



DEVELOPMENT SERVICES DEPARTMENT
 ENVIRONMENTAL COORDINATOR
 450 110th Ave. NE
 BELLEVUE, WA 98004

DETERMINATION OF NON-SIGNIFICANCE

PROPONENT: Verizon Wireless

LOCATION OF PROPOSAL: 13635 NE 8th Street

DESCRIPTION OF PROPOSAL: Administration Conditional Use Permit approval to replace an existing 35' tall light pole in the right-of-way with a 60' pole with 6 panel antennas flush mounted at the top. The applicant will reattach street light at the existing height of 35'. The new pole and ground mounted equipment will be located on adjacent private property (office building) behind existing vegetation with a new wood fence screen.

FILE NUMBER: 10-109826-LA

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 Department of Planning & Community Development. 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 **October 14, 2010**.
- 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 p.m. on _____.

This DNS may be withdrawn at any time if the proposal is modified so that it is likely to have significant adverse environmental impacts; if there is significant new information indicating, or on, 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.

Care V. Holland
 Environmental Coordinator

September 30, 2010
 Date

OTHERS TO RECEIVE THIS DOCUMENT:

State Department of Fish and Wildlife
 State Department of Ecology, Shoreline Planner N.W. Region
 Army Corps of Engineers
 Attorney General
 Muckleshoot Indian Tribe



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

Proposal Name: Verizon SEA Glendale

Proposal Address: 13635 NE 8th Street

Proposal Description: Replace an existing 35' tall light pole in the right-of-way with a 60' pole with 6 panel antennas flush mounted at the top. The applicant will reattach street light at the existing height of 35'. The new pole and ground mounted equipment will be located on adjacent private property (office building) behind existing vegetation with a new wood fence screen.

File Number: 10-109826-LA

Applicant: Verizon Wireless

Décisions Included: Process II, Administrative Conditional Use with SEPA

Planner: Carol Hamlin, 425-452-2731 *CHamlin*

State Environmental Policy Act Threshold Determination: Determination of Non-Significance (DNS)

Carol V. Helland
Carol V. Helland, Environmental Coordinator
Development Services Department

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

By: *Carol V. Helland*
Carol V. Helland, Land Use Director
Development Services Department

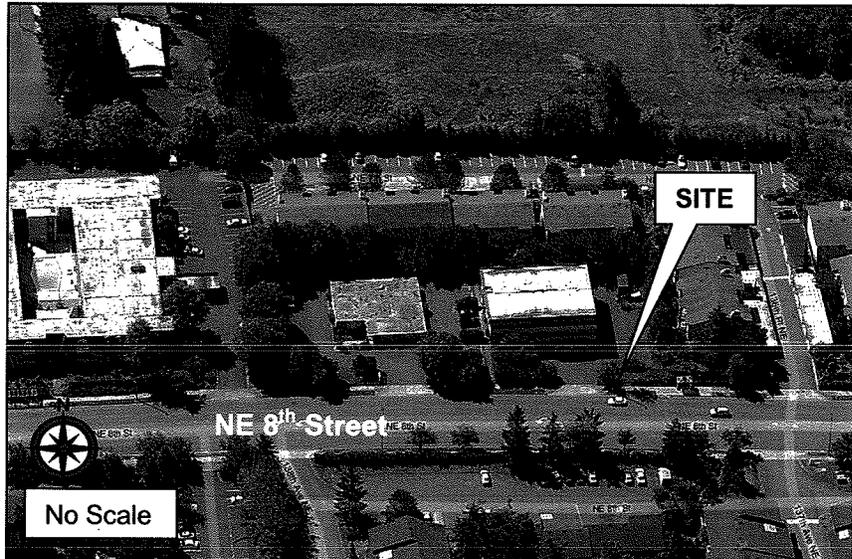
Notice of Decision Date: 09-30-2010
Appeal Deadline: 10-14-2010

For information on how to appeal the project, visit the Development Services Center at City Hall or call (425) 452-6800. Comments on State Environmental Policy Act (SEPA) Determinations can be made with or without appealing the proposal within the noted comment period for a SEPA Determination. Appeal of the Decision must be received in the City Clerk's office by 5 PM on the date noted for the appeal deadline.

A. Site Description

Aerial Photograph

A row of street trees exist within the ROW, with the closest tree approximately 25 feet west of the proposed pole location. The existing sound wall along NE 8th Street, approximately 8' in height, and mature evergreen trees on private property will provide some screening of the pole for views that originate south of NE 8th Street.



III. Environmental Impacts of the Proposal

Environmental review is required because the proposal is 60 feet or more in height, per Bellevue City Code 22.02.020, Washington Administrative Code 197-11-800 (25)(a)(iii). The environmental review indicates no probability of significant adverse environmental impacts as a result of the proposal. The Environmental Checklist (see Attachment C) submitted with the application adequately discloses the expected environmental impacts of the proposed 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 (DNS) is the appropriate determination under State Environmental Policy Act (SEPA) requirements.

IV. Public Comment

On June 10, 2010, notice of the application was published in The Seattle Times and The Weekly Permit Bulletin. A public information sign for the proposed project was installed on-site on June 10, 2010. The minimum public comment period for the application ended on June 24, 2010, but comments were accepted until the decision issuance date. The City did not receive any written comments, emails or phone calls. Project information was provided to the East Bellevue Community Council on July 30, 2010. No written comments were received from the East Bellevue Community Council.

V. Applicable Decision Criteria / Findings and Conclusions

Compliance with decision criteria of Land Use Code, Section 20.30E.140, is discussed below.

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

Finding: This proposal is consistent with the Comprehensive Plan policies for wireless communications facilities. The policies that specifically support the City's decision on this application are:

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

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

The antennae are required to be flush mounted and painted to match the new light pole. The proposed pole height is 60 feet and will be a steel pole, which is that same as the existing 35 foot pole to be replaced. The new pole and ground mounted equipment will be located on adjacent private property (office building) behind existing vegetation with a new wood fence screen. As proposed, the ground mounted equipment will not be visible from the public right-of-way of NE 8th Street.

UT-43: *Encourage consolidation on existing facilities where reasonably feasible, and where such consolidation leads to fewer impacts than would construction of separate facilities.*

The proposed pole will replace a light pole that is part of an existing string of light poles in the public right-of-way along NE 8th Street. The proposed pole will be a steel pole. Antennae will be painted to match the pole. The light fixture will be reattached at the existing 35' height.

UT-53: *Require 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.*

Ground mounted equipment will be located on adjacent private property (office building) behind existing vegetation with a new wood fence screen. As proposed, the ground mounted equipment will not be visible from the public right-of-way of NE 8th Street.

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

The proposed replacement pole is 25 feet taller than the light pole it would replace, and visually match the existing light poles along NE 8th Street. The antennae at the top are flush-mounted and will be painted to match the color of

the pole. The associated ground-mounted equipment will be located on adjacent private property and screened with existing vegetation and a new wood fence.

UT-56: *Encourage permit applicants to submit an area wide plan that demonstrates the lowest land use impacts consistent with telecommunication customer needs.*

The area-wide plan is shown on the Search Area Map (located in file). The applicant identified three possible WCF locations within the search ring, all of which are discussed below.

There are approximately 60 parcels within the search area initially identified by the applicant's RF engineer. The vast majority of these parcels are within residential zones (R-2.5 and R-3.5) and were considered last priority. The non-residential and multifamily parcels are clustered near the intersection of 140th Avenue and 8th Street and were considered as follows:

(1) 3 parcels zoned Office ("O") on the northwest corner of the NE 8th Street/140th Avenue NE intersection (parcel numbers 2725059310, 2725059308, and 2725059309): The intended coverage area is, in part, in a valley including the Glendale Golf Course to the west of this intersection (approximately 125 feet below the elevation of the NE 8th Street/140th Avenue NE intersection). To adequately provide coverage, a very tall support structure (pole), approximately 130 feet in height, would be required on one of these parcels. The 130 foot height is more than twice the height of the proposed 60 foot pole. These parcels were rejected for this reason (increased pole height). In addition, there is currently an existing wireless facility on the east side of 140th Avenue NE and south of NE 8th Street at the Puget Sound Energy site.

(2) 1 parcel zoned Neighborhood Business ("NB") on the southwest corner of the NE 8th Street/140th Avenue NE intersection (Walgreens, parcel number 3425059135): This landlord was unwilling to consider a lease.

(3) Chosen Location: 2 parcels zoned Office ("O") further west on NE 8th Street (parcel numbers 3425059103 and 3425059246). These parcels are closer to the "edge" where the elevation begins to drop so adequate coverage could be accomplished with a much shorter structure. There are existing street lights along NE 8th Street that could be replaced. Since one of the landlords (parcel number 3425059103) was willing to lease ground space for the equipment cabinet, the applicant chose the subject site.

UT-58: *Require wireless equipment constructed in public rights of way in residential areas to be under 30-inches high.*

This policy is not applicable to the subject site since the site is zoned Office.

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: To ensure that the proposed facility is compatible with property in the immediate vicinity, the proposal includes the following:

1. The replacement will be a steel pole to match the other light poles along NE 8th Street.
2. The panel antennas will be flush-mounted and painted to match the pole (see Photo-simulations, Attachment A). The attachment method and finish color are in keeping with the appearance of the existing steel poles. See condition VII.1.A.
3. The ground mounted equipment is proposed to be located adjacent to the existing office building screened by existing vegetation and a new wood fence. The equipment will not be visible from NE 8th Street.
4. Any areas disturbed and/or damaged during the construction or during future maintenance of the WCF facility is required to will be fully restored as a condition of this decision. See condition VII.2.

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

Finding: The proposed facility location is within public right-of-way, which is already served by adequate public facilities including streets, fire protection and utilities. The Fire Department requires a separate permit for any proposed generators. See condition VII.3. In order to meet the Transportation Department requirements, the applicant will be required to provide a lighting analysis to assure lighting levels along NE 8th Street are met, provide an agreement for pole maintenance, provide an easement to locate facilities on private property, and protect street trees. See conditions VII.4-7.

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

Finding: The proposed administrative conditional use permit will not be materially detrimental to the uses or property in the immediate vicinity. There is an existing string of light poles along this section of NE 8th Street. The existing light pole to be replaced is 35 feet in height. The proposed replacement pole is 60 feet in height and will be a steel pole to match the other existing poles along NE 8th Street. The proposed antennae at the top of the pole will be flush-mounted to the pole such that no portion of the antenna extends above the height of the support pole and so that the antenna is within six-inches of the support structure. The antennas will be finished in a color that blends with the steel pole. See condition VII.1.A.

Verizon Wireless' radios are mounted in the ground cabinets, thus eliminating the need for multiple cables to tower-mounted radios. Each antenna will have two cables (7/8" diameter) that will run inside the pole, exit the pole from a "port" and plug into the back of antenna. In order to reduce negative visual impacts, there shall be no more than two cables connecting to each antenna and such cables shall be pulled tightly so as to not be visible at street level. See condition VII.8.

The conduit cover at the base of the pole will be painted gray to match the color of the steel pole. See condition VII.9. As noted above, the ground mounted equipment is proposed to be located adjacent to the existing office building screened by existing vegetation and a new wood fence. The equipment will not be visible from NE 8th Street.

Any areas disturbed and/or damaged during the construction or during future maintenance of the WCF facility is required to will be fully restored as a condition of this decision. See condition VII.2.

The facility is required to be removed when it ceases to be operational or if it falls into disrepair. See condition VII.10.

Together these measures provide solid reasons why proposed project will not be materially detrimental to uses or property in the immediate vicinity of the subject property.

E. The administrative conditional use complies with the applicable requirements for a wireless communication facility as provided by the Land Use Code (20.20.195), including location and design preferences.

Finding: The proposed wireless facility 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, as summarized below.

1. **Height:** The pole height it is the minimum necessary for effective functioning of the provider's network, as certified by the provider's licensed engineer (letter located in file).

2. WCF Location and Design

a. **Preferred Location (LUC 20.20.195D.2.a):** The applicant's site development team faced a number of constraints in locating the proposed facility, including radiofrequency coverage needs, zoning requirements, aesthetic considerations and construction feasibility. The proposed location was selected because it is a non-residential zoning district in Transition (Office/Transition) within the public right-of-way (and adjacent private property). This location represents the second most preferred locational alternative per LUC 20.20.195D.2.a.² The facility (pole replacement with increased height) lends itself to a design that is consistent with the existing light poles along NE 8th Street. Finally, the applicant's engineer has certified that this location is necessary to address Verizon Wireless' coverage gap and meet its capacity needs for this specific area (1.5 miles x 1 mile).

² The most preferred location: Nonresidential land use districts not providing transition (LUC 20.20.195.D.2.a)

The project plans indicate that the new pole will be approximately ten feet from the existing location. However, since minor adjustments during construction are possible, a condition of approval is included requiring that the proposed replacement pole be located within ten feet of the existing pole. See condition VII.1.B.

- b. Preferred System Design (LUC 20.20.195.D.2.b):** The requirements for wireless communication facilities encourage co-locating facilities versus building new poles. Verizon Wireless' proposal is consistent with this direction, since they have opted to co-locate with a light pole instead of constructing a separate pole. The proposal represents the second most preferred system design alternative (co-located on utility poles, light standards and signal supports) under LUC 20.20.195D.2.b.³ While WCFs attached to public facility structures, building-mounted, or integrated with utility support structures are more preferred alternatives, under the circumstances of this project, the configuration proposed will be more compatible with and respond to the existing character, appearance, quality of development and physical characteristics of the subject property and immediate vicinity. Further, the applicant's engineer has certified that the mechanical equipment is the minimum size necessary to support operation of the facility (Engineer's Certification located in file).
- c. Minimizing Adverse Impacts LUC 20.20.195.D.2.c):**
Application of the location and design hierarchies as described above results in a proposal that minimizes the adverse impacts of the WCF, considering the search ring as a whole. In addition, the applicant has provided a letter from the RF engineer which states that the facility complies with RF Emission Guidelines set forth by the FCC (see file).
- 3. Dispersal Limits:** The nearest existing cellular facility located within the public right of way or on City-owned property is approximately ½ mile to the east along 140th Avenue NE near NE 8th Street (at the Shell Station).
- 4. Development Standards:** The equipment will be screened with existing vegetation and a new wood fence. A landscape assurance device is not necessary in this case. The applicant will be required to restore any areas disturbed or damaged during construction or future maintenance. Further, a condition of approval is included stating that the facility shall not be activated until all work included in the project scope and shown on plans and specifications is completed. See conditions VIII.2, 11.
- 5. Radio Frequency Emissions:** Refer to the letter from Verizon Wireless' radio frequency engineer stating that the facility will comply with the radio frequency emission standards adopted by the Federal Communications Commission (see file).

³ The most preferred system design: Attached to public facility structures, building mounted, or integrated with utility support structures, per (LUC 20.20.195.D.2.b)

6. **Setback Requirements for Freestanding Wireless Communication Facilities:** The freestanding ground-mounted equipment will be located 40 feet back from the front property line, thus exceeding the 30' front yard setback requirement for this zoning district.
7. **Independent Technical Review:** No such review was deemed necessary for this application.
8. **Removal of Abandoned Antennas and Towers:** Removal of abandoned antennas and towers is a condition of approval. See condition VII.12.
9. **Removal Upon Under-grounding:** The facility shall be removed at no expense to the City if co-located on an electrical system facility or utility support structure that is subsequently undergrounded. See condition VII.13.

VI. 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 Director of Development Services does hereby **APPROVE** the proposal subject to the following conditions:

VII. Conditions of Approval

Codes & Ordinances

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

Applicable Ordinances	Contact Person
Clearing and Grading Code- BCC 23.76	Janney Gwo, 425-452-6190
Construction Codes- BCC Title 23	Bldg. Division 425-452-6864
Fire Code- BCC 23.11	Travis Ripley, 425-452-6042
Land Use Code- BCC Title 20	Carol Hamlin, 425-452-2731
Noise Control- BCC 9.18	Carol Hamlin, 425-452-2731
Sign Code- BCC Title 22B	Carol Hamlin, 425-452-2731
Right of Way Use Code- BCC 14.30	Dottie Schmidt, 425-452-2888
Utility Code- BCC Title 24	Rob Hutchinson, 425-452-7903

1. Replacement Pole/Antennas:

- (a) The antennas shall be attached to the replacement pole such that no portion of the antenna extends above the height of the new support structure (replacement pole) AND the inside face of the antennas shall be flush-mounted no greater than six inches from the face of the replacement pole. Such antennas shall be painted to match the color of the steel pole.
- (b) The proposed replacement pole shall be located within 10 feet of the existing pole. The pole shall not block sight distance between drivers, or between drivers and cyclists/pedestrians.

Authority: LUC 20.20.195.B.1.a.ii, v
Reviewer: Carol Hamlin

2. **Site 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 either the WCF or its associated equipment structure.
Authority: LUC 20.20.195D.4.c
Reviewer: Carol Hamlin
3. **Generator:** A separate permit is required for any proposed generators.
Authority: Development Services Handout Number 67
Reviewer: Travis Ripley
4. **Lighting Design:** Prior to ROW permit issuance, the applicant shall submit a lighting design to analyze the existing light levels on NE 8th Street and compare that to the proposed light levels, to assure the lighting levels are the same.
Authority: BCC 14.30
Reviewer: Dottie Schmidt
5. **PSE/Verizon Agreement:** Prior to ROW permit issuance, The existing light pole is a City of Bellevue Light Pole not a PSE Pole, therefore, PSE/Verizon Agreement must be in place for PSE to assume all maintenance of the light.
Authority: BCC 14.30
Reviewer: Dottie Schmidt
6. **Easement behind Sidewalk:** Prior to ROW permit issuance, the applicant must provide an easement from the property owner.
Authority: BCC 14.30
Reviewer: Dottie Schmidt
7. **Street Trees/Irrigation:** The plans submitted for ROW permit issuance shall portray street tree protection. The applicant shall contact the Parks & Community Services Department regarding any irrigation that might be in the beds along the streetscape at that location.
Authority: BCC 14.30
Reviewer: Dottie Schmidt
8. **Exterior Cabling from the Pole to the Antenna:** In order to reduce negative visual impacts, there shall be no more than two cables connecting to each antenna and such cables shall be pulled tightly so as to not be visible at street level.
Authority: LUC 20.20.195.B.1.a.iii
Reviewer: Carol Hamlin
9. **Conduit Box:** The applicant will be required to paint the conduit box to match the steel pole.
Authority: LUC 20.20.195.B.1.a.ii
Reviewer: Carol Hamlin

10. Removal upon Disrepair: The facility shall be removed when it ceases to be operational or if it falls into disrepair

Authority: LUC 20.20.195.D.8

Reviewer: Carol Hamlin

11. Activation: The facility shall not be activated until all work included in the project scope and shown on plans and specifications is completed.

Authority: LUC 20.20.195

Reviewer: Carol Hamlin

12. 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 (FCC). All WCFs and the associated equipment 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.

Authority: LUC 20.20.195.D.8

Reviewer: Carol Hamlin

13. Future Undergrounding: The facility shall be removed at no expense to the City if co-located on an electrical system facility or utility support structure that is subsequently undergrounded.

Authority: LUC 20.20.195.D.9

Reviewer: Carol Hamlin

Attachments

A - Photo-simulations

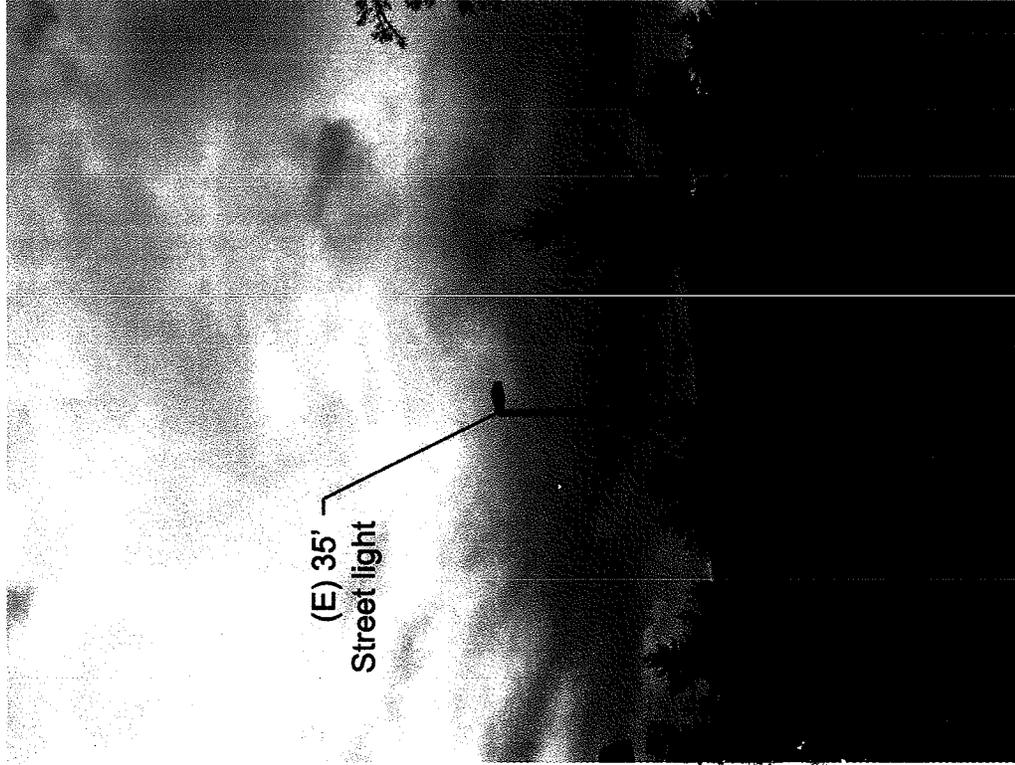
B - Project Plans

C - Environmental Checklist



verizon wireless Glendale

Looking South West



Existing



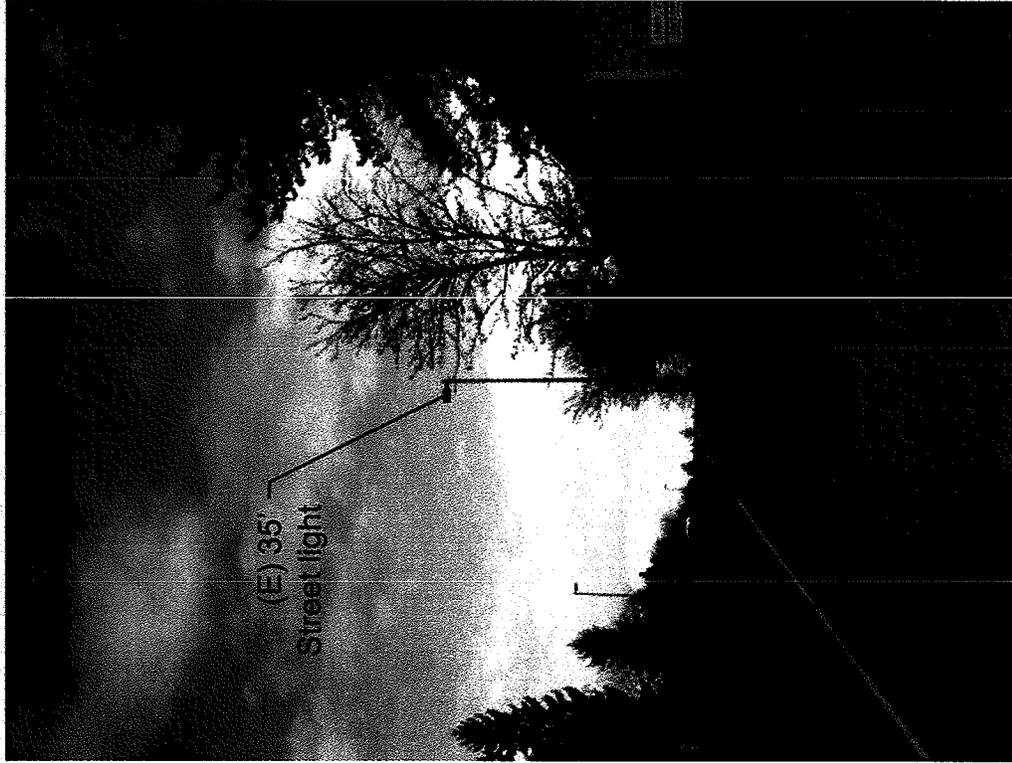
Note: Visual impacts will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

Proposed



verizon wireless Glendale

Looking East

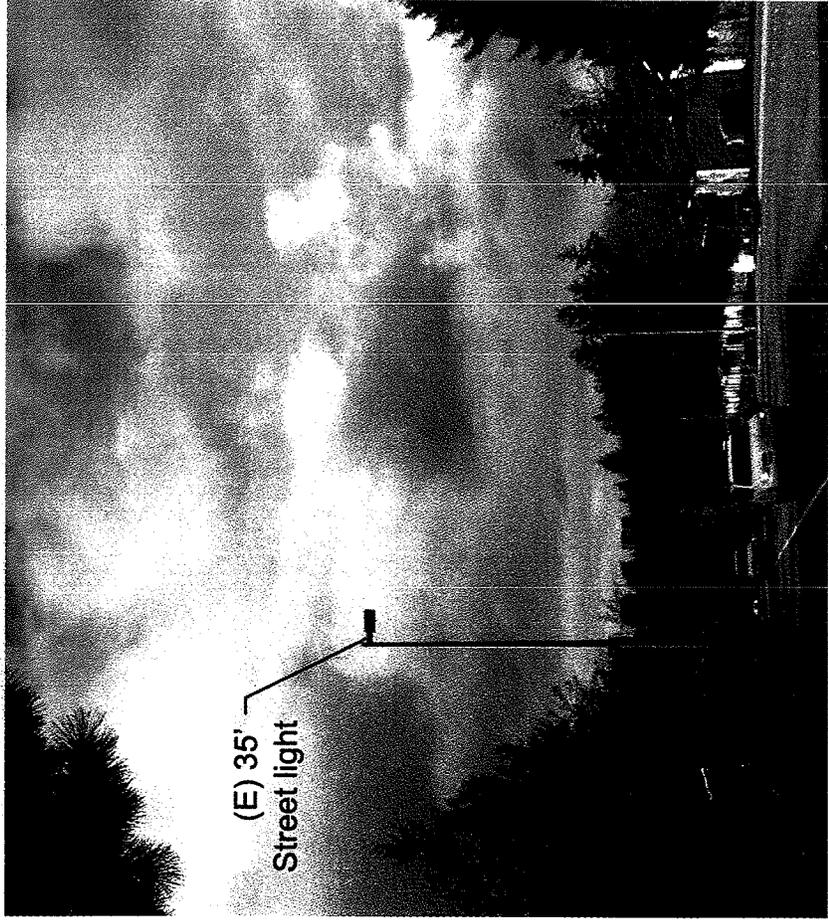


Note: Visual impacts will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

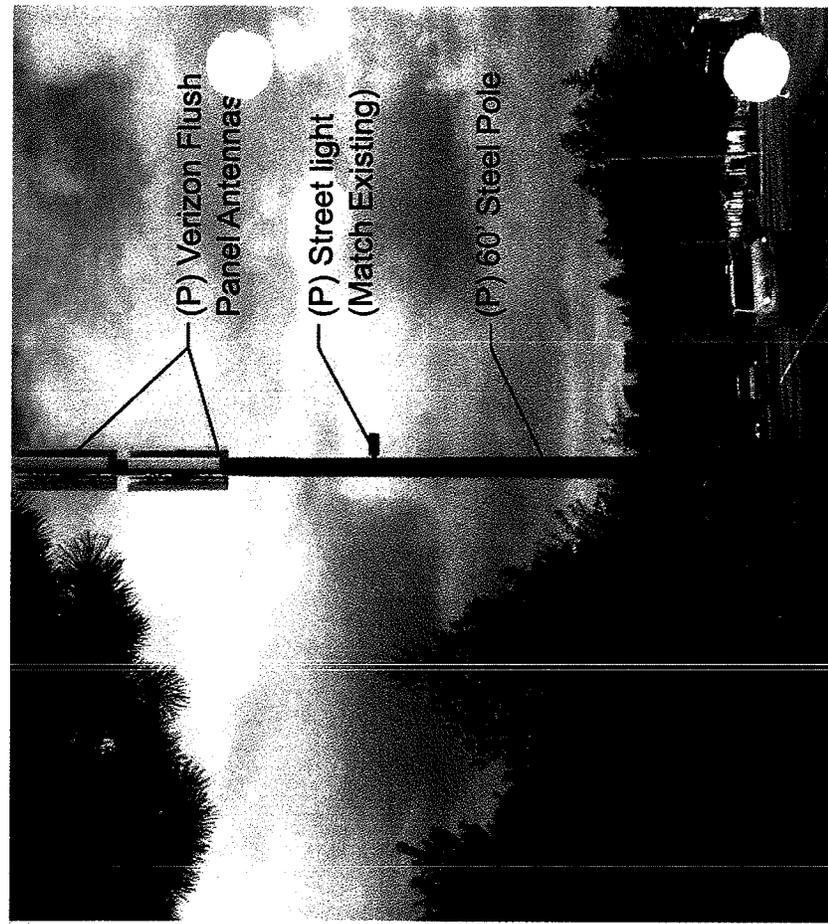
Existing

Proposed

Looking Southwest



Existing



Note: Visual impacts will be affected by location and visibility of observer. This document is for planning and information purposes only and is conceptual. This is solely the photographer's interpretation of the proposed development.

Proposed



VZW GLENDALE CONSTRUCTION DRAWINGS



Cascadia PM
8780 122ND AVE, NE
KIRKLAND, WA 98033
PH: (425) 828-1088

PROJECT DATA

SITE ADDRESS: 13655 NE 8TH STREET
BELLEVUE, WA 98005

LATITUDE: 47°37'01.44" N
LONGITUDE: 122°09'28.48" W

JURISDICTION: KING COUNTY, WA

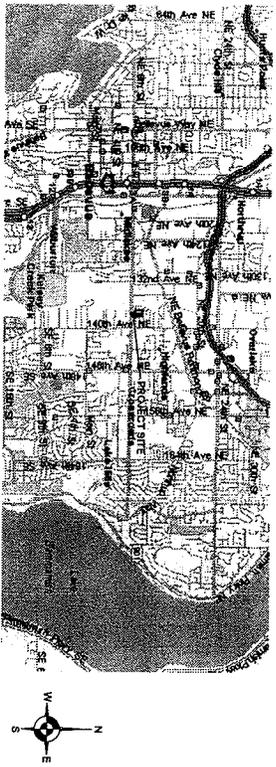
APN: 342509103
GROUND ELEVATION: 2452.4MSL
POLE TOP ELEVATION: 80' AGL

OCCUPANCY GROUP: U-2
CONSTRUCTION TYPE: V-B
ZONING: O
PROPERTY TYPE CODE: O

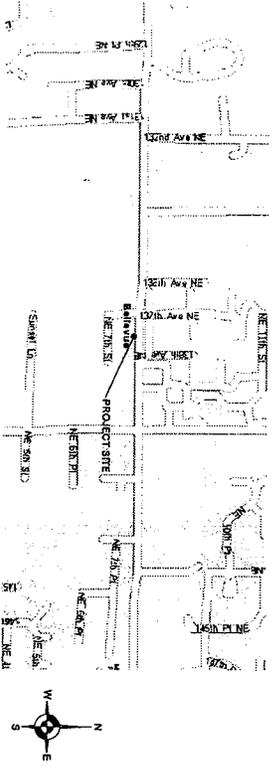
GOVERNING CODES: IBC-2006, INTERNATIONAL BUILDING CODE W/ LOCAL AMENDMENTS
NEC-2006, NATIONAL ELECTRICAL CODE

A.D.A. COMPLIANCE: UNPLANNED AND NOT FOR HUMAN HABITATION.
INSTALLATIONS: HANDICAP ACCESS IS NOT REQUIRED PER A.D.A.

AREA MAP



VICINITY MAP



PROJECT CONTACTS

APPLICANT: VERIZON WIRELESS
TIM LEWIS
13655 NE 8TH STREET
MS 321
BELLEVUE, WA 98008

PROPERTY OWNER: SPRINT
13655 NE 8TH STREET
BELLEVUE, WA 98008
PH: 206.547.0335

STRUCTURE OWNER: PUGET SOUND ENERGY
ATTN: TIMOTHY GASSER
PROJECT MANAGER
13655 NE 8TH STREET
BELLEVUE, WA 98008
PH: 206.547.0335

ZONING CONSULTANT: CASCADIA PM
8780 122ND AVE, NE
KIRKLAND, WA 98033
BILL POWELL, LL
PH: 253.225.5970

CONSTRUCTION MANAGEMENT: VERIZON WIRELESS
1880 SE EASTGATE WAY MS 321
ED STEWART
KIRKLAND, WA 98008
PH: 206.715.0014

CONSULTING ENGINEER: VECTOR STRUCTURAL ENGINEERS
818 S. STATE STREET,
SANDY, UT 84070
ROGER ALMORTH, SE
PH: 801.590.1775

PRE ENGINEERING CONTRACT: LUTHER RIMORIN
P.O. BOX 87024
SEASIDE, WA 98086-9724
PH: 425.456.2776

PROJECT SUMMARY

THIS PROJECT INCLUDES THE FOLLOWING SCOPE OF WORK:

1. PROPOSED REPLACEMENT OF AN (E) STREET LIGHT WITH A NEW 6' ENGINEERED STEEL POLE W/ REPLACEMENT STREET LAMP.
2. PROPOSED INSTALLATION OF 6 PANEL ANTENNAS ON THE NEW POLE. W/ UNDERGROUND COAX RUN TO THE POLE FROM THE ADJACENT PARKING GARAGE AND RISING TO THE ANTENNAS.
4. PROPOSED INSTALLATION OF NEW VERIZON WIRELESS RF EQUIPMENT IN THE BASEMENT PARKING GARAGE OF THE ADJACENT COMMERCIAL BUILDING.
5. PROPOSED INSTALLATION OF A NEW 200A ELECTRICAL SERVICE.
6. PROPOSED INSTALLATION OF A NEW TELCO DEMARK ADJACENT TO THE RF EQUIPMENT.

DRAWING INDEX

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A-3	WEST ELEVATION
A-3.1	NORTH ELEVATION
A-4	EQUIPMENT DETAILS
A-5	ANTENNA DETAILS
A-6	FENCE DETAILS
A-7	GENERATOR DETAILS
E-1	ELECTRICAL PLAN
E-2	GROUNDING PLAN
E-3	ELECTRICAL DETAILS
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GN-2	GENERAL NOTES
GN-3	GENERAL NOTES
GN-4	GENERAL NOTES

DRIVING DIRECTIONS

VERIZON GLENDALE CELL SITE

FROM THE INTERSECTION OF I-405 & I-90 IN BELLEVUE, WA, PROCEED NORTH ON I-405
RAVE EXIT 188 TO MERGE ONTO NE 8TH ST 7.0 MI
RAVE EXIT 187 TO MERGE ONTO NE 8TH ST 1.0 MI
PROCEED NORTH ON NE 8TH ST TO 13655 NE 8TH - BUILDING IS ON THE SOUTH SIDE OF THE STREET.

SITE NAME: GLENDALE

SITE ADDRESS: 13655 NE 8TH ST
BELLEVUE, WA 98005
APN: 342509103

SHEET TITLE: TITLE SHEET

SHEET NO.: T-1

DATE PROJECT TO NO.: 2008

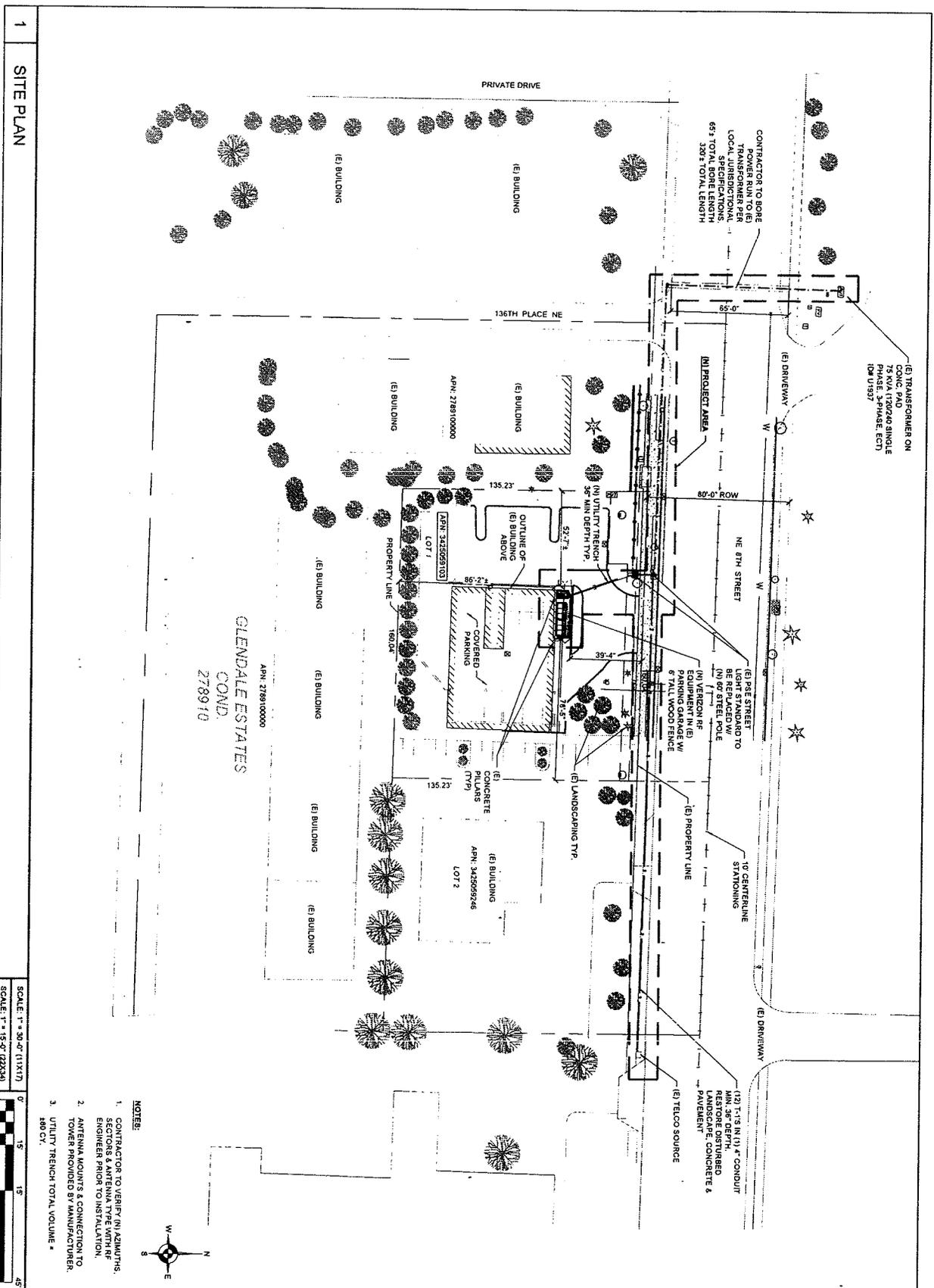
CHECKED BY: JF STEVENSON

NO.	DATE	INITIALS	DESCRIPTION
01	03-24-10	EX	CONSTRUCTION
02	03-24-10	EX	REV. PER COMMENTS
03	03-25-10	MM	REV. PER COMMENTS
04	04-25-10	MM	REV. PER COMMENTS
05	04-12-10	MM	GENERATOR MOD.

SUBMITTAL:

NO.	DATE	DESCRIPTION
01	04-12-10	RF SUBMITTAL
02	05-15-10	RF COMMENTS

SITE NO.:



Verizon Wireless

Cascadia PM

87260 122ND AVE NE
KIRKLAND, WA 98033
PH: (425) 826-1888

CONTRACT NO. 2208
DRAWN BY: J.P. GARDNER
CHECKED BY: J.P.

SUBMITTAL

NO.	DATE	BY	DESCRIPTION
01	03-04-10	JK	CG REVISIONS
02	03-04-10	JK	REV PER COMMENTS
03	03-29-10	MM	SOA FOR REVIEW
04	04-15-10	MM	SOA FOR REVIEW
05	04-15-10	MM	SOA FOR REVIEW

SITE NO.

SITE NAME

GLENDALE

SITE ADDRESS

13635 NE 8TH ST
BELLEVUE, WA 98005
APN: 3425098103

SHEET TITLE

SITE PLAN

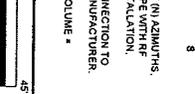
SHEET NO.

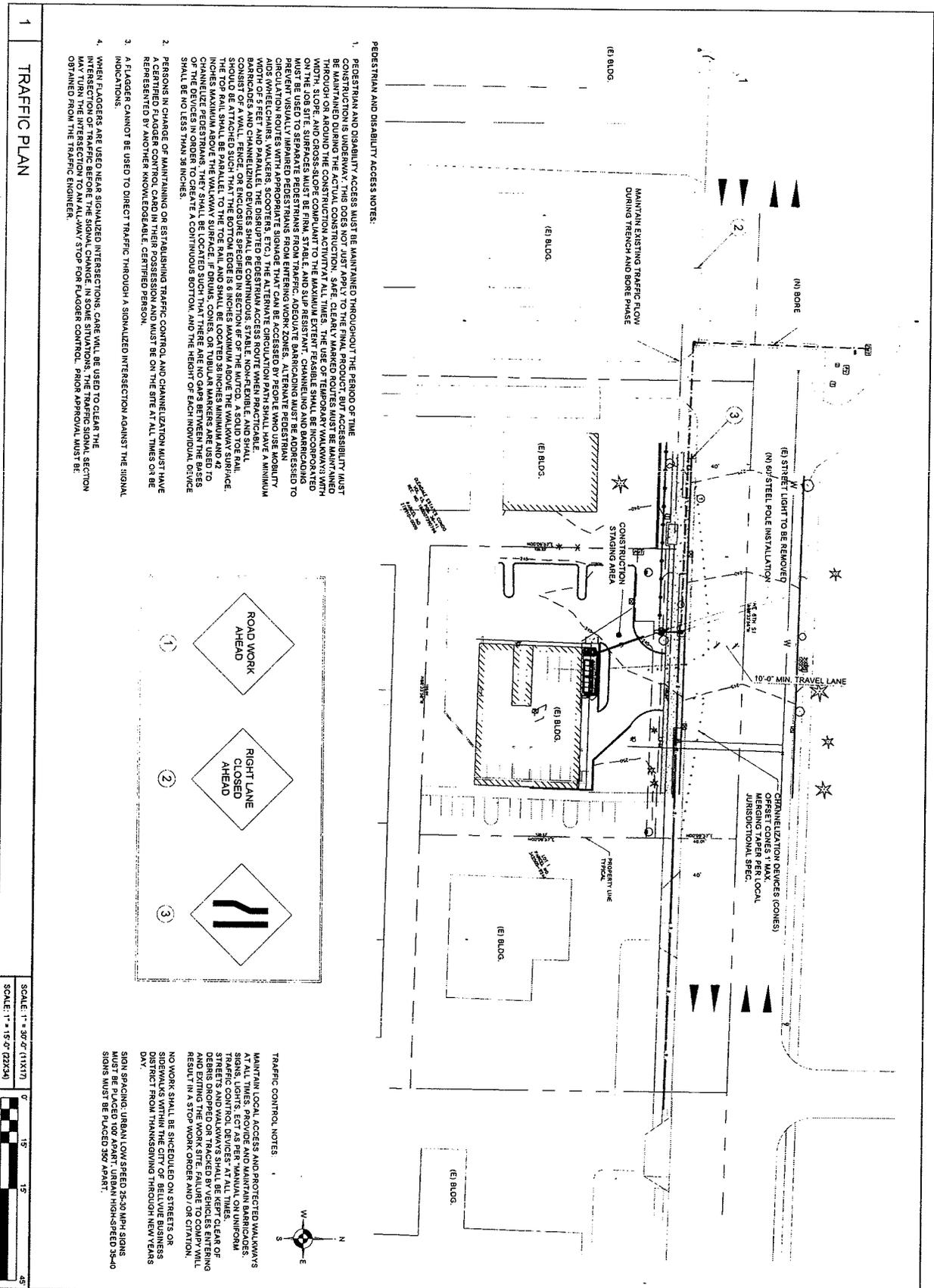
A-1

1 SITE PLAN

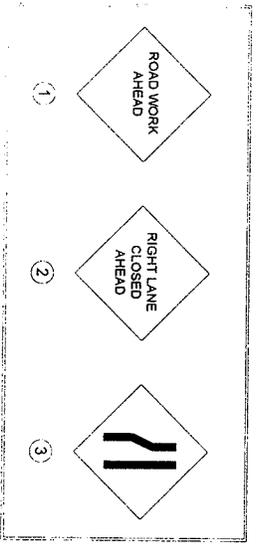
SCALE: 1" = 30'-0" (11X17)
SCALE: 1" = 15'-0" (22X34)

- NOTES:**
- CONTRACTOR TO VERIFY (N) AZIMUTHS, SECTIONS & ANTENNA TYPE WITH RF ENGINEER PRIOR TO INSTALLATION.
 - ANTENNA MOUNTS & CONNECTION TO TOWER PROVIDED BY MANUFACTURER.
 - UTILITY TRENCH TOTAL VOLUME = 1480 CY.





- PEDESTRIAN AND DISABILITY ACCESS NOTES:**
1. PEDESTRIAN AND DISABILITY ACCESS MUST BE MAINTAINED THROUGHOUT THE PERIOD OF THIS CONSTRUCTION IS UNDERWAY. THIS DOES NOT JUST APPLY TO THE FINAL PRODUCT, BUT ACCESSIBILITY MUST BE MAINTAINED DURING THE ACTUAL CONSTRUCTION. SAFE, CLEARLY MARKED ROUTES MUST BE MAINTAINED THROUGH OR AROUND THE CONSTRUCTION ACTIVITY AT ALL TIMES. THE USE OF TEMPORARY WALKWAYS WITH CHANNELIZATION DEVICES SHALL BE PLACED TO THE MAXIMUM EXTENT FEASIBLE SHALL BE INCORPORATED ON THE JOB SITE SURFACES. MUST BE PLACED TO THE MAXIMUM EXTENT FEASIBLE SHALL BE INCORPORATED TO PREVENT VISUALLY IMPAIRED PEDESTRIANS FROM ENTERING WORK ZONES. ALTERNATE PEDESTRIAN ROUTES SHALL BE IDENTIFIED AND MARKED WITH APPROPRIATE SIGNAGE THAT CAN BE ACCESSED BY PEOPLE WHO USE MOBILITY DEVICES. CHANNELIZATION DEVICES SHALL BE CONTINUOUS, STABLE, NON-FLEXIBLE, AND SHALL CONSIST OF A WALL, FENCE, OR ENCLOSURE SPECIFIED IN SECTION #6 OF THE MANUAL. A SOLID TOP RAIL, THE TOP RAIL SHALL BE SUCH THAT THE BOTTOM EDGE IS 6 INCHES MAXIMUM ABOVE THE WALKWAY SURFACE. INCHES MAXIMUM ABOVE THE WALKWAY SURFACE. IF DRUMS, CONES, OR TUBULAR SIGNERS ARE USED TO CHANNELIZE PEDESTRIANS, THEY SHALL BE LOCATED SUCH THAT THERE ARE NO GAPS BETWEEN THE BASES OF THE DEVICES IN ORDER TO CREATE A CONTINUOUS BOTTOM, AND THE HEIGHT OF EACH INDIVIDUAL DEVICE SHALL BE NO LESS THAN 36 INCHES.
 2. PERSONS IN CHARGE OF MAINTAINING OR ESTABLISHING TRAFFIC CONTROL AND CHANNELIZATION MUST HAVE A CERTIFIED FLAGGER CONTROL CARD IN THEIR POSSESSION AND MUST BE ON THE SITE AT ALL TIMES OR BE REPRESENTED BY ANOTHER KNOWLEDGEABLE, CERTIFIED PERSON.
 3. A FLAGGER CANNOT BE USED TO DIRECT TRAFFIC THROUGH A SIGNALIZED INTERSECTION AGAINST THE SIGNAL INDICATIONS.
 4. WHEN FLAGGERS ARE USED, SIGNALIZED INTERSECTIONS CARE WILL BE USED TO CLEAR THE INTERSECTION OF TRAFFIC BEFORE THE FLAGGER IS PLACED IN THE INTERSECTION AND SIGNAL SECTION MAY TURN THE INTERSECTION TO AN ALL-WAY STOP FOR FLAGGER CONTROL. PRIOR APPROVAL MUST BE OBTAINED FROM THE TRAFFIC ENGINEER.



1 TRAFFIC PLAN

SCALE: 1" = 30'-0" (1:360)
 SCALE: 1" = 15'-0" (1:180)
 0 15' 15' 45'

Cascadia PM
 2076 22ND AVE. N.E.
 KIRKLAND, WA 98033
 PH: (425) 826-1886

CDM PROJECT ID NO.: 2206
 DRAWN BY: MCKENNA
 CHECKED BY: JP

PRELIMINARY

NO.	DATE	INIT.	DESCRIPTION
01	03-04-10	TK	CD REV. PER COMMENTS
02	03-04-10	TK	CD REV. PER COMMENTS
03	04-05-10	KN	CD REV. PER COMMENTS
04	04-12-10	KN	GENERATOR MOD.

SITE NO.

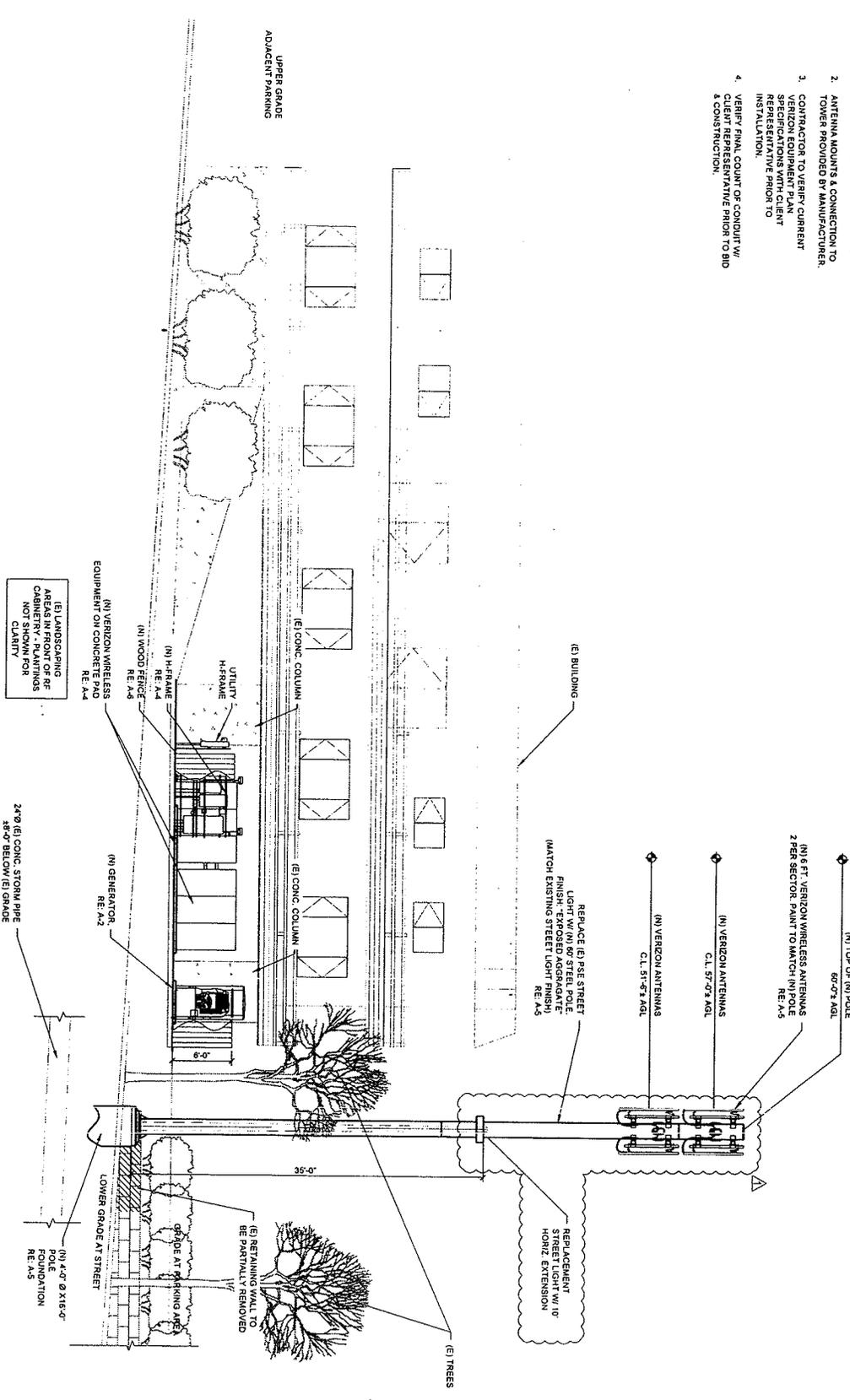
SITE NAME
 GLENDALE

SITE ADDRESS
 13830 NE 87TH ST
 BELLEVUE, WA 98005
 P/N: 54588910

SHEET TITLE
 TRAFFIC PLAN

SHEET NO.
 A-2.1

- NOTES:**
1. CONTRACTOR TO VERIFY (N) AZIMUTHS, SECTORS & ANTENNA TYPE WITH RF ENGINEER PRIOR TO INSTALLATION.
 2. ANTENNA MOUNTS & CONNECTION TO TOWER PROVIDED BY MANUFACTURER.
 3. CONTRACTOR TO VERIFY CURRENT VERIZON EQUIPMENT PLAN REPRESENTATIVE PRIOR TO INSTALLATION.
 4. VERIFY FINAL COUNT OF CONDUIT W/ CLIENT REPRESENTATIVE PRIOR TO BID & CONSTRUCTION.



1 NORTH ELEVATION

SCALE: 1" = 10'-0" (1/32")
 SCALE: 1" = 5'-0" (1/250)



Cascadia PM
 8760 123ND AVE NE
 KIRKLAND, WA 98033
 PH: (425) 828-1008

CPM PROJECT ID NO.: 2208
 DATE: 04-18-10
 CHECKED BY: JP PERKINS

PRELIMINARY

NO.	DATE	BY	DESCRIPTION
06	04-18-10	KMCT	BP SUBMITTAL
07	03-28-10	PKN	INT. REV. PER COMMENTS
08	04-05-10	PKN	OWN CD REVIEW
09	04-12-10	PKN	GENERATOR MOD.

NO.	DATE	BY	DESCRIPTION
04	04-18-10	KMCT	BP SUBMITTAL
05	04-18-10	KMCT	BP COMMENTS

SUBMITTAL

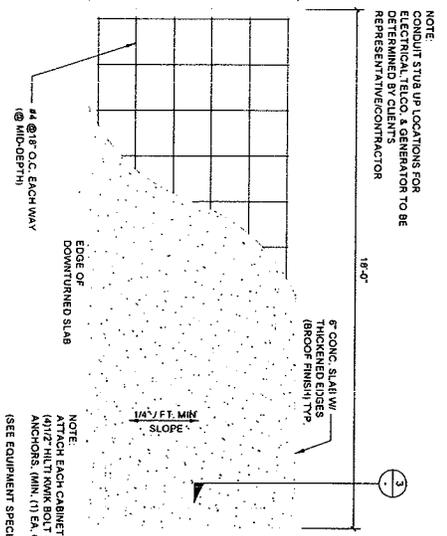
SITE NO.

SITE NAME
 GLENDALE

SITE ADDRESS
 13635 NE 87TH ST
 BELLEVUE, WA 98005
 APN: 3425059103

SHEET TITLE
 NORTH ELEVATION

SHEET NO.
 A-3.1

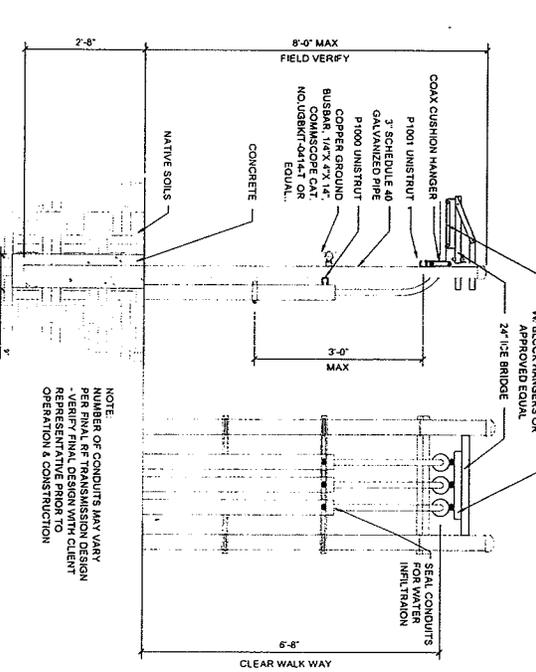


NOTE: CONDUIT STUB UP LOCATIONS FOR ELECTRICAL, TELCO, & GENERATOR TO BE DETERMINED BY CLIENTS REPRESENTATIVE/CONTRACTOR

NOTE: EACH CABINET TO CONCRETE PAD WITH EXPANSION ANCHORS, MIN (11 EA. CORNER/W/3/4" EMBED.) (SEE EQUIPMENT SPECIFICATIONS FOR LOCATIONS)

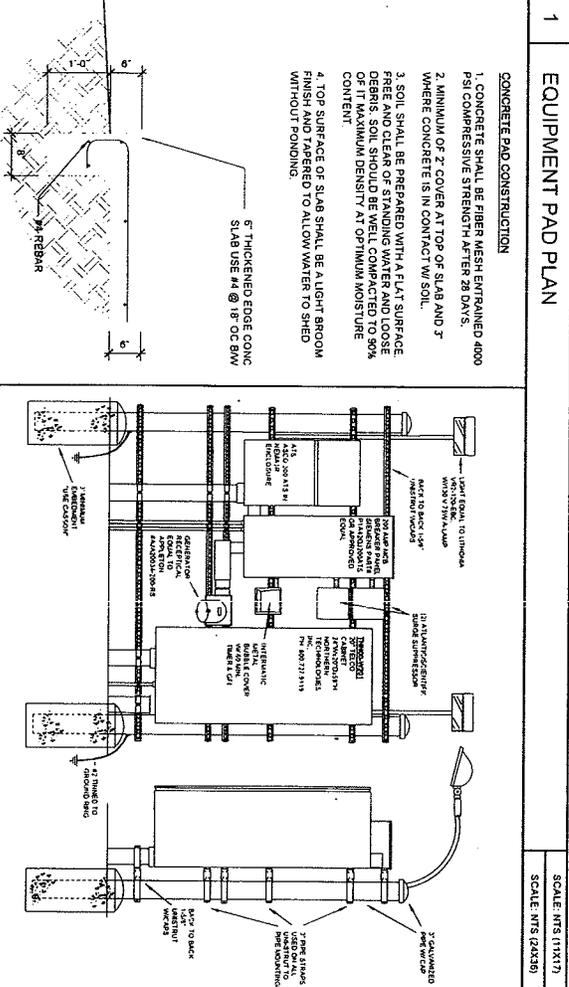
1 EQUIPMENT PAD PLAN

SCALE: NTS (11X17)
SCALE: NTS (24X36)



2 COAX FRAME

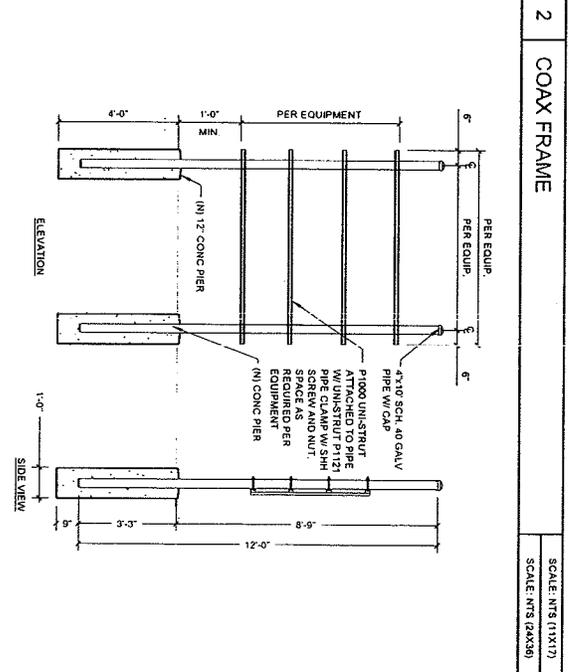
SCALE: NTS (11X17)
SCALE: NTS (24X36)



CONCRETE PAD CONSTRUCTION

1. CONCRETE SHALL BE FIBER MESH ENHANCED 4000 PSI COMPRESSIVE STRENGTH AFTER 28 DAYS.
2. MINIMUM OF 2" COVER AT TOP OF SLAB AND 3" WHERE CONCRETE IS IN CONTACT W/ SOIL.
3. SOIL SHALL BE PREPARED WITH A FLAT SURFACE FREE OF DEBRIS. SOIL SHOULD BE WELL COMPACTED TO 90% OF IT MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT.
4. TOP SURFACE OF SLAB SHALL BE A LIGHT BROOM FINISH & ALLOWED TO ALLOW WATER TO SHED WITHOUT FLOODING.

6" THICKENED EDGE CONCRETE SLAB USE #4 @ 18" OC BW



3 EQUIPMENT PAD DETAIL

SCALE: NTS (11X17)
SCALE: NTS (24X36)

4 H-FRAME

SCALE: NTS (11X17)
SCALE: NTS (24X36)

5 H-FRAME DETAIL

SCALE: NTS (11X17)
SCALE: NTS (24X36)

Cascadia PM

76261 122ND AVE. NE
KIRKLAND, WA 98033
PH: (425) 824-1088

PM PROJECT ID NO.: 2306

DATE: 07/20/20

CHECKED BY: JF/DEK/KN

PRELIMINARY

NO.	DATE	TIME	DESCRIPTION
01	03-24-10	REV.	CONSTRUCTION
02	03-24-10	REV.	PER COMMENTS
03	03-25-10	REV.	PER COMMENTS
04	03-25-10	REV.	PER COMMENTS
05	04-21-10	REV.	50% CD REVIEW
06	04-21-10	REV.	GENERATOR MOD.

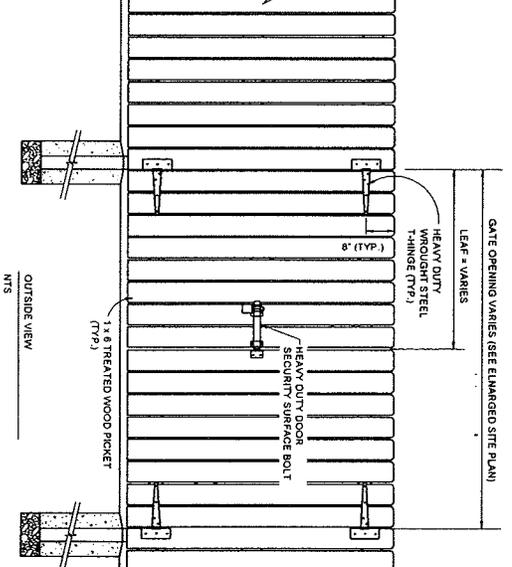
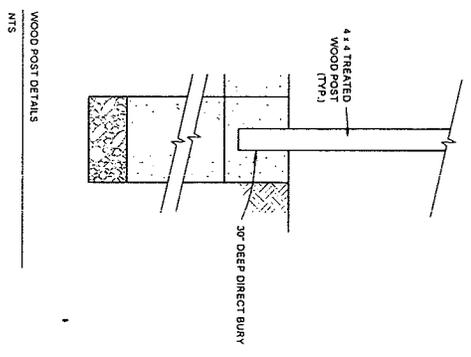
SITE NAME
GLENDALE

SITE ADDRESS
13835 NE 8TH ST
BELLEVUE, WA 98005
APN: 342595103

SHEET TITLE
EQUIPMENT
DETAILS

SHEET NO.
A-4

1 WOOD FENCE DETAILS



WOOD FENCE GATE DETAILS
NTS

- FENCING NOTES:**
1. ALL STEEL HARDWARE MATERIAL SHALL BE HOT-DIPPED GALVANIZED AND CONFORM TO ALL ASTM REG.
 2. PROVIDE ALL OTHER HARDWARE NECESSARY TO ATTACH TENSION, CUP, BAND, HINGE, PASTER AND FINISH THE FENCING PROPERLY.
 3. GATES SHALL BE INSTALLED SO THAT LOCKS ARE ACCESSIBLE FROM BOTH SIDES.
 4. GATE HINGES SHALL HAVE THEIR THREADS PENED OR WELDED TO PREVENT UNAUTHORIZED REMOVAL.
 5. TOUCH UP ALL SCRATCHES, SCRATCHES, MARKS, BARE AREAS AND APPLY WOOD SEALANT.

SCALE: NTS
SCALE: NTS



Cascadia PM
 87601 22ND AVE. NE
 KIRKLAND, WA 98033
 PH: (425) 825-1100

NO.	DATE	BY	DESCRIPTION
01	04-18-10	KN	PRELIMINARY
02	03-04-10	KN	EX REV. PER COMMENTS
03	03-26-10	KN	REV. PER COMMENTS
04	04-05-10	KN	REV. CO REVIEW
05	04-12-10	KN	GENERATOR WOOD

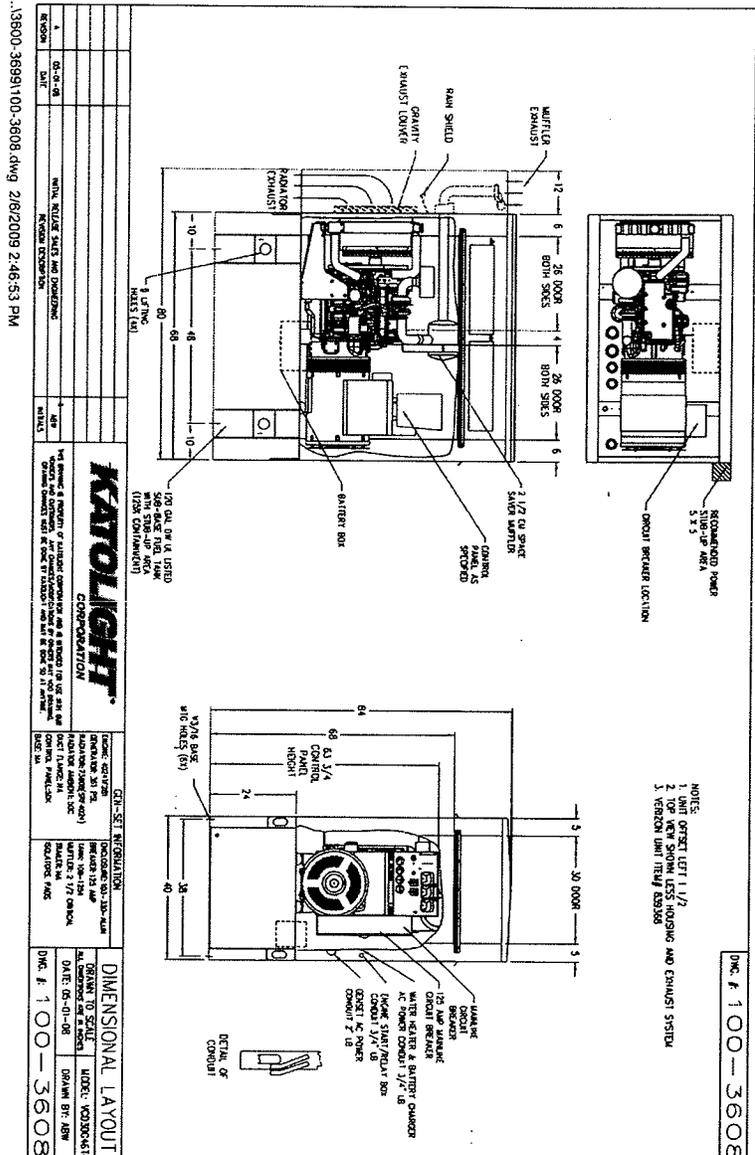
SITE NAME
 GLENDALE

SITE ADDRESS
 10900 NE 87TH ST
 BELLEVUE, WA 98005
 APT. 34260591 03

SHEET TITLE
 WOOD FENCE
 DETAILS

SHEET NO.
 A-6

1 GENERATOR DETAILS



13800-36991100-3608.dwg 2/6/2009 2:46:53 PM

REVISION	DATE	BY	DESCRIPTION
1	04-01-08	WHL	INITIAL REVISED QUANTITY AND DIMENSIONS
2	04-01-08	WHL	WHL

KATOLIGHT CORPORATION
 145 Avenue A, Hudson, NJ 07433
 908-942-1000
 FAX: 908-942-1001
 WWW.KATOLIGHT.COM

GEN-SET INFORMATION
 MODEL: KATOLIGHT
 SERIAL NO: 117
 DATE: 04-01-08
 DRAWN BY: AW

DIMENSIONAL LAYOUT
 MODEL: KATOLIGHT
 SERIAL NO: 117
 DATE: 04-01-08
 DRAWN BY: AW

SCALE: 1/4" = 1'-0"
 DATE: 04-01-08
 DRAWN BY: AW

NOTE:
 ANCHOR GENERATOR TO (N) CONCRETE PAD, RE A-2

1 (Hr)	2	3	4	5	6	7	8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

1 (Hr)	2	3	4	5	6	7	8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

1 (Hr)	2	3	4	5	6	7	8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

1 (Hr)	2	3	4	5	6	7	8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

1 (Hr)	2	3	4	5	6	7	8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

1 (Hr)	2	3	4	5	6	7	8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

1 (Hr)	2	3	4	5	6	7	8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

1 (Hr)	2	3	4	5	6	7	8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

1 (Hr)	2	3	4	5	6	7	8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

1 (Hr)	2	3	4	5	6	7	8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

1 (Hr)	2	3	4	5	6	7	8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

1 (Hr)	2	3	4	5	6	7	8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

1 (Hr)	2	3	4	5	6	7	8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

1 (Hr)	2	3	4	5	6	7	8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

1 (Hr)	2	3	4	5	6	7	8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Verizon Wireless
Cascadia PM
 8760 12ND AVE, NE
 KIRKLAND, WA 98033
 PH: (425) 828-1000

GEN PROJECT TO NO: 2206
DRAWN BY: JMC/ERON
CHECKED BY: JMC/ERON

PRELIMINARY

NO. DATE DICT DESCRIPTION
 01 04-01-08 EXHIBIT PER COMMENTS
 02 04-01-08 REV PER COMMENTS
 03 04-05-10 IAH REV PER COMMENTS
 04 04-13-10 IAH GENERATOR MOD.

SUBMITTAL

NO. DATE DICT DESCRIPTION
 0 04-13-10 KNIGHT BP SUBMITTAL
 01 05-10-10 KNIGHT BP COMMENTS

SITE NO.

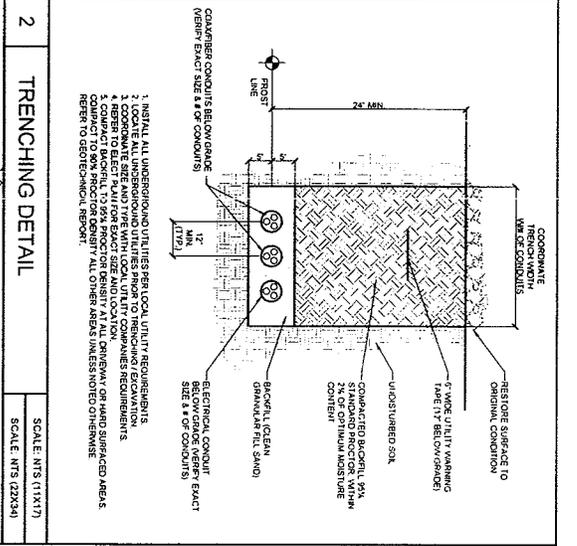
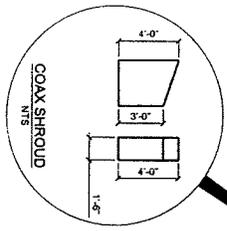
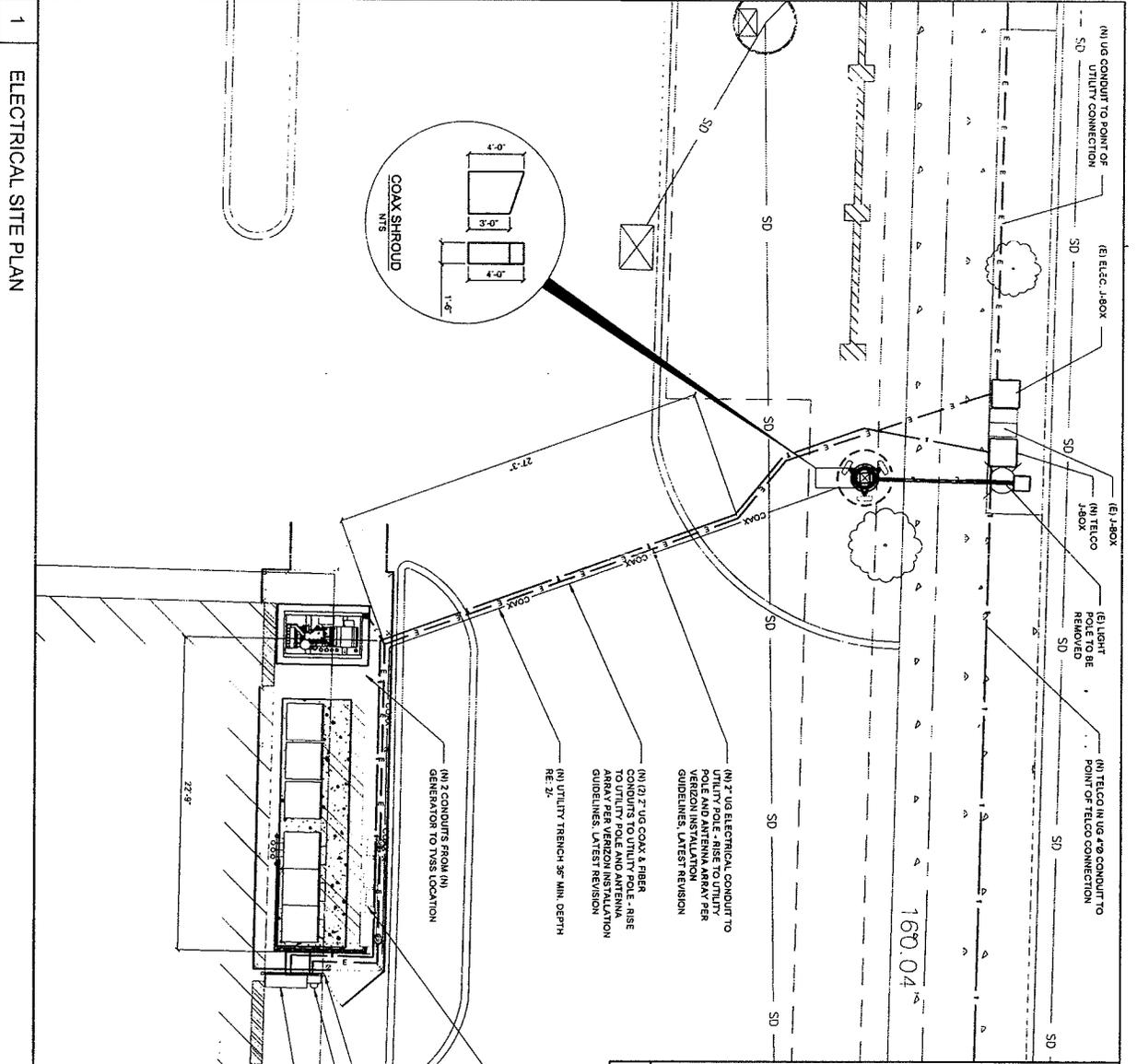
SITE NAME
 GLENDALE

SITE ADDRESS
 1385 NE BELLEVUE WA 98005
 APN: 342509103

SHEET TITLE
 GENERATOR
DETAILS

SHEET NO.
 A-7

SCALE: 1/4" = 1'-0"



1. INSTALL ALL UNDERGROUND UTILITIES PER LOCAL UTILITY REQUIREMENTS.
2. LOCATE ALL UNDERGROUND UTILITIES PRIOR TO TRENCHING EQUIPMENT.
3. COMPACT TO THE SPECIFIED MINIMUM LOCAL UTILITY COMPANIES REQUIREMENTS.
4. COMPACT BACKFILL TO 95% PROCTOR DENSITY AT ALL OVERLAY OR HARD SURFACED AREAS. REFER TO GEOTECHNICAL REPORT.
5. COMPACT BACKFILL TO 95% PROCTOR DENSITY AT ALL OVERLAY OR HARD SURFACED AREAS. REFER TO GEOTECHNICAL REPORT.

NOTE:
DESIGN OF CONDUIT ROUTING IS FOR CONCEPTUAL PURPOSES ONLY. CONTRACTOR TO DETERMINE BEST PRACTICE FOR ROUTING PER UTILITY LOCATES AND EXISTING SITE CONDITIONS.

SCALE: 1/8" = 1'-0" (11/17)
SCALE: 1/4" = 1'-0" (22/34)

Verizon Wireless

Cascadia PM

3700 12TH AVE. NE
REDMOND, WA 98053
TEL: (425) 344-1000

GEN PROJECT NO.: 2106

DRAWN BY: MK/CKM

CHECKED BY: JP

PRELIMINARY

NO.	DATE	INIT.	DESCRIPTION
01	03-04-10	EX	CONTRACT
02	03-04-10	EX	REV. PER COMMENTS
03	03-04-10	MR	REV. PER COMMENTS
04	03-04-10	KN	REV. PER COMMENTS
05	04-12-10	KN	GENERATOR MOD.

SUBMITTALS

NO.	DATE	NO.	DESCRIPTION
01	04-15-10	KN	DESIGN
02	05-16-10	KN/CK	BP COMMENTS

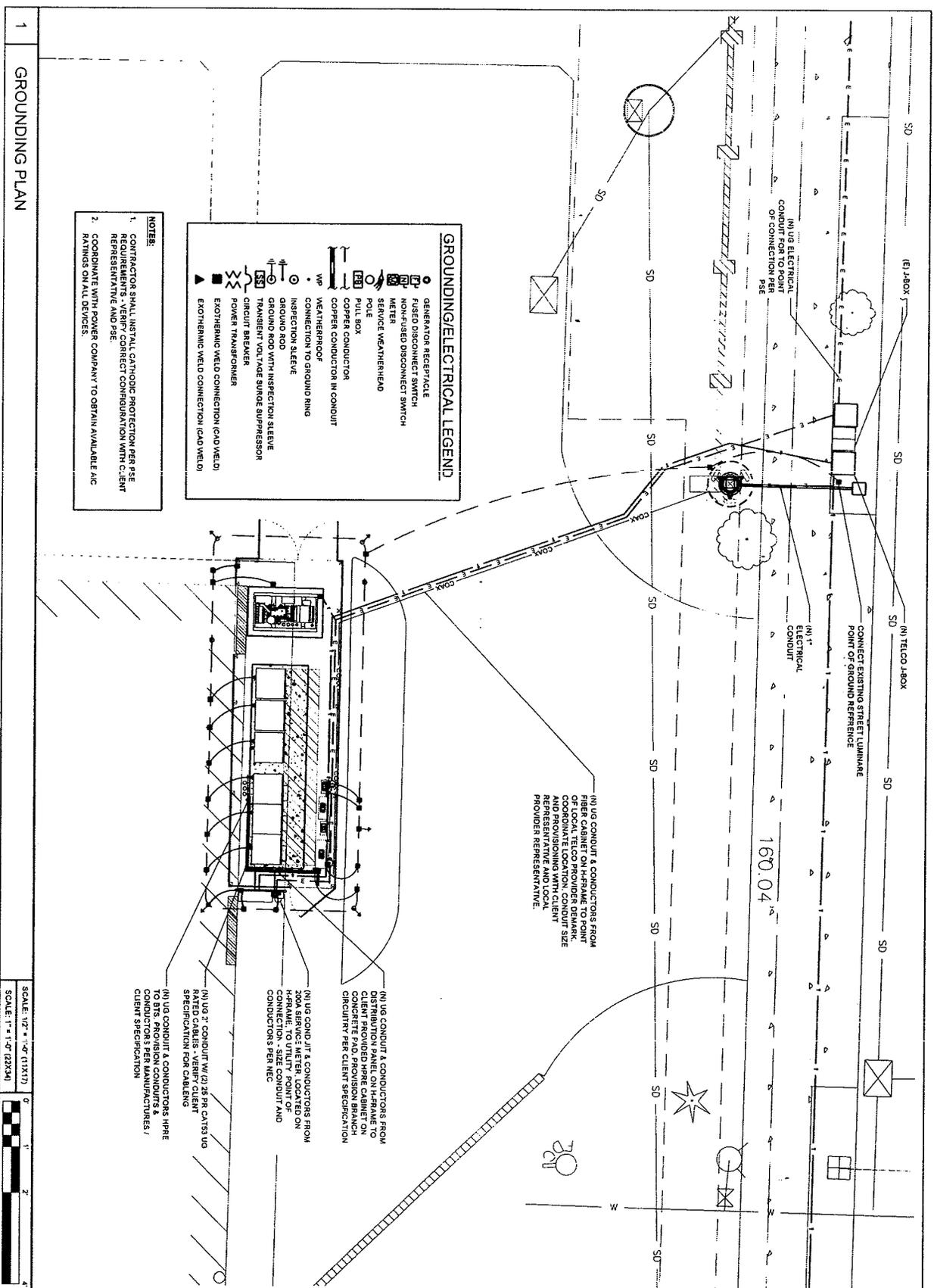
SITE NO.:

SITE NAME:
GLENDALE

SITE ADDRESS:
13435 NE 8TH ST
BELLEVUE, WA 98005
APN: 345059103

SHEET TITLE:
ELECTRICAL PLAN

SHEET NO.:
E-1



1 GROUNDING PLAN

- NOTES**
- CONTRACTOR SHALL INSTALL CATHODIC PROTECTION PER PSE AND COORDINATE WITH POWER COMPANY TO OBTAIN AVAILABLE AIC RATINGS ON ALL DEVICES.
 - COORDINATE WITH POWER COMPANY TO OBTAIN AVAILABLE AIC RATINGS ON ALL DEVICES.

GROUNDING/ELECTRICAL LEGEND

- GENERATOR RECEPTACLE
- FUSED DISCONNECT SWITCH
- NON-FUSED DISCONNECT SWITCH
- ⊕ METER
- ⊕ SERVICE WEATHERHEAD
- ⊕ POLE
- ⊕ PULL BOX
- COPPER CONDUCTOR IN CONDUIT
- ⊕ WEATHERPROOF CONNECTION TO GROUND RING
- ⊕ INSPECTION SLEEVE
- ⊕ GROUND ROD
- ⊕ GROUND ROD WITH INSPECTION SLEEVE
- ⊕ TRANSIENT VOLTAGE SURGE SUPPRESSION CIRCUIT BREAKER
- ⊕ POWER TRANSFORMER
- ⊕ EXOTHERMIC WELD CONNECTION (CATH WELD)
- ⊕ EXOTHERMIC WELD CONNECTION (ANOD WELD)

SCALE: 1/2" = 1'-0" (1X117)
SCALE: 1" = 1'-0" (23X34)



Cascadia PM
1501 13TH AVE NE
KIRKLAND, WA 98033
PH: (425) 824-1888

CPN PROJECT ID NO.: 2706
DRAWN BY: MWE/KN
CHECKED BY: JP

PRELIMINARY

NO.	DATE	BY	DESCRIPTION
01	02-20-10	PER	CD REVISIONS
02	03-26-10	MH	REV PER COMMENTS
03	04-05-10	KN	90% CSD REVIEW
04	04-12-10	KN	GENERATOR MOD.

SUBMITTAL

NO.	DATE	DESC	DESCRIPTION
0	04-18-10	KINCT	BP SUBMITTAL
1	04-18-10	KINCT	BP SUBMITTAL

SITE NO.

SITE NAME
GLENDALE

SITE ADDRESS
BELLEVUE, WA 98005
APN: 3425098103

SHEET TITLE
GROUNDING PLAN

SHEET NO.
E-2



Cascadia PM
 87261 122ND AVE. NE
 KIRKLAND, WA 98033
 PH: (425) 826-1000

NO.	DATE	INITIALS	DESCRIPTION
01	03-04-10	ER	CD REVISIONS
02	03-04-10	ER	REV. PER COMMENTS
03	03-23-10	MM	REV. PER COMMENTS
04	04-23-10	MM	REV. PER COMMENTS
05	04-23-10	MM	REV. PER COMMENTS
06	04-23-10	MM	REV. PER COMMENTS
07	04-23-10	MM	REV. PER COMMENTS
08	04-23-10	MM	REV. PER COMMENTS
09	04-23-10	MM	REV. PER COMMENTS
10	04-23-10	MM	REV. PER COMMENTS

DATE: 03-04-10
 TIME: 09:15 AM
 DRAWN BY: AMERSON
 CHECKED BY: JP

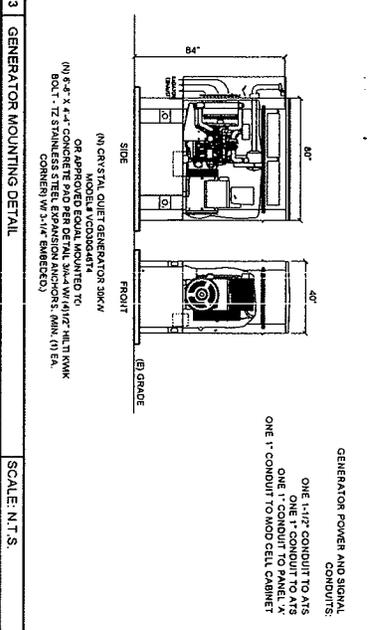
NO.	DATE	INITIALS	DESCRIPTION
01	03-04-10	ER	CD REVISIONS
02	03-04-10	ER	REV. PER COMMENTS
03	03-23-10	MM	REV. PER COMMENTS
04	04-23-10	MM	REV. PER COMMENTS
05	04-23-10	MM	REV. PER COMMENTS
06	04-23-10	MM	REV. PER COMMENTS
07	04-23-10	MM	REV. PER COMMENTS
08	04-23-10	MM	REV. PER COMMENTS
09	04-23-10	MM	REV. PER COMMENTS
10	04-23-10	MM	REV. PER COMMENTS

SITE NAME
 GLENDALE

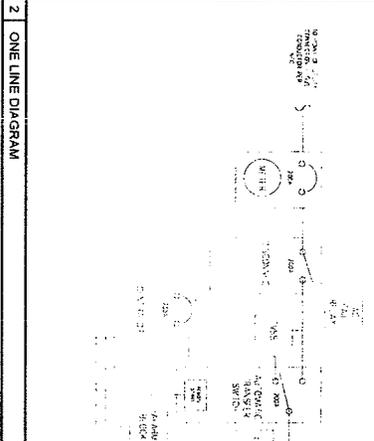
SITE ADDRESS
 13835 NE 8TH ST
 BELLEVUE, WA 98005
 APN: 3425099103

SHEET TITLE
 ELECTRICAL DETAILS

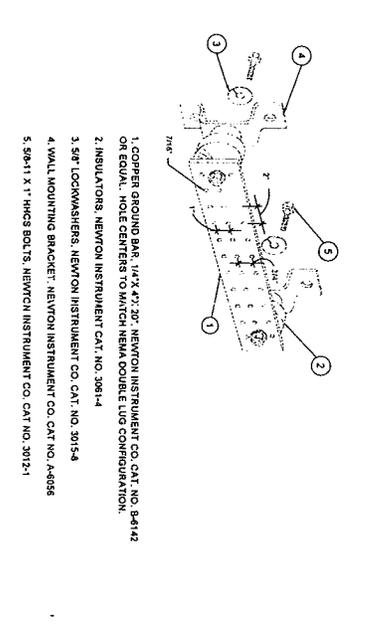
SHEET NO.
 E-3



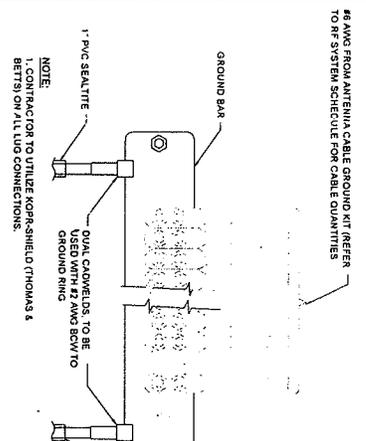
SCALE: N.T.S.



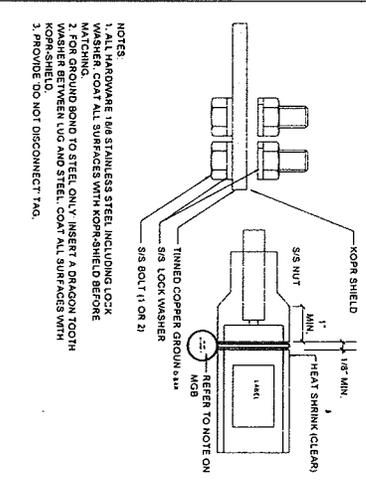
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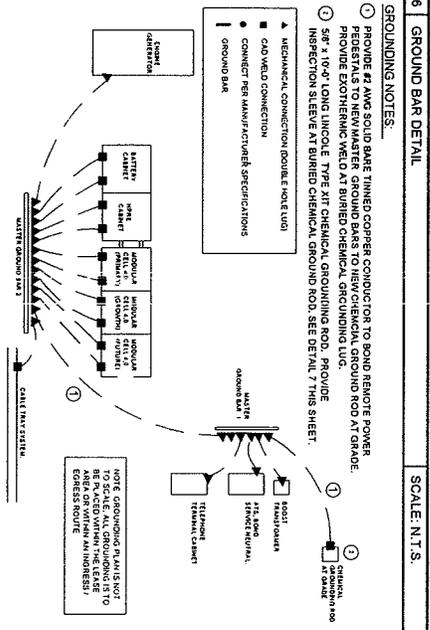
SCALE: N.T.S.



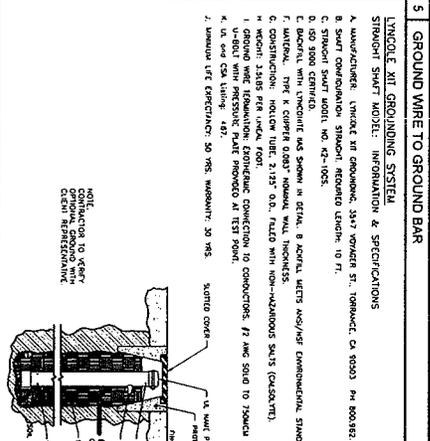
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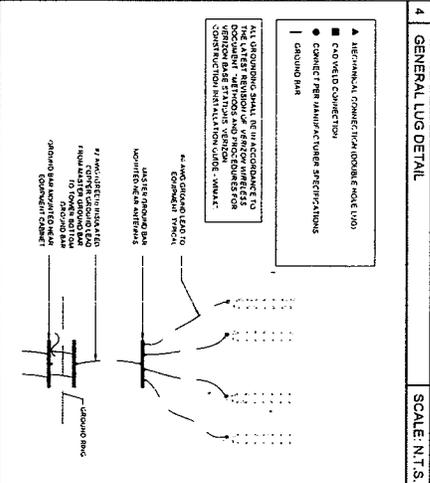
SCALE: N.T.S.



SCALE: N.T.S.



SCALE: N.T.S.



SCALE: N.T.S.

DATE: 03-04-10
 TIME: 09:15 AM
 DRAWN BY: AMERSON
 CHECKED BY: JP

NO. DATE INITIALS DESCRIPTION
 01 03-04-10 ER CD REVISIONS
 02 03-04-10 ER REV. PER COMMENTS
 03 03-23-10 MM REV. PER COMMENTS
 04 04-23-10 MM REV. PER COMMENTS
 05 04-23-10 MM REV. PER COMMENTS
 06 04-23-10 MM REV. PER COMMENTS
 07 04-23-10 MM REV. PER COMMENTS
 08 04-23-10 MM REV. PER COMMENTS
 09 04-23-10 MM REV. PER COMMENTS
 10 04-23-10 MM REV. PER COMMENTS

NO. DATE INITIALS DESCRIPTION
 01 03-04-10 ER CD REVISIONS
 02 03-04-10 ER REV. PER COMMENTS
 03 03-23-10 MM REV. PER COMMENTS
 04 04-23-10 MM REV. PER COMMENTS
 05 04-23-10 MM REV. PER COMMENTS
 06 04-23-10 MM REV. PER COMMENTS
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 08 04-23-10 MM REV. PER COMMENTS
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 10 04-23-10 MM REV. PER COMMENTS

RAVEN SMALL RCS SERIES

Cat #	Job	Type	Approvals

SPAULDING LIGHTING

APPLICATIONS

- Provides a superior lighting solution for a wide array of area/site lighting applications.

FEATURES

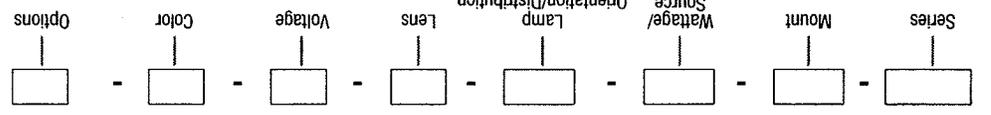
- Lightweight, rugged, one-piece formed and welded aluminum for smooth construction and weatherproofing. Pre-drilled for mounting. Decorative embossed band and reveal colors available.
- Extruded aluminum frame with rigid corner bracing and die-cast zinc latches for tool-free entry. Quality silicone gasketing seals out insects, dirt and moisture. Decorative silk screening conceals electrical compartment. Flat tempered and impact-resistant glass provide sharp full cutoff.
- Hydroformed and performance series reflectors available. ICS type II, III, IV, and V distributions. All distributions are field rotatable.
- Extruded arms along with multiple adapters provide mounting flexibility.
- Mogul porcelain socket, pulse rated, with spring-loaded, nickel-plated center contact and reinforced lamp grip screw shell. Medium base for ED-17 lamp.
- Removable Power-Part™ available for maintenance and installation ease.
- 200W-400W CWA type HFF Ballast starting rating at -20°F (-40°F for HPS).
- 150W and below LA6 type HFF Ballast starting rating at -20°F (-40°F for HPS).
- Durable Letkroco™ TGIC thermoset polyester powder coat paint finish assures long life and maintenance-free service.

LISTINGS/CERTIFICATIONS

- UL 1598 listed and CSA certified for outdoor use in wet locations.
- UL US
- ICS
- IES
- IES E17

ORDERING INFORMATION

ORDERING EXAMPLE: RCS-A4-P40-H3-F-Q-DB-L



SERIES	RCS Raven Small (100-400W)
MOUNT	A4 Arm Mount (includes 4" rigid arm) A10 Arm Mount (includes 10" rigid arm) WB Wall Bracket (arm not required) or included
WB4	Wall Bracket with 4" rigid arm
WB10	Wall Bracket with 10" rigid arm
0	No arm or wall bracket accessory
WATTAGE/SOURCE	
P10	100 watt (ED-17)
P12	125 watt (ED-17)
P15	150 watt (ED-28)
P20	200 watt (ED-28)
P25	250 watt (ED-28)
P32	320 watt (ED-28)
P35	350 watt (ED-28)
P40	400 watt (ED-28)

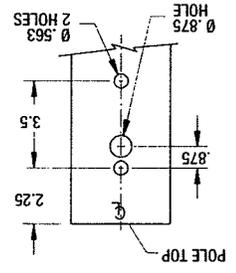
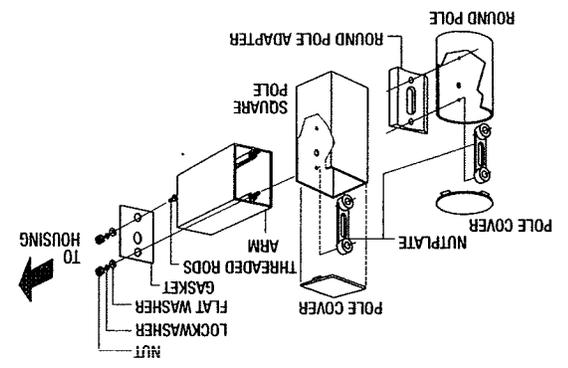
SOURCE/WATTAGE con't	
S10	100 watt (ED-23 1/2)
S15	150 watt (ED-23 1/2)
S25	250 watt (ED-18)
S40	400 watt (ED-18)
LAMP ORIENTATION/DISTRIBUTION	
H2	Horizontal II
H2P	Horizontal II Performance Series (patented multi-faceted hydroformed)
H3	Horizontal III (hydroformed)
H3P	Horizontal III Performance Series (patented multi-faceted)
H4	Horizontal IV (multi-piece)
H5	Horizontal V (hydroformed)
H5P	Horizontal V Performance Series

LENS	
F	Flat
VOLTAGE	
Q	Quad-Tap* 120/208/240/277V
5	480V
T	Tri-Tap* 120/277/347V
E	50Hz 220/240V (250, 400 & 1000W MH, SMH & HPS only)
V	Five-Tap - 120/208/240/277/480V (250 & 400W MH, SMH & HPS only)
0	No Ballast
COLOR	
DB	Dark Bronze
BL	Black
WH	White
GR	Gray
PS	Platinum Silver
RD	Red (premium color)
FG	Forest Green (premium color)
CC	Custom Color (consult factory) (RAL # preferred)

OPTIONS	
W1	120V Wiring Prep
W2	208V Wiring Prep
W3	240V Wiring Prep
W4	277V Wiring Prep
W5	480V Wiring Prep
W6	347V Wiring Prep
RPA2	Round Pole Adapter (2 3/4" - 3 1/8")
RPA3	Round Pole Adapter (3 1/4" - 3 3/4")
RPA4	Round Pole Adapter (3 7/8" - 4 1/2")
RPA5	Round Pole Adapter (5")
RPA6	Round Pole Adapter (6")
F(X)	Fusing (replace X with voltage: 1-120, 2-208, 3-240, 4-277, 5-480, 6-347)
P(X)	Photo Button (replace X with voltage: 1-120, 2-208, 3-240, 4-277, 5-480, 6-347)
PR(X)	Photo Cell Receptacle (replace X with voltage: 1-120, 2-208, 3-240, 4-277, 5-480, 6-347)
RP	Power Panel (RCS Only)
QZ	Quartz Restrike with 150W DC bayonet lamp
HS	Internal House Side Shield (all except Type V distributions)
VG	Polycarbonate Vandal Guard
R(XX)	Reveal (replace XX with color designation) EB option must be chosen with reveal option
EB	Embossed Band
L	Lamp

1 Factory wired for highest voltage unless specified.
2 Required for 90° configurations.
3 FOMLH, direct mount hardware kit required.
NOTE: All poles to be drilled with #2 pattern.

Due to our continued efforts to improve our products, product specifications are subject to change without notice.



HOUSING Die formed rectangular housing to have continuous corner welds creating a seamless one-piece enclosure. Housing material to be heavy gauge low copper aluminum alloy. Door assembly to recess completely within luminaire housing creating evenly spaced reveal and floating door appearance. Housing to provide positive seal with door assembly gasket.

DOOR/LENS Extruded aluminum doorframe to have 45° miter cut corners with internal corner key brackets for rigid support. Finish to be anodized with natural aluminum color. Tool-free entry design provided from corrosion resistant, spring loaded die cast zinc thumb latches (one per corner). Door assembly to hinge forward (toward pole) and backward (away from pole) and must remain captive to the luminaire housing when only two latches are released. Complete removal of door is achievable without tools. Extruded silicone gasket profile to positively seal tempered glass lens to doorframe and doorframe to luminaire housing ensuring a contaminant free environment. Tempered flat glass lens to include internal coating of temperature resistant black silk-screening to hide electrical compartment.

MOUNT The luminaire housing shall attach to all mounting hardware via two 1/2" diameter bolts/rods. Mounting options to include rigid arm assemblies, knuckled arm assemblies for flat surfaces, knuckled arm assemblies for 2 3/8" OD tenon, wall bracket

SPECIFICATIONS

Catalog Number	Description
PSC	Shorting Cap - Twist-Lock®
PTL-6	Photocontrol - Twist-Lock® Cell (347V)
PTL-5	Photocontrol - Twist-Lock® Cell (480V)
PTL-8	Photocontrol - Twist-Lock® Cell (120-277V)
PTL-1	Photocontrol - Twist-Lock® Cell (120V)

PHOTOCONTROL EQUIPMENT

Catalog Number	Description
RCS-PVG	1/8" Polycarbonate Vandal Guard suspended 3" below door frame
RCS-HS-4	Internal Lamp Shielding (RCS - H4 distribution)
RCS-HS-23P	Internal Lamp Shielding (RCS - H2P & H3P distributions)
RCS-HS-23	Internal Lamp Shielding (RCS - H2 & H3 distributions)

ACCESSORIES - RCS

(Must be ordered separately. For field installation.)

ORDERING INFORMATION

OPTICS Multiple levels of photometric performance to be achieved via tiered optic offering ranging from fully segmented to hydroformed reflectors. All optical assemblies to field rotate in 90° increments. All distributions to be IES - Full Cutoff classified. Internal house side shielding to be available on Type II, III, and IV distributions and should be factory or field installable.

ELECTRICAL Available HID wattage range of 100 to 400 watts from Pulse Start Metal Halide and High Pressure Sodium sources. Optional removable Power-Pan® to contain quick connects on both ballast and socket leads. Additional options include fusing, photocell control, and quartz restrick lamp.

FINISH TGIC thermoset polyester powder paint finish applied at nominal 2.5 mil thickness. Prior to painting all luminaires and mounting accessories should be thoroughly cleaned with acid and alkaline cleaners followed by the application of a chromate conversion coating.

LISTINGS/CERTIFICATION UL1598 listed and CSA certified for outdoor use in wet locations

TENON TOP POLE BRACKET ACCESSORIES (2 3/8" OD tenon)
 (RCS version requires 4" round pole adapter)

Catalog #	Description
SETA-XX ²	Square Pole Tenon Adapter (4 at 90 degrees)
RETA-XX ²	Round Pole Tenon Adapter - 4" (4 at 90 degrees)
TEA-XX ²	Triangular Pole Tenon Adapter - 4" (3 at 120 degrees)

1 Replace XX with color choice, eg: **DB** for Dark Bronze
 2 Accommodates #2 drill pattern

2 When ordering poles, specify Pole Drill Pattern #2.
 1 Replace XX with color choice, eg: **DB** for Dark Bronze

Catalog #	Description
F-RPA2-XX ²	Round Pole Adapter (2 3/4" - 3 1/8")
F-RPA3-XX ²	Round Pole Adapter (3 1/4" - 3 3/4")
F-RPA4-XX ²	Round Pole Adapter (3 7/8" - 4 1/2")
F-RPA5-XX ²	Round Pole Adapter (5")
F-RPA6-XX ²	Round Pole Adapter (6")
WB-CR-XX ²	Wall Bracket
ARM-F-K-TA-XX ²	Tenon Arm (single) adjustable (2 3/8" O.D. tenon)
ARM-F-TA-XX ²	Tenon Arm (double 180°) adjustable (2 3/8" O.D. tenon)
ARM-F-K-S-XX ²	Adjustable Arm
ARM-F-4-S-XX ²	4" Rigid Straight Arm
ARM-F-10-S-XX ²	10" Rigid Straight Arm
F-DMLH	Direct mount hardware kit
TPLB-XX	Twin parallel luminaire bracket.

ADDITIONAL ACCESSORIES

CONTRACTOR GENERAL NOTES

1. CONTRACTOR WILL PROVIDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, SAFETY EQUIPMENT, TRANSPORTATION, AND SERVICES NECESSARY TO COMPLETE THE WORK OUTLINED IN ALL THE DRAWINGS. SPECIFICATIONS, SCOPE OF WORK, AND ALL DISCREPANCIES TO CLIENTS REPRESENTATIVE OF CLIENTS REPRESENTATIVE AND THE WIRELESS SERVICES COMPANY.
2. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL AND NATIONAL CODES, LAWS, ORDINANCES, REGULATIONS, AND ANY UTILITY COMPANY REGULATIONS AND DIRECTIVES.
3. ALL MATERIALS SUPPLIED BY THE CLIENTS REPRESENTATIVE REPRESENTATIVE AND NATIONAL CODES, LAWS, ORDINANCES, REGULATIONS AND PER MANUFACTURER'S RECOMMENDATIONS.
4. ANY CONTRACTOR SUBMITTING BIDS ON ANY OF THE WORK IS REQUIRED TO VERIFY THE EXISTING CONDITIONS AND UNDERSTAND THE SCOPE OF WORK INTENDED FOR THE PROJECT. THIS WILL BE PERFORMED AT THE CONTRACTOR'S EXPENSE.
5. THE DRAWINGS AND SPECIFICATIONS ARE A GENERAL, DIRECTIVE FOR THE SCOPE OF WORK. EXACT DIMENSIONS AND LOCATIONS MAY CHANGE IN THE FIELD. THE CONTRACTOR IS TO VERIFY THE DIMENSIONS AND LOCATIONS AND REPORT ANY AND ALL DISCREPANCIES TO CLIENTS REPRESENTATIVE PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS PRIOR TO THE START OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS PRIOR TO THE START OF WORK.
6. ALL SITES SHALL BE KEPT CLEAN AND FREE OF DEBRIS ON A DAILY BASIS. ALL TRASH AND MATERIALS NO LONGER BEING USED AT THE SITE MUST BE REMOVED AND PROPERLY DISPOSED OF ON A DAILY BASIS. ANY EXCESS MATERIAL WILL BE RETURNED TO CLIENTS REPRESENTATIVE AND DELIVERED TO THE WAREHOUSING FACILITY PER THE DIRECTION OF CLIENTS REPRESENTATIVE.
7. THE CONTRACTOR SHALL NOT PROCEED WITH ANY WORK AT THE SITE PRIOR TO MEETING AT THE SITE HAS TAKEN PLACE.
8. ALL WORK AND MATERIALS FURNISHED BY THE CONTRACTOR SHALL HAVE A WRITTEN 18 MONTH WARRANTY STARTING AT THE ACCEPTANCE OF THE SITE FROM CLIENTS REPRESENTATIVE.
9. THE CONTRACTOR SHALL HAVE DESIGNATED A MANAGER ON SITE AT ALL TIMES THAT ANY WORK IS BEING PERFORMED. A SUB-CONTRACTOR IS NOT PERMITTED AS A DESIGNATED MANAGER.
10. THE CONTRACTOR SHALL PROVIDE A SCHEDULED LIST OF ALL PHONE NUMBERS, HOME PHONE NUMBERS, VERIFICATION OF INSURANCE, ANY AND ALL PERMITS LICENSES, AND AN ACCURATE SCHEDULE FOR THE PROJECT PRIOR TO THE ISSUANCE OF AN IPT.
11. THE CONTRACTOR IS TO KEEP A COMPLETE AND UP-TO-DATE SET OF THE DRAWINGS, SPECIFICATIONS, SCOPE OF WORK, AND BILL OF MATERIAL ON THE SITE AT ALL TIMES. THIS WILL BE REFERENCED AS THE AS-BUILT DRAWINGS AND MUST BE KEPT CURRENT ON A DAILY BASIS. THIS IS IN ADDITION TO THE PERMIT SET.
12. A NEW AND CLEAN SET OF CONTRACT DOCUMENTS WILL BE ISSUED TO THE CONTRACTOR NEAR THE COMPLETION OF THE PROJECT TO BE USED TO TRANSFER CONTRACT FROM THE FIELD COPY OF AS-BUILT DRAWINGS TO THE NEW CONTRACT. THIS NEEDS TO BE SUBMITTED TO CLIENTS REPRESENTATIVE WITH THE CONTRACT DOCUMENTS.
13. ON ANY CO-LOCATION SITE, THE CONTRACTOR AND ANY AND ALL ASSIGNMENTS NOT TO USE EXISTING POWER OR TAMPERS WITH ANY EQUIPMENT BELONGING TO DISMISAL OF THE CONTRACTOR FROM THE PROJECT.
14. THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING ALL INSPECTIONS AND TESTING REQUIRED FOR EACH REPORT. A 24-HOUR NOTIFICATION TO CLIENTS REPRESENTATIVE MUST BE PROVIDED AT LEAST 48 HOURS PRIOR TO THE START OF ALL INSPECTION AND TESTING REPORTS AS WELL AS TRUCK TICKETS MUST BE SUBMITTED TO CLIENTS REPRESENTATIVE WITHIN 24 HOURS OF THE INSPECTION OR TEST.
15. THE CONTRACTOR IS RESPONSIBLE TO VERIFY ALL MATERIAL, ISSUED TO HIMSELF, AND TO REPORT ANY SHORTAGES AND DISCREPANCIES TO CLIENTS REPRESENTATIVE AT THE TIME OF ISSUANCE. THE CONTRACTOR SHALL STORE THESE MATERIALS PROPERLY, ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS AND IN A MANNER THAT WILL NOT VOID THE WARRANTY ON ANY OF THE MATERIALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS PRIOR TO THE START OF WORK.
16. THE CONTRACTOR IS RESPONSIBLE TO FURNISH PROPER FACILITIES FOR THE WORKERS ON EACH PROJECT FOR THE DURATION OF THAT PROJECT.
17. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN THE PRESENT CONDITION OF ANY EXISTING BUILDINGS, LANDSCAPING, FENCING, EQUIPMENT, YAKS, DRIVES, AND ATTACHMENTS. IF ANY DAMAGE SHOULD OCCUR, THE CONTRACTOR IS RESPONSIBLE TO RESOLVE THE DAMAGE TO A BETTER OR NEW CONDITION.

PART 1 - PROJECT GENERAL NOTES

- 1.1. SCOPE OF WORK
 - A. PROVIDE ALL LABOR, MATERIAL, TOOLS, EQUIPMENT, TRANSPORTATION AND SERVICES NECESSARY TO COMPLETE THE WORK OUTLINED IN ALL THE DRAWINGS AND ON AS SPECIFIED HEREIN.
- 1.2. DRAWING USE AND INTERPRETATION
 - A. THE DRAWINGS ARE DIAGRAMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND EQUIPMENT UNLESS INDICATED OTHERWISE BY DIMENSIONS OR DETAILS. EXACT EQUIPMENT LOCATIONS AND ROUTINGS, ETC. SHALL BE GOVERNED BY ACTUAL FIELD CONDITIONS AND/OR INSTRUCTIONS OF THE ENGINEER. AVOID CLIENTS REPRESENTATIVE.
- 1.3. CONCRETE SYSTEMS
 - A. GENERAL. FURNISH AND INSTALL ALL MATERIALS AS REQUIRED FOR COMPLETE CONCRETE SYSTEMS. ALL CONCRETE SHALL BE PROPERLY MIXED, PLACED, COMPACTED, FINISHED, CURED, AND PROTECTED. DEMONSTRATED TO BE READY FOR OPERATION PRIOR TO CLIENTS REPRESENTATIVE'S ACCEPTANCE.
- 1.4. CODES AND REGULATIONS
 - A. GENERAL. COMPLY WITH ALL GOVERNING FEDERAL, STATE AND LOCAL LAWS, ORDINANCES, CODES, RULES AND REGULATIONS, WHERE THE CONTRACT DOCUMENTS EXCEED THESE REQUIREMENTS, THE CONTRACT DOCUMENTS SHALL MINIMUM LEGAL STANDARDS.
 - B. UTILITIES. COMPLY WITH ALL APPLICABLE RULES, RESTRICTIONS, AND REQUIREMENTS OF THE UTILITY COMPANIES SERVING THE PROJECT SITE/ FACILITIES.
 - C. NON-COMPLIANCE. SHOULD ANY WORK BE PERFORMED WHICH IS FOUND NOT TO COMPLY WITH ANY OF THE ABOVE, CONTRACTOR SHALL PROVIDE ALL WORK AND PAY ALL COSTS NECESSARY TO CORRECT THE DEFICIENCIES.
- 1.5. REFERENCE STANDARDS
 - A. ALL LATEST PUBLISHED STANDARDS OF THE FOLLOWING ASSOCIATIONS, MINIMUM REQUIREMENTS, SHALL BE FOLLOWED AND APPLIED WHERE APPLICABLE, AS MINIMUM REQUIREMENTS.
 - 1) (ANSI) AMERICAN NATIONAL STANDARDS INSTITUTE.
 - 2) (ASTM) AMERICAN SOCIETY FOR TESTING AND MATERIALS.
 - 3) (IEEE) INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS.
 - 4) (NEMA) NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION.
 - 5) (NFPA) NATIONAL FIRE PROTECTION ASSOCIATION.
 - 6) (UL) UNDERWRITERS LABORATORIES.
 - 7) (IBEC) INTERNATIONAL BOARD OF ELECTRICAL AND ELECTRONIC ENGINEERS.
 - 8) (NIBEL) NATIONAL BOARD OF FIRE UNDERWRITERS.
 - 9) (NEMA) NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION.
 - 10) (NFPA) NATIONAL FIRE PROTECTION ASSOCIATION.
 - 11) (IBEC) INTERNATIONAL BOARD OF ELECTRICAL AND ELECTRONIC ENGINEERS.
 - 12) (UL) UNDERWRITERS LABORATORIES.
- 1.6. PERMITS
 - A. GENERAL. ALL PERMITS REQUIRED BY ALL APPLICABLE AGENCIES, WILL BE OBTAINED BY SUB-CONTRACTOR.
- 1.7. MAINTAINING SITE CONDITIONS
 - A. GENERAL. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A NEAT AND ORDERLY WORK AREA. ALL FOREIGN SUBSTANCES IN A LEGAL MANNER, REMOVE PETRO-CHEMICAL SPILLS, STAINS, AND OTHER FOREIGN DEPOSITS IN COMPLIANCE WITH OSHA REGULATIONS, RETURN ALL SURFACES TO ORIGINAL CONDITION.
- 1.8. CONCRETE
 1. ALL MATERIALS, LABOR, AND METHODS SHALL CONFORM TO ALL APPLICABLE ASTM AND ACI STANDARDS AND REQUIREMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE QUALITY OF ALL MATERIALS AND METHODS TO PRODUCE THE VERIFICATION OF THESE ITEMS UPON REQUEST.
 2. THE CONTRACTOR SHALL SCHEDULE ALL INSPECTIONS DURING THE TESTING LABORATORY. AND PROVIDE CLIENTS REPRESENTATIVE WITHIN 24 HOURS OF THE TESTING. ALL TESTS SHALL BE PERFORMED IN THE PRESENCE OF CLIENTS REPRESENTATIVE AND TEST OPERATORS. A TOTAL OF FIVE CYLINDERS SHALL BE TAKEN DURING EACH POUR OR FOR EACH 50 YARDS IF THE POUR IS OVER 50 YARDS. THE FIRST CYLINDER WILL BE BROKEN AT 24 HOURS. A SECOND AT 7 DAYS. THIRD AT 14 DAYS. AND FOURTH AT 28 DAYS. THE LAST CYLINDER WILL BE KEPT SEPARATELY FOR 180 DAYS FOR FUTURE TESTING.
 3. ALL CONCRETE FOR THE PROJECT SHALL HAVE A 28-DAY STRENGTH OF 4,000 PSI AND A SLUMP OF 7" MAXIMUM WITH THE MIXTURE PROPORTIONS MEETING THE REQUIREMENTS OF ASTM C 193. ALL CONCRETE SHALL BE PROPERLY CURED. ALL CONCRETE MATURE SHALL ALSO CONFORM TO THE PROPER ASTM REQUIREMENTS.

1.9. ANTENNAS AND CABLE

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER STORAGE AND HANDLING OF ALL MATERIALS ONCE THEY HAVE BEEN RELEASED FROM THE WAREHOUSE.
2. INSTALLATION OF ALL MATERIALS SHALL BE DONE IN STRICT ADHERENCE TO MANUFACTURER'S RECOMMENDATIONS.
3. TOWER TECHNICIANS MUST BE CURRENT ANDREWS CERTIFIED FOR CABLE CONNECTOR INSTALLATIONS.
4. THE CONTRACTOR SHALL RUN ALL LINES AND CONDUITS IN A NEAT, ORDERLY AND STRAIGHT FASHION. PROVIDING ANCHORING AS RECOMMENDED BY THE MANUFACTURER AND WHEREVER NECESSARY TO SUPPORT THE LINES PROPERLY.
- 1.11. WARRANTIES
 1. THE CONTRACTOR SHALL WARRANT ALL GENERAL WORK FOR A MINIMUM OF 18 MONTHS OR AS STATED ELSEWHERE IN THE CONTRACT.
 2. ROOF WARRANTY: ALL WORK ON ROOFS SHALL BE PERFORMED IN FULL COMPLIANCE WITH THE ROOF MANUFACTURER'S RECOMMENDATIONS AND A WRITTEN VERIFICATION FROM THE ROOF MANUFACTURER THAT THE WARRANTY REMAINS VALID AFTER CONSTRUCTION.
- 1.12. ELECTRICAL
 1. THE CONTRACTOR IS RESPONSIBLE FOR ALL PERMITTING, FILING, AND FEES IN CONNECTION WITH THE PROJECT.
 2. THE CONTRACTOR SHALL SCHEDULE ALL NECESSARY INSPECTIONS WITH THE PROPER AUTHORITIES AND INFORM THE PROJECT MANAGEMENT COMPANY 24 HOURS IN ADVANCE. ALL TICKETS AND INSPECTION VERIFICATIONS WILL BE SUBMITTED TO CLIENTS REPRESENTATIVE WITHIN 24 HOURS AFTER THE INSPECTION HAS TAKEN PLACE.
 3. ALL LABOR AND MATERIAL SHALL CONFORM TO ALL LOCAL, STATE, AND NATIONAL CODES, RULES, REGULATIONS AND STANDARDS.
 4. ALL EQUIPMENT, WIRING, AND MATERIALS MUST HAVE A UL LABEL.
 5. ALL WORK SHALL BE DONE BY QUALIFIED AND EXPERIENCED JOURNEYMEN AND PERFORMED IN A WORKMANLIKE MANNER AND SHALL PROCEED IN AN ORDERLY MANNER SO AS NOT TO HOLD UP THE PROGRESS OF THE PROJECT.
 6. THOROUGHLY TEST ALL LINES, FEEDERS, EQUIPMENT, AND DEVICES WITH MAXIMUM LOADS TO ASSURE PROPER OPERATION.
 7. CONDUITS AND FITTINGS FOR OUTDOOR APPLICATIONS SHALL BE RIGID OR NON-RIGID. ALL CONDUITS SHALL BE PROPERLY SUPPORTED. ALL CONDUITS WITHIN 3 FEET OF ALL JUNCTION BOXES AND AT 6-FOOT INTERVALS OR LESS AS NEEDED WITH APPROVED ANCHORING DEVICES.



Cascadia PM
 #760 12ND AVE. NE
 KIRKLAND, WA 98033
 PH: (425) 826-1188

GHX PROJECT ID NO.: 2206

NO.	DATE	REV.	DESCRIPTION
01	03-24-10	1	ISSUE FOR PERMITS
02	03-24-10	2	REV. PER COMMENTS
03	03-24-10	3	REV. PER COMMENTS
04	03-24-10	4	REV. PER COMMENTS
05	03-24-10	5	REV. PER COMMENTS
06	03-24-10	6	REV. PER COMMENTS
07	03-24-10	7	REV. PER COMMENTS
08	03-24-10	8	REV. PER COMMENTS
09	03-24-10	9	REV. PER COMMENTS

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07	03-24-10	7	REV. PER COMMENTS
08	03-24-10	8	REV. PER COMMENTS
09	03-24-10	9	REV. PER COMMENTS

SITE NAME
 GLENDALE

SITE ADDRESS
 1365 NE 8TH ST
 BELLEVUE, WA 98005
 APN: 342909103

SHEET TITLE
 GENERAL NOTES

SHEET NO.
 GN-1



Cascadia PM
 17401 122ND AVE. NE
 KIRKLAND, WA 98033
 PH: (425) 762-1188

PRELIMINARY	NO. DATE	BY	DESCRIPTION
01	03-24-10	JK	DESIGN
02	03-24-10	JK	REV. PER COMMENTS
03	03-24-10	JK	REV. PER COMMENTS
04	03-24-10	JK	REV. PER COMMENTS
05	04-12-10	JK	REV. PER COMMENTS

SITE NAME
 GLENDALE

SITE ADDRESS
 13636 NE 8TH ST
 BELLEVUE, WA 98005
 APR. 24/2009 103

SHEET TITLE
 GENERAL NOTES

SHEET NO.
 GN-2

2.2 GROUNDING

- A. SYSTEM DESCRIPTION: A GROUNDING NETWORK SYSTEM SHALL BE INSTALLED AND FASTENED TO THE REINFORCING BARS AND STRUCTURE AND OTHER METAL OBJECTS INCLUDING GROUNDING ELECTRODES AND INTERCONNECTING CONDUCTORS. THIS SHALL BE FOLLOWED WITH THE 3 POINT TEST METHOD.
- B. MATERIAL - INDICATED AS FOLLOWS
 1. WATER SERVICE METALLIC PIPE
 2. GALVANIZED STEEL COPPER STRANDED OR SO. ID. TIMED BARE SIZE AS INDICATED
 3. GROUND RODS - 5/8" DIA. X 10'-0" LONG COPPER CLAD GROUND ROD
 4. CHEMICAL GROUND RODS - 1/2" GROUND ROD 10'-0" STRAIGHT SHAFT TYPE
 5. COMPRESSION HYDRONIC AS MANUFACTURED BY FCI BIRNEY. CONNECTIONS SHALL BE 50% TEST FOR COMPRESSION AS MANUFACTURED BY ZINC CHEMICAL
 6. CONNECTIONS - DOUBLE HOLE LUGS FOR ALL MECHANICAL CONNECTIONS
 7. CONNECTIONS - DOUBLE HOLE LUGS FOR ALL MECHANICAL CONNECTIONS
 8. EXOTHERMIC CEMENTED WITH PROPER WOLDS

- 2.8 SAFETY SWITCHES
 - A. GENERAL - HEAVY DUTY HONGSPER POWER RATED, FULLY ENCLOSED, FUSIBLE WITH REJECTION FUSE CLIPS OR NON-FUSED AS INDICATED, QUICK-BREAK, QUICK BREAK SWITCHING MECHANISM WITH COVER, AND NEARLY ENCLOSED FOR PROTECTION FROM CONTACT WITH LIVE PARTS.
 - B. RATINGS - VOLTAGE, PHASES, AMPERAGES AND FUSING AS INDICATED
 - C. IN THE FUSED CONFIGURATION, SWITCHES SHALL HAVE AN INTERRUPTING CAPACITY OF AT LEAST 10,000 AMPS SYMMETRICAL AT SIX HUNDRED (600) VOLTS WHEN USED WITH CLASS RK1 TIME DELAY CURRENT LIMITING FUSES, AND 20,000 FUSES, SYMMETRICAL AT 600 VOLTS WHEN USED WITH CLASS RK1 CURRENT LIMITING FUSES.
 - D. GUARDS - LIVE SHIELD GUARDS TO PREVENT CONTACT WITH LIVE PARTS.
 - E. CONTACTS - SILVER ALLOY. SWITCH BLADES SHALL BE DE-ENERGIZED IN THE OPEN POSITION.
 - F. LUGS - SOLID BRASS TYPE
 - G. REJECTION USE CLIPS - PROVIDE FOR FUSIBLE SWITCHES (24-600A) TO PREVENT THE INSTALLATION OF CLASS H AND CLASS K NON-CURRENT-LIMITING FUSES.
- H. ACCEPTABLE MANUFACTURER - GENERAL ELECTRIC, SQUARE D, SIEMENS, OR EQUIVALENT.
- I. FUSES
 - A. ALL CLASS RK1, 250 VOLT OR 600 VOLT AS REQUIRED FOR SYSTEM VOLTAGE. QUALITY AND TYPE OF FUSES SHALL BE INDICATED ON POWER DIAGRAM.
 - B. ACCEPTABLE MANUFACTURERS - BUSSEMAN FUSEIRON, OR EQUAL, BY FERRAZ SHAWMUT.

- 2.10 CIRCUIT BREAKERS
 - A. GENERAL - MOLDED CASE WITH THERMAL AND MAGNETIC TRIPS UNLESS OTHERWISE NOTED. 200 AMP 2-POLAR INTERRUPTING CAPACITY, HIGHER RATINGS AS INDICATED OR REQUIRED BY MANUFACTURER'S DATA SHEET.
 - B. CIRCUIT BREAKERS FOR EXISTING EQUIPMENT SHALL BE FROM THE SAME MANUFACTURER AS THE ORIGINAL EQUIPMENT.
- 2.11 LOAD CENTER / PANELBOARDS
 - A. TWO-POLAR CIRCUIT BREAKER WITH MAINS, HATINGS AND BRANCH DEVICES AS INDICATED.
 - B. MINIMUM 10,000 AIC FOR 208V/240V UNLESS OTHERWISE NOTED.
 - C. LOCKABLE COVER, COPPER BUS.
 - D. LOAD CENTER SHALL HAVE MAIN CIRCUIT BREAKER (LOCKABLE IN ON & OFF POSITIONS).
 - E. COPPER BUS BARS (ALUMINUM COMPONENTS IN ELECTRICAL DEVICES IS PROHIBITED), ISOLATED NEUTRAL BUS AND FULL SIZE GROUNDING BUS.
 - F. ACCEPTABLE MANUFACTURERS - GENERAL ELECTRIC, SQUARE D, SIEMENS OR EQUIVALENT.
- 2.12 DEVICES
 - A. SWITCHES - 20AMP, 120/277 VOLTS, A.C. ONLY TOGGLE TYPE, SINGLE POLE, DOUBLE POLE, 3-WAY, OR 4-WAY TRIPPER STYLE AS INDICATED OR REQUIRED.

PART 2 - PRODUCTS

- 2.1 GENERAL
 - A. GENERAL REQUIREMENTS: ALL MATERIALS AND EQUIPMENT SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARDS OF THE VARIOUS MANUFACTURERS WITH ALL MATERIALS AND EQUIPMENT TO BE NEW, CLEAN, UNDAMAGED, AND FREE OF DEFECTS AND CORROSION.
 - B. ACCEPTABLE PRODUCTS: THE PRODUCT OF A SPECIFIC OR APPROVED MANUFACTURER WILL BE ACCEPTABLE ONLY WHEN THE PRODUCT COMPLY WITH OR IS MODIFIED AS NECESSARY TO COMPLY WITH ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS.
 - C. COMMON ITEMS: WHERE MORE THAN ONE OF ANY SPECIFIC ITEM IS REQUIRED, ALL SHALL BE OF THE SAME TYPE AND MANUFACTURER.
 - D. CONDUIT TYPES: WHERE MORE THAN ONE OF ANY SPECIFIC ITEM IS REQUIRED, ALL SHALL BE OF THE SAME TYPE AND MANUFACTURER.
 - E. UL LISTING: ALL LISTED AND LABELED EQUIPMENT SHALL BE UNDERWRITERS LABORATORY (UL) LISTED AND LABELED, WHERE UL STANDARDS AND LISTINGS APPLY (UL LISTING SHALL BE ON EQUIPMENT).
- 2.2 RACEWAY SYSTEMS
 - A. RACEWAY SIZING: AS REQUIRED BY NEC, MINIMUM WITH OVERSIZED RACEWAYS AS INDICATED ON DRAWINGS. MINIMUM CONDUIT SIZE - 3/4" - HIGH, UNLESS INDICATED OTHERWISE.
 - B. RACEWAY TYPES: RIGID GALVANIZED STEEL CONDUIT ELECTRICAL METALLIC TUBING (EMT), UNLISTED AND LABELED, WHERE UL STANDARDS AND LISTINGS APPLY (UL LISTING SHALL BE ON EQUIPMENT).
 - C. FITTINGS: ALL RACEWAY FITTINGS (EXCEPT FOR RIGID NON-METALLIC CONDUIT TO BE STEEL OR MALLEABLE IRON, AND UL LISTED FOR THE INTENDED APPLICATION, EMT FITTING TO BE COMPRESSION TYPE).
 - D. OUTLET BOXES (SURFACE MOUNTED): CHROME PLATED CAST OR MALLEABLE IRON.
 - E. PULL AND JUNCTION BOXES AND WIREWAYS: USE AS INDICATED AND REQUIRED. JUNCTION BOXES FOR GENERAL (INDOOR) USE (FOR LOCATIONS) TO BE OF UNLISTED AND LABELED TYPE "F" OR "X" WITH 1/2" DEEP WITH SCRIBED COVER. WIREWAYS TO BE UNLISTED AND LABELED TYPE "X" WITH CONSTRUCTION WITH SCRIBED COVERS. FOR EXTENDED AND HAMP OR WET INDOOR LOCATIONS, USE BOXES AND WIREWAYS APPROVED FOR SUCH USE.
 - F. PIPE SLEEVES: RIGID STEEL CONDUIT OR IRON PIPE.
 - G. CONDUIT SEALS FOR CAST-IN-PLACE CONCRETE APPLICATIONS - ACCEPTABLE MANUFACTURERS: OSGEMET TYPE "FSK" THUNDERBOLT CORPORATION LINK SEAL WITH LINK SEAL WIRE, FOR CONCRETE AND PRE-CAST OPENING THUNDERBOLT CORP. LINK SEAL.
 - H. SWEETS: ALL SWEETS FOR COMMUNICATION EQUIPMENT OR INTO CONCRETE AND SHALL BE MIN. 24 RADIOS.
- 2.3 CONDUIT - 600 VOLT AND BELOW
 - A. GENERAL: SINGLE-CONDUCTOR 90% CONDUCTIVITY, ANNEALED, UNCOATED COPPER CONDUCTORS WITH 800-VOLT RATED TYPE "THUNDERBOLT" INSULATION.
 - B. CONNECTORS: NYLON BELT INSULATED METALLIC SERRATION CONNECTORS FOR #14 TO #10 AWG, AND BELT PRESSURE OR COMPRESSION TYPE LUGS AND CONNECTORS WITH INSULATING COVERS FOR #6 AWG AND LARGER.
- 2.4 HANGERS AND SUPPORTS
 - A. GENERAL: ALL HANGERS, SUPPORTS, FASTENERS AND HARDWARE SHALL BE UNLISTED AND LABELED OF EQUAL OR BETTER CORROSION RESISTANCE BY THE MANUFACTURER AND SHALL BE MANUFACTURED PRODUCTS DESIGNATED FOR THE APPLICATION.
 - B. TYPES - HANGERS, STRAPS, RISER SUPPORTS, CLAMPS, U-CHANNEL, THREADED BARS, ETC. AS INDICATED OR REQUIRED.
- 2.5 ELECTRICAL IDENTIFICATION
 - A. HANGERS, STRAPS, THREE-LAYER LAMINATED PLASTIC WITH MINIMUM 5/16" HIGH WHITE LETTERS OR LOGO IN BLACK BACKGROUND AND PANGLOSS FOR MECHANICAL FASTENING.
 - B. FASTENERS: SELF-TAPPING STAINLESS-STEEL SCREWS NUMBER 10-32.
 - C. UNDERGROUND MARKING TAPE: SIX-INCH WIDE POLYETHYLENE TAPE, PERMANENTLY BROWN COLORED WITH CONTINUOUS-PATTERNED LEGEND INDICATING GENERAL TYPE OF UNDERGROUND LINE BELOW AND CAUTION. COLORS AS FOLLOWS: 1) RED - ELECTRIC, 2) ORANGE - COMMUNICATIONS.
 - D. MARKING PENS: PERMANENT WATERPROOF, QUICK DRYING BLACK INK, WIRE MARKS VINYL OR VINYL-CLOTH SELF-ADHESIVE MARKING TAPE OR EQUIVALENT MARKING APPROPRIATE CIRCUIT NUMBER, ETC.

- 8. ALL WIRES SHALL BE COPPER, USE OF ALUMINUM CONDUCTORS WILL NOT BE PERMITTED. SEE ELECTRICAL PLANS FOR SIZING AND LOCATIONS. USE PROPER SIZE CONNECTORS PER LOCAL, STATE AND NATIONAL CODES.
- 9. CONDUIT OR WIREWAYS SHALL BE CONTINUOUS FROM TERMINATION TO TERMINATION WITHOUT SPLICES.
- 10. PROVIDE PULL BOXES WHERE SHOWN AND WHERE REQUIRED BY CODES AND UTILITY COMPANIES.
- 11. ALL CONDUIT RIGID SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT TO AVOID LOCATION CONFLICTS. CONTRACTORS SHALL VERIFY ALL LOCATIONS.
- 12. ALL WIRES SHALL BE TAGGED AT ALL PULL BOXES, J-BOXES, EQUIPMENT BOXES AND CABINETS WITH APPROVED PLASTIC TAGS.
- 13. ALL BREAKERS IN LOAD CENTERS SHALL BE IDENTIFIED WITH TYPE WRITTEN LABELS NEARLY PLACED ALONG SIDE OF THE BREAKER.
- 14. ALL GROUND BUS BARS SHALL BE A MINIMUM SIZE OF 1/4" X 3/4" UNLESS OTHERWISE NOTED AND SHALL BE TINED COPPER AND LARGE ENOUGH TO ACCOMMODATE THE REQUIRED NUMBER OF GROUNDING CONNECTIONS. THE MINIMUM SIZE OF GROUNDING BUS SHALL BE 1/2" THICK TO THE STRUCTURE TO WHICH THEY ARE FASTENED.
- 15. ANY PENETRATIONS THROUGH WALLS, CEILINGS, FLOORS, ROOFS OR ANY OTHER STRUCTURE SHALL BE MADE IN ACCORDANCE WITH THE MANUFACTURER'S SANDING ASSEMBLY. IF A FIRE RATING IS NOT REFERRED TO ON THE DRAWINGS, THEN THE CONTRACTOR SHALL ASSUME A 1-HOUR RATING.
- 16. THE MATERIALS AND EQUIPMENT INFORMATION ON THESE DRAWINGS IS BASED ON THE CURRENT CODES AND REGULATIONS. ANY CHANGES IN CODES OR REGULATIONS MAY OCCUR, AND THE CONTRACTOR SHALL VERIFY ALL ITEMS PRIOR TO PLACEMENT, AND MAKE ANY CORRECTIONS WITHOUT FURTHER COST TO CLIENT'S REPRESENTATIVE.
- 17. ALL UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 EPC. ALL SWEETS OR BENDS AND ABOVE-GROUND CONDUITS SHALL BE RIGID GALVANIZED STEEL OR PVC SCHEDULE 80. ALL CONDUITS NOT TERMINATING INTO A CLOSED AREA MUST BE SEALED TO PREVENT ENTRY OF ANY MOISTURE OR FOREIGN OBJECTS. ALL CONDUIT FITTERS TO INCLUDE: SLIP-TYPE EXPANSION JOINT.

- 1. THE CONTRACTOR SHALL VERIFY WITH CLIENT'S REPRESENTATIVE THAT ALL CONDUIT SYSTEMS, EQUIPMENT DEVICES, PANELS, LINES, TRAYS, BRIDGES, PULL BOXES, AND WIREWAYS ARE PROTECTED FROM PHYSICAL DAMAGE.
- 2. THE GROUNDING SYSTEM CONNECTIONS SHALL BE MADE WITH EXOTHERMIC WELDS AND/OR MECHANICAL TWO-POLAR COMPRESSION CONNECTORS AS INDICATED ON DRAWINGS. USE ONLY 316 STAINLESS STEEL SCREWS, BOLTS, WASHERS, AND NUTS FOR FASTENING.
- 3. CLEAN SURFACES THOROUGHLY BEFORE APPLYING GROUND LUGS OR CLAMPS. ALL SURFACES TO BE COATED WITH AN ANTI-OXIDANT COMPOUND TO PREVENT CORROSION. WHERE GALVANIZING IS REMOVED FROM METAL, IT SHALL BE PAINTED OR TOUCHED UP WITH COLORED GALVANIZING PAINT SUCH AS GLAVANOX OR EQUAL.
- 4. ALL CLAMPS, SLEEVES, AND SUPPORTS USED TO SUPPORT OR CHANNEL THE GROUNDING SYSTEM CONDUCTORS AND PVC CONDUITS SHALL BE PVC TYPE NON-CONDUCTIVE. DO NOT USE METAL BRACKETS OR SUPPORTS THAT WOULD FORM A COMPLETE RING AROUND ANY GROUNDING CONDUCTOR.
- 5. ALL GROUNDING CONNECTIONS SHALL BE COATED WITH 128 COPPER SHIELD ANTI-CORROSION AGENT. NO SUBSTITUTIONS ARE PERMITTED. VERIFY THE PRODUCT WITH CLIENT'S REPRESENTATIVE PRIOR TO USAGE.
- 6. GROUND THE ANTENNA BASES, FRAMES, CABLE TRAYS AND BARS, AND ANY OTHER METALLIC COMPONENTS WITH #2 GROUNDING CONDUCTORS, AND CONNECT TO THE SURFACE-MOUNTED GROUND BARS. CONNECTION DETAILS SHALL BE PERFORMED PER THE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
- 7. THE ANTENNA CABLES SHALL BE GROUND AT THE TOP AND BOTTOM OF THE VERTICAL RUN FOR LIGHTNING PROTECTION. THE ANTENNA CABLE SHIELD SHALL BE GROUND TO A COPPER GROUND BUS AT THE LOWEST POINT OF A VERTICAL ANTENNA. THE GROUNDING SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE ANTENNA MANUFACTURER'S INSTRUCTIONS AND SHALL BE KEPT AS STRAIGHT AND SHORT AS POSSIBLE. THE ANTENNA CABLE SHIELD SHALL BE GROUND JUST BEFORE ENTERING THE CELL CABINET. ANY ANTENNA CABLES OVER 200 FEET IN VERTICAL LENGTH SHALL ALSO BE EQUIPPED WITH ADDITIONAL GROUNDING AT MID-POINT.
- 8. THE CONTRACTOR, UPON COMPLETION OF THE GROUNDING SYSTEM, SHALL SCHEDULE A TEST OF THE SYSTEM. CLIENT'S REPRESENTATIVE REPRESENTATIVE WILL BE INFORMED 48 HOURS IN ADVANCE OF THE TEST.

B. RECEPTACLES: 20 AMP, 120V, NEMA 5-20BY DUTLEK TYPE FOR INDOOR MOUNTED USE STAINLESS STEEL COVER. FOR OUTDOOR OR WET LOCATION USE 30 AMP, 120V, NEMA 3R DUTLEK TYPE. PROVIDE 1/2" DIA. STAINLESS STEEL GROUND FAULT BENDING & 3/4" DIA. TIP FOR OUTDOOR OR WET LOCATION.
 C. AUXILIARY POWER (GENERATOR INLET): PROVIDE 3-POLE, 4W, 125/250 VOLT, 150 AMP, 1500 VA, 3000 RPM WITH MOTORING DISK AND CLOSURE PLUG.
 D. MINIMUM MOUNTING HEIGHT: 8 FT. MINIMUM.

2.13. CABLE TRAY

A. PROVIDE A COMPLETE CABLE TRAY SYSTEM WITH BENDS, FITTINGS, ACCESSORIES, ETC. AS REQUIRED.
 B. DESCRIPTION: ALUMINUM ALLOY CONSTRUCTION, TYPE: LADDER WITH 1/2" MAXIMUM SPACING, DEPTH: MINIMUM 6" WIDTH AS INDICATED ON DRAWINGS. FOOT MINIMUM, UNLESS OTHERWISE NOTED. LADDING: 100 ROUND/FOOT 3/8" MINIMUM, (SHALLER RADIIUS MAY BE PERMITTED IF APPROVED BY CLIENT'S REPRESENTATIVE). COVER: VENTILATED, 0.03 ALUMINUM, PROVIDE WHERE INDICATED.
 C. GROUNDING: BOND ALL TRAY SECTIONS USING #2 AWG BARE COPPER GROUND.
 D. ACCEPTABLE MANUFACTURERS: NEWTON INSTRUMENTS OR EQUIVALENT

2.14. SURGE SUPPRESSION

A. PRODUCTS MANUFACTURED BY ATLANTIC SCIENTIFIC.
 B. FURNISHED BY CASCADIA, INSTALLED BY CONTRACTOR

2.15. TRANSFORMER

A. GENERAL PURPOSE DRY-TYPE TRANSFORMERS SHALL BE ACCORDING TO NEMA 2000-1000 SERIES OR EQUIVALENT. PROVIDE 100% OVERLOAD PROTECTION FOR DE-ENERGIZED TAP-CHANGING OPERATION. INSULATE WITH CLASS 220 INSULATION AND RATE FOR 150 DEGREES C RISE AT CONTINUOUS OPERATION AT RATED VVA.
 B. TRANSFORMER SURFACE TEMPERATURE RISE TO BE LIMITED TO A MAXIMUM OF 65 DEGREES C.
 C. PROVIDE TERMINAL ENCLOSURE WITH COVER TO ACCOMMODATE PRIMARY AND SECONDARY CONNECTIONS AND ELECTRICAL SUPPLY RACEWAY AND TERMINAL CONNECTIONS.
 D. CUSHION TRANSFORMER COIL AND CORE ASSEMBLY FROM ENCLOSURE WITH VIBRATION ISOLATION SUPPORT.
 E. PAINT WITH LIGHT GREY ENAMEL.
 F. TRANSFORMER SHALL BE PAID MOUNTED (PROVIDE HOUSEKEEPING PAD ACCORDING TO WH'S RECOMMENDATIONS).

PART 3 - EXECUTION

3.1. GENERAL

A. THE INSTALLATION OF ALL WORK SHALL BE IN ACCORDANCE WITH THE INTENT OF THE CONTRACT DOCUMENTS.
 B. INSTALLATION REQUIREMENTS: ALL MATERIALS AND EQUIPMENT SHALL BE INSTALLED AS RECOMMENDED BY THE RESPECTIVE MANUFACTURER'S MECHANICAL EXPERIENCE AND SKILLED IN THEIR TRADE, IN A NEAT AND WORKMANLIKE MANNER IN ACCORDANCE WITH THE STANDARDS OF THE TRADE AND SO AS NOT TO VOID ANY WARRANTY OF UTILITY LISTING.
 C. ADMINISTRATION AND SUPERVISION: ALL WORK SHALL BE PERFORMED UNDER THE CONTRACTOR'S DIRECT SUPERVISION, USING SUFFICIENT AND QUALIFIED PERSONNEL AS NECESSARY TO COMPLETE THE WORK IN ACCORDANCE WITH THE PROJECT SCHEDULE. THE CONTRACTOR SHALL ASSIGN ONE OR MORE QUALIFIED SUPERVISORS TO SUPERVISE THE WORK. THE CONTRACTOR SHALL EXECUTE ORDERS AND INSTRUCTIONS, AND WHO SHALL COOPERATE WITH THE OTHER CONTRACTORS AND SUBCONTRACTORS. THE ENGINEER, AND CLIENT'S REPRESENTATIVE IN ALL MATTERS TO RESOLVE CONFLICTS AND AVOID DELAYS.
 D. MINIMUM MOUNTING HEIGHT: INSTALL EXPOSED RACEWAY AND ALL OTHER EQUIPMENT (EG. LIGHTING FIXTURES) WITH NOT LESS THAN 7'-6" CLEAR TO FINISHED FLOOR, UNLESS INDICATED OR APPROVED OTHERWISE AND EXCLUDING RACEWAY AND EQUIPMENT MOUNTED ON WALLS.
 E. DIMENSIONS AND CLEARANCES: FIELD MEASURE ALL DIMENSIONS AND CLEARANCES AFFECTING THE INSTALLATION OF ELECTRICAL WORK, IN RELATION TO OTHER TRADES, AS CONSTRUCTION PROGRESSES.
 F. EXAMINATION
 A. CONDITIONS VERIFICATION: EXAMINE THE AREAS AND CONDITIONS UNDER THE CONTRACT DOCUMENTS. VERIFY ALL CONDITIONS UNDER THE CONTRACT DOCUMENTS DETERMINAL TO THE PROPER AND TIMELY COMPLETION OF THE WORK. PROCEED UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

3.3. MOUNTING HEIGHTS

A. GENERAL: INDICATED HEIGHTS ARE MEASURED FROM THE CENTER OF THE DEVICE OUTLET BOX TO THE FINISHED FLOOR OR GRADE, UNLESS INDICATED OTHERWISE. REQUEST SPECIFICATIONS FOR MOUNTING HEIGHTS NOT INDICATED.
 B. DEVICES: SWITCHES - 48" A.F.F.; RECEPTACLES - 18" A.F.F.; THERMOSTATS - 48" A.F.F.

3.4. HOLES, SLEEVES, AND OPENINGS

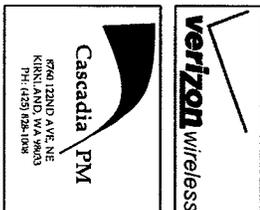
A. GENERAL: PROVIDE ALL HOLES, SLEEVES, AND OPENINGS REQUIRED FOR THE COMPLETION OF WORK, AND RESTORE ALL DAMAGED SURFACES TO MATCH ORIGINAL FINISHES. PROVIDE ALL DAMAGED SURFACES TO MATCH ORIGINAL FINISHES USING APPROVED PRECASTING SYSTEMS. PATCH CUTTING HOLES OR OPENINGS, OR INSTALLING SLEEVES, DO NOT CUT, DAMAGE OR DISTURB STRUCTURAL ELEMENTS OR REINFORCING STEEL, UNLESS APPROVED IN WRITING BY THE PROJECT STRUCTURAL ENGINEER.
 B. CONDUIT PENETRATIONS: SIZE CORE DRILLED HOLES SO THAT AN ANNULAR SPACE OF NOT LESS THAN 1/4" AND NOT MORE THAN 1/2" IS LEFT AROUND THE CONDUIT. WHEN OPENINGS ARE CUT IN LIEU OF CORE DRILLED, PROVIDE SLEEVE IN CONDUIT. SLEEVES TO PROVIDE AN ANNULAR SPACE OF NOT LESS THAN 1/4" AND NOT MORE THAN 1/2". PROVIDE SLEEVE WITH 1/2" DIA. PATCH PATCH AROUND SLEEVE TO MATCH SURROUNDING SURFACES.

3.5. RACEWAY SYSTEMS

A. UNLESS INDICATED OTHERWISE, USE RACEWAY TYPES AS FOLLOWS:
 1) OUTDOORS: EXPOSED, RIGID GALVANIZED STEEL CONDUIT AND SLUICHT RESISTANT SCHEDULE 40, WHERE NOT SUBJECT TO PHYSICAL DAMAGE.
 2) LIQUID TIGHT FLEXIBLE STEEL CONDUIT: USE WHERE FLEXIBLE STEEL CONDUIT CONNECTIONS ARE REQUIRED IN DRY, DAMP, WET, OR OILY LOCATIONS, FOR CONNECTIONS TO TRANSFORMERS, VIBRATING EQUIPMENT, EQUIPMENT REQUIRING VIBRATION ISOLATION SUPPORT, AND FOR FINAL CONNECTIONS TO ALL OTHER EQUIPMENT.
 3) HANGER AND SUPPORTS
 A. GENERAL: RIGIDLY SUPPORT AND SECURE ALL MATERIALS, RACEWAY AND EQUIPMENT TO BUILDING STRUCTURE USING HANGERS, SUPPORTS, AND FASTENERS SUITABLE FOR THE USE. MATERIALS AND LOADS ENCOUNTERED. PROVIDE ALL NECESSARY HARDWARE. PROVIDE CONDUIT SUPPORT AT MAXIMUM 3 FEET ON CENTER.
 B. OVERHEAD MOUNTING: ATTACH OVERHEAD MOUNTED EQUIPMENT TO STRUCTURAL FRAMEWORK OR SUPPORTING METAL FRAMEWORK. DO NOT MAKE ATTACHMENTS TO STEEL ROOFING, STEEL FLOORING OR CEILING MINERAL TILE.
 C. WALL MOUNTING: SUPPORT WALL MOUNTED EQUIPMENT BY MASONRY, CONCRETE BLOCK, METAL FRAMING OR SUPERFRAMING.
 D. EXTERIOR WALLS: MOUNT ALL EQUIPMENT LOCATED ON THE INTERIOR OR EXTERIOR OF BUILDING WALLS AT LEAST ONE INCH AWAY FROM WALL SURFACE USING SUITABLE FASTENERS.
 E. STRUCTURAL MEMBERS: DO NOT CUT, DRILL, OR WELD ANY STRUCTURAL MEMBER EXCEPT AS SPECIFICALLY APPROVED BY THE ENGINEER.
 F. INDEPENDENT SUPPORT: DO NOT SUPPORT MATERIALS OR EQUIPMENT FROM OTHER EQUIPMENT, PIPING, DUCTWORK OR SUPPORTS FOR SAME.
 G. TEMPORARY CONDITIONS: DO NOT ATTACH TO OR SUPPORT ELECTRICAL WORK FROM NEARBY WALLS OR PARTITIONS.
 H. RACEWAY SUPPORTS: RIGIDLY SUPPORT ALL RACEWAY WITH MAXIMUM SPACINGS PER NEC, AND SO AS TO PREVENT DISTORTION OF ALIGNMENT DURING INSTALLATION. RACEWAYS SHALL BE SUPPORTED BY HANGERS, SUPPORTS, AND STRAPS FOR INDIVIDUAL RACEWAYS. DO NOT USE PRECASTING SYSTEMS. PATCH CUTTING HOLES OR OPENINGS, OR INSTALLING SLEEVES, DO NOT CUT, DAMAGE OR DISTURB STRUCTURAL ELEMENTS OR REINFORCING STEEL, UNLESS APPROVED IN WRITING BY THE PROJECT STRUCTURAL ENGINEER.
 I. RACEWAY HANGERS AND SUPPORTS: PROVIDE HANGERS AND SUPPORTS FOR RACEWAYS TO BE INSTALLED IN CONFORMANCE WITH THE INTENT OF THE CONTRACT DOCUMENTS.
 J. ONE HOLE STRAPS SHALL NOT BE USED FOR CONDUITS LARGER THAN 3/4 INCH.

3.7. EQUIPMENT CONNECTIONS

A. VERIFICATION: OBTAIN AND REVIEW SHOP DRAWINGS, PRODUCT DATA AND MANUFACTURER'S INSTRUCTIONS FOR EQUIPMENT FURNISHED BY OTHERS. EXAMINE ACTUAL EQUIPMENT TO VERIFY PROPER CONNECTION LOCATIONS AND REQUIREMENTS.
 B. HANGING: PROVIDE ALL REQUIRED CONDUIT, BOXES, FITTINGS, WIRE, CONNECTORS AND MISCELLANEOUS ACCESSORIES, ETC., AS NECESSARY TO HANG AND MAKE THE FINAL CONNECTIONS TO ALL EQUIPMENT REQUIRING HANGING. PROVIDE ALL REQUIRED HANGING AND SUPPORTS. PATCH CUTTING HOLES OR OPENINGS, OR INSTALLING SLEEVES, DO NOT CUT, DAMAGE OR DISTURB STRUCTURAL ELEMENTS OR REINFORCING STEEL, UNLESS APPROVED IN WRITING BY THE PROJECT STRUCTURAL ENGINEER.
 C. CONNECTIONS: PROVIDE PROPERLY SIZED OVERHEAD AND SHORT CIRCUIT PROTECTION FOR ALL EQUIPMENT TERMINALS, WHETHER FURNISHED UNDER THIS CONTRACT OR BY OTHERS. VERIFY PRIOR CONNECTIONS WITH MANUFACTURER'S PUBLISHED DRAWINGS AND COMPLY WITH SAME. VERIFY THAT EQUIPMENT IS PROPERLY GROUNDING AND WIRING AND IDENTIFICATION, PRIOR TO PERFORMING SAME.
 D. CONTROL WIRING: PROVIDE ALL CONTROL WIRING TO REMOVE DEVICES OR EQUIPMENT AS INDICATED OR REQUIRED. MODIFY EQUIPMENT CONTROL WIRING, INSTALL OR DISCONNECT JUMPERS, ETC., AS REQUIRED.
 E. IDENTIFICATION
 A. GENERAL: LOCATE NUMBERED MARKING OR OTHER IDENTIFICATION MEANS ON OUTSIDE OF EQUIPMENT OR BOX FRONT COVERS, TERMINAL AND FEEDER AREAS WHEN IN MECHANICAL OR ELECTRICAL EQUIPMENT ROOMS OR OTHER UNFINISHED AREAS, AND ON INSIDE OF FRONT COVER WHEN IN FINISHED ROOMS / AREAS. USE CONTRACT DOCUMENT DESIGNATIONS FOR IDENTIFICATION UNLESS INDICATED OTHERWISE.
 B. NAMEPLATES: PROVIDE NAMEPLATES ENGRAVED WITH EQUIPMENT DESIGNATION FOR EACH SAFETY SWITCH, PANELBOARD, TRANSFORMER, MOTOR STARTER AND ALL OTHER EQUIPMENT, ETC.
 C. UNDERGROUND WARNING TAPE: DURING TRENCH BACKFILLING FOR EACH UNDERGROUND ELECTRICAL, TELEPHONE, SIGNAL, AND COMMUNICATIONS LINE, PROVIDE A CONTINUOUS UNDERGROUND WARNING TAPE LOCATED DIRECTLY ABOVE LINE, AT SIX TO EIGHT INCHES BELOW FINISHED GRADE.
 D. MARKING PEN LABELLING: MARK EACH JUNCTION AND PULL BOX INDICATING SOURCE DESIGNATION AND CIRCUIT NUMBERS FOR THE ENCLOSED CONDUITORS.
 E. LABEL, ALL WIRES AND CABLES AT EVERY POINT OF TERMINATION AND IN ALL PULL BOXES AND JUNCTION BOXES. FOR POWER CIRCUITS, APPLY WIRE TAGS INDICATING APPROPRIATE CIRCUIT OR FEEDER NUMBER TO EACH CONDUCTOR PRESENT IN DISTRIBUTION PANEL AND PANELBOARD GUTTERS, AND TO EACH CONDUCTOR IN PULL AND JUNCTION BOXES.
 F. LOAD CENTER CIRCUIT DIRECTORIES: AT COMPLETION OF PROJECT, ACCURATELY COMPLETE EACH PANELBOARD CIRCUIT DIRECTORY CARD, IDENTIFYING CONDUIT OR SHAPE OR SPACE FOR EACH CIRCUIT POLE AND CIRCUIT BREAKER. PROVIDE CIRCUIT DIRECTORY CARDS TO PANELBOARD, UPDATE THE EXISTING OR PROVIDE NEW CIRCUIT DIRECTORY CARD TO ACCURATELY REFLECT FINAL CONDITIONS.
 G. GROUNDING SYSTEM
 A. EXAMINATION: VERIFY THAT SURFACES ARE READY TO RECEIVE WORK AND THAT THE FIELD MEASUREMENTS ARE AS SHOWN ON SHOP DRAWINGS.
 B. INSTALLATION: INSTALL AS INDICATED ON THE DRAWINGS AND AS REQUIRED.
 1) GROUNDING NETWORK SYSTEM SHALL INCLUDE ELECTRICAL TRENCHING, BACKFILL AND COMPACTOR PER THIS SECTION, GROUNDING WIRE, GROUNDING CONDUCTORS AND ALL NECESSARY MATERIALS AND LABOR REQUIRED TO COMPLETE THE GROUNDING SYSTEM.
 2) ALL GROUND CONNECTIONS SHALL CONFORM TO IEEE STD 80 AND/OR UL 467 PROTECTED FROM CORROSION AS NOTED ON DWGS. USE GALVANIZED OR DOUBLE INSTALLED WIRE, AS INDICATED ON DWGS.
 3) ALL CLAMP CONNECTIONS SHALL BE MADE ACCESSIBLE FOR INSPECTION, USE ONLY WHERE SPECIFIED.
 4) ALL UNDERGROUND CONNECTIONS SHALL BE INSPECTED BY THE CLIENT'S REPRESENTATIVE'S REPRESENTATIVE PRIOR TO BACKFILLING.
 5) IF POLE IS ENCOUNTERED, GROUND ROD SHALL BE INSTALLED IN 2 INCH DIAMETER DRILLED HOLE TO THE UNFINISHED DEPTH. THE HOLE SHALL BE FILLED WITH APPLICATIONS OF MANGANESE SULFATE OR COPPER SULFATE.
 6) GROUNDING WIRE SHALL NOT BE LESS THAN 90° IN ANY LOCATION WITH A MINIMUM BEND RADIUS OF 8'.



001 PROJECT NO. 2304
 DRAWN BY: JH
 CHECKED BY: JH
 DATE: 04-12-10

NO.	DATE	BY	DESCRIPTION
01	04-12-10	JK	REVISED PER COMMENTS
02	04-26-10	JK	REVISED PER COMMENTS
03	04-26-10	JK	REVISED PER COMMENTS
04	04-26-10	JK	REVISED PER COMMENTS
05	04-12-10	JK	GENERATOR MOD.

PRELIMINARY
 SUBMITTAL

SITE NAME
 GLENDALE

SITE ADDRESS
 1305 N 8TH ST
 BEAVER CREEK, WA 98005
 PH: 425-999-103

SHEET TITLE
 GENERAL NOTES

SHEET NO.
 GN-3

- 7) PROVIDE CORROSION PROOFING PAINT ON SURFACES EXPOSED DURING INSTALLATION.
- 8) ALL BELOW GROUND CONNECTIONS SHALL BE CHOWFIELD. PROVIDE CORROSION PROTECTION TO CONNECTION AREA, IF INDICATED.
- 9) ALL ABOVE GROUND CONNECTIONS SHALL BE BOTTED CLAMP BURNOY. CONNECTIONS SHALL NOT BE USED FOR EXTERIOR GROUNDING UNLESS NOTED.
- 10) ALL GROUND CONNECTIONS TO THE GROUND BAR SHALL BE MADE WITH DOUBLE HOLE HYDRANULICALLY INBENTED LUGS, EXCEPT FOR TWO CABLES, AS SHOWN ON PLANS.
- 11) WHERE GROUND CONNECTIONS ARE MADE, THE CONTACT POINTS ARE TO BE CLEANED AND MADE FREE OF FOREIGN MATERIALS, SUCH AS PAINT AND CORROSION, TO ENSURE AN ADEQUATE BOND.
- 12) ALL GROUNDING AND BONDING INSTALLATIONS AND CONNECTIONS SHALL COMPLY WITH VERIZON WIRELESS SERVICES ELECTRICAL AND GROUNDING SPECIFICATIONS.
- 13) ALL MECHANICAL GROUNDING CONNECTIONS MADE THROUGHOUT THESE DRAWINGS SHALL BE MADE IN ACCORDANCE WITH THE VERIZON WIRELESS SERVICES ELECTRICAL AND GROUNDING SPECIFICATIONS. THESE ANTIOXIDATION COMPOUNDS, NO OTHER COMPOUND WILL BE ACCEPTED. COAT ALL WIRES BEFORE LUGGING, COAT ALL SURFACES BEFORE CONNECTING.
- C. FIELD QUALITY CONTROL - FIELD INSPECTION AND TESTING WILL BE PERFORMED AS REQUIRED.
- 1) THE CONTRACTOR SHALL VERIFY THAT THE SYSTEM IS EFFECTIVELY GROUNDING, MEETS NEC ARTICLE 250 REQUIREMENTS, AND IS ACCEPTABLE TO THE LOCAL UTILITY AND LOCAL AUTHORITY MAKING JURISDICTION.
- 2) THE CONTRACTOR SHALL MAKE ALL MEASUREMENTS REQUIRED TO TEST THE GROUNDING NETWORK SYSTEM. SYSTEM SHALL BE TESTED AT THE TIME OF INSTALLATION.
- 3) THE GROUNDING NETWORK SYSTEM TEST PROCEDURE SHALL COMPLY WITH NFPA 78 THREE POINT TECHNIQUE FOR GROUND RESISTANCE, EXCEPT AS MODIFIED HEREIN.
- 4) CONTRACTOR SHALL VERIFY THE ADEQUACY OF THE INSTALLED SYSTEM. CONTRACTOR SHALL CONDUCT "SITE RESISTANCE TO EARTH GROUNDING TEST" WITH INSTALLED OHMS.
- 5) RECORD GROUND RESISTANCE PER VERIZON WIRELESS COMPANY'S STANDARDS.
- 6) TEST SHALL BE WITNESSED BY CLIENT'S REPRESENTATIVE SHALL ACHIEVE A GROUND RESISTANCE OF LESS THAN 5 OHMS. TEST RESULTS SHALL BE SUBMITTED TO THE CLIENT'S REPRESENTATIVE.
- 7) SUBMIT 3 COPIES OF THE GROUND RESISTANCE TEST FORM TO THE CLIENT'S REPRESENTATIVE REPRESENTATIVE.
- 3.10. CHECKOUT, TESTING, AND ADJUSTING
 - A. CORRECTION/REPLACEMENT AFTER TESTING BY CONTRACTOR, CLIENT'S MATERIALS AND EQUIPMENT SHOULD TO BE DEFECTIVE OR UNABLE TO PERFORM AT DESIGN OR RATED CAPACITY.
 - B. POWER CONDUCTORS CONTRACTOR SHALL CONDUCT A CONTINUITY & POWER CABINET.
 - C. GROUNDING - IEEE FALL OF POTENTIAL TESTS; CONDUCT TEST WITH A RMC MODEL R8000 TESTER. THE METHOD OF USING TWO AUXILIARY GROUND RODS, AS AUXILIARY TEST RODS MUST BE SUFFICIENTLY FAR AWAY FROM THE RODS SO THAT THE REGIONS IN WHICH THEIR RESISTANCE IS LOCALIZED DO NOT OVERLAP.
- 3.11. SYSTEMS DEMONSTRATION
 - A. INSTRUCT CLIENT'S REPRESENTATIVE'S REPRESENTATIVES IN THE START-UP, OPERATION AND MAINTENANCE OF ALL ELECTRICAL SYSTEMS AND EQUIPMENT AS REQUESTED BY THE CLIENT'S REPRESENTATIVE REPRESENTATIVE.
- 3.12. CLEANING AND TOUCHUP PAINTING
 - A. GENERAL - PERIODICALLY REMOVE FROM THE PROJECT SITE ALL WASTE, GARBAGE AND CONSTRUCTION DEBRIS ACCUMULATED FROM CONSTRUCTION OPERATIONS. REMOVE ALL DEBRIS FROM THE PROJECT SITE PRIOR TO FINAL ACCEPTANCE. UNUSED CONSTRUCTION MATERIALS PRIOR TO FINAL ACCEPTANCE.
 - B. ELECTRICAL EQUIPMENT - REMOVE ALL DUST, OIL, GREASE, MORTAR, WIRE CUTTING DEBRIS, AND OTHER FOREIGN MATERIALS FROM THE INTERIOR AND EXTERIOR OF ALL ELECTRICAL EQUIPMENT. CLEAN AND POLISH ALL SURFACES. CLEAN ACCESSIBLE CURRENT CARRYING ELEMENTS AND INSULATORS PRIOR TO ENERGIZING.

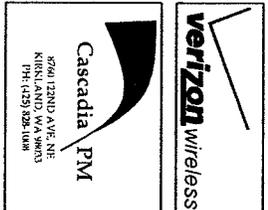
- 3.13. COAXIAL CABLE INSTALLATION
 - A. THE COAXIAL CABLE SIZE SHALL BE AS SHOWN ON DRAWINGS.
 - B. COAXIAL CABLE SUPPORTS.
 - 1) SUPPORT COAXIAL CABLES INSIDE MONOPOLES WITH "KELLET" GRIP TYPE PRODUCTS.
 - 2) SECURE AND SUPPORT COAXIAL CABLES ON OPEN W/VEQUIRES STRUCTURAL TOWERS.
 - 3) SECURE AND SUPPORT COAXIAL CABLES ONCE BRIDGES AS INDICATED ON DRAWINGS.
 - C. COAXIAL CABLE GROUNDING.
 - 1) THE COAXIAL CABLES SHALL BE GROUND TO BUS BARS AT THE ANTENNAS USING THE GROUNDING KITS AS SPECIFIED ON THE DRAWINGS.
 - 2) THE COAXIAL CABLES SHALL BE GROUND TO A BUS BAR AT THE BOTTOM OF THE TOWER OR MONOPOLE USING THE GROUNDING KITS SPECIFIED ON THE DRAWINGS.
 - 3) THE COAXIAL CABLES SHALL BE GROUND TO A BUS BAR AT THE BULKHEADS USING THE GROUNDING KITS AS SPECIFIED ON THE DRAWINGS.
- 3.14. TELEPHONE SERVICE
 - A. GENERAL - ARRANGE WITH THE UTILITY COMPANY AND VERIZON WIRELESS FOR A TIMELY INSTALLATION OF THE T-1 SERVICE. COMPLY WITH ALL REQUIREMENTS OF THE UTILITY COMPANY.
 - B. CLIENT'S REPRESENTATIVE WILL ORDER THE T-1 SERVICE.
 - C. CONTRACTOR WILL ARRANGE FOR T-1 SERVICE INSTALLATION AND PAY FOR ASSOCIATED UTILITY CHARGES.
- 3.15. ELECTRICAL SERVICE
 - A. GENERAL - ARRANGE WITH THE UTILITY COMPANY AND VERIZON WIRELESS SERVICES FOR THE TIMELY INSTALLATION OF THE T-1 SERVICE. COMPLY WITH ALL REQUIREMENTS OF THE UTILITY COMPANY.
 - B. CLIENT'S REPRESENTATIVE WILL ORDER THE ELECTRIC SERVICE.
 - C. CONTRACTOR WILL ARRANGE FOR ELECTRIC SERVICE INSTALLATION AND PAY FOR ASSOCIATED UTILITY CHARGES.
 - D. ARRANGE FOR AN INSPECTION OF THE ELECTRICAL SERVICE BY THE AUTHORITY HAVING JURISDICTION. OBTAIN A CERTIFICATE OF INSPECTION FROM THE AUTHORITY OF CERTIFICATE TO VERIZON WIRELESS AND A COPY TO THE UTILITY COMPANY.
 - E. COORDINATE METER SOCKET REQUIREMENTS WITH VERIZON WIRELESS SERVICES AND ELECTRIC UTILITY.
 - F. GROUNDING - PROVIDE GROUNDING ELECTRODE SYSTEM FOR THE SERVICE, PER THE NEC, PER UTILITY COMPANY REQUIREMENTS, AND AS INDICATED.
 - G. SHORT CIRCUIT RATINGS: PROVIDE EQUIPMENT WITH HIGHER FAULT CURRENT RATINGS AS NEEDED TO MATCH UTILITY COMPANY AVAILABLE FAULT CURRENT.

PART 4 - SPECIAL INSPECTION

A. THIRD PARTY SPECIAL INSPECTION SHALL BE REQUIRED FOR THE FOLLOWING IN ACCORDANCE WITH SECTION 1704 OF THE 2006 IBC:

REQUIRED INSPECTION OF STEEL CONSTRUCTION (IBC TABLE 1704.3)

INSPECTION	CONTINUOUS	PERIODIC	REFERENCE STANDARD	IBC REFERENCE
5) INSPECTION OF WELDING A. STRUCTURAL STEEL	-	-		
4) SINGLE PASS FILET WELDS 3/16" (WELD FLUSH MOUNTS TO NEW POLE)	-	X	AMS D1.1	1704.2.1



GEN PROJECT ID NO: 2026
 DRAWN BY: MURKIN
 CHECKED BY: JP

PRELIMINARY

NO.	DATE	INIT.	DESCRIPTION
01	03-24-10	EKL	CD REVISIONS
02	03-24-10	EX	REV PER COMMENTS
03	03-28-10	MR	REV PER COMMENTS
04	04-26-10	KN	REV CD REVIEW
05	04-13-10	KN	GENERAL ON HOLD

SUBMITTAL

NO.	DATE	DOC	DESCRIPTION
1	08-16-10	KN	RFI COMMENTS
2	08-16-10	KN	RFI COMMENTS

SITE NO.

SITE NAME
 GLENDALE

SITE ADDRESS
 13435 NE 87TH ST
 BELLEVUE, WA 98005
 APN 342509103

SHEET TITLE
 GENERAL NOTES

SHEET NO.
 GN-4

Chamberlain
9/30/10

City of Bellevue Submittal Requirements 27a

ENVIRONMENTAL CHECKLIST

4/18/02

If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call the Permit Center (425-452-6864) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Our TTY number is 425-452-4636.

BACKGROUND INFORMATION

Property Owner: Shirley L. Wegner

Proponent: Verizon Wireless

Contact Person: Bill Powell, Cascadia PM
(If different from the owner. All questions and correspondence will be directed to the individual listed.)

Address: 8760 122nd Ave NE, Kirkland, WA 98033

Phone: 253-225-5870

Proposal Title: Verizon SEA Glendale

Proposal Location: 13655 NE 8th Street, Bellevue, WA
(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: Wireless telecommunications facility on a replacement light structure. Equipment cabinets beneath the existing commercial building.
- 2. Acreage of site: Approx. 0.27 acres
- 3. Number of dwelling units/buildings to be demolished: 0
- 4. Number of dwelling units/buildings to be constructed: 0
- 5. Square footage of buildings to be demolished: 0
- 6. Square footage of buildings to be constructed: 0
- 7. Quantity of earth movement (in cubic yards): <10
- 8. Proposed land use: Wireless facility
- 9. Design features, including building height, number of stories and proposed exterior materials: 60' tall light standard with 6 panel antennas. The exterior of the pole to match the existing pole finish. The equipment cabinets
- 10. Other will be screened by a wooden fence.

Received
JUL 19 2010
Permit Processing

Existing light will be reattached @ 35' ht.

Estimated date of completion of the proposal or timing of phasing: Construction planned for 3rd quarter 2010

Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain. No current plans.

List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal. None.

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. Administrative Conditional Use permit, Wireless Communications Facility permit, filed for in April, 2010.

CD permit submitted

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

CD permit

Shoreline Management Permit
Site plan

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)? 3%

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.

Not known. The site is predominantly paved.

✓

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
There is a very small retaining wall along 8th Ave. No other indications of unstable soils.
- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.
The foundation of the new light pole will require a drilled hole for the foundation. The cables will require a narrow trench to bury the conduit.
- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.
Erosion is unlikely to occur. There will be very little disturbed soil.
- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?
No change to the impervious surface area will result. The site is currently approximately 80% impervious surface.
- h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:
None planned.

*Erosion control
per CC-inspector
BCC 23.76*

*Erosion control
per BCC 23.76*

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.
Limited construction traffic will result for approximately 2 weeks.
No emissions will result once completed.
- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.
No.
- c. Proposed measures to reduce or control emissions or other impacts to the air, if any:
None.

*Dust during construction
activities.
Dust suppressant measures
per BCC 23.76*

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.
None known.

- (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.

N/A

- (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.

N/A

- (4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

No.

- (5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

No.

- (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.

No.

b. Ground

- (1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description.

No.

- (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.

None.

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.

The current water flow patterns will not change. Storm water drains are currently located in the parking lot and these will not change.

- (2) Could waste materials enter ground or surface waters? If so, generally describe.
No.

- d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:
None planned.

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?

A small amount of landscaping will be removed to place the new light pole.

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

None known.

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

None planned.

Existing vegetation adjacent to the office building to screen ground-mounted equipment.

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:

Small animals & birds typical of suburban areas

- b. List any threatened or endangered species known to be on or near the site.
None known.
- c. Is the site part of a migration route? If so, explain.
Not known.
- d. Proposed measures to preserve or enhance wildlife, if any:
None planned.

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.
Electricity will be needed to power the radio equipment.
- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.
No. 8th Avenue is to the north of the proposed pole.
- 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:
None planned.

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.
No.

(1) Describe special emergency services that might be required.
None needed.

(2) Proposed measures to reduce or control environmental health hazards, if any.
None planned.

*RF regulated by Federal
regulations. RF letter by
RF engineer (in file).*



b. Noise

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

No noise will affect the project.

- (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.

A small amount of noise from the HVAC equipment is all that will result. This will be beneath the limits required by the land-use code.

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

None.

per BCC 9.18
per BCC 9.18

8. Land and Shoreline Use

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

Multi-family residential and light commercial.

office w/ adjacent MF units

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

No.

- c. Describe any structures on the site.

3-story commercial office building.

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

No.

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

O (Office)

O/Transition

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

Office

- 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.

No.

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

No change will result. The current building has offices for approximately 20-30 people.

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

None.

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

None planned.



- i. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
The facility will meet the city zoning requirements for siting and design of wireless facilities. The antennas and pole will match the current design and finish. The equipment will be screened from view. ✓

9. Housing

- a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
None.
- b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
None.
- c. Proposed measures to reduce or control housing impacts, if any:
None proposed.

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?
The pole will be 60' tall with an aggregate finish.
- b. What views in the immediate vicinity would be altered or obstructed?
No view impacts will result.
- c. Proposed measures to reduce or control aesthetic impacts, if any:
The height has been kept to a minimum and the antennas are mounted as closely as possible to the pole. The finish of the pole will match the area light poles.

Steel pole

11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?
The pole will have a street light matching the current illumination pattern of the street light it is replacing.
- b. Could light or glare from the finished project be a safety hazard or interfere with views?
No.

Existing vegetation + new wood fence to provide screening per LUC 20.20.1955 See letter in file from RF engineer re: minimum necessary height.

✓

- c. What existing off-site sources of light or glare may affect your proposal?
None.
- d. Proposed measures to reduce or control light or glare impacts, if any:
None.

*Must meet Transp Dept
neg to replace
existing light &
proposed lighting
meet 5/15.
BCC 14.30*

12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?
None.
- b. Would the proposed project displace any existing recreational uses? If so, describe.
No.
- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:
None proposed.

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.
None known.
- b. Generally describe any landmarks or evidence of historic, archeological, scientific, or cultural importance known to be on or next to the site.
None known.
- c. Proposed measures to reduce or control impacts, if any:
None proposed.

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.
The site is currently served by NE 8th Street. No change to this access.
- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?
Yes. The bus stop is on the front of the parcel.
- c. How many parking spaces would be completed project have? How many would the project eliminate?
The proposed facility is unmanned and no change to the existing parking is proposed.
- 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).
No.
- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.
The project will not impact transportation.



- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.
The proposed facility is unmanned. Approximately one vehicular visit per month is anticipated.
- g. Proposed measures to reduce or control transportation impacts, if any:
None proposed.

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 proposed.

16. Utilities

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.
- 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.
Additional power and telephone service is required to be provided by Puget Sound Energy and Qwest, respectively. The cables will be run underground from the nearest transformer or point of connection.

Proposal will provide improved cellular phone service via new Verizon antennas

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..... *[Handwritten Signature]*

Date Submitted..... June 3, 2010



6/2/2010

13655 NE 8th Street, Bellevue, wa - G...

Google maps

Address 13655 NE 8th St
Bellevue, WA 98005

Notes Verizon SEA Glendale

