AND GOOD CONSTRUCTION PRACTICES.
- THE CONTRACTOR SHALL MEET ALL OSHA REQUIREMENTS FOR ALL INSTALLATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGES TO THE EXISTING CONSTRUCTION AND REPAIR ALL DAMAGES TO BETTER THAN NEW CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE CONSULTANT OF ANY DAMAGE TO THE BUILDING SITE OR ANY ADJACENT STRUCTURES AROUND THE PROJECT. THE T-MOBILE REPRESENTATIVE SHALL BE SOLE AND FINAL JUDGE AS TO THE QUALITY OF THE REPAIRED CONSTRUCTION. ANY ADDITIONAL MODIFICATIONS WHICH MUST BE MADE SHALL BE MADE AT THE CONTRACTOR'S EXPENSE.
- WHERE NEW PAVING, CONCRETE SIDEWALKS OR PATHS MEET EXISTING CONSTRUCTION, THE CONTRACTOR SHALL MATCH THE EXISTING PITCH, GRADE, AND ELEVATION SO THE ENTIRE STRUCTURE SHALL HAVE A SMOOTH TRANSITION.
- THE CONTRACTOR SHALL MODIFY THE EXISTING FLOORS, WALL, CEILING, OR OTHER CONSTRUCTION AS REQUIRED TO GAIN ACCESS TO AREAS FOR ALL MECHANICAL, PLUMBING, ELECTRICAL, OR STRUCTURAL MODIFICATIONS. WHERE THE EXISTING CONSTRUCTION DOORS, PARTITIONS, CEILING, ETC., ARE TO BE REMOVED, MODIFIED, OR REARRANGED OR WHERE THE EXPOSED OR HIDDEN MECHANICAL, ELECTRICAL, SYSTEMS ARE ADDED OR MODIFIED, THE GENERAL CONTRACTOR SHALL REPAIR, PATCH AND MATCH ALL EXISTING CONSTRUCTION AND FINISHES OF ALL FLOORS WALLS AND CEILINGS. WHERE CONCRETE MASONRY CONSTRUCTION IS MODIFIED, THE CONTRACTOR SHALL TOOTH IN ALL NEW CONSTRUCTION TO MATCH THE EXISTING BOND. WHERE CONCRETE CONSTRUCTION IS MODIFIED, THE CONTRACTOR SHALL VERIFY THE EXACT DETAILS TO BE USED FOR CONSTRUCTION. ALL WORK SHALL BE COVERED UNDER THE GENERAL CONTRACT.
- IF CONTRACTOR OR SUBCONTRACTOR FIND IT NECESSARY TO DEVIATE FROM ORIGINAL APPROVED PLANS, THEN IT IS THE CONTRACTOR'S AND THE SUBCONTRACTOR'S RESPONSIBILITY TO PROVIDE THE CONSULTANT WITH 4 COPIES OF THE PROPOSED CHANGES FOR HIS APPROVAL BEFORE PROCEEDING WITH THE WORK. IN ADDITION THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR PROCURING ALL NECESSARY APPROVALS FROM THE BUILDING AUTHORITIES FOR THE PROPOSED CHANGES BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR PROCURING ALL NECESSARY INSPECTIONS AND APPROVALS FROM BUILDING AUTHORITIES DURING THE EXECUTION OF THE WORK.
- CONTRACTOR TO PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF PROJECT AREA DURING CONSTRUCTION.
- THE CONTRACTOR SHALL PERFORM WORK DURING OWNER'S PREFERRED HOURS TO AVOID DISTURBING NORMAL BUSINESS.
- SEAL ALL PENETRATIONS THROUGH FIRE-RATED AREAS WITH U.L. LISTED OR FIRE MARSHAL APPROVED MATERIALS AS APPLICABLE TO THIS FACILITY AND OR PROJECT SITE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR UTILITY LOCATES, SCHEDULING, COORDINATING SPECIAL AND BUILDING DEPARTMENT INSPECTIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND UTILIZING ORIGINAL ROOFING CONTRACTOR AS REQUIRED TO MAINTAIN ANY EXISTING ROOFING WARRANTY.
- ROUTING OF ALL CONDUITS, CABLES, CABLE TRAYS ETC ARE INDICATED AS PROPOSED LOCATION ONLY. CONFIRM THE EXACT LOCATION AND ROUTING WITH THE ON SITE T-MOBILE CONSTRUCTION MANAGER PRIOR TO STARTING WORK.

**CONCRETE NOTES:**

- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318 AND THE SPECIFICATION CAST-IN-PLACE CONCRETE.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS UNO.
- REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES CLASS "B" AND ALL HOOKS SHALL BE STANDARD UNO.
- 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.
- A 1/2" TROWELED RADIUS SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE UNO. HOLES TO RECEIVE EXPANSION/WEDGE ANCHORS SHALL BE 1/8" LARGER IN DIAMETER THAN THE ANCHOR BOLT, DOWEL OR ROD AND SHALL CONFORM TO MFR RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. AVOID CUTTING EXISTING REBAR WHEN DRILLING HOLES IN THE ELEVATED SLAB.
- INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURES.
- FLOAT SURFACE SHALL BE A SMOOTH FINISH. SURFACE SHALL BE FREE OF ALL OBVIOUS DEPRESSIONS. SURFACE SHALL BE SLOPED AT 2% TO PROMOTE DRAINAGE AWAY FROM EQUIPMENT.

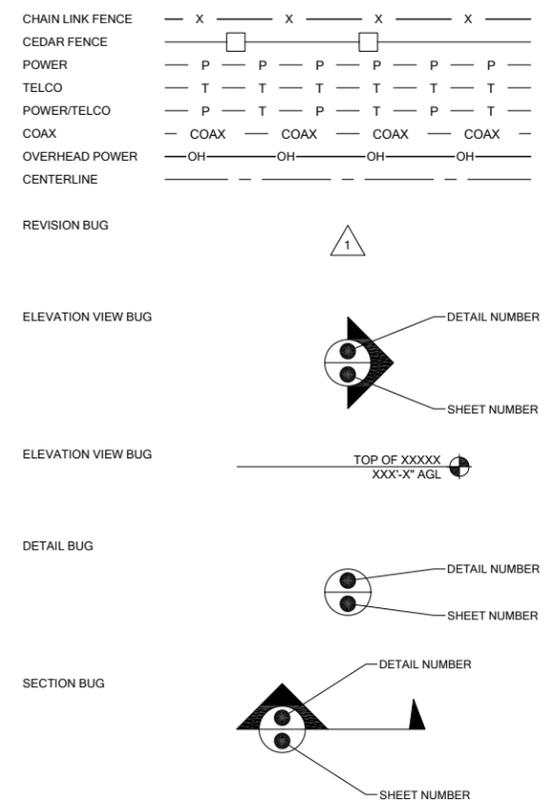
**CONCRETE NOTES:**

- RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
  - THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE PCS EQUIPMENT, TOWER AREAS, AND ADJACENT BUILDINGS.
  - 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.
  - THE SUBGRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO THE CRUSHED STONE APPLICATION.
  - 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 ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR PIER DRILLING AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW.
  - ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND SHALL BE CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF ENGINEERING.
  - THE AREAS OF THE CUSTOMER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE BUILDING, DRIVEWAY OR CRUSHED STONE, SHALL BE GRADED TO A UNIFORM SLOPE, FERTILIZED, SEEDED, AND COVERED WITH MULCH AS SPECIFIED IN THE SPECIFICATION LANDSCAPE WORK.
  - BEDDING MATERIAL FOR UTILITY LINES, CULVERTS AND PIPING: CLEAN SAND, MEDIUM TP COARSE, SUB ROUNDED NATURAL RIVER OR BANK SAND, WASHED, FREE OF SILT OR CLAY, LOAM, FRIABLE OR SOLUBLE MATERIALS, AND ORGANIC MATER; GRADED IN ACCORDANCE WITH THE FOLLOWING GRAIN SIZE DISTRIBUTION:
- | SIEVE SIZE   | PERCENT PASSING |
|--------------|-----------------|
| 3/8"         | 100             |
| NO. 4 MESH   | 60-90           |
| NO. 8 MESH   | 0-45            |
| NO. 16 MESH  | 0-25            |
| NO. 100 MESH | 0-2             |
| NO. 200 MESH | 0-2             |
- BMP'S FOR TEMPORARY EROSION/SEDIMENTATION CONTROL SHALL BE IMPLEMENTED PER LOCAL, CITY OR COUNTY GUIDELINES AND PER PLAN IF APPLICABLE.

**ABBREVIATIONS**

AC	AIR CONDITIONER	JT	JOINT
AFF	ABOVE FINISHED FLOOR	LAM	LAMINATED
AFG	ABOVE FINISHED GRADE	LINEAL FOOT	LINEAL FOOT
AFS	ABOVE FINISHED SLAB	MANUF	MANUFACTURER
ALUM	ALUMINUM	MAX	MAXIMUM
	ANCHOR BOLT	MECH	MECHANICAL
	ANGLE	MH	MANHOLE
ARCH	ARCHITECTURAL	MM	MILLIMETER
BTS	BASE TRANSMISSION SYSTEM	MIN	MINIMUM
BLDG	BUILDING	MISC	MISCELLANEOUS
BM	BEAM	MPH	MILES PER HOUR
BO	BOTTOM	MTL	METAL
B.O	BOTTOM OF	NIC	NOT IN CONTRACT
BOC	BOTTOM OF CONCRETE	NOM	NOMINAL
BOS	BOTTOM OF STEEL	NTS	NOT TO SCALE
	CONTROL JOINT	OC	ON CENTER
	CENTER LINE	OD	OUTSIDE DIAMETER
	CEILING	OH	OVERHEAD
CLG	CLEAR	OPNG	OPENING
CLR	CONCRETE MASONRY UNIT	OPP	OPPOSITE
CMU	COLUMN	PROPOSED	PROPOSED
COL	CONCRETE	PCS	PERSONAL COMMUNICATION SYSTEM
CONC	CONSTRUCTION	R	PLATE
CONST	CONTINUOUS	PR	PAIR
CONT	CENTER	PSI	POUNDS PER SQUARE INCH
CTR	DIAMETER	PSF	POUNDS PER SQUARE FOOT
DIA / <sup>ø</sup>	DETAIL	PT	PRESSURE TREATED
DTL	EXISTING	RAD	RADIUS
	EACH	RD	ROOF DRAIN
EA	EXPANSION JOINT	REINF	REINFORCED/REINFORCING
	ELECTRICELECTRICAL	REQD	REQUIRED
ELEC	ELEVATION	RM	ROOM
	EQUAL	R/W	RIGHT OF WAY
EQ	EACH WAY	SCHED	SCHEDULE
EW	EXPANSION	SECT	SECTION
EXP	EXTERIOR	SF	SQUARE FOOT
EXT	FLOOR DRAIN	SIM	SIMILAR
	FINISH	SQ FT	SQUARE FOOT
FIN	FINISH FLOOR	SS	STAINLESS STEEL
FIN FLR	FLOOR	STD	STANDARD
FLR	FOOTING	STL	STEEL
FTG	GAUGE	STRUC	STRUCTURAL
GA	GALVANIZED	TEMP	TEMPORARY
GALV	GYP	THK	THICK
GYP	GYP SUM BOARD	T.O.	TOP OF
GB	HOLLOW METAL	TOS	TOP OF STEEL
HM	HORIZONTAL	TOC	TOP OF CONCRETE
HR	HEIGHT	TYP	TYPICAL
	HEATING VENTILATION AIR CONDITIONING	UNO	UNLESS NOTED OTHERWISE
HVAC	INSULATION	VCT	VINYL COMPOSITION TILE
INSUL	INTERIOR	VERT	VERTICAL
INT		W/	WITH
		WWW	WELDED WIRE MESH

**LEGENDS & SYMBOLS**



**PROJECT INFORMATION:**

**SOLVANG/PSE  
SE01914A**

**4624 164TH AVE SE  
BELLEVUE, WA 98006**

**ISSUED FOR:**

**BUILDING PERMIT**

**REVISION HISTORY:**

NO.	DATE:	DESCRIPTION:	CHK. BY:	APPV. BY:
	4/11/2014	REV. PER CITY COMMENTS	BJT	LL
	9/4/2013	UPDATE CODE COMPLIANCE, STYLE SHEET, & ADD FRP FILLER NOTE	BJT	LL
	8/13/2012	REV PER REDLINES	BJT	KC
	8/7/2012	ISSUED DESIGN REVIEW	BJT	KC

**PLANS PREPARED BY:**

**B. J. THOMAS, P.E.  
7607 80TH AVE NE  
MARYSVILLE, WA 98270  
206-851-1106**

**DRAWN BY: JL      CHK. BY: BJ      APPV. BY: LL**

**LICENSURE:**

**EQUIPMENT:**

REPLACE (E) (2) ANTENNAS W/ (2) NEW TMZXXX-6516-A3M ANTENNAS. ADD (2) FXFB, (2) FRIG, (2) COVP (1 AT TOP & 1 AT BOTTOM), (8) ANDREW DIPLEXERS, (2) TWIN AWS TMA'S, (1) LMU BUNDLE CABLE & (1) HYBRID CABLE.

**DRAWING INFORMATION:**

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS AND OMISSIONS. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN WHICH IS RELATED TO NAMED CLIENT IS STRICTLY PROHIBITED.

**DRAWING TITLE:**

**GENERAL NOTES**

**DRAWING NUMBER:**

**G-1**

**PROJECT INFORMATION:**

**SOLVANG/PSE  
SE01914A**

**4624 164TH AVE SE  
BELLEVUE, WA 98006**

**ISSUED FOR:**

**BUILDING PERMIT**

**REVISION HISTORY:**

NO.	DATE:	DESCRIPTION:	CHK. BY:	APPV. BY:
4	4/11/2014	REV. PER CITY COMMENTS	BJT	LL
3	9/4/2013	UPDATE CODE COMPLIANCE, STYLE SHEET, & ADD FRP FILLER NOTE	BJT	LL
2	8/13/2012	REV PER REDLINES	BJT	KC
1	8/7/2012	ISSUED DESIGN REVIEW	BJT	KC

**PLANS PREPARED BY:**

**B. J. THOMAS, P.E.  
7607 80TH AVE NE  
MARYSVILLE, WA 98270  
206-851-1106**

**DRAWN BY: CHK. BY: APPV. BY:**

**JL BJ LL**

**LICENSURE:**



**EQUIPMENT:**

REPLACE (E) (2) ANTENNAS W/ (2) NEW TMZXXX-6516-A3M ANTENNAS. ADD (2) FXFB, (2) FRIG, (2) COVP (1 AT TOP & 1 AT BOTTOM), (8) ANDREW DIPLEXERS, (2) TWIN AWS TMA'S, (1) LMU BUNDLE CABLE & (1) HYBRID CABLE.

**DRAWING INFORMATION:**

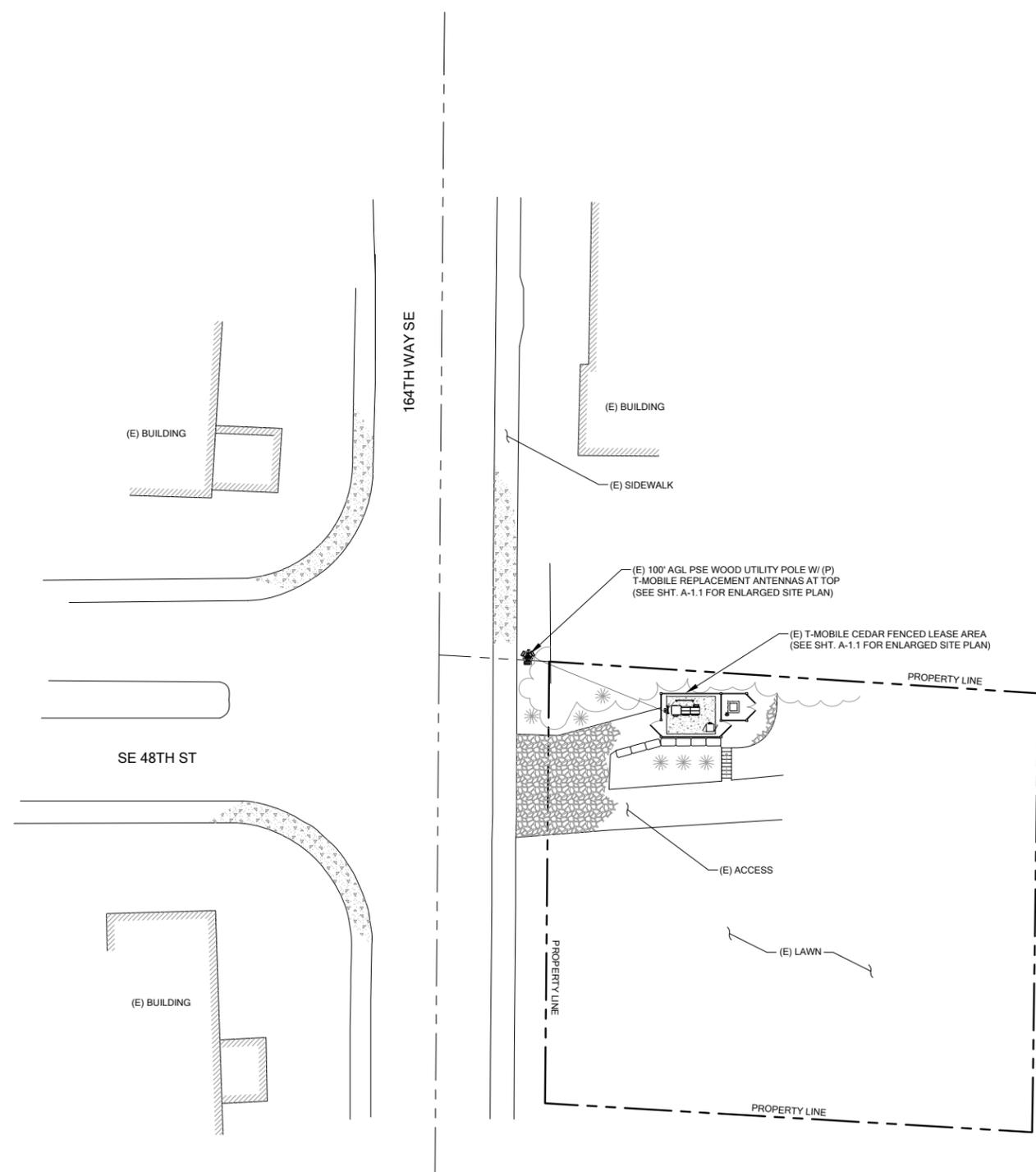
DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS AND OMISSIONS. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN WHICH IS RELATED TO NAMED CLIENT IS STRICTLY PROHIBITED.

**DRAWING TITLE:**

**SITE PLAN**

**DRAWING NUMBER:**

**A-1**



**PROJECT INFORMATION:**

**SOLVANG/PSE  
SE01914A**

**4624 164TH AVE SE  
BELLEVUE, WA 98006**

**ISSUED FOR:**

**BUILDING PERMIT**

**REVISION HISTORY:**

NO.	DATE:	DESCRIPTION:	CHK. BY:	APPV. BY:
4	4/11/2014	REV. PER CITY COMMENTS	BJT	LL
3	9/4/2013	UPDATE CODE COMPLIANCE, STYLE SHEET, & ADD FRP FILLER NOTE	BJT	LL
2	8/13/2012	REV PER REDLINES	BJT	KC
1	8/7/2012	ISSUED DESIGN REVIEW	BJT	KC

**PLANS PREPARED BY:**

**B. J. THOMAS, P.E.  
7607 80TH AVE NE  
MARYSVILLE, WA 98270  
206-851-1106**

**DRAWN BY: CHK. BY: APPV. BY:**

**JL BJ LL**

**LICENSURE:**



**EQUIPMENT:**

REPLACE (E) (2) ANTENNAS W/ (2) NEW TMZXXX-6516-A3M ANTENNAS. ADD (2) FXFB, (2) FRIG, (2) COVP (1 AT TOP & 1 AT BOTTOM), (8) ANDREW DIPLEXERS, (2) TWIN AWS TMA'S, (1) LMU BUNDLE CABLE & (1) HYBRID CABLE.

**DRAWING INFORMATION:**

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS AND OMISSIONS. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN WHICH IS RELATED TO NAMED CLIENT IS STRICTLY PROHIBITED.

**DRAWING TITLE:**

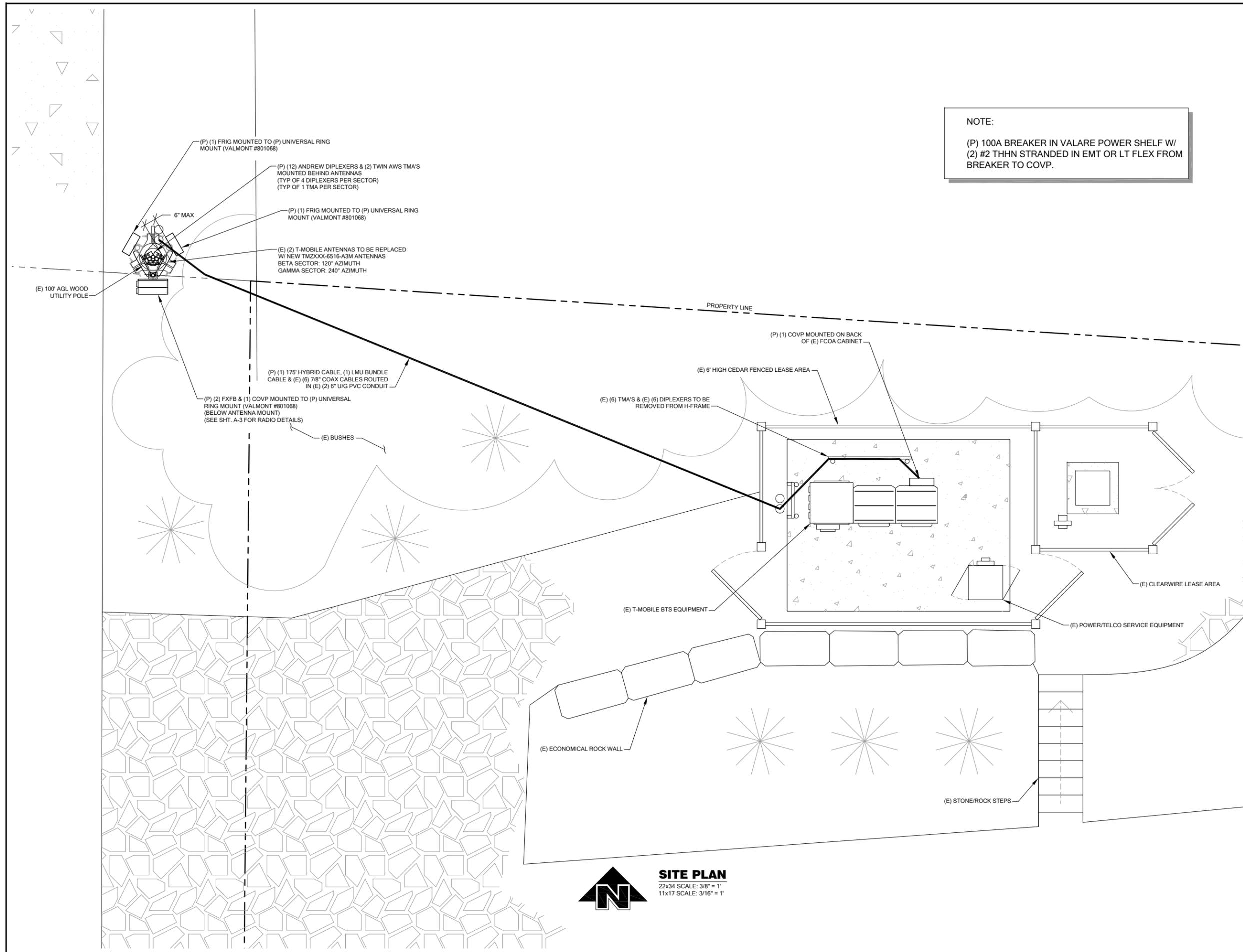
**SITE PLAN**

**DRAWING NUMBER:**

**A-1.1**

**NOTE:**

(P) 100A BREAKER IN VALARE POWER SHELF W/  
(2) #2 THHN STRANDED IN EMT OR LT FLEX FROM  
BREAKER TO COVP.



**SITE PLAN**  
22x34 SCALE: 3/8" = 1'  
11x17 SCALE: 3/16" = 1'

PROJECT INFORMATION:

**SOLVANG/PSE  
SE01914A**

**4624 164TH AVE SE  
BELLEVUE, WA 98006**

ISSUED FOR:

**BUILDING PERMIT**

REVISION HISTORY:

NO.	DATE:	DESCRIPTION:	CHK. BY:	APPV. BY:
4	4/11/2014	REV. PER CITY COMMENTS	BJT	LL
3	9/4/2013	UPDATE CODE COMPLIANCE, STYLE SHEET, & ADD FRP FILLER NOTE	BJT	LL
2	8/13/2012	REV PER REDLINES	BJT	KC
1	8/7/2012	ISSUED DESIGN REVIEW	BJT	KC

PLANS PREPARED BY:

**B. J. THOMAS, P.E.**  
**7607 80TH AVE NE**  
**MARYSVILLE, WA 98270**  
**206-851-1106**

DRAWN BY: CHK. BY: APPV. BY:

JL BJ LL

LICENSURE:



EQUIPMENT:

REPLACE (E) (2) ANTENNAS W/ (2) NEW TMZXXX-6516-A3M ANTENNAS. ADD (2) FXFB, (2) FRIG, (2) COVP (1 AT TOP & 1 AT BOTTOM), (8) ANDREW DIPLEXERS, (2) TWIN AWS TMA'S, (1) LMU BUNDLE CABLE & (1) HYBRID CABLE.

DRAWING INFORMATION:

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS AND OMISSIONS. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN WHICH IS RELATED TO NAMED CLIENT IS STRICTLY PROHIBITED.

DRAWING TITLE:

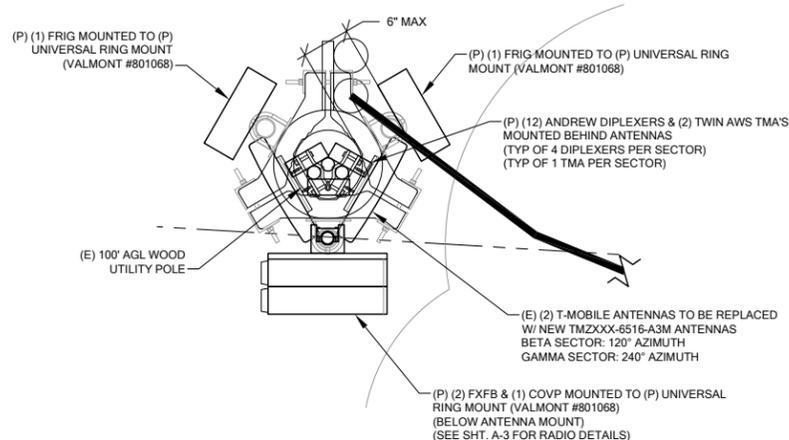
**ENLARGED  
SITE PLAN**

DRAWING NUMBER:

**A-1.2**

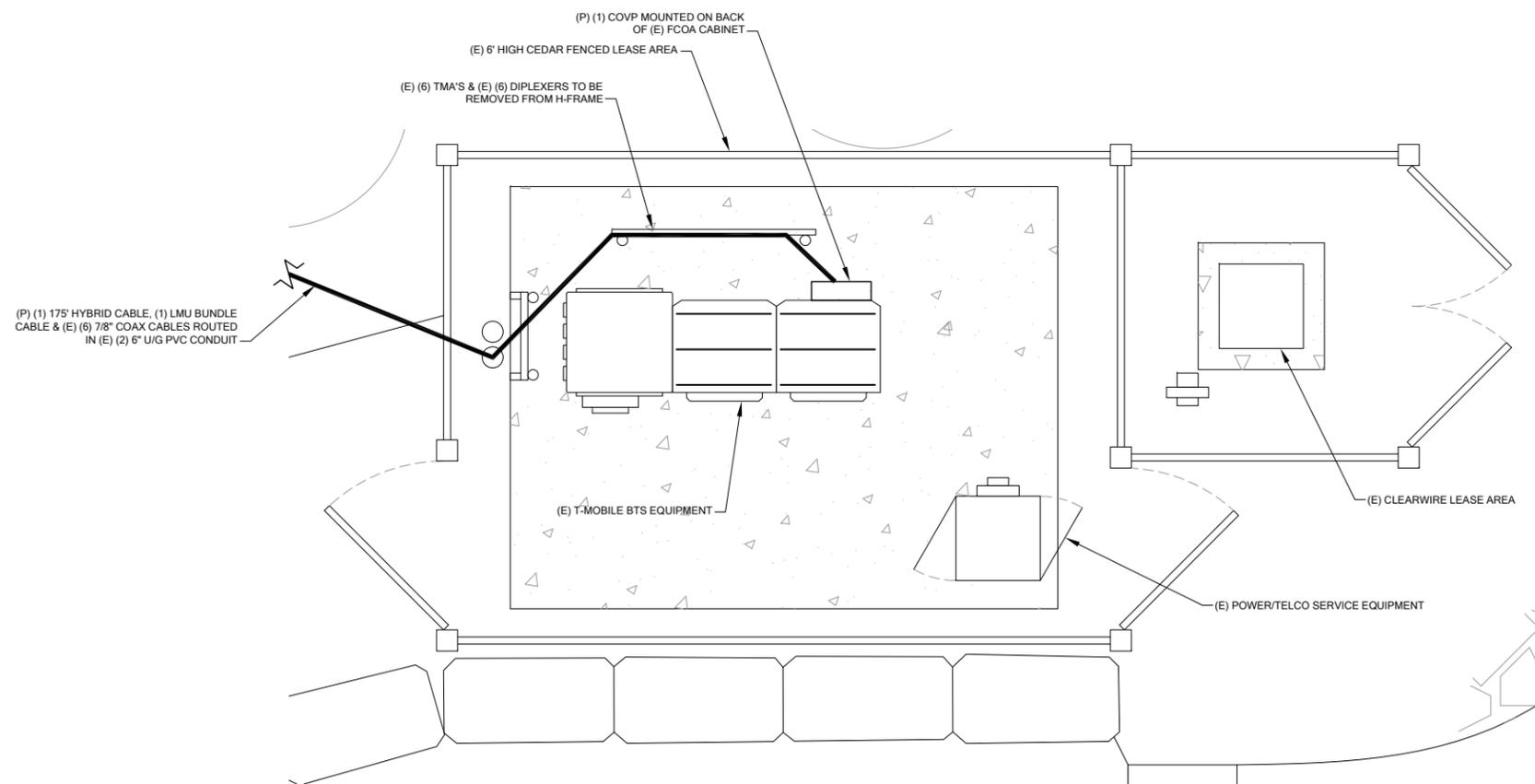
NOTE:

(P) 100A BREAKER IN VALARE POWER SHELF W/  
(2) #2 THHN STRANDED IN EMT OR LT FLEX FROM  
BREAKER TO COVP.



**ENLARGED ANTENNA PLAN**

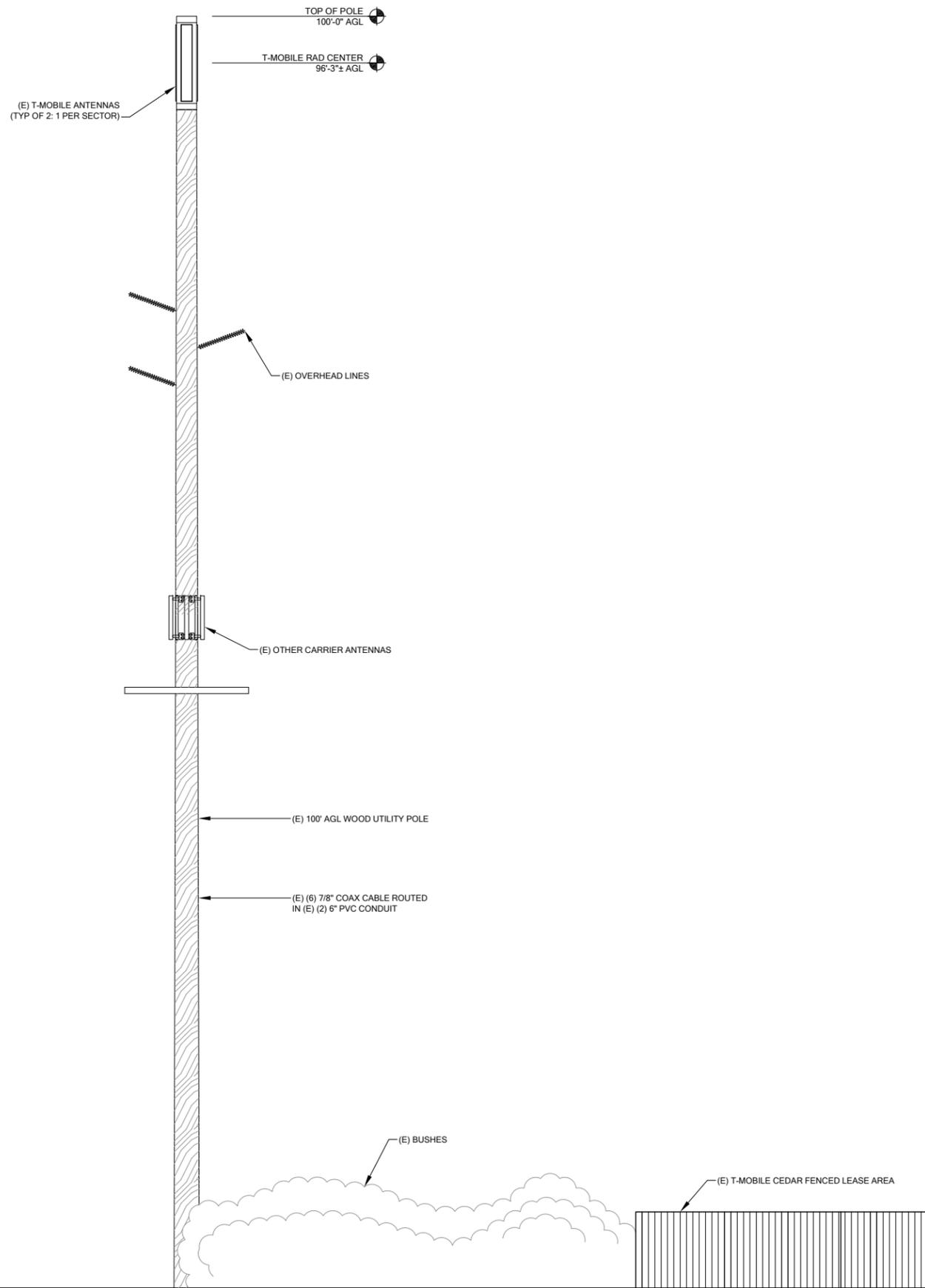
22x34 SCALE: 3/4" = 1'  
11x17 SCALE: 3/8" = 1'



**ENLARGED EQUIPMENT PLAN**

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





**1** EXISTING SOUTH ELEVATION  
A-2 SCALE: NTS



**PROJECT INFORMATION:**

**SOLVANG/PSE  
SE01914A**

**4624 164TH AVE SE  
BELLEVUE, WA 98006**

**ISSUED FOR:**

**BUILDING PERMIT**

**REVISION HISTORY:**

NO.	DATE:	DESCRIPTION:	CHK. BY:	APPV. BY:
4	4/11/2014	REV. PER CITY COMMENTS	BJT	LL
3	9/4/2013	UPDATE CODE COMPLIANCE, STYLE SHEET, & ADD FRP FILLER NOTE	BJT	LL
2	8/13/2012	REV PER REDLINES	BJT	KC
1	8/7/2012	ISSUED DESIGN REVIEW	BJT	KC

**PLANS PREPARED BY:**

**B. J. THOMAS, P.E.  
7607 80TH AVE NE  
MARYSVILLE, WA 98270  
206-851-1106**

**DRAWN BY: CHK. BY: APPV. BY:**

JL

BJ

LL

**LICENSURE:**



**EQUIPMENT:**

REPLACE (E) (2) ANTENNAS W/ (2) NEW TMZXXX-6516-A3M ANTENNAS. ADD (2) FXFB, (2) FRIG, (2) COWP (1 AT TOP & 1 AT BOTTOM), (8) ANDREW DIPLEXERS, (2) TWIN AWS TMA'S, (1) LMU BUNDLE CABLE & (1) HYBRID CABLE.

**DRAWING INFORMATION:**

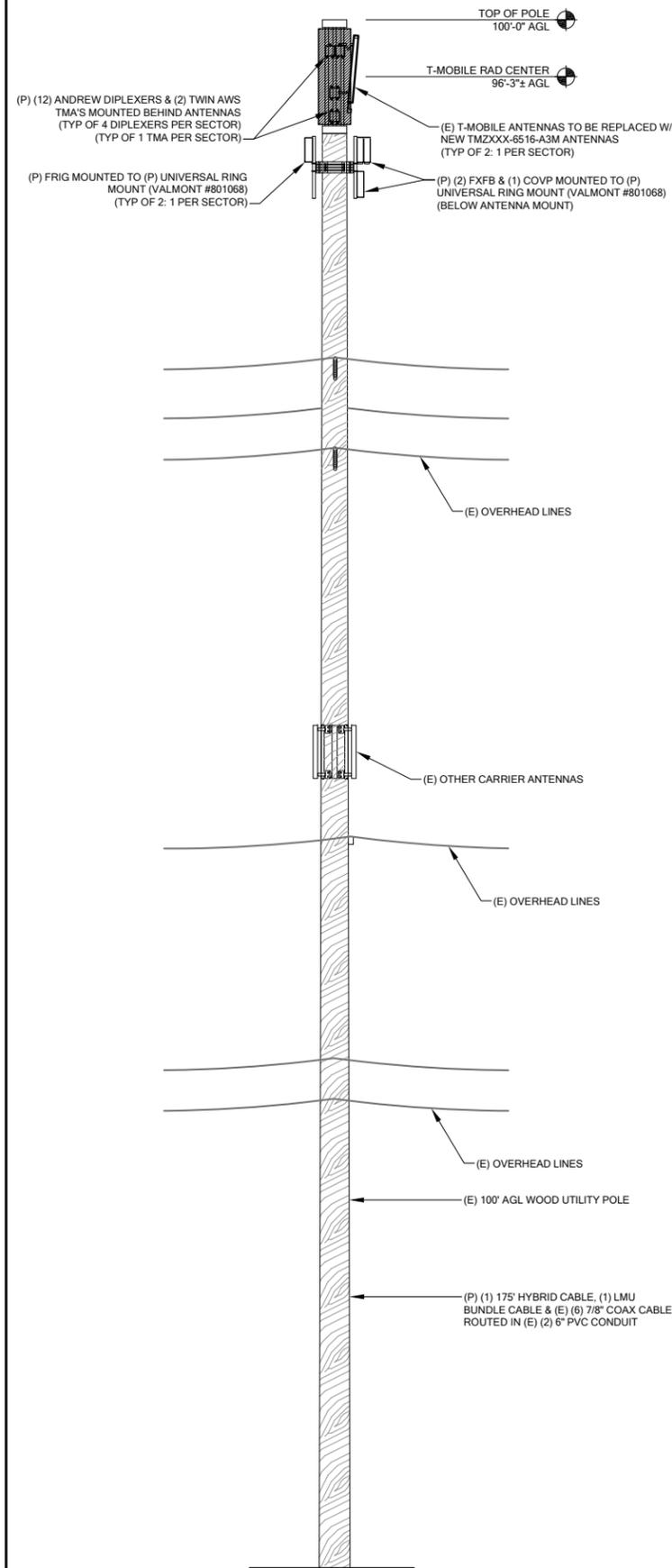
DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS AND OMISSIONS. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN WHICH IS RELATED TO NAMED CLIENT IS STRICTLY PROHIBITED.

**DRAWING TITLE:**

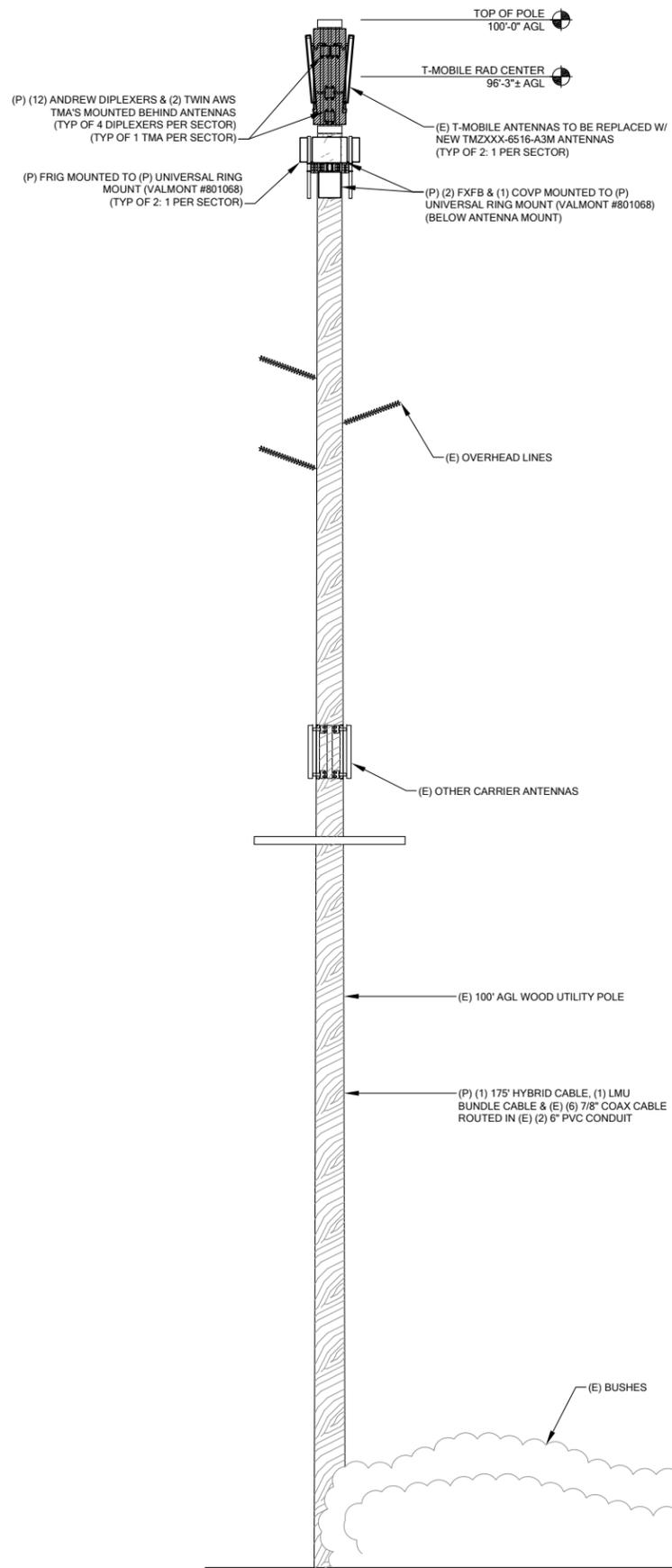
**EXISTING SITE  
ELEVATION**

**DRAWING NUMBER:**

**A-2**



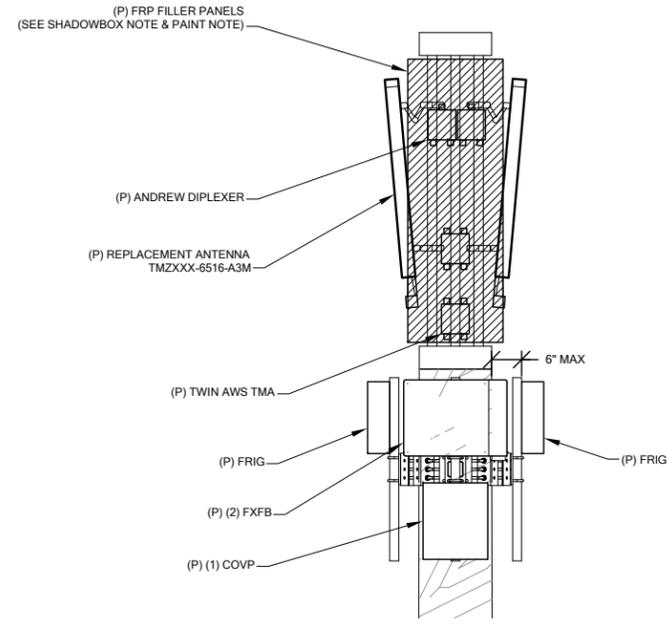
**1 PROPOSED WEST ELEVATION**  
A-2.1 SCALE: NTS



**2 PROPOSED SOUTH ELEVATION**  
A-2.1 SCALE: NTS

**PAINT NOTE:**  
ALL PROPOSED ANTENNAS/EQUIPMENT, FRP FILLER, AND ATTACHMENTS SHALL BE PAINTED TO MATCH (E) WOOD UTILITY POLE.

**NOTE:**  
CONTRACTOR TO PROVIDE FRP FILLER PANEL STRIPS BETWEEN ANTENNAS.



**2 ENLARGED DETAILS**  
A-2.1 SCALE: NTS



**PROJECT INFORMATION:**

**SOLVANG/PSE  
SE01914A**  
  
4624 164TH AVE SE  
BELLEVUE, WA 98006

**ISSUED FOR:**

**BUILDING PERMIT**

**REVISION HISTORY:**

NO.	DATE	DESCRIPTION	CHK. BY:	APPV. BY:
4	4/11/2014	REV. PER CITY COMMENTS	BJT	LL
3	9/4/2013	UPDATE CODE COMPLIANCE, STYLE SHEET, & ADD FRP FILLER NOTE	BJT	LL
2	8/13/2012	REV PER REDLINES	BJT	KC
1	8/7/2012	ISSUED DESIGN REVIEW	BJT	KC

**PLANS PREPARED BY:**

**B. J. THOMAS, P.E.**  
7607 80TH AVE NE  
MARYSVILLE, WA 98270  
206-851-1106

**DRAWN BY: CHK. BY: APPV. BY:**

JL BJ LL

**LICENSURE:**



**EQUIPMENT:**

REPLACE (E) (2) ANTENNAS W/ (2) NEW TMZXXX-6516-A3M ANTENNAS. ADD (2) FXFB, (2) FRIG, (2) COVP (1 AT TOP & 1 AT BOTTOM), (8) ANDREW DIPLEXERS, (2) TWIN AWS TMA'S, (1) LMU BUNDLE CABLE & (1) HYBRID CABLE.

**DRAWING INFORMATION:**

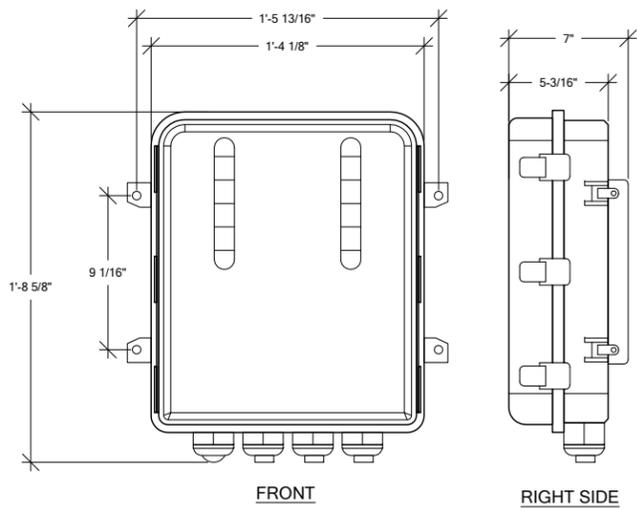
DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS AND OMISSIONS. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN WHICH IS RELATED TO NAMED CLIENT IS STRICTLY PROHIBITED.

**DRAWING TITLE:**

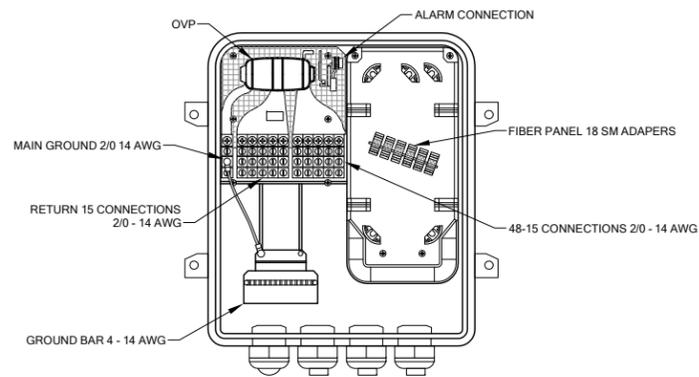
**PROPOSED SITE ELEVATION**

**DRAWING NUMBER:**

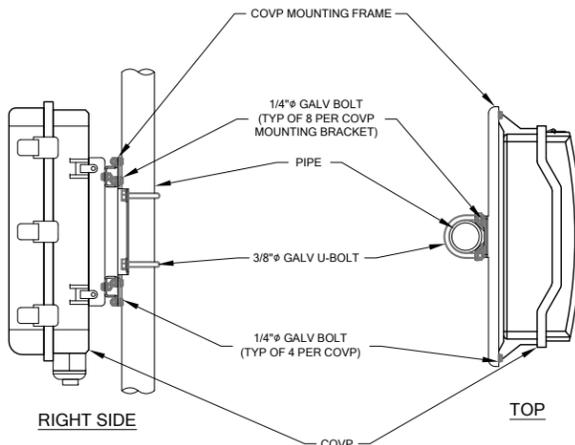
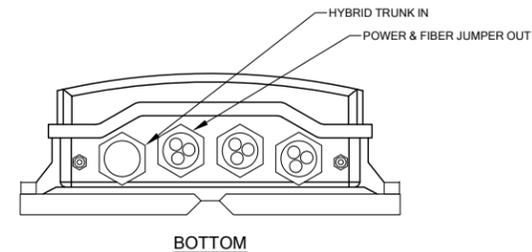
**A-2.1**



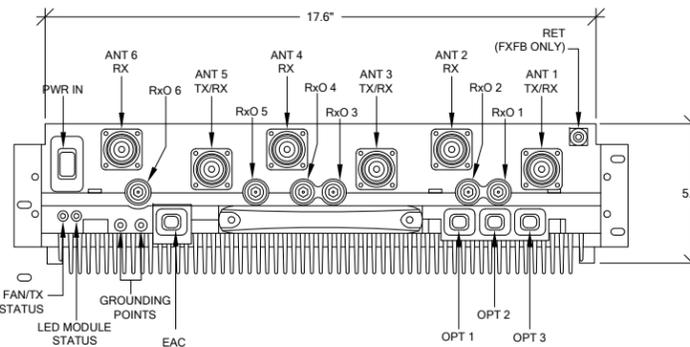
**1 RAYCAP COVP DETAIL**  
A-3 SCALE: NTS



**3 COVP INTERIOR DETAIL**  
A-3 SCALE: NTS



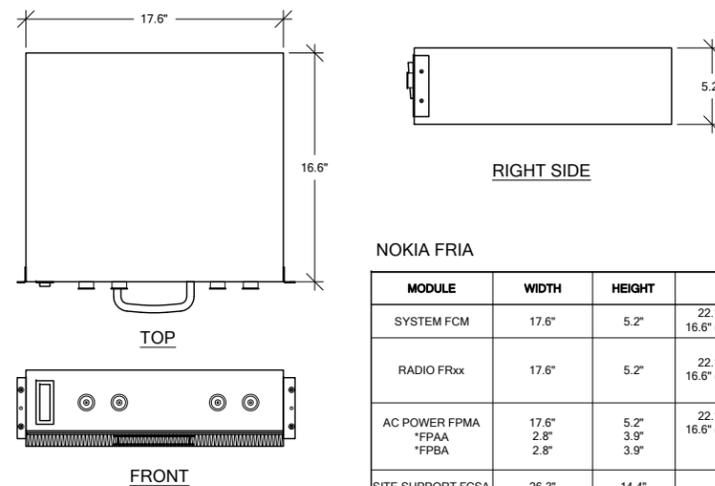
**4 COVP MOUNTING DETAIL**  
A-3 SCALE: NTS



**2 FXFB DETAIL**  
A-3 SCALE: NTS

NOKIA FXFB MODEL #472166A

PROPERTY	VALUE
HEIGHT	133mm/3U (5.2 in)
WIDTH WIDTH (WITH COVERS)	447 mm (17.6 in) 490 mm (19.3 in)
DEPTH (FOR RACK ASSEMBLIES) DEPTH (WITH COVERS)	395 mm (15.6 in) 560 mm (22 in)
WEIGHT (INCLUDING THE CORE, FANS AND CASING)	MAX. 25 kg (55.1 lb)



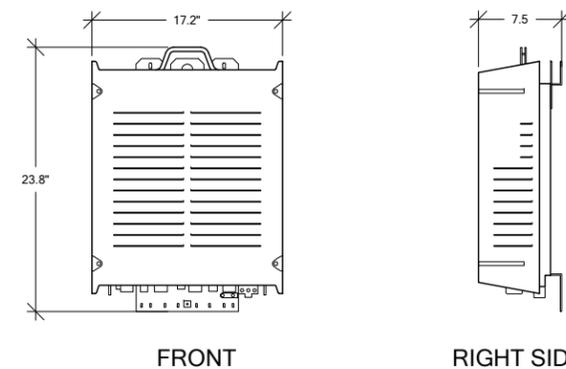
NOKIA FRIA

MODULE	WIDTH	HEIGHT	DEPTH	WEIGHT
SYSTEM FCM	17.6"	5.2"	22.1" (WITH COVER) 16.6" (WITHOUT COVER)	46.3 LBS
RADIO FRxx	17.6"	5.2"	22.1" (WITH COVER) 16.6" (WITHOUT COVER)	46.3 LBS
AC POWER FPMA *FPAA *FPBA	17.6" 2.8"	5.2" 3.9" 3.9"	22.1" (WITH COVER) 16.6" (WITHOUT COVER) 15" 15"	24.3" 7.0" 8.4"
SITE SUPPORT FCSSA *LTE *MIBBU (WPU) *WMP	26.3" 17.6" 17.6" 4.3"	14.4" 7" 5.2" 1.3"	20.6" 17.1" - -	44.1 LBS 44.1 LBS 6.2 LBS

**5 FRIA DETAIL**  
A-3 SCALE: NTS

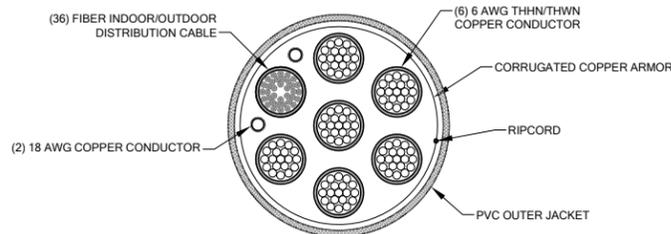
DIMENSIONS (WxHxD) W/ SOLAR COVER & MOUNTING	17.2" x 23.8" x 7.5"
FRIG UNIT WEIGHT	24.0 kg / 25.9 lbs
SOLAR SHIELD WEIGHT	1.2 kg / 2.6 lbs
MOUNTING BRACKET WEIGHT	0.7 kg / 1.5 lbs
TOTAL WEIGHT	25.9 kg / 57 lbs

**NOTE:**  
FRIG TO BE MOUNTED VERTICALLY ONLY.



**7 FRIG DETAIL**  
A-3 SCALE: NTS

HYBRID CABLE		
STRUCTURE	# OF CABLES	LENGTH
UTILITY POLE	1	175'



**6 HYBRID CABLE DETAIL**  
A-3 SCALE: NTS

T-Mobile

**PROJECT INFORMATION:**

**SOLVANG/PSE  
SE01914A**

**4624 164TH AVE SE  
BELLEVUE, WA 98006**

**ISSUED FOR:**

**BUILDING PERMIT**

**REVISION HISTORY:**

NO.	DATE	DESCRIPTION	CHK. BY:	APPV. BY:
4	4/11/2014	REV. PER CITY COMMENTS	BJT	LL
3	9/4/2013	UPDATE CODE COMPLIANCE, STYLE SHEET, & ADD FRP FILLER NOTE	BJT	LL
2	8/13/2012	REV PER REDLINES	BJT	KC
1	8/7/2012	ISSUED DESIGN REVIEW	BJT	KC

**PLANS PREPARED BY:**

**B. J. THOMAS, P.E.  
7607 80TH AVE NE  
MARYSVILLE, WA 98270  
206-851-1106**

**DRAWN BY: CHK. BY: APPV. BY:**

**JL BJ LL**

**LICENSURE:**



**EQUIPMENT:**

REPLACE (E) (2) ANTENNAS W/ (2) NEW TMZXXX-6516-A3M ANTENNAS. ADD (2) FXFB, (2) FRIG, (2) COVP (1 AT TOP & 1 AT BOTTOM), (8) ANDREW DIPLEXERS, (2) TWIN AWS TMA'S, (1) LMU BUNDLE CABLE & (1) HYBRID CABLE.

**DRAWING INFORMATION:**

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS AND OMISSIONS. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN WHICH IS RELATED TO NAMED CLIENT IS STRICTLY PROHIBITED.

**DRAWING TITLE:**

**GENERAL DETAILS**

**DRAWING NUMBER:**

**A-3**

PROJECT INFORMATION:

**SOLVANG/PSE  
SE01914A**

4624 164TH AVE SE  
BELLEVUE, WA 98006

ISSUED FOR:

**BUILDING PERMIT**

REVISION HISTORY:

NO.	DATE:	DESCRIPTION:	CHK. BY:	APPV. BY:
4	4/11/2014	REV. PER CITY COMMENTS	BJT	LL
3	9/4/2013	UPDATE CODE COMPLIANCE, STYLE SHEET, & ADD FRP FILLER NOTE	BJT	LL
2	8/13/2012	REV PER REDLINES	BJT	KC
1	8/7/2012	ISSUED DESIGN REVIEW	BJT	KC

PLANS PREPARED BY:

**B. J. THOMAS, P.E.**  
7607 80TH AVE NE  
MARYSVILLE, WA 98270  
206-851-1106

DRAWN BY: CHK. BY: APPV. BY:

JL BJ LL

LICENSURE:



EQUIPMENT:

REPLACE (E) (2) ANTENNAS W/ (2) NEW TMZXXX-6516-A3M ANTENNAS. ADD (2) FXFB, (2) FRIG, (2) COVP (1 AT TOP & 1 AT BOTTOM), (8) ANDREW DIPLEXERS, (2) TWIN AWS TMA'S, (1) LMU BUNDLE CABLE & (1) HYBRID CABLE.

DRAWING INFORMATION:

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS AND OMISSIONS. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN WHICH IS RELATED TO NAMED CLIENT IS STRICTLY PROHIBITED.

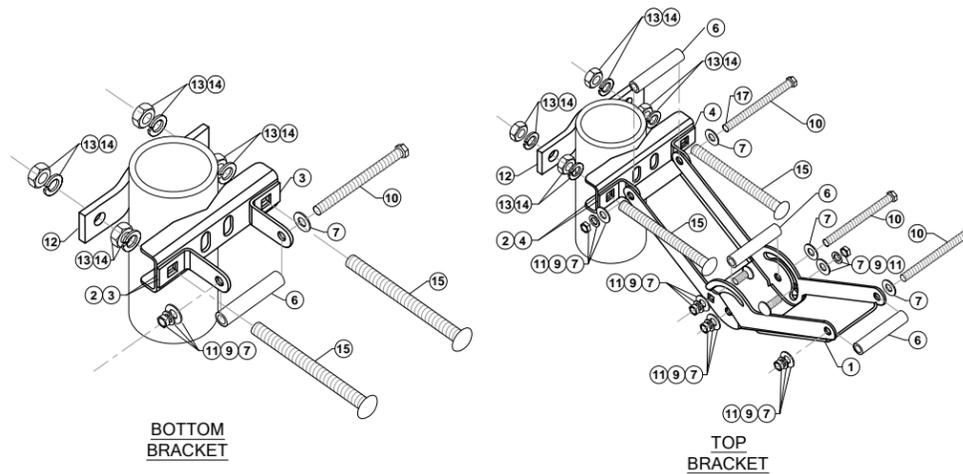
DRAWING TITLE:

**GENERAL DETAILS**

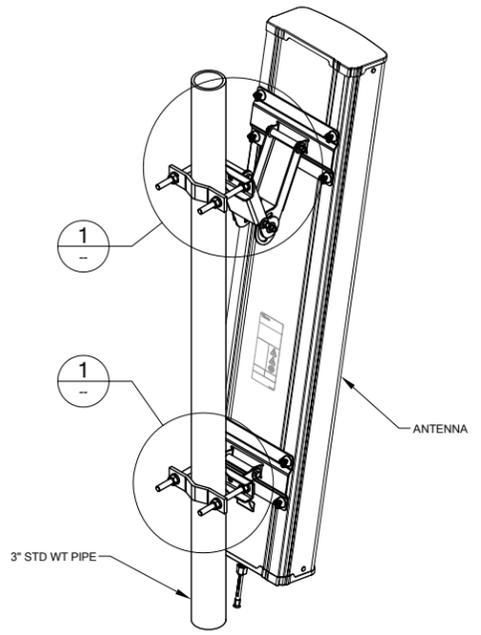
DRAWING NUMBER:

**A-4**

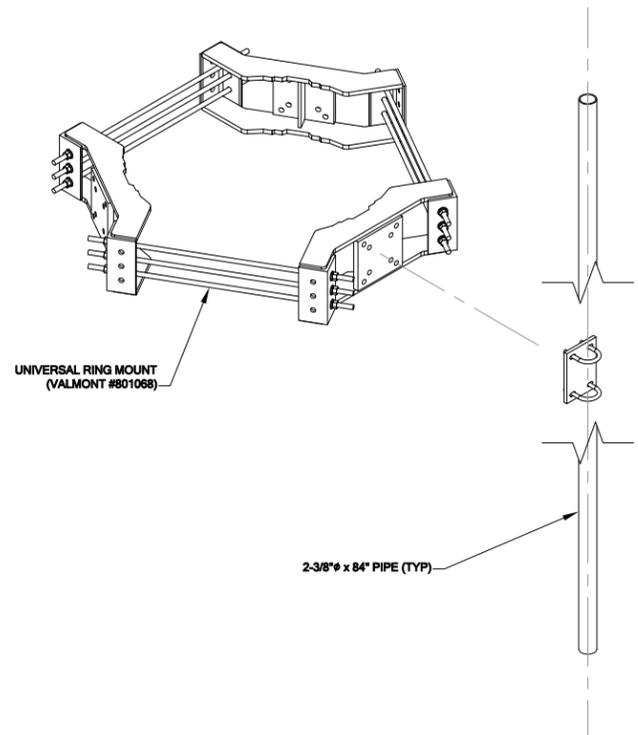
PARTS LIST			
ITEM #	QUANTITY	PART NUMBER	DESCRIPTION
1	2	601257	ANGLE ARM
2	2	601256	MOUNTING CLAMP
3	2	601235-1	BRACKET
4	2	601235-2	BRACKET
5	1	601258	LABEL, ANGLE
6	4	600679-3	SPACER TUBE
7	14	100525-24	ME FLAT WASHER (STAINLESS STEEL)
8	2	600419-8	M8x1.25x25mm LARGE CARRIAGE BOLT (STAINLESS STEEL)
9	6	617395	M8 LOCK WASHER (STAINLESS STEEL)
10	4	600419-10	M8x1.25x110mm LARGE HEX HEAD SCREW (STAINLESS STEEL)
11	6	204001-15	M8x1.25 HEX NUT (STAINLESS STEEL)
12	2	225244	CLAMP PLATE
13	8	600419-24	LARGE LOCK WASHER (STAINLESS STEEL)
14	8	204001-21	M12x1.75 HEX NUT (STAINLESS STEEL)
15	4	600419-12	M12x1.75x150mm LARGE CARRIAGE BOLT (STAINLESS STEEL)
17	1	601594	MOLYBDENUM DISULFIDE GREASE



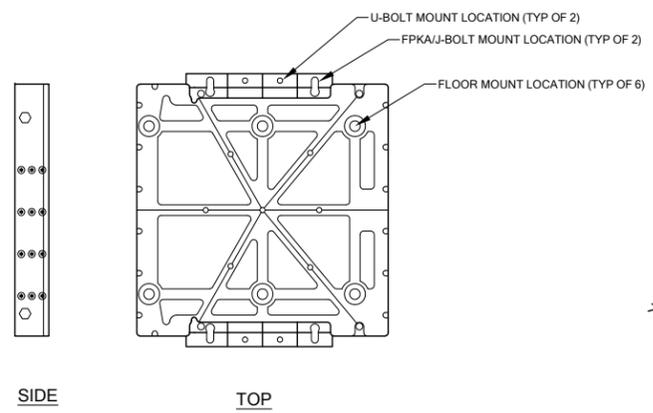
**1 ANTENNA BRACKET ATTACHMENT DETAIL**  
SCALE: NTS



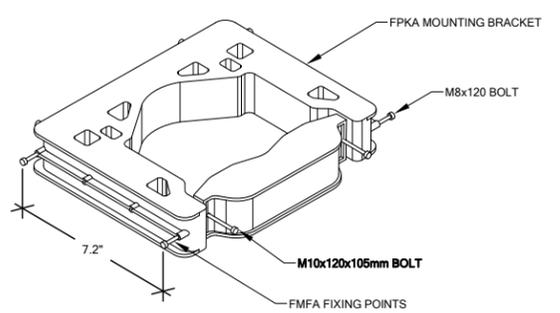
**2 ANTENNA ATTACHMENT DETAIL**  
SCALE: NTS



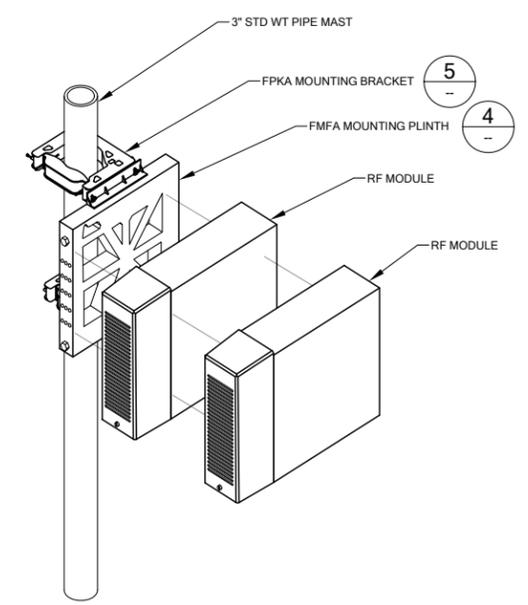
**3 UNIVERSAL RING MOUNT DETAIL**  
SCALE: NTS



**4 FMFA DETAIL**  
SCALE: NTS



**5 FPKA DETAIL**  
SCALE: NTS



**6 RRU MOUNTING DETAIL**  
SCALE: NTS

**PROJECT INFORMATION:**

**SOLVANG/PSE  
SE01914A**

**4624 164TH AVE SE  
BELLEVUE, WA 98006**

**ISSUED FOR:**

**BUILDING PERMIT**

**REVISION HISTORY:**

NO.	DATE:	DESCRIPTION:	CHK. BY:	APPV. BY:
4	4/11/2014	REV. PER CITY COMMENTS	BJT	LL
3	9/4/2013	UPDATE CODE COMPLIANCE, STYLE SHEET, & ADD FRP FILLER NOTE	BJT	LL
2	8/13/2012	REV PER REDLINES	BJT	KC
1	8/7/2012	ISSUED DESIGN REVIEW	BJT	KC

**PLANS PREPARED BY:**

**B. J. THOMAS, P.E.  
7607 80TH AVE NE  
MARYSVILLE, WA 98270  
206-851-1106**

**DRAWN BY: CHK. BY: APPV. BY:**

JL

BJ

LL

**LICENSURE:**



**EQUIPMENT:**

REPLACE (E) (2) ANTENNAS W/ (2) NEW TMZXXX-6516-A3M ANTENNAS. ADD (2) FXFB, (2) FRIG, (2) COWP (1 AT TOP & 1 AT BOTTOM), (8) ANDREW DIPLEXERS, (2) TWIN AWS TMA'S, (1) LMU BUNDLE CABLE & (1) HYBRID CABLE.

**DRAWING INFORMATION:**

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS AND OMISSIONS. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN WHICH IS RELATED TO NAMED CLIENT IS STRICTLY PROHIBITED.

**DRAWING TITLE:**

**ELECTRICAL  
GROUNDING PLAN**

**DRAWING NUMBER:**

**E-1**

**SYMBOL LEGEND:**

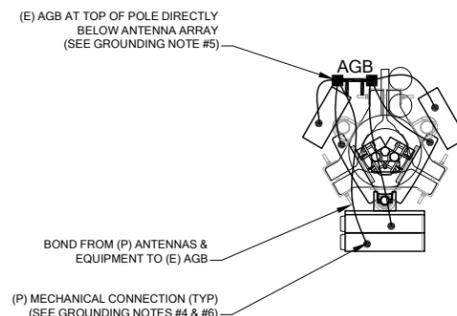
- MGB MASTER GROUND BAR 1/4"x4"x24" COPPER
- AGB ACCESSORY GROUND BAR 1/4"x4"x12" OR 1/4"x4"x20" COPPER
- EXPOSED WIRING
- UNDERGROUND WIRING
- CADWELD
- MECHANICAL CONNECTION
- 5/8"x8" COPPER CLAD STEEL GROUND ROD
- INSPECTION PORT
- EXOTHERMIC (CADWELD) BELOW GROUND
- GROUND

**GROUNDING NOTES:**

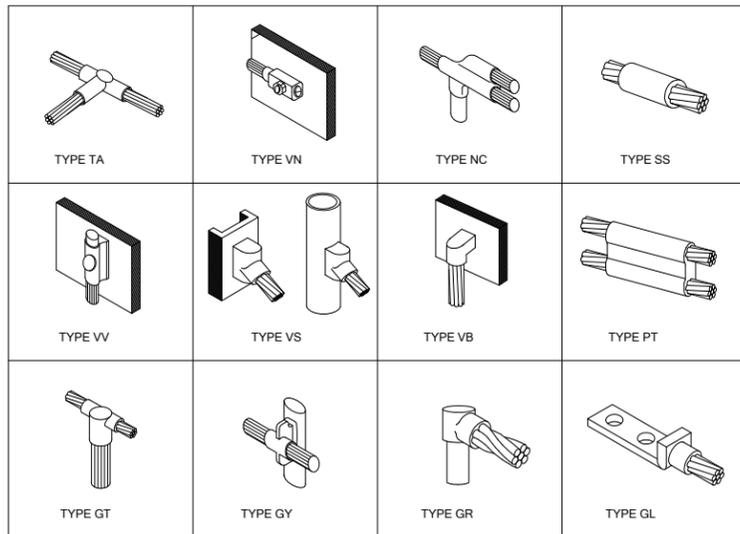
1. GROUNDING SHALL COMPLY WITH LATEST EDITION OF THE NATIONAL ELECTRICAL CODE.
2. MINIMUM BENDING RADIUS FOR GROUND CONDUCTOR IS 8".
3. NO SPLICES PERMITTED IN GROUND CONDUCTORS.
4. ALL GROUNDING CONNECTORS TO BE CLEAN AND FREE OF PAINT AT THEIR MATING SURFACES AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. USE PENETROX OR EQUIVALENT ANTIOXIDANT GREASE.
5. ALL GROUND BAR CONNECTIONS ARE TO BE 2 HOLE LUG COMPRESSION TYPE. STACKED CONNECTIONS ARE NOT ACCEPTABLE. BACK TO BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BAR WILL BE PERMITTED.
6. ENSURE ALL MECHANICAL CONNECTORS ARE TORQUED TO THE MANUFACTURER'S SPECIFIED VALUES.
7. MULTIPLE BONDS ON GROUND RODS TO BE SEPARATED BY ATLEAST 6".
8. MAXIMUM RESISTANCE OF THE COMPLETED GROUND SYSTEM SHALL NOT EXCEED A RESISTANCE OF 5 OHMS TO EARTH.
9. GROUND WIRES SHALL NOT BE INSTALLED THROUGH HOLES IN ANY METAL OBJECTS OR SUPPORTS; TO PRECLUDE ESTABLISHING A "CHOKE" POINT.
10. GROUND BARS SHALL NOT BE FIELD MODIFIED.
11. GROUND RING BURIAL DEPTH SHALL BE 30".
12. A CERTIFIED CONTRACTOR WILL MAKE ALL MEASUREMENTS REQUIRED TO TEST THE GROUNDING SYSTEM USING A MEGGER OR EQUIVALENT. THE ACCEPTABLE RESISTANCE MEASURED FOR THE GROUNDING SYSTEM WILL NOT EXCEED 5 OHMS RESISTANCE. THREE DISTANCES SHALL BE USED: 1 AT 100 FEET, 1 AT 70 FEET, AND 1 AT 35 FEET. THESE DISTANCES ARE SUBJECT TO A SITE BY SITE BASIS. T-MOBILE-WTS SHALL BE GIVEN 24 HOURS NOTICE. ALL COSTS ASSOCIATED WITH GROUND TESTING WILL BE AT THE EXPENSE OF THE CONTRACTOR.

**GROUNDING NOTE:**

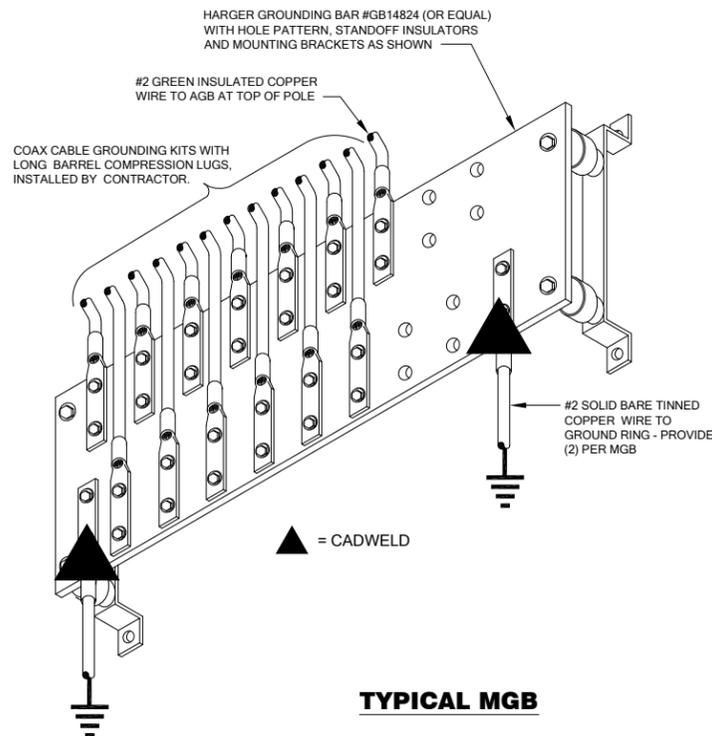
GROUND HYBRID CABLE TOP & BOTTOM USING UNIVERSAL 1-5/8" GROUNDING STRAP, PART #252172



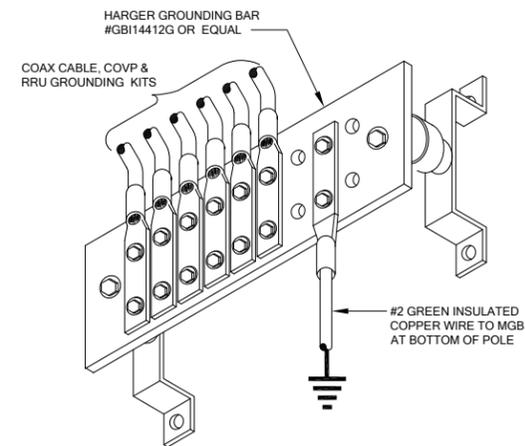
**1 ELECTRICAL GROUNDING PLAN**  
E-1  
22x34 SCALE: 1/2" = 1'  
11x17 SCALE: 1/4" = 1'



1 **TYPICAL CADWELD CONNECTIONS**  
E-2 N.T.S.



**TYPICAL MGB**



**TYPICAL AGB**

2 **GROUND BAR DETAILS**  
E-2 N.T.S.



**PROJECT INFORMATION:**

**SOLVANG/PSE  
SE01914A**

**4624 164TH AVE SE  
BELLEVUE, WA 98006**

**ISSUED FOR:**

**BUILDING PERMIT**

**REVISION HISTORY:**

NO.	DATE:	DESCRIPTION:	CHK. BY:	APPV. BY:
4	4/11/2014	REV. PER CITY COMMENTS	BJT	LL
3	9/4/2013	UPDATE CODE COMPLIANCE, STYLE SHEET, & ADD FRP FILLER NOTE	BJT	LL
2	8/13/2012	REV PER REDLINES	BJT	KC
1	8/7/2012	ISSUED DESIGN REVIEW	BJT	KC

**PLANS PREPARED BY:**

**B. J. THOMAS, P.E.  
7607 80TH AVE NE  
MARYSVILLE, WA 98270  
206-851-1106**

**DRAWN BY:      CHK. BY:      APPV. BY:**

**JL**

**BJ**

**LL**

**LICENSURE:**



**EQUIPMENT:**

REPLACE (E) (2) ANTENNAS W/ (2) NEW TMZXXX-6516-A3M ANTENNAS. ADD (2) FXFB, (2) FRIG, (2) COVP (1 AT TOP & 1 AT BOTTOM), (8) ANDREW DIPLEXERS, (2) TWIN AWS TMA'S, (1) LMU BUNDLE CABLE & (1) HYBRID CABLE.

**DRAWING INFORMATION:**

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS AND OMISSIONS. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN WHICH IS RELATED TO NAMED CLIENT IS STRICTLY PROHIBITED.

**DRAWING TITLE:**

**ELECTRICAL  
GROUNDING  
DETAILS**

**DRAWING NUMBER:**

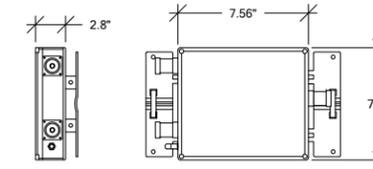
**E-2**

**SITE LOADING CHART**

SECTOR	ANTENNA MODEL #	VENDOR	AZIMUTH (TN)	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	RADIATION CENTER	HYBRID CABLE LENGTH	COAX CABLE
BETA	TMZXXX-6516-A3M	ANDREW	120°	TBD	TBD	96'-3" AGL		(2) 7/8"
GAMMA	TMZXXX-6516-A3M	ANDREW	240°	TBD	TBD	96'-3" AGL	175'	(2) 7/8"
ALPHA								(2) 7/8"

**ANTENNA AND COAX GENERAL NOTES:**

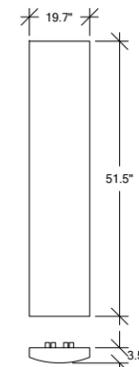
- ALL ANTENNA AND COAXIAL ANTENNA CABLE TO BE FURNISHED BY T-MOBILE AND INSTALLED BY CONTRACTOR.
- COAX COLOR CODING: ANTENNAS TO BE NUMBERED IN A CLOCKWISE MANNER FROM TRUE NORTH AND COLOR CODED AS FOLLOWS.
- THE ABOVE COAX COLOR CODING APPLIES TO SECTORIZED SITES. FOR OMNI SITES, USE THE AT0, BT0, & GT0 COLOR CODES ONLY.
- COAX SHALL BE TAGGED WITH COLOR CODING AT (2) PLACES USING 1" WIDE WEATHER PROOF COLORED VINYL TAPE AT THE FOLLOWING LOCATIONS:
  - #1 - AT ANTENNA CONNECTION
  - #2 - AT ENTRY TO EQUIPMENT CABINET
- RUN COAXIAL CABLE WITH MINIMUM 12" SLACK & 12" FROM EDGE OF EQUIPMENT CABINETS, ACROSS WAVE GUIDE BRIDGE (IF APPLICABLE), UP TO TOWER LEG (IF APPLICABLE), & DISTRIBUTE TO EACH ANTENNA DEVICE. FURNISH AND INSTALL A MINIMUM OF (3) GROUND KITS PER COAXIAL CABLE ACCORDING TO ELECTRICAL DRAWINGS. VERIFY NUMBER OF ANTENNAS, CABLE, & CABLE DIAMETER WITH PROJECT MANAGER.



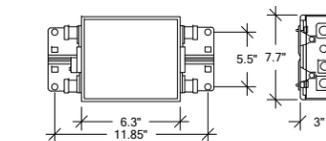
CROSSBAND COUPLER- PCS/AWS "DIPLEXER"				
MECHANICAL SPECIFICATIONS:				
PART #	LENGTH	WIDTH	DEPTH	WEIGHT
ECC1920-V PUB	7.56" (192mm)	7.32" (186mm)	2.8" (72mm)	3.6 kg (7.9 lb)
CONNECTORS	MOUNTING CONNECTOR			
TYPE "RF"	7-16 DIN FEMALE			
ELECTRICAL SPECIFICATIONS:				
FREQUENCY				POWER HANDLING
1710-1755 MHz / 2110-2155 MHz				7-30 Vdc

**SCOPE OF WORK:**

- (2) TMZXXX-6516-A3M ANTENNAS
- ADD (1) TWIN AWS TMA PER SECTOR
- ADD (4) ANDREW DIPLEXERS PER SECTOR
- (2) FXFB & (2) FRIG
- (1) HCS & (2) COVP'S
- (1) LMU BUNDLE CABLE
- TOTAL OF (6) COAX CABLES REMAIN (IF POSSIBLE)
- REMOVE ALL EXISTING TMA'S
- REMOVE ALL EXISTING DIPLEXERS



ANDREW ANTENNA DATA				
MECHANICAL SPECIFICATIONS:				
PART NUMBER	HEIGHT	WIDTH	DEPTH	WEIGHT
TMZXXX-6516-A3M	60 in (with actuator)	19.7 in	3.5 in	38.4 lbs
CONNECTORS	STANDARD MOUNTING HARDWARE			
(4) 7-16 DIN	INCLUDED			
ELECTRICAL SPECIFICATIONS:				
FREQUENCY	POLARIZATION	GAIN	AZIMUTH B.W.	ELEVATION B.W.
1710-2155 MHz	±45°	17.4 ± 0.8	63° ± 8	7.3° ± 1.0
VSWR	MAX INPUT POWER			
1.35:1 / 16.5	250 WATTS			



AWS WITH AISG TMA DATA				
MECHANICAL SPECIFICATIONS:				
PART #	LENGTH	WIDTH	DEPTH	WEIGHT
ETW200VS12UB	6.3" (160mm)	7.7" (196mm)	3" (78mm)	5 kg (11 lb)
CONNECTORS	MOUNTING CONNECTOR			
TYPE "LONG NECK"	7-16 DIN FEMALE			
AWS FULL BAND TWIN AISG TMA WITH VSWR ALARM				
ELECTRICAL SPECIFICATIONS:				
FREQUENCY				POWER HANDLING
AWS (1850-1910 MHz)				7-30 Vdc
				GAIN
				12 dB ± 6

UL & DL FREQUENCIES FOR SEATTLE MARKET:

**PCS:**

UL: 1885 - 1895 MHz, 1900 - 1905 MHz

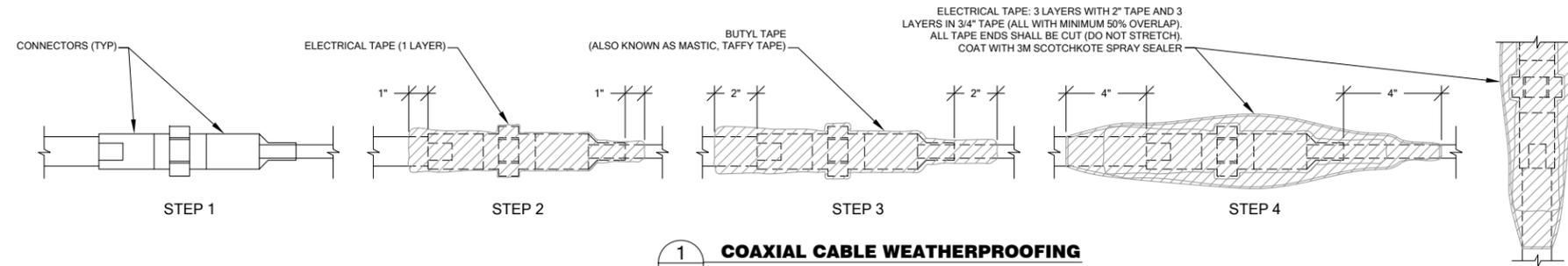
DL: 1965 - 1975 MHz, 1980 - 1985 MHz

**AWS:**

UL: 1745 - 1755 MHz

DL: 2145 - 2155 MHz

- NOTE:**
- ALL COAXIAL CABLE CONNECTIONS TO BE WEATHER PROOFED.
  - CONTRACTOR TO DIP CABLES AND JUMPERS WHERE NECESSARY.
  - TAGGING:
    - ALL COAXIAL CABLES TO BE MARKED WITH COLOR CODED TAPE TO INDICATE THE ANTENNA SECTOR.
    - COLORLED ELECTRICAL TAPE SHALL MARK EACH END OF CABLE AND EACH END OF JUMPERS AS CLOSE TO EACH END AS POSSIBLE. (NOT TO INTERFERE WITH WEATHERPROOFING.)
  - COAXIAL CABLE SPECIFICATIONS REQUIRE CABLE SUPPORT EVERY 3'-0" ON CENTER. CONTRACTOR SHALL SUPPLY SUPPORTS AS REQUIRED TO MEET THIS REQUIREMENT.
  - VERTICAL CONNECTIONS SHALL BE TAPED FROM THE BOTTOM UP SO OVERLAP MOVES WATER AWAY FROM CONNECTION. (SEE STEP 4.)
  - PROVIDE HEAT SHRINK IN PLACE OF TAPE FOR QUAD POLES AND TMA'S.



**1 COAXIAL CABLE WEATHERPROOFING**  
SCALE: NTS



**PROJECT INFORMATION:**

**SOLVANG/PSE  
SE01914A**

**4624 164TH AVE SE  
BELLEVUE, WA 98006**

**ISSUED FOR:**

**BUILDING PERMIT**

**REVISION HISTORY:**

NO.	DATE:	DESCRIPTION:	CHK. BY:	APPV. BY:
4	4/11/2014	REV. PER CITY COMMENTS	BJT	LL
3	9/4/2013	UPDATE CODE COMPLIANCE, STYLE SHEET, & ADD FRP FILLER NOTE	BJT	LL
2	8/13/2012	REV PER REDLINES	BJT	KC
1	8/7/2012	ISSUED DESIGN REVIEW	BJT	KC

**PLANS PREPARED BY:**

**B. J. THOMAS, P.E.**  
**7607 80TH AVE NE**  
**MARYSVILLE, WA 98270**  
**206-851-1106**

**DRAWN BY: CHK. BY: APPV. BY:**

**JL BJ LL**

**LICENSURE:**



**EQUIPMENT:**

REPLACE (E) (2) ANTENNAS W/ (2) NEW TMZXXX-6516-A3M ANTENNAS. ADD (2) FXFB, (2) FRIG, (2) COVP (1 AT TOP & 1 AT BOTTOM), (8) ANDREW DIPLEXERS, (2) TWIN AWS TMA'S, (1) LMU BUNDLE CABLE & (1) HYBRID CABLE.

**DRAWING INFORMATION:**

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS AND OMISSIONS. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN WHICH IS RELATED TO NAMED CLIENT IS STRICTLY PROHIBITED.

**DRAWING TITLE:**

**RF DETAILS**

**DRAWING NUMBER:**

**RF-1**

PROJECT INFORMATION:

**SOLVANG/PSE  
SE01914A**

4624 164TH AVE SE  
BELLEVUE, WA 98006

ISSUED FOR:

**BUILDING PERMIT**

REVISION HISTORY:

NO.	DATE	DESCRIPTION	CHK. BY:	APPV. BY:
4	4/11/2014	REV. PER CITY COMMENTS	BJT	LL
3	9/4/2013	UPDATE CODE COMPLIANCE, STYLE SHEET, & ADD FRP FILLER NOTE	BJT	LL
2	8/13/2012	REV PER REDLINES	BJT	KC
1	8/7/2012	ISSUED DESIGN REVIEW	BJT	KC

PLANS PREPARED BY:

**B. J. THOMAS, P.E.**  
7607 80TH AVE NE  
MARYSVILLE, WA 98270  
206-851-1106

DRAWN BY: CHK. BY: APPV. BY:

JL BJ LL

LICENSURE:



EQUIPMENT:

REPLACE (E) (2) ANTENNAS W/ (2) NEW TMZXXX-6516-A3M ANTENNAS. ADD (2) FXFB, (2) FRIG, (2) COVP (1 AT TOP & 1 AT BOTTOM), (8) ANDREW DIPLEXERS, (2) TWIN AWS TMA'S, (1) LMU BUNDLE CABLE & (1) HYBRID CABLE.

DRAWING INFORMATION:

DO NOT SCALE DRAWINGS. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ADVISE CONSULTANTS OF ANY ERRORS AND OMISSIONS. ALL PREVIOUS ISSUES OF THIS DRAWING ARE SUPERSEDED BY THE LATEST REVISION. THE INFORMATION CONTAINED IN THIS SET OF DOCUMENTS IS PROPRIETARY BY NATURE. ANY USE OR DISCLOSURE OTHER THAN WHICH IS RELATED TO NAMED CLIENT IS STRICTLY PROHIBITED.

DRAWING TITLE:

**RF DETAILS**

DRAWING NUMBER:

**RF-2**

NSN Configuration 1A with 1 HEX TT-2012/2013  
Tower-Top RRU for Contiguous Spectrum Markets  
(1 Sector of cabling shown for clarity)

