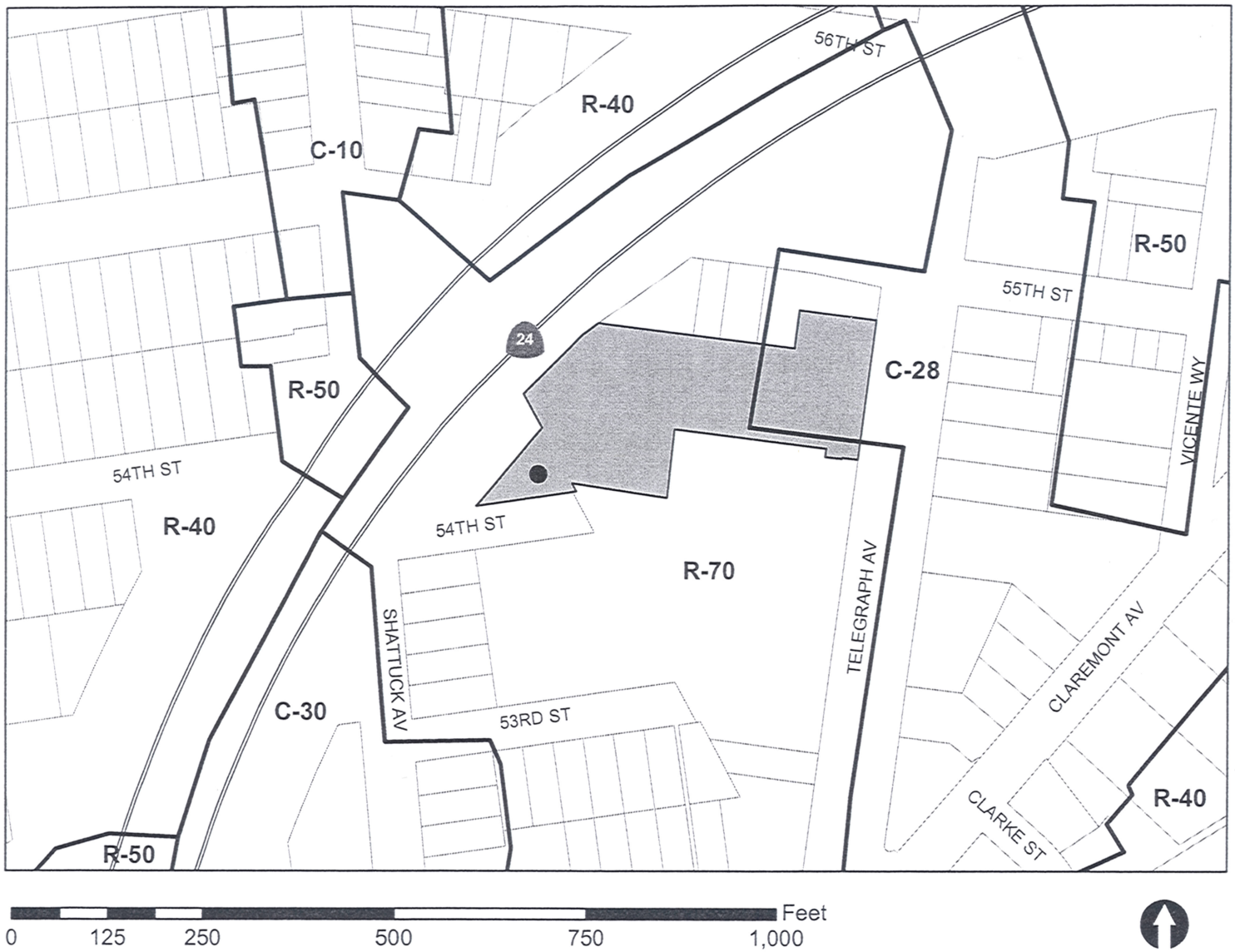
1. **Location:** **5427 Telegraph Ave. (APN: 014-1221-003-07)**
Proposal: To collocate 6 small Radio Remote Unit (RRU's) antennas and to replace 6 antenna panels on an existing 76-ft. high steel Monopole, including the installation of a ground-mounted equipment cabinet located inside the existing equipment shelter.
Contact Person: AT&T, Jonathan Fong
Phone Number: (916) 717-4427
Owner: Telegraph Business Properties
Case File Number: **CMD10-267**
Planning Permits Required: Major Conditional Use Permit to operate a Monopole Telecommunications facility in a residential zone; Regular Design Review to install a Telecommunications Facility
General Plan: Urban Residential & Community Commercial
Zoning: R-70 High Density Residential Zone & C-28 Commercial Shopping District Zone
Environmental Determination: Exempt, Section 15301(e) of the State CEQA Guidelines: Existing Facilities (additions to existing structures); Section 15183 of the State CEQA Guidelines: Projects consistent with a Community plan, General Plan or Zoning
Historic Status: PDHP (Potential Designated Historic Property); Survey Rating: B+3
Service Delivery District: 2
City Council District: 1
Date Filed: October 18, 2010 (revised plans submitted on March 23, 2011)
Action to be Taken: Decision based on staff report
Finality of Decision: *Appealable to City Council within 10 calendar days*
For Further Information: Contact case Planner **Mike Rivera** at **(510) 238-6417,** or by email at mrivera@oaklandnet.com

PROJECT SUMMARY

The proposed development is to collocate six (6) small Radio Remote Unit (RRU) antennas, replace six (6) antenna panels on an existing steel Monopole and install one concealed equipment cabinet. The proposal is located next to a commercial building and near the end of 54th Street in the Temescal District. The proposal is considered a Monopole Telecommunication Facility because it supports wireless telecommunications antennas with a monopolar structure erected on the ground. The proposal is located on a 1.71 acre parcel and contains a commercial building, which is accessed from Telegraph Avenue, 55th Street and 54th Street. The proposed development is located in the R-70 High Density Residential Zone and is adjacent to the C-28 Commercial Shopping District Zone. The site of the proposed development is classified Urban Residential and Community Commercial by the Oakland General Plan. Per Section 17.134.020(A)(3)(i) of the Planning Code, a Major Conditional Use Permit is required for a Telecommunications Facility located in a residential zone. The Planning Commission is the decision-making body for the proposed development. Based on the proposed plans, staff recommends approval subject to the required findings **(See Attachment A)** and conditions of approval **(See Attachment B)**.

CITY OF OAKLAND PLANNING COMMISSION



Case File: CMD10-267
Applicant: AT&T, Jonathan Fong
Address: 5427 Telegraph Avenue
Zone: R-70, C-28

PROPERTY DESCRIPTION

The property is located at 5427 Telegraph Avenue on a 1.71 acre private parcel which contains a large two-story commercial building, an open private parking lot, a billboard and a Monopole facility, which was approved under a Minor Conditional Use Permit (C90-79) by the Planning Director on August 31, 1990. The property is accessed from Telegraph Avenue, 55th Street and 54th Street. The property is bounded to the north by commercial and residential building, to the northwest by Highway-24, to the south by a multi-family residential building and to the east across Telegraph Avenue by commercial buildings.

PROJECT DESCRIPTION

The applicant, AT&T, proposes to collocate six (6) small Radio Remote Unit (RRU) antenna panels, replace six (6) existing antenna panels and remove the existing 'unused' antenna mounting arm. The existing steel Monopole is distanced about five feet from the southwest corner of the two-story commercial building and it is surrounded by an 8 feet high chain-linked fence. The proposal also includes the installation of one equipment cabinet inside an existing AT&T equipment shelter located near the southwest corner of the parcel.

The applicant proposes to collocate six (6) small new RRU antenna panels below the existing nine (9) directional antenna panels. The new RRU antennas will be flush-mounted to the west, north and east sides and will be painted to match the monopole. The purpose of the RRU antennas is to provide support to the main antenna panels by transmitting data to the ground-mounted equipment cabinets. The purpose of the existing and replacement of the directional antenna panels is to transmit and receive signals. The replacement of the existing antenna panels will be of the same dimension and will prevent the need to add additional new antenna panels.

The applicant also proposes to replace six (6) of the nine (9) existing antenna panels, which are divided into "Sectors" A, B and C. Each Sector contains three (3) antenna panels that are supported by steel mounting arms. The replacement of the six (6) antenna panels is located in Sectors: A1 and A3, B1 and B3, and C1 and C3 and will be painted to match the monopole. The purpose for the antenna replacement is to improve needed services to users in the immediate neighborhood areas, major corridors along Telegraph Avenue, Shattuck Avenue and Claremont Avenue including to users traveling along Highway-24, between 40th Street and College Avenue. The applicant does not propose to alter the configuration of the supporting antenna mounting arms or increase the height of the monopole. However, the applicant proposes to remove the unused antenna mounting arm located east. **(See Attachment A)**

The proposal includes the installation of one (1) equipment cabinet located inside the existing AT&T equipment shelter located on the southwest corner of the parcel. This equipment shelter is distanced about 84 feet from the monopole. The existing nine (9) feet high, 260 square feet in size equipment shelter is surrounded by an existing 8 feet high chain-linked fence. The new fiber power conduits from the main antennas will be located inside the monopole, and will be routed and placed underground and connected to the new cabinet equipment located inside the existing storage shed. The proposal also includes photo simulation of the proposal viewed from Telegraph Avenue, 54th Street and 55th Street. The proposal also includes the planting of two (2) 15-gallon City street trees to the north of 54th Street along the frontage of the subject property. In addition, the applicant proposes to plant 5-gallon Potato flowering vines along the front side of the chain-link fence on the southerly property line.
(See Attachment E)

GENERAL PLAN ANALYSIS

The property is designated by the Oakland General Plan as a Urban Residential and Community Commercial Land Use Classifications. The intent of the Urban Residential create, maintain and enhance areas of the City that are appropriate for multi-unit, mid-rise or high-rise residential structures in locations that have great access to transportation and other services. The desired character and uses are primary future uses for residential, mixed-use building that contain ground-floor commercial uses and public facilities of compatible character. The intent of the Community Commercial Classification is to also identify, create, maintain and enhance areas suitable for a wide variety of commercial and institutional operations along the City's major corridors and in shopping districts or centers. Staff believes that the proposal meets the intent of the designated land use classifications for providing needed and improved telecommunication services thus making living and working at the same location feasible and desirable. The General Plan sets goals and objectives to minimize conflicts between residential and non-residential. The proposed telecommunication facility would enhance essential/basic services to the surrounding neighborhoods.

Objective N5 states:
"The mix of residential and non-residential activities in Oakland neighborhoods is one factor making these areas so dynamic and distinctive. This intermixing of activities is likely to continue as telecommunications and improved technology make living and working at the same location increasingly feasible and desirable..."

The proposal to operate a telecommunication facility provides services that are in character with the surrounding residential activities. Though the operation of wireless communication facility is a non-residential activity, the use of enhanced communication network such as voice, text, digital data networking and wireless computer connectivity provides personal and professional services. The proposal will serve the needs of surrounding residents, users traveling along highway-24, BART commuters including emergency personnel as the need for quality and reliable wireless and internet use is in demand.

ZONING ANALYSIS

The property is located in the R-70 High Density Residential Zone, and in the C-28 Commercial Shopping District. The intent of the R-70 Zone is to create, preserve, and enhance areas of apartment living at high densities in desirable settings, and is typically appropriate to areas having good accessibility to transportation routes and major shopping and community centers. The intent of the C-28 Zone is to create, preserve, and enhance major boulevards of medium-scale retail establishments featuring some specified higher density nodes in attractive settings oriented to pedestrian comparison shopping, and to encourage mixed-use residential and nonresidential developments, and is typically appropriate along major thoroughfares near residential communities.

The development proposal is located in the R-70 Zone area adjacent to a large two-story brick commercial building that is occupied by a mix of commercial businesses, and it is located in the same property. The proposal is to collocate six (6) new small RRU (Radio Remote Unit) antennas and replace six (6) existing directional antenna panels on the existing 76 feet high steel Monopole.

Sections 17.28.080(B) & 17.134.020(A)(3)(i) of the Planning Code, state that a proposal for a Telecommunication Facility (Monopole) in the R-70 Zone requires a Major Conditional Use Permit. Section 17.10.900 of the Planning Code for Telecommunication facility states that a Monopole Facility is a wireless communication facility that supports wireless communications antennas with a monopolar structure erected on the ground. The proposed development is to collocate six (6) new small Radio Remote Unit antennas to be located under the existing antenna panels. The development also includes the replacement of

six (6) directional antenna panels from the existing nine (9) antenna panels located on the top of the existing 76 feet high steel monopole. The reason for the required Major Conditional Use Permit is to analyze the operating characteristics and the potential adverse effects of the proposal on the surrounding areas.

Section 17.136.040 of the Planning Code, states that a development proposal for a Telecommunication Monopole Facility requires Regular Design Review. The purpose for the Regular Design Review is to analyze development that requires special design treatment and consideration of relationships to the existing physical surroundings. The criteria for Conditional Use Permit and Regular Design Review require the making of specific findings to support the proposal. Staff has analyzed the required Conditional Use Permit and Regular Design Review findings and can justify approval of the proposed project for a Telecommunication Facility. **See Findings for approval, Attachment "A"**

ENVIRONMENTAL DETERMINATION

The California Environmental Quality Act (CEQA) Guidelines lists the projects that qualify as categorical exemptions from environmental review. The development proposal is categorically exempt from the environmental review requirements pursuant to Section 15301(e) for additions to existing structures and Section 15183 for projects consistent with a Community Plan, General Plan or Zoning.

HISTORIC PRESERVATION

Policy 3.5 of the Historic Preservation Element of the Oakland General Plan states that any additions or alterations to Heritage Properties or Potentially Designated Historic Properties that requires discretionary City permits, the City needs to make one of the following findings:

1) The design matches or is compatible with, but not necessarily identical to, the properties existing or historical design; or
2) The proposed design comprehensively modifies and is at least equal in quality to the existing design and is compatible with the neighborhood; or
3) The existing design is undistinguished and does not warrant retention and the proposed design is compatible with the character of the neighborhood.

The proposed development is located adjacent to a commercial building that it is considered a Potential Designated Historic Property with a Survey Rating of B+3 Major Importance. The proposed application was referred to the City Historic Preservation Planner for review. The Historic Planner finds the potential impact of the proposal insignificant and supports the project because the collocation and size of the new six Radio Remote Unit antennas on the existing monopole are small and the replacement of the six existing antenna panels are similar and will not significantly affect the historic design of the building. Furthermore, the property has historically been used as an industrial site and remnants of that use can be seen on the rear of the property where the existing monopole is located. Therefore, the proposal does not decrease the quality of the historic building because the most prominent design features of the brick building are located to the front along Telegraph Ave (east) and to the side (north).

KEY ISSUES AND IMPACTS

1. Conditional Use Permit and Regular Design Review Findings

Section 17.134.020(A)(3)(i) of the Oakland Planning Code states that the operation of a Telecommunication Facility (Monopoles) within a residential zone area requires a Major Conditional Use Permit (CUP). To make the required findings for a CUP, the development proposal is subject to the General Use Permit Criteria found in Sections 17.134.050 and 17.128.080(C). Furthermore, the

proposal is subject to the Regular Design Review Criteria found in Sections 17.136.040 (A)(10) and 17.136.050 (B) including the specific Design Review Criteria for Monopole Facilities found in Section 17.128.080(B). Staff will evaluate the required findings within the body of this report. **(See Attachment A)**

2. **Site Location Preferences**

Section 17.128.110 of the Telecommunication Regulations states that new wireless facilities shall generally be located on the following properties or facilities in order of preference:

A. Collocated on an existing structure or facility with existing wireless antennas.
B. City owned properties or other public or quasi-public facilities.
C. Existing commercial or industrial structures in non-residential zones.
D. Existing commercial or industrial structures in residential zones
E. Other non-residential uses in residential zones.
F. Residential uses in non-residential zones.
G. Residential uses in residential zones.

The Telecommunication regulation above states that wireless facility proposals locating on an A, B or C ranked preference, and these areas do not require a site alternative analysis. Staff finds that the proposed development fits with the first site location preference (A) because the new and replacement antennas will collocate on an existing Telecommunication facility (Monopole) that contains existing antenna panels by the same wireless carrier. Staff finds that the development proposal to install six (6) small Radio Remote Unit (RRU'S) antennas are flush with the pole and painted to match. Staff also finds that the replacement of the existing six (6) directional antenna panels are keeping with the design of the facility and will be painted to match. Overall, the installation and replacement of the antennas located near the top of the 76 feet high monopole meets the site location preference. Therefore, staff finds that a site alternative analysis is not required.

3. **Site Design Preferences**

Section 17.128.120 of the Telecommunication Regulations states that new wireless facilities shall generally be designed in the following order of preference:

A. Building or structure mounted antennas concealed from view.
B. Building or structure mounted antennas set back from roof edge, not visible from public right-of-way.
C. Building or structure mounted antennas below roof line (façade mount, pole mount) visible from public right-of-way, painted to match existing structure.
D. Building or structure mounted antennas above roof line visible from public right-of-way.
E. Monopoles.
F. Towers.

This regulation states that facilities designed to meet A or B ranked preference, do not require a site design alternative analysis. Facilities designed to meet C through F ranked preference, inclusive, must submit a site design alternative analysis. A site design alternative analysis should consist minimum written evidence indicating why each higher preference design alternative can not be used. The written evidence should indicate if the reason an alternative site was rejected due to technical or other structural impediments.

The applicant submitted a site alternative analysis listing four different site locations and the reasons why these locations could not be used for the proposed project. The design alternative analysis listed four 'Candidate' property sites as follows (**See Attachment F)**

1) **Candidate A**: 744 52nd Street (Oakland Children's Hospital)
This site is distanced about 0.27 miles from the proposed site. The applicant states that due to roof location and volume of wireless uses in the area this site provides mainly services south of Higway-24 and north to the immediate neighborhoods.

2) **Candidate B**: 479 45th Street (AT&T's Two-story commercial building)
This site is distanced about 0.45 miles from the proposed site. The applicant indicates that due to the location of the buildings between Candidate B and the project site (5427 Telegraph Ave), adequate coverage cannot be provided alone.

3) **Candidate C**: 5835 College Avenue (Three-story commercial building)
This site is distanced about 0.76 miles from the proposed site. The applicant states that due to the concentration of existing buildings and the high volume of wireless traffic this site would not provide the intended coverage in the proposed area.

4) **Candidate D**: 5634 College Avenue (Three-story mixed-use building)
This site is distanced about 0.76 miles from the proposed site. The applicant indicates that due to the location of the Highway-24 and BART this site can not provide the required service in the proposed area.

Staff concurs with the applicant's alternative site design analysis and can support the installation of the proposed telecommunication facilities as described in Site Design Preference (E). Staff finds the collocation of the new antennas takes advantage of an existing Telecommunication facility (Monopole) that was approved by the City Planning Division under Conditional Use Permit application: C90-79; and it has been in operation since 1990. Furthermore, staff finds that the location of the proposed antennas will achieve the designated wireless coverage intended for that stretch of Highway-24, the major street corridors and surrounding properties. Although the existing Monopole can be seen from some distant public view areas, staff finds that the new small RRU antennas located under the existing antenna panels will be flush with the pole, painted to match and the new conduits will be routed inside the steel monopole thus minimizing its visibility from street views.

4. Radio Frequency Emissions Standards

Planning Code Section 17.128.130 of the Telecommunications Regulations, requires the applicant to submit the following verifications:

A. With the initial application submittal, a Radio Frequency (RF) emissions report shall be prepared by a licensed professional engineer or other expert, indicating that the proposed site will operate within the current acceptable thresholds as established by the Federal government or any such agency who may be subsequently authorized to established such standards.
B. Prior to commencement of construction, a RF emissions report indicating the baseline RF emissions condition at the proposed site.
C. Prior to final building permit sign off, an RF emissions report indicating that the site is actually operating within the acceptable thresholds as established by the Federal government or any such agency who may be subsequently authorized to establish such standards.

The proposal includes a Radio Frequency (RF) Emissions report prepared by EBI Consulting, dated September 24, 2010.**(See Attachment D)**The project engineer, Herbert J. Stockinger, evaluated the project and determined that the proposal to operate six small Radio Remote Unit (RRU's) antenna and replace six existing antenna panels will comply with the set standards for limiting public exposure to radio frequency energy and will not cause significant impacts on the environment. In order to confirm that the applicant meets the standards of Section 17.128.130 of the Planning Code, staff recommends a condition of approval that requires the applicant to submit a final Radio Frequency emissions report prior to the issuance of a final building permit stating that the facility is operating within the acceptable thresholds as established by the Federal Communication Commission. **See Conditions of Approval #16**

CONCLUSION

The proposed development to install six (6) small Radio Remote Unit antennas and replace six (6) directional antenna panels on an existing 76 feet high steel Monopole facility is a compatible use to the area because it improves access to telecommunication services and internet use to the general public, without creating impacts to the environment. Staff finds the installation of the new antennas and replacement of the existing antenna panels will not create a significant visual impact to the area because the project is adequately distanced from property lines, neighboring buildings and public streets. In addition, the project is designed to be less conspicuous from public view because the new small antennas are flush with the steel monopole and painted to match; and the addition of new city street trees and colorful vines to the north of 54th Street and along the southerly property line will be improvement to the site. The proposal also complies with the regulations set by the Federal Communication Commission. Therefore, staff determines the application meets the required findings for Conditional Use Permit and Design Review **(See Attachment A)**, and recommends approval of the application to the Planning Commission subject to the standards and specific project Conditions of Approval **(See Attachment B)**.

RECOMMENDATIONS

1. Affirm staff's environmental determination.

2. Approve Major Conditional Use Permit and Regular Design Review application CMD10-267 subject to the attached Findings and Conditions of Approval.

Prepared by:

Mike Rivera
Planner II

Approved by:

for

Scott Miller
Zoning Manager

Approved for forwarding to the
City Planning Commission:

Eric Angstadt, Deputy Director
Community & Economic Development Agency

ATTACHMENTS

A. Project Findings
B. Project Conditions of Approval
C. Revised Design Plans, submitted on March 23, 2011
D. Radio Frequency Emissions Report, submitted on October 18, 2010
E. Photo Simulations, submitted on October 18, 2010
F. Site design alternative analysis and map, submitted on February 9, 2011

ATTACHMENT A

Findings for Approval

The findings required granting your application for Major Conditional Use Permit and Design Review found in Sections 17.134.050, 17.128.070(C), 17.136.050(B), 17.128.070(B) and 17.136.050(D) of the Oakland Zoning Regulations, and the reasons your proposal satisfy these findings, are as follows:

SECTION 17.134.050 –CONDITIONAL USE PERMIT FINDINGS

A. That the location, size, design, and operating characteristics of the proposed development will be compatible with, and will not adversely affect, the livability or appropriate development of abutting properties and the surrounding neighborhood, with consideration to be given to harmony in scale, bulk, coverage, and density; to the availability of civic facilities and utilities; to harmful effect, if any upon desirable neighborhood character; to the generation of traffic and the capacity of surrounding streets; and to any other relevant impact of the development.

The proposed development to collocate and replace wireless antennas for the operation of an existing Monopole Telecommunication Facility adjacent to a commercial building which is split by commercial and residential zone areas will be compatible with the site, and will not adversely affect the development pattern around the residential and commercial properties. The proposal to add and replace wireless antennas on the top of the existing 76 feet high Monopole is distant from the nearby multi-family residential facility (to the south) about 90 feet and from nearest public road, 54th St. (to the south) about 20 feet. The size and design of the new and replacement antennas will be flushed with the Monopole and will not increase the size or orientation of the existing antenna panels. The new and replacement antennas will be painted to match existing monopole.

B. That the location, design, and site planning of the proposed development will provide a convenient and functional living, working, shopping, or civic environment, and will be as attractive as the nature of the use and its location and setting warrant.

The location, design and site planning of the proposed development will provide a convenient and functional living and working environment to the surrounding areas in the neighborhood. The addition and replacement of wireless antennas will provide improvements to voice, wireless computer connectivity, text, and digital data networking to the general public. The size, design and location of the new and replacement antennas will fit in with the existing antennas. The location of the monopole located behind the two-story commercial building in the property, the height of the Highway-24, and adjacent three-story multi-family residential buildings and large trees will help to minimize the view of the antennas from public view.

C. That the proposed development will enhance the successful operation of the surrounding area in its basic community functions, or will provide an essential service to the community or region.

The proposed development will provide and improve essential and quality internet wireless communications services to the surrounding neighborhoods, nearby street corridors and to Highway-24 and BART commuters and to emergency officials in the immediate areas.

D. That the proposal conforms with all applicable Regular Design Review criteria set forth in Section 17.136.050 of the Oakland Planning Code.

The proposal conforms to the design review findings in section 17.136.050 (B) for non-residential facilities. See Design Review Findings listed below.

E. That the proposal conforms in all significant respects with the Oakland General Plan and with any other applicable plan or development control map which has been adopted by the City Council.

The property is designated by the Oakland General Plan as a Urban Residential and Community Commercial Land Use Classification. The intent of the Urban Residential is to create, maintain and enhance areas of the City that are appropriate for multi-unit, mid-rise or high-rise residential structures in locations that have great access to transportation and other services. The desired character and uses are primary future uses for residential, mixed-use building that contain ground-floor commercial uses and public facilities of compatible character. The intent of the Community Commercial is to also identify, create, maintain and enhance areas suitable for a wide variety of commercial and institutional operations along the City's major corridors and in shopping districts or centers. Staff finds that the proposed development conforms with the policies of the General Plan because it improves needed telecommunication services, thus enhancing the demand of essential services to the surrounding neighborhoods.

SECTION 17.128.080(C)-CONDITIONAL USE PERMIT CRITERIA FOR MONOPOLES

1. The project must meet the special design review criteria listed in subsection B of this section.

The proposed development conforms to the design review criteria for Monopoles as described in section 17.128.080 (B). See design review findings listed below.

2. Monopoles should not be located any closer than one thousand five hundred (1,500) feet from existing monopoles unless technologically required or visually preferable.

The property contains an existing 76 foot high steel Monopole with 9 directional antenna panels that was constructed in 1990. Based on permit records, there are no other existing Monopoles located within 1,500 feet from the proposed site.

3. The proposed project must not disrupt the overall community character.

The proposed development is to collocate six new small Radio Remote Unit (RRU) antennas, replace six existing directional antenna panels located on the top of the existing steel Monopole and install one equipment cabinet inside an existing storage facility. Staff finds the proposal will not significantly disrupt the overall characteristics of the residential and commercial neighborhood because the site is surrounded by a mix of high to medium density residential and commercial facilities including a stretch of the Highway-24 and BART structures. Overall, the proposal will not significantly disrupt the visual community character of the area because the new antennas will be flushed to the pole and painted to match the color of the structure in order to reduce its visibility from the distant locations.

4. If a major conditional use permit is required, the Planning Director or the Planning Commission may request independent expert review regarding site location, collocation and facility

configuration. Any party may request that the Planning Commission consider making such request for independent expert review.

At the time of the completion of this report, neither the Planning Director nor the Planning Commission has requested an independent review regarding site location, collocation and facility configuration.

SECTION 17.128.080 (B)–DESIGN REVIEW CRITERIA FOR MONOPOLE FACILITIES

1. Collocation is to be encouraged when it will decrease visual impact and collocation is to be discouraged when it will increase negative visual impact.

   The collocation of the Radio Remote Unit (RRU) antennas is encouraged because the proposed small antennas will be flush with the existing monopole and will be located under the existing antenna panels. The collocation will decrease the potential visual impact because the small RRU antennas will be painted to match and will be located near the top of the 76 feet high monopole, thus minimizing their visibility from public views.

2. Monopoles should not be sited to create visual clutter or negatively affect specific views.

   The existing 76 foot high monopole was approved by the Planning Director in 1990 under the Minor Conditional Use Permit application, C90-79. The installation of small RRU antennas and replacement of existing antenna panels on the top of the monopole will not create a visual clutter because the new RRU small antennas will be flushed to the pole and will be painted to match. The replacement of the existing antenna panels will also be located in the same position and painted to match. Overall, the existing monopole would not increase a visual clutter because it is tucked into the rear of the two-story commercial building and next to a large pine tree; and the monopole is also surrounded by three-story multi-family residential facilities, a section of Highway-24 and BART's elevated rail tracks.

3. Monopoles shall be screened from the public view wherever possible.

   The existing monopole is considerably screened from public view by large commercial and residential buildings, Highway-24, BART's elevated rail tracks and by a large pine tree. Although the existing monopole can not be completely screened from public view, staff finds that the proposed planting of two (2) 15-gallon City Street Trees at the end of 54th Street, and the planting of 5-gallon Potato flowering vines along the southerly property line would minimize the visibility of the existing monopole from public view.

4. The equipment shelter or cabinet must be concealed from public view or made compatible with the architecture of the surrounding structures or placed underground. The shelter or cabinet must be regularly maintained.

   The one proposed equipment cabinet will be located inside the existing AT&T storage container located to the southwest corner of the property; therefore, the equipment cabinet will be concealed from public view.

5. Site location and development shall preserve the preexisting character of the surrounding buildings and land uses and the zone district as much as possible. Wireless communication towers shall be integrated through location and design to blend in with the existing characteristics of the site to the

extent practical. Existing on-site vegetation shall be preserved or improved, and disturbance of the existing topography shall be minimized, unless such disturbance would result in less visual impact of the site to the surrounding area.

The existing monopole preserves the pre-existing character of the surrounding commercial and multi-family residential buildings including the current mixed land uses as much as possible. The existing landscaping along the frontage of the property on 54th Street and the additional planting of city street trees and flowering vines at the end of 54th Street will be an improvement to reduce visual impacts to the site and to surrounding properties.

6. That all reasonable means of reducing public access to the antennas and equipment has been made, including, but not limited to, placement in or on buildings or structures, fencing, anti-climbing measures and anti-tampering devices.

The development proposal will not be accessible to the general public because the Monopole is secured by a locked gate and the site is surrounded by an 8 foot high chain-link fence.

SECTION 17.136.050 (B)–DESIGN REVIEW FINDINGS FOR NON-RESIDENTIAL FACILITIES

1. That the proposal will help achieve or maintain a group of facilities which are well related to one another and which, when taken together, will result in a well-composed design, with consideration given to site, landscape, bulk, height, arrangement, texture, materials, colors, and appurtenances; the relation of these factors to other facilities in the vicinity; and the relation of the proposal to the total setting as seen from key points in the surrounding area. Only elements of design which have some significant relationship to outside appearance shall be considered, except as otherwise provided in Section 17.136.060.

   The proposed development will maintain a group of facilities which are well-related to one another. The overall design of the new and existing antennas will result in a well-composed design because the new antennas will be flush with, and pained to match, the existing monopole.

2. That the proposed design will be of a quality and character which harmonizes with, and serves to protect the value of, private and public investments in the area.

   The proposed development will be in character with the area because the installation of the small Radio Remote Unit (RRU) antennas are relatively small and are painted grey to match the existing monopole. The proposed design protects the neighborhood context because the new RRU antennas and the replacement of the six antenna panels would not significantly create a visual impact.

3. That the proposed design conforms in all significant respects with the Oakland General Plan and with any applicable design review guidelines or criteria, district plan, or development control map which have been adopted by the Planning Commission or City Council.

   The proposal conforms with the Oakland General Plan Objectives and Policies including the Conditional Use Permit Findings 17.134.050 & 17.128.080(C), and Design Review Findings 17.128.080(B) and 17.136.050(B) found within this report.

ATTACHMENT B

Conditions of approval

1. **Approved Use**

   Ongoing

   a) The project shall be constructed and operated in accordance with the authorized use as described in the application materials, and the *revised* design review plans dated **March 23, 2011** and submitted to the City on **March 23, 2011** and as amended by the following conditions. Any additional uses or facilities other than those approved with this permit, as described in the project description and the approved plans, will require a separate application and approval. Any deviation from the approved drawings, Conditions of Approval or use shall required prior written approval from the Director of City Planning or designee.

   b) This action by the **Planning Commission** ("this Approval") includes the approvals set forth below. This Approval includes the collocation of six (6) small Radio Remote Unit (RRU's) antennas and replacement of six (6) directional antenna panels on the existing 76-ft. high steel Monopole including the installation of a ground-mounted equipment cabinet located inside the existing equipment shelter located at next to a commercial facility at 5427 Telegraph Avenue.

2. **Effective Date, Expiration, Extensions and Extinguishment**

   Ongoing

   Unless a different termination date is prescribed, this Approval shall expire **two (2) years** from the approval date, unless within such period all necessary permits for construction or alteration have been issued, or the authorized activities have commenced in the case of a permit not involving construction or alteration. Upon written request and payment of appropriate fees submitted no later than the expiration date of this permit, the Director of City Planning or designee may grant a one-year extension of this date, with additional extensions subject to approval by the approving body. Expiration of any necessary building permit for this project may invalidate this Approval if the said extension period has also expired.

3. **Scope of This Approval; Major and Minor Changes**

   Ongoing

   The project is approved pursuant to the **Planning Code** only. Minor changes to approved plans may be approved administratively by the Director of City Planning or designee. Major changes to the approved plans shall be reviewed by the Director of City Planning or designee to determine whether such changes require submittal and approval of a revision to the approved project by the approving body or a new, completely independent permit.

4. **Conformance with other Requirements**

   Prior to issuance of a demolition, grading, P-job, or other construction related permit

   a) The project applicant shall comply with all other applicable federal, state, regional and/or local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City's Building Services Division, the City's Fire Marshal, and the City's Public Works Agency. Compliance with other applicable requirements may require changes to the approved use and/or plans. These changes shall be processed in accordance with the procedures contained in Condition of Approval #3.

   b) The applicant shall submit approved building plans for project-specific needs related to fire protection to the Fire Services Division for review and approval, including, but not limited to

automatic extinguishing systems, water supply improvements and hydrants, fire department access, elevated walking pathways, safety railings, emergency lighting and vegetation management for preventing fires.

5. **Conformance to Approved Plans; Modification of Conditions or Revocation**
Ongoing
a) Site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within 60-90 days of approval, unless an earlier date is specified elsewhere.

b) The City of Oakland reserves the right at any time during construction to require certification by a licensed professional that the as-built project conforms to all applicable zoning requirements, including but not limited to approved maximum heights and minimum setbacks. Failure to construct the project in accordance with approved plans may result in remedial reconstruction, permit revocation, permit modification, stop work, permit suspension or other corrective action.

c) Violation of any term, **conditions of approval** or **project description** relating to the Approvals is unlawful, prohibited, and a violation of the Oakland Municipal Code. The City of Oakland reserves the right to initiate civil and/or criminal enforcement and/or abatement proceedings, or after notice and public hearing, to revoke the Approvals or alter these **conditions of approval** if it is found that there is violation of any of the **conditions of approval** or the provisions of the Planning Code or Municipal Code, or the project operates as or causes a public nuisance. This provision is not intended to, nor does it, limit in any manner whatsoever the ability of the City to take appropriate enforcement actions. The project applicant shall be responsible for paying fees in accordance with the City's Master Fee Schedule for inspections conducted by the City or a City-designated third-party to investigate alleged violations of the Conditions of Approval.

6. **Signed Copy of the Conditions of Approval**
With submittal of a demolition, grading, and building permit
A copy of the approval letter and **Conditions of Approval** shall be signed by the property owner, notarized, and submitted with each set of permit plans to the appropriate City agency for this project.

7. **Indemnification**
Ongoing
a. To the maximum extent permitted by law, the applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the City of Oakland Redevelopment Agency, the Oakland City Planning Commission and its respective agents, officers, and employees (hereafter collectively called City) from any liability, damages, claim, judgment, loss (direct or indirect)action, causes of action, or proceeding (including legal costs, attorneys' fees, expert witness or consultant fees, City Attorney or staff time, expenses or costs) (collectively called "Action") against the City to attack, set aside, void or annul, (1) an approval by the City relating to a development-related application or subdivision or (2) implementation of an approved development-related project. The City may elect, in its sole discretion, to participate in the defense of said Action and the applicant shall reimburse the City for its reasonable legal costs and attorneys' fees.
b. Within ten (10) calendar days of the filing of any Action as specified in subsection A above, the applicant shall execute a Letter Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Letter of

Agreement shall survive termination, extinguishment or invalidation of the approval. Failure to timely execute the Letter Agreement does not relieve the applicant of any of the obligations contained in this condition or other requirements or conditions of approval that may be imposed by the City.

8. **Compliance with Conditions of Approval**
Ongoing
The project applicant shall be responsible for compliance with the recommendations in any submitted and approved technical report and all the Conditions of Approval set forth below at its sole cost and expense, and subject to review and approval of the City of Oakland.

9. **Severability**
Ongoing
Approval of the project would not have been granted but for the applicability and validity of each and every one of the specified **conditions of approval**, and if one or more of such **conditions of approval** is found to be invalid by a court of competent jurisdiction this Approval would not have been granted without requiring other valid **conditions of approval** consistent with achieving the same purpose and intent of such Approval.

10. **Job Site Plans**
Ongoing throughout demolition, grading, and/or construction
At least one (1) copy of the stamped approved plans, along with the Approval Letter and Conditions of Approval, shall be available for review by City officials and project developer at the job site at all times.

11. **Special Inspector/Inspections, Independent Technical Review, Project Coordination and Management**
Prior to issuance of a demolition, grading, and/or construction permit
The project applicant may be required to pay for on-call third-party special inspector(s)/inspections as needed during the times of extensive or specialized plancheck review or construction. The project applicant may also be required to cover the full costs of independent technical review and other types of peer review, monitoring and inspection, including without limitation, third party plan check fees, including inspections of violations of Conditions of Approval. The project applicant shall establish a deposit with the Building Services Division, as directed by the Building Official, Director of City Planning or designee.

12. **Landscape Maintenance.**
Ongoing
All existing landscaping shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable landscaping requirements.

13. **Operational Noise-General**
Ongoing.
Noise levels from the activity, property, or any mechanical equipment on site shall comply with the performance standards of Section 17.120 of the Oakland Planning Code and Section 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall

be abated until appropriate noise reduction measures have been installed and compliance verified by the Planning and Zoning Division and Building Services.

14. **Lighting Plan**
Prior to the issuance of an electrical or building permit
The proposed lighting fixtures shall be adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties. Plans shall be submitted to the Planning and Zoning Division and the Electrical Services Division of the Public Works Agency for review and approval. All lighting shall be architecturally integrated into the site.

15. **Tree Removal Permit**
Prior to issuance of a demolition, grading, or building permit
Prior to removal of any protected trees, per the Protected Tree Ordinance, located on the project site or in the public right-of-way adjacent to the project, the project applicant must secure a tree removal permit from the Tree Division of the Public Works Agency, and abide by the conditions of that permit.

SPECIFIC PROJECT CONDITIONS

16. **Emissions Report**
Prior to final inspection
The applicant shall provide an RF emissions report to the City of Oakland Zoning Division indicating that the site is actually operating within the acceptable thresholds as established by the regulatory Federal government or any such agency that may be subsequently authorized to establish such standards.

17. **Sinking Fund for Facility Removal or Abandonment.**
Prior to issuance of a building permit.
The applicant shall provide proof of the establishment of a sinking fund to cover the cost of removing the facility if it is abandoned within a prescribed period. The word "abandoned" shall mean a facility that has not been operational for a six (6) month period, except where nonoperation is the result of maintenance of renovation activity pursuant to valid City permits. The sinking fund shall be established to cover a two-year period, at a financial institution approved by the City's Office of Budget and Finance. The sinking fund payment shall be determined by the Office of Budget and Finance and shall be adequate to defray expenses associated with the removal of the telecommunication facility.

18. **Encroachment Permits**
Prior to issuance of a demolition, grading or building permit
The applicant shall obtain any encroachment permits, waiver of damages or other approvals required by the Building Services Division, for any privately constructed public improvements, or any permanent or temporary elements located in the public right of way. This shall include telecommunication equipment, overhead wires, underground trenching, etc.

APPROVED BY:

City Planning Commission:_____(date)_____(vote)

CONDITIONS OF APPROVAL

CNU0168/CNU4378

LTE SITE: CCL00168

FA#: 10087949 USID: 12763

SOUTH BERKELEY

5427 TELEGRAPH
OAKLAND, CA 94609

USA NORTH
OF CENTRAL/NORTHERN CALIFORNIA AND NEVADA
1-800-227-2600
AT LEAST TWO DAYS BEFORE YOU DIG

— REVISED PLAN —

RECEIVED
MAR 23 2011
City of Oakland
Planning & Zoning Division

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

1. 2010 CALIFORNIA ADMINISTRATIVE CODE
2. 2010 CALIFORNIA BUILDING CODE
3. 2010 CALIFORNIA MECHANICAL CODE
4. 2010 CALIFORNIA PLUMBING CODE
5. 2010 CALIFORNIA ELECTRIC CODE
6. 2010 CALIFORNIA FIRE CODE
7. ANY LOCAL BUILDING CODE AMENDMENTS TO THE ABOVE
8. CITY/COUNTY ORDINANCES

HANDICAP REQUIREMENTS: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA ADMINISTRATIVE STATE CODE PART 2, TITLE 24, CHAPTER 11B, SECTION 1103B.

PROJECT DESCRIPTION

THIS IS AN UNMANNED TELECOMMUNICATIONS FACILITY FOR AT&T WIRELESS CONSISTING OF THE INSTALLATION OF THE FOLLOWING:

1. NEW (1) INDOOR MAIN UNIT MOUNTED TO EXISTING RACK INSIDE EXISTING EQUIPMENT SHELTER.
2. NEW THREE (3) LTE ANTENNAS (TO REPLACE THREE (3) EXISTING) AND NEW (3) PANEL ANTENNAS (TO REPLACE THREE (3) EXISTING ANTENNAS), ON EXISTING MONOPOLE.
3. NEW SIX (6) RRU'S MOUNTED ON EXISTING MONOPOLE.
4. NEW ONE (1) FIBER POWER CONDUIT FROM MAIN UNIT TO FIBER/POWER DOME UNIT.
5. NEW FIFTEEN (15) RET'S [SIX (6) NEW AND NINE (9) RO REPLACE EXISTING] PER ANTENNA CONFIGURATION.
6. NEW ONE (1) FIBER/POWER DOME UNIT (DC6-48-60-18-8F)
7. NEW ONE (1) AT&T GPS ANTENNA MOUNTED ON EXISTING SHELTER.

DRIVING DIRECTIONS

FROM AT&T OFFICE - PLEASANTON, CA

1. DEPART ROSEWOOD DR TOWARD OLD SANTA RITA RD
2. TURN LEFT ONTO SANTA RITA RD
3. TAKE RAMP RIGHT FOR I-580 WEST/ARTHUR H BREED FWY
4. KEEP RIGHT TO STAY ON I-580 WEST/MACARTHUR FWY
5. AT EXIT 26A, TAKE RAMP RIGHT FOR SR-13 NORTH
6. TAKE RAMP LEFT FOR SR-24 WEST
7. TAKE RAMP RIGHT AND FOLLOW SIGNS FOR TELEGRAPH AVE
8. TURN LEFT ONTO TELEGRAPH AVE
9. ARRIVE AT 5427 TELEGRAPH, OAKLAND, CA 94609

GENERAL CONTRACTOR NOTES

DO NOT SCALE DRAWING:

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

SHEET INDEX

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PROJECT TEAM

ENGINEER:
PDC CORPORATION
1062 CONCANNON BLVD.
LIVERMORE, CA 94550
CONTACT: PAULO PUELIU
OFFICE: (925) 606-5868
MOBILE: (510) 385-5541
EMAIL: paulo@pdccorp.net

APPLICANT/LESSEE:
AT&T
4430 ROSEWOOD DR.
PLEASANTON, CA 95488

SITE ACQUISITION MANAGER:
ERICSSON
6160 STONERIDGE MALL DR. SUITE 400
PLEASANTON, CA 94588
CONTACT: RICK RAMIREZ
PHONE: (925) 737-5800
EMAIL: rick.ramirez@ericsson.com

ZONING MANAGER:
LYLE COMPANY
3140 GOLD CAMP DR. SUITE 30
RANCHO CORDOVA, CA 95670
CONTACT: JONATHAN FONG
PHONE: (916) 265-7000
EMAIL: jfong@lyleco.com

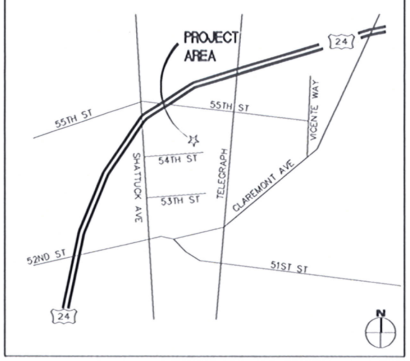
RF ENGINEER:
AT&T
4430 ROSEWOOD DR.
PLEASANTON, CA 94588
CONTACT: TONI DALDE
PHONE: (925) 468-8587

CONSTRUCTION MANAGER:
ERICSSON
6160 STONERIDGE MALL DR. SUITE 400
PLEASANTON, CA 94588
CONTACT: AMEDIE PARK
PHONE: (925) 737-5800
EMAIL: amedie.park@ericsson.com

PROJECT INFORMATION

SITE ADDRESS:	5427 TELEGRAPH OAKLAND, CA 94609
APN:	014-112-100-206
PROPERTY OWNER:	TELEGRAPH BUSINESS PROPERTIES 1401 GRIFFITH ST. SAN FRANCISCO, CA 94124
LATITUDE:	37.84000' N (NAD 83)
LONGITUDE:	122.26250' W (NAD 83)
GROUND ELEVATION:	±120' AMSL
HEIGHT OF STRUCTURE:	76' AGL
ZONING:	R-70
JURISDICTION:	ALAMEDA
TELEPHONE:	AT&T
POWER:	PG&E

VICINITY MAP



APPROVALS

LANDLORD: _____
CONSTRUCTION MANAGER: _____
RF ENGINEER: _____
SITE ACQUISITION MANAGER: _____
ZONING MANAGER: _____
UTILITY COORDINATOR: _____
PROGRAM REGIONAL MANAGER: _____
NETWORK OPERATIONS MANAGER: _____

at&t
4430 ROSEWOOD DRIVE
PLEASANTON, CA 94588

PROJECT INFORMATION:
CNU0168/CNU4378
LTE SITE: CCL00168
FA#: 10087949 USID: 12763
SOUTH BERKELEY
5427 TELEGRAPH
OAKLAND, CA 94609

CURRENT ISSUE DATE:
03/23/11

ISSUED FOR:
REV 3
CITY COMMENTS

REV.:	DATE:	DESCRIPTION:	BY:
A	07/26/10	90% CONSTRUCTION DRAWING	JD
0	09/17/10	100% CONSTRUCTION DRAWING	JD
1	01/07/11	CITY COMMENTS	PN
2	01/31/11	CITY COMMENTS	HT
3	03/23/11	CITY COMMENTS	HG

PLANS PREPARED BY:
PDC CORPORATION
1062 CONCANNON BLVD.
LIVERMORE, CA 94550
TEL: (925) 606-5868

CONSULTANT:
LYLE
3140 GOLD CAMP DR, SUITE 30
RANCHO CORDOVA, CA 95670

DRAWN BY:	CHK.:	APV.:
JD	PP	SAS

LICENSER:
REGISTERED PROFESSIONAL ENGINEER
SOHAIL SHAH
No. C60216
EXP. 06-30-12
CIVIL
STATE OF CALIFORNIA

SHEET TITLE:
TITLE SHEET, SITE INFORMATION AND VICINITY MAP

SHEET NUMBER:
T-1

ATTACHMENT C

	NEW ANTENNA
	EXISTING ANTENNA
	GROUND ROD
	GROUND BUS BAR
	MECHANICAL GRND. CONN.
	CADWELD
	GROUND ACCESS WELL
E	ELECTRIC BOX
T	TELEPHONE BOX
	LIGHT POLE
	FND. MONUMENT
	SPOT ELEVATION
	SET POINT
	REVISION
X	GRID REFERENCE
X Z-Y	DETAIL REFERENCE
X Z-Y	ELEVATION REFERENCE
X Z-Y	SECTION REFERENCE
	GROUT OR PLASTER
	(E) BRICK
	(E) MASONRY
	CONCRETE
	EARTH
	GRAVEL
	PLYWOOD
	SAND
	WOOD CONT.
	WOOD BLOCKING
	STEEL
	CENTERLINE
	PROPERTY/LEASE LINE
	MATCH LINE
	WORK POINT
	GROUND CONDUCTOR
T	TELEPHONE CONDUIT
E	ELECTRICAL CONDUIT
A	COAXIAL CABLE
OU	OVERHEAD SERVICE CONDUCTORS
X	CHAIN LINK FENCING
F/P	FIBER/POWER CONDUIT

LEGEND 1

A.B.	ANCHOR BOLT	GRND.	GROUND
ABV.	ABOVE	HDR.	HEADER
ACCA	ANTENNA CABLE COVER ASSEMBLY	HGR.	HANGER
ADD'L	ADDITIONAL	HT.	HEIGHT
A.F.F.	ABOVE FINISHED FLOOR	ICGB.	ISOLATED COPPER GROUND BUS
A.F.G.	ABOVE FINISHED GRADE	IN.(")	INCH(ES)
ALUM.	ALUMINUM	INT.	INTERIOR
ALT.	ALTERNATE	LB.(#)	POUND(S)
ANT.	ANTENNA	L.B.	LAG BOLTS
APPRX.	APPROXIMATE(LY)	L.F.	LINEAR FEET (FOOT)
ARCH.	ARCHITECT(URAL)	L.	LONG(ITUDINAL)
AWG.	AMERICAN WIRE GAUGE	MAS.	MASONRY
BLDG.	BUILDING	MAX.	MAXIMUM
BLK.	BLOCK	M.B.	MACHINE BOLT
BLKG.	BLOCKING	MECH.	MECHANICAL
BM.	BEAM	MFR.	MANUFACTURER
B.N.	BOUNDARY NAILING	MIN.	MINIMUM
BTCW.	BARE TINNED COPPER WIRE	MISC.	MISCELLANEOUS
B.O.F.	BOTTOM OF FOOTING	MTL.	METAL
B/U	BACK-UP CABINET	(N)	NEW
CAB.	CABINET	NO.(#)	NUMBER
CANT.	CANTILEVER(ED)	N.T.S.	NOT TO SCALE
C.I.P.	CAST IN PLACE	O.C.	ON CENTER
CLG.	CEILING	OPNG.	OPENING
CLR.	CLEAR	P/C	PRECAST CONCRETE
COL.	COLUMN	PCS	PERSONAL COMMUNICATION SERVICES
CONC.	CONCRETE	PLY.	PLYWOOD
CONN.	CONNECTION(OR)	PPC	POWER PROTECTION CABINET
CONST.	CONSTRUCTION	PRC	PRIMARY RADIO CABINET
CONT.	CONTINUOUS	P.S.F.	POUNDS PER SQUARE FOOT
d	PENNY (NAILS)	P.S.I.	POUNDS PER SQUARE INCH
DBL.	DOUBLE	P.T.	PRESSURE TREATED
DEPT.	DEPARTMENT	PWR.	POWER (CABINET)
D.F.	DOUGLAS FIR	QTY.	QUANTITY
DIA.	DIAMETER	RAD.(R)	RADIUS
DIAG.	DIAGONAL	REF.	REFERENCE
DIM.	DIMENSION	REINF.	REINFORCEMENT(ING)
DWG.	DRAWING(S)	REQ'D.	REQUIRED
DWL.	DOWEL(S)	RGS.	RIGID GALVANIZED STEEL
EA.	EACH	SCH.	SCHEDULE
EL.	ELEVATION	SHT.	SHEET
ELEC.	ELECTRICAL	SIM.	SIMILAR
ELEV.	ELEVATOR	SPEC.	SPECIFICATION(S)
EMT.	ELECTRICAL METALLIC TUBING	SQ.	SQUARE
E.N.	EDGE NAIL	S.S.	STAINLESS STEEL
ENG.	ENGINEER	STD.	STANDARD
EQ.	EQUAL	STL.	STEEL
EXP.	EXPANSION	STRUC.	STRUCTURAL
EXST.(E)	EXISTING	TEMP.	TEMPORARY
EXT.	EXTERIOR	THK.	THICK(NESS)
FAB.	FABRICATION(OR)	T.N.	TOE NAIL
F.F.	FINISH FLOOR	T.O.A.	TOP OF ANTENNA
F.G.	FINISH GRADE	T.O.C.	TOP OF CURB
FIN.	FINISH(ED)	T.O.F.	TOP OF FOUNDATION
FLR.	FLOOR	T.O.P.	TOP OF PLATE (PARAPET)
FDN.	FOUNDATION	T.O.S.	TOP OF STEEL
F.O.C.	FACE OF CONCRETE	T.O.W.	TOP OF WALL
F.O.M.	FACE OF MASONRY	TYP.	TYPICAL
F.O.S.	FACE OF STUD	U.G.	UNDER GROUND
F.O.W.	FACE OF WALL	U.L.	UNDERWRITERS LABORATORY
F.S.	FINISH SURFACE	U.N.O.	UNLESS NOTED OTHERWISE
FT.(')	FOOT (FEET)	V.I.F.	VERIFY IN FIELD
FTG.	FOOTING	W	WIDE(WIDTH)
G.	GROWTH (CABINET)	W/	WITH
GA.	GAUGE	WD.	WOOD
GI.	GALVANIZE(D)	W.P.	WEATHERPROOF
G.F.I.	GROUND FAULT CIRCUIT INTERRUPTER	WT.	WEIGHT
GLB. (GLU-LAM)	GLUE LAMINATED BEAM	℄	CENTERLINE
GPS	GLOBAL POSITIONING SYSTEM	℄	PLATE, PROPERTY LINE

ABBREVIATIONS 2

GENERAL NOTES FOR EXISTING AT&T CELL SITES:

1. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
2. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
3. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
4. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.
5. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR.
6. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.

GENERAL NOTES FOR EXISTING AWS CELL SITES 3

GENERAL CONSTRUCTION NOTES:

1. THE FACILITY IS AN UNOCCUPIED DIGITAL TELECOMMUNICATION FACILITY.
2. PLANS ARE NOT TO BE SCALED AND ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY, UNLESS NOTED OTHERWISE. THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
3. PRIOR TO THE SUBMISSION OF BIDS, THE CONTRACTORS SHALL VISIT THE JOB SITE AND BE RESPONSIBLE FOR ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES ARE TO BE BROUGHT TO THE ATTENTION OF THE IMPLEMENTATION ENGINEER AND ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
4. THE CONTRACTOR SHALL OBTAIN, IN WRITING, AUTHORIZATION TO PROCEED BEFORE STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED OR IDENTIFIED BY THE CONTRACT DOCUMENTS.
5. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY INDICATED OTHERWISE OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
6. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. MECHANICAL AND ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
7. THE GENERAL CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK, USING THE BEST SKILLS AND ATTENTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT INCLUDING CONTACT AND COORDINATION WITH THE IMPLEMENTATION ENGINEER AND WITH THE LANDLORD'S AUTHORIZED REPRESENTATIVE.
8. SEAL PENETRATIONS THROUGH FIRE RATED AREAS WITH U.L. LISTED AND FIRE CODE APPROVED MATERIALS.
9. PROVIDE A PORTABLE FIRE EXTINGUISHER WITH A RATING OF NOT LESS THAN 2-A OR 2-A10BC WITHIN 75 FEET TRAVEL DISTANCE TO ALL PORTIONS OF THE PROJECT AREA DURING CONSTRUCTION.
10. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CHAPTER 23 OF THE CBC REGARDING EARTHQUAKE PIPING, LIGHT FIXTURES, CEILING GRID, INTERIOR PARTITIONS AND MECHANICAL EQUIPMENT. ALL WORK MUST BE IN ACCORDANCE WITH LOCAL EARTHQUAKE CODES AND REGULATIONS.
11. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS, AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF THE WORK.
12. REPRESENTATIONS OF TRUE NORTH, OTHER THAN THOSE FOUND ON THE PLOT OF SURVEY DRAWING, SHALL NOT BE USED TO IDENTIFY OR ESTABLISH THE BEARING OF TRUE NORTH AT THE SITE. THE CONTRACTOR SHALL RELY SOLELY ON THE PLOT OF SURVEY DRAWING AND ANY SURVEYOR'S MARKINGS AT THE SITE FOR THE ESTABLISHMENT OF TRUE NORTH, AND SHALL NOTIFY THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK IF ANY DISCREPANCY IS FOUND BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND THE TRUE NORTH ORIENTATION AS DEPICTED ON THE CIVIL SURVEY. THE CONTRACTOR SHALL ASSUME SOLE LIABILITY FOR ANY FAILURE TO NOTIFY THE ENGINEER.
13. THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, PAVING, CURBS, VEGETATION, GALVANIZED SURFACES, ETC., AND UPON COMPLETION OF WORK REPAIR ANY DAMAGE THAT OCCURRED DURING CONSTRUCTION TO THE SATISFACTION OF **AT&T**.
14. KEEP GENERAL AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST OR SMUDGES OF ANY NATURE.
15. PENETRATIONS OF ROOF MEMBRANES SHALL BE PATCHED/FLASHED AND MADE WATERTIGHT USING LIKE MATERIALS IN ACCORDANCE WITH NRCA ROOFING STANDARDS AND DETAILS. CONTRACTOR SHALL OBTAIN DETAILING CLARIFICATION FOR SITE-SPECIFIC CONDITIONS FROM ENGINEER, IF NECESSARY, BEFORE PROCEEDING.
16. BEFORE ORDERING AND/OR BEFORE FABRICATING/CONSTRUCTING/INSTALLING ANY ITEMS, VERIFY THE TYPES AND QUANTITIES.
17. CONTRACTOR SHALL PROVIDE SITE FOREMAN WITH A CELLULAR PHONE AND PAGER, AND KEEP SAME ON SITE WHENEVER PERSONNEL ARE ON SITE.
18. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON THE SITE AND NOTIFY THE PROJECT MANAGER OF ANY DISCREPANCIES BEFORE STARTING ANY WORK.
19. KEEP GENERAL AREA CLEAN, HAZARD FREE, AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. LEAVE PREMISES IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
20. CONTRACTOR TO PROVIDE COMPLETE SET OF AS BUILT DRAWINGS WITHIN 10 WORKING DAYS OF PROJECT COMPLETION
21. CONTRACTOR IS TO EXCAVATE 6" BELOW EXISTING GRADE AND SPRAY WITH WEED CONTROL. REPLACE WITH CLASS II AGGREGATE BASE AND CRUSHED WASHED ROCK. AS SPECIFIED ON SITE PLAN.
22. CONTRACTOR SHALL PROVIDE TOILET FACILITY DURING ALL PHASES OF CONSTRUCTION.
23. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OR THE FABRICATION OF MATERIALS TO BE INSTALLED AT THE SITE, THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS INCLUDING AS-BUILT DIMENSIONS OF EXISTING STRUCTURES OR STRUCTURAL ELEMENTS HAVING A BEARING ON THE SCOPE OF THE WORK TO BE PERFORMED. IF ANY DISCREPANCY IS FOUND BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND THE DIMENSIONS OR CONDITIONS FOUND TO BE EXISTING IN THE FIELD, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OBTAIN DESIGN RESOLUTION PRIOR TO PROCEEDING WITH THE PORTION(S) OF THE WORK AFFECTED. THE CONTRACTOR SHALL ASSUME SOLE LIABILITY FOR ANY FAILURE TO SO NOTIFY THE ENGINEER AND OBTAIN RESOLUTION BEFORE PROCEEDING.

GENERAL CONSTRUCTION NOTES 4

at&t
4430 ROSEWOOD DRIVE
PLEASANTON, CA 94588

PROJECT INFORMATION:

CNU0168/CNU4378
LTE SITE: CCL00168
FA#: 10087949 USID: 12763
SOUTH BERKELEY
5427 TELEGRAPH
OAKLAND, CA 94609

CURRENT ISSUE DATE:

03/23/11

ISSUED FOR:

REV 3
CITY COMMENTS

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PLANS PREPARED BY:

PDC CORPORATION
1062 CONCANNON BLVD.
LIVERMORE, CA 94550
TEL: (925) 606-5868

CONSULTANT:

LYLE
3140 GOLD CAMP DR, SUITE 30
RANCHO CORDOVA, CA 95670

DRAWN BY:	CHK.:	APV.:
JD	PP	SAS

LICENSER:

SHEET TITLE:

GENERAL NOTES, LEGEND AND ABBREVIATIONS

SHEET NUMBER:

T-2

SCALE NOTE:

IF DIMENSIONS SHOWN ON PLAN DO NOT SCALE CORRECTLY, CHECK FOR REDUCTION OR ENLARGEMENT FROM ORIGINAL PLANS.

GENERAL NOTES:

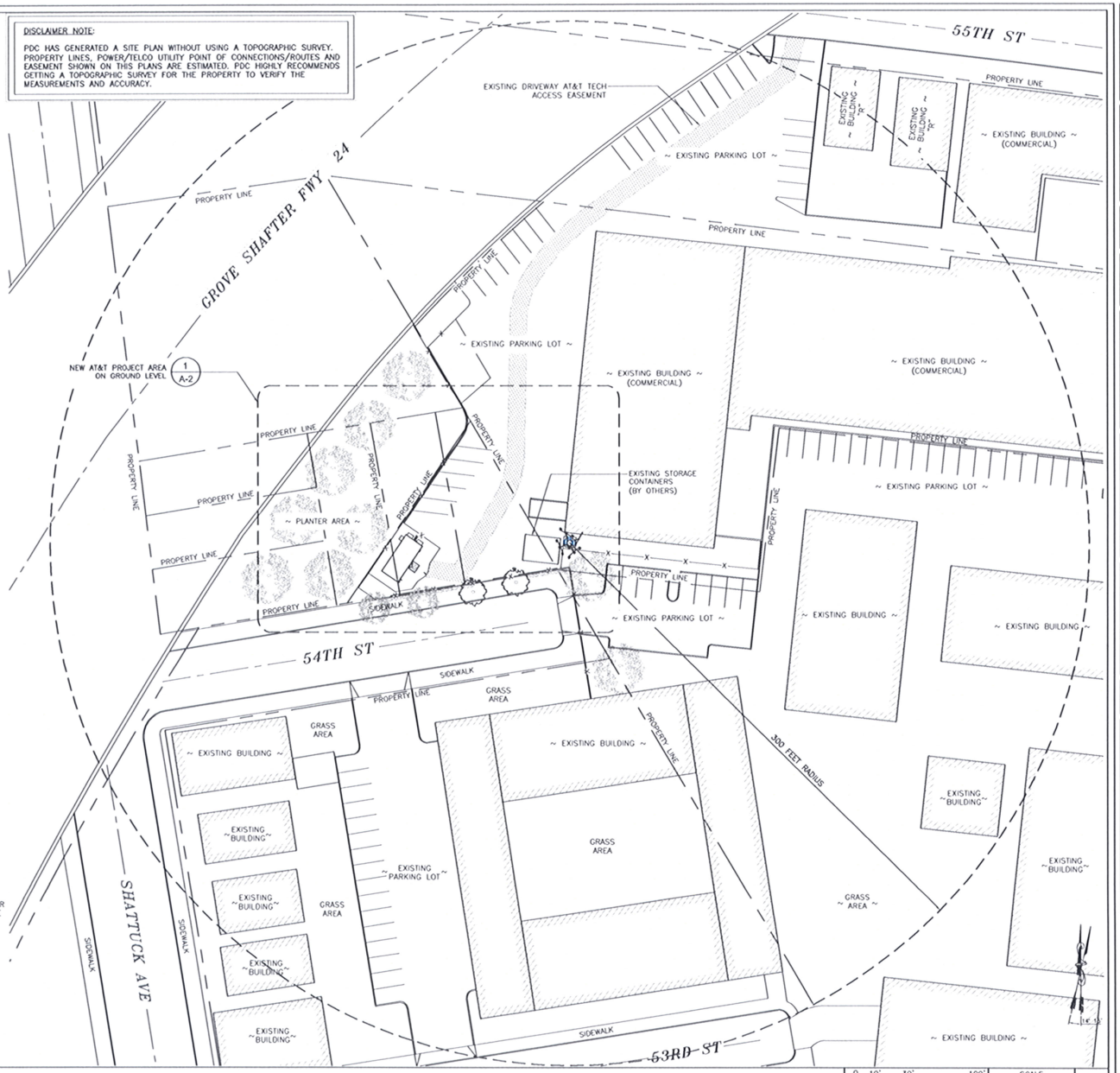
1. THIS PROPOSAL IS FOR THE MODIFICATION OF AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY CONSISTING OF INSTALLATION OF THE FOLLOWING: ONE (1) NEW INDOOR MAIN UNIT MOUNTED TO EXISTING RACK INSIDE EXISTING EQUIPMENT SHELTER, THREE (3) NEW LTE PANEL ANTENNAS, THREE (3) NEW PANEL ANTENNAS (TO REPLACE THREE (3) EXISTING ANTENNAS), SIX (6) NEW RRU'S, ONE (1) FIBER/POWER CONDUIT, FIFTEEN (15) NEW RET CONTROLLERS, ONE (1) NEW FIBER/POWER DOME UNIT (DC8-48-60-18-8F) AND ONE (1) NEW GPS ANTENNA.
2. THE EXISTING FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE.
3. THE EXISTING FACILITY IS UNMANNED AND IS NOT FOR HUMAN HABITAT. (NO HANDICAP ACCESS IS REQUIRED).
4. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH, BY AT&T TECHNICIANS.
5. NO NOISE, SMOKE, DUST OR ODOR WILL RESULT FROM THIS PROPOSAL.
6. OUTDOOR STORAGE AND SOLID WASTE CONTAINERS ARE NOT NEW.
7. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
8. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATION.
9. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTION REQUIRED FOR CONSTRUCTION.
10. SUBCONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
11. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND DRAWINGS PROVIDED BY THE SITE OWNER. SUBCONTRACTOR SHALL NOTIFY AT&T OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

SITE WORK GENERAL NOTES:

1. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRANING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING & EXCAVATION.
2. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
3. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
4. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
5. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
6. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
7. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF ENGINEERING, OWNER AND/OR LOCAL UTILITIES.
8. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE AND STABILIZED TO PREVENT EROSION AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
9. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
10. ADD ELECTRICAL CONNECTIONS IN THE PUBLIC RIGHT OF WAY SHALL BE INSTALLED UNDERGROUND TO THE NEAREST UTILITY POLE.
11. NO WORK SHALL BE DONE WITHIN THE PUBLIC RIGHT-OF-WAY WITHOUT THE PRIOR APPROVAL AND PERMIT FROM THE ENVIRONMENTAL AND PUBLIC WORKS MANAGEMENT DEPARTMENT – ADMINISTRATIVE SERVICES.
12. CONTRACTOR IS RESPONSIBLE FOR REPAIR OF ALL DAMAGED OFFSITE IMPROVEMENTS CAUSED BY CONSTRUCTION. CALL PUBLIC WORKS INSPECTOR FOR INSPECTION OF OFFSITE IMPROVEMENTS AT SUBSTANTIAL COMPLETION OF ONSITE WORK.
13. NO CONSTRUCTION DEBRIS SHALL BE SPILLED OR STORED ONTO PUBLIC RIGHT-OF-WAY.
14. NO RUNOFF SEDIMENT OR WASTES IS ALLOWED IN WATER LEAVING THE SITE.
15. ALL SITE UTILITIES SHALL BE CONSTRUCTED UNDERGROUND TO THE NEAREST POLE.
16. ALL LABOR, EQUIPMENT AND MATERIAL REQUIRED FOR OFF-SITE IMPROVEMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR.

DISCLAIMER NOTE:

PDC HAS GENERATED A SITE PLAN WITHOUT USING A TOPOGRAPHIC SURVEY. PROPERTY LINES, POWER/TELCO UTILITY POINT OF CONNECTIONS/ROUTES AND EASEMENT SHOWN ON THIS PLANS ARE ESTIMATED. PDC HIGHLY RECOMMENDS GETTING A TOPOGRAPHIC SURVEY FOR THE PROPERTY TO VERIFY THE MEASUREMENTS AND ACCURACY.



SITE PLAN

0 10' 30' 100' SCALE 1" = 30'-0" 1

at&t
4430 ROSEWOOD DRIVE
PLEASANTON, CA 94588

PROJECT INFORMATION:

CNU0168/CNU4378
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SOUTH BERKELEY
5427 TELEGRAPH
OAKLAND, CA 94609

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LIVERMORE, CA 94550
TEL: (925) 606-5868

CONSULTANT:

LYLE
3140 GOLD CAMP DR, SUITE 30
RANCHO CORDOVA, CA 95670

DRAWN BY:	CHK.:	APV.:
JD	PP	SAS

LICENSER:

SHEET TITLE:

SITE PLAN

SHEET NUMBER:

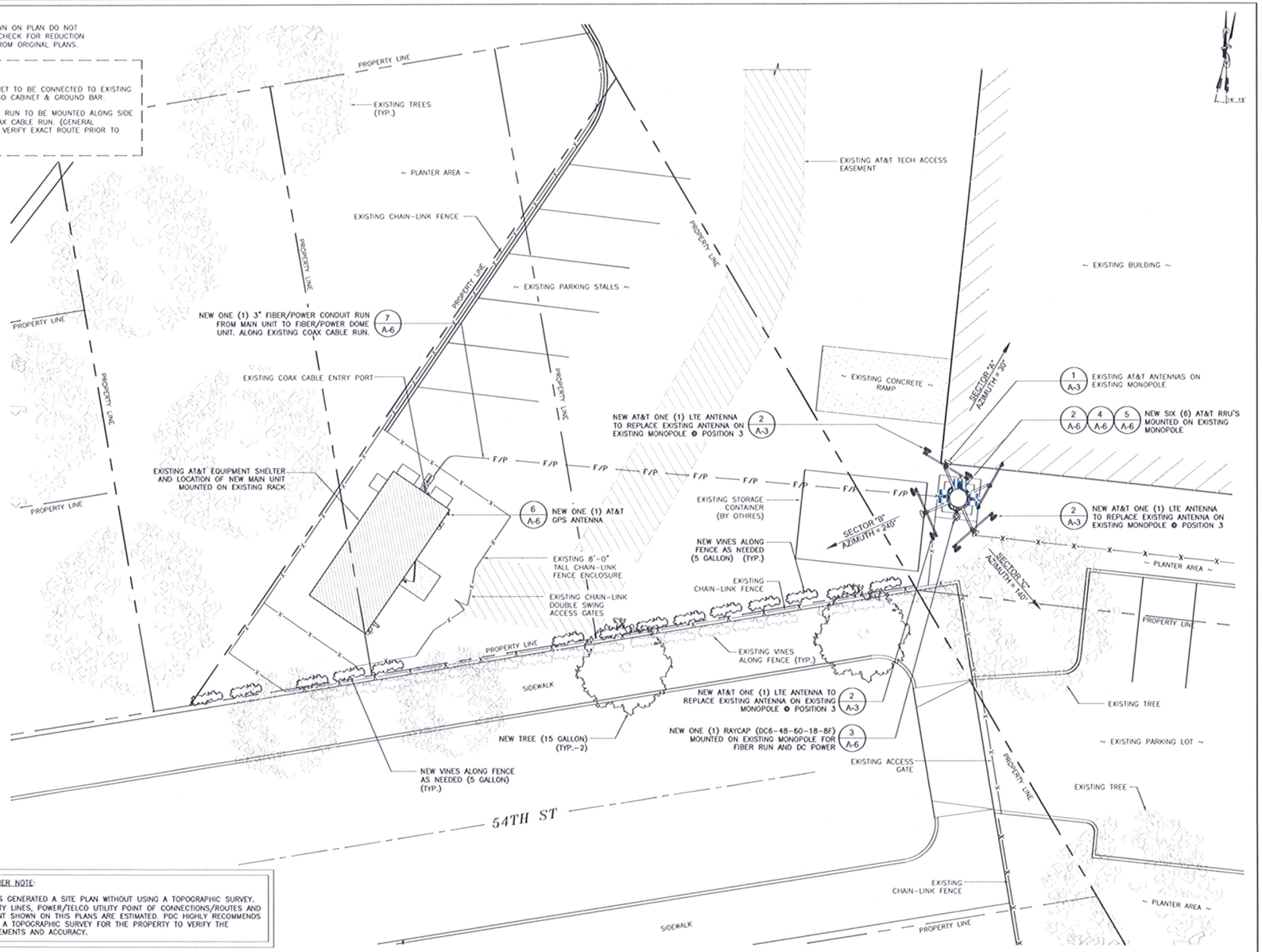
A-1

SCALE NOTE:

IF DIMENSIONS SHOWN ON PLAN DO NOT SCALE CORRECTLY, CHECK FOR REDUCTION OR ENLARGEMENT FROM ORIGINAL PLANS.

NOTES:

1. NEW AT&T CABINET TO BE CONNECTED TO EXISTING DC POWER, TELCO CABINET & GROUND BAR.
2. NEW AT&T FIBER RUN TO BE MOUNTED ALONG SIDE OF EXISTING COAX CABLE RUN. (GENERAL CONTRACTOR TO VERIFY EXACT ROUTE PRIOR TO CONSTRUCTION)



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ENLARGED SITE PLAN

0 4' 8' 16' SCALE 1/8" = 1'-0" 1

at&t
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PLEASANTON, CA 94588

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RANCHO CORDOVA, CA 95670

DRAWN BY:	CHK.:	APV.:
JD	PP	SAS

LICENSER:

SHEET TITLE:

ENLARGED SITE PLAN

SHEET NUMBER:

A-2

SCALE NOTE:

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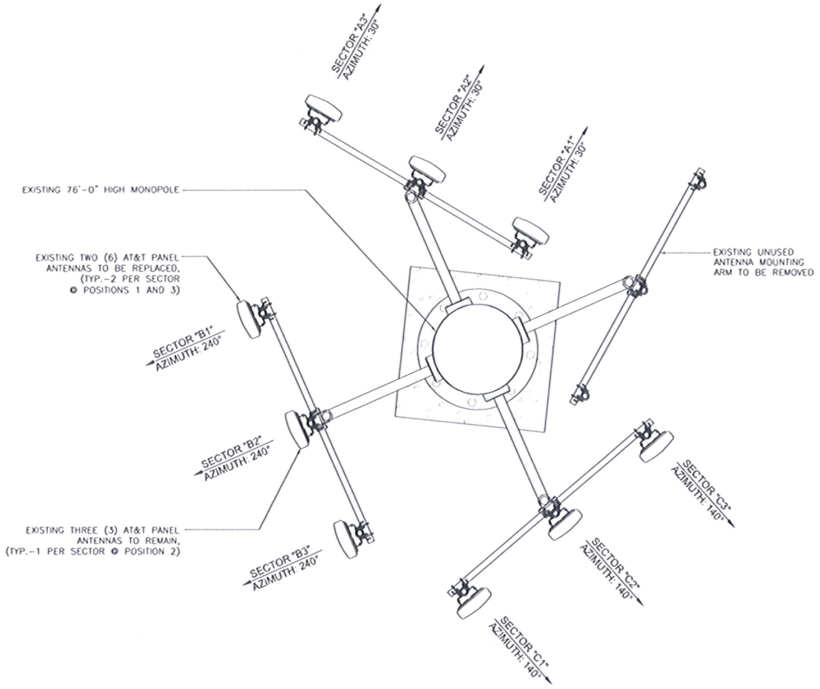
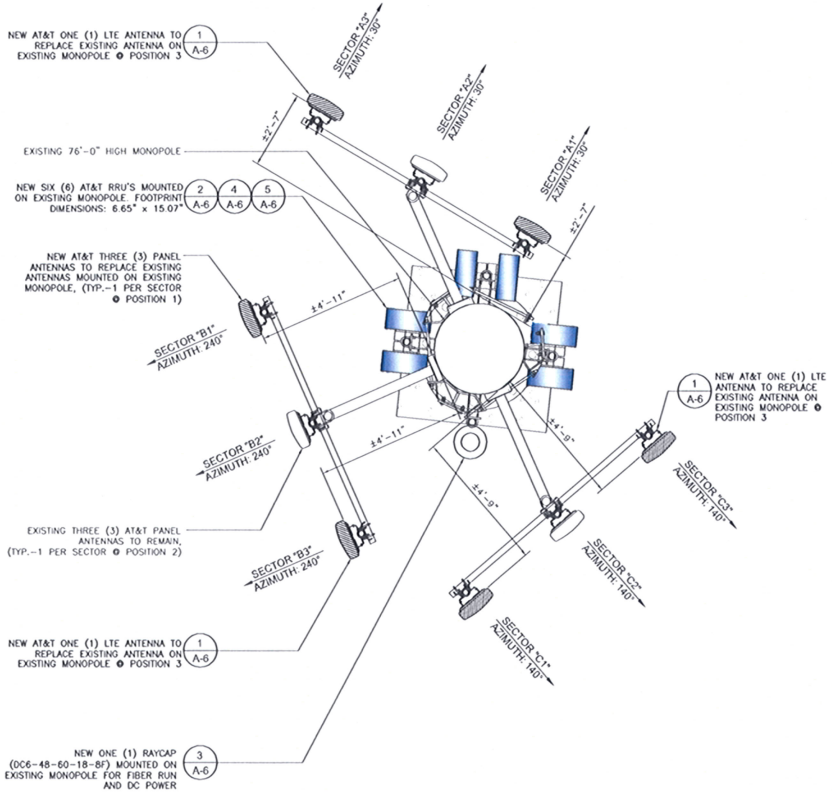


EXISTING ANTENNA PLAN

0 1' 2' 4' SCALE 1/2" = 1'-0" 1

NOTE:

1. ANTENNA CONFIGURATIONS BASED ON RFDS REVISION 8.2 DATED 04-17-2010.
2. NEW ANTENNA DIMENSION: 52" x 12" x 8"
3. RRU FOOTPRINT DIMENSIONS: 6.65" x 15.07"



NEW ANTENNA PLAN

0 1' 2' 4' SCALE 1/2" = 1'-0" 2

at&t
4430 ROSEWOOD DRIVE
PLEASANTON, CA 94588

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SOUTH BERKELEY
5427 TELEGRAPH
OAKLAND, CA 94609

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PLANS PREPARED BY:

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LIVERMORE, CA 94550
TEL: (925) 606-5868

CONSULTANT:

LYLE
3140 GOLD CAMP DR, SUITE 30
RANCHO CORDOVA, CA 95670

DRAWN BY:	CHK.:	APV.:
JD	PP	SAS

LICENSER:

SHEET TITLE:

ANTENNA PLANS

SHEET NUMBER:

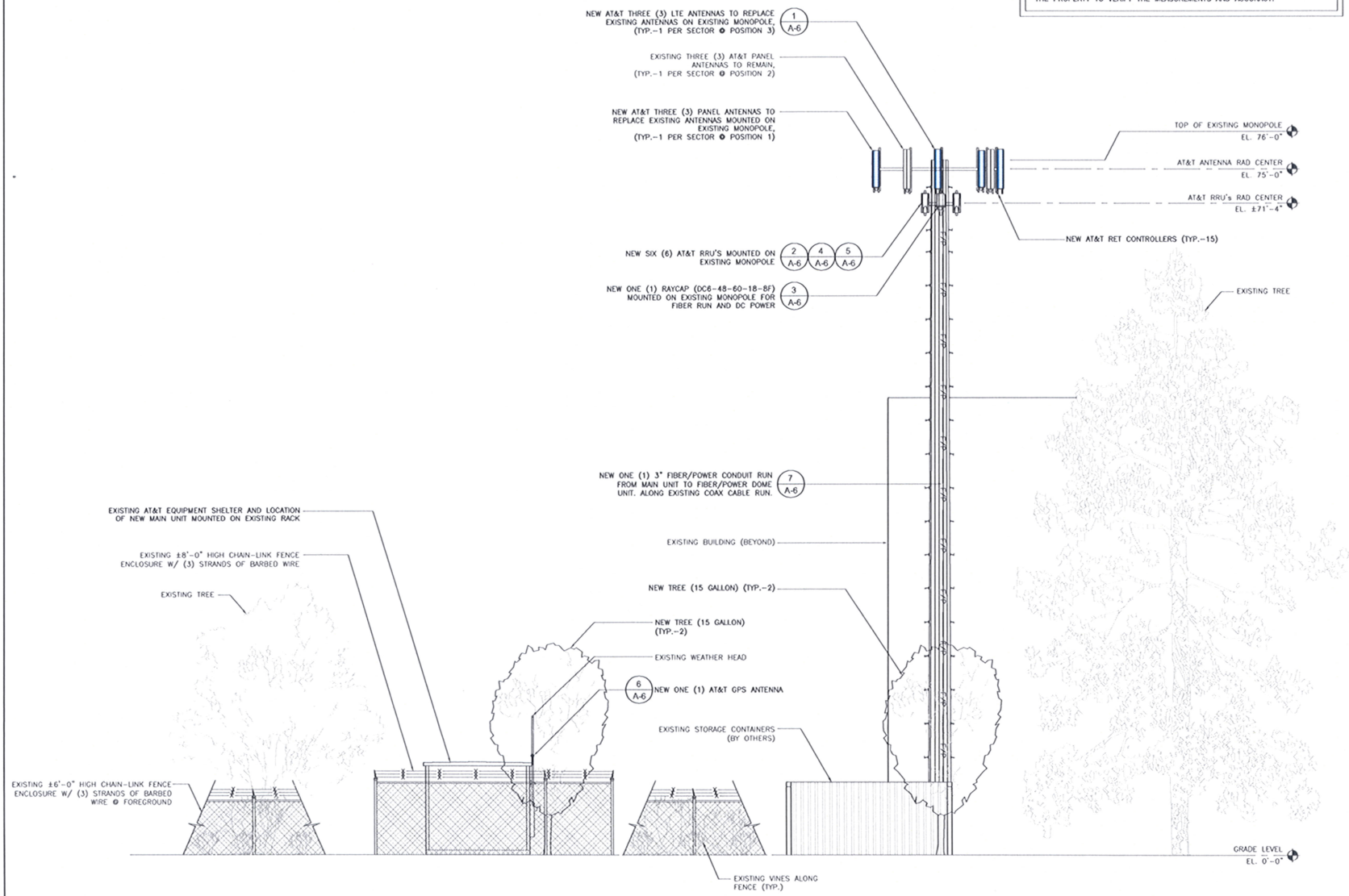
A-3

SCALE NOTE:

IF DIMENSIONS SHOWN ON PLAN DO NOT SCALE CORRECTLY, CHECK FOR REDUCTION OR ENLARGEMENT FROM ORIGINAL PLANS.

DISCLAIMER NOTE:

PDC GENERATED THESE ELEVATIONS WITHOUT USING A TOPOGRAPHIC SURVEY. BUILDING STRUCTURE AND POLE HEIGHTS SHOWN ON THE PLANS ARE ESTIMATED. PDC HIGHLY RECOMMENDS GETTING A TOPOGRAPHIC SURVEY FOR THE PROPERTY TO VERIFY THE MEASUREMENTS AND ACCURACY.



SOUTHWEST ELEVATION

0 3' 10' 15' SCALE 3/16" = 1'-0"

1

at&t
4430 ROSEWOOD DRIVE
PLEASANTON, CA 94588

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RANCHO CORDOVA, CA 95670

DRAWN BY:	CHK.:	APV.:
JD	PP	SAS

LICENSER:

SHEET TITLE:

SOUTHWEST ELEVATION

SHEET NUMBER:

A-4

SCALE NOTE:

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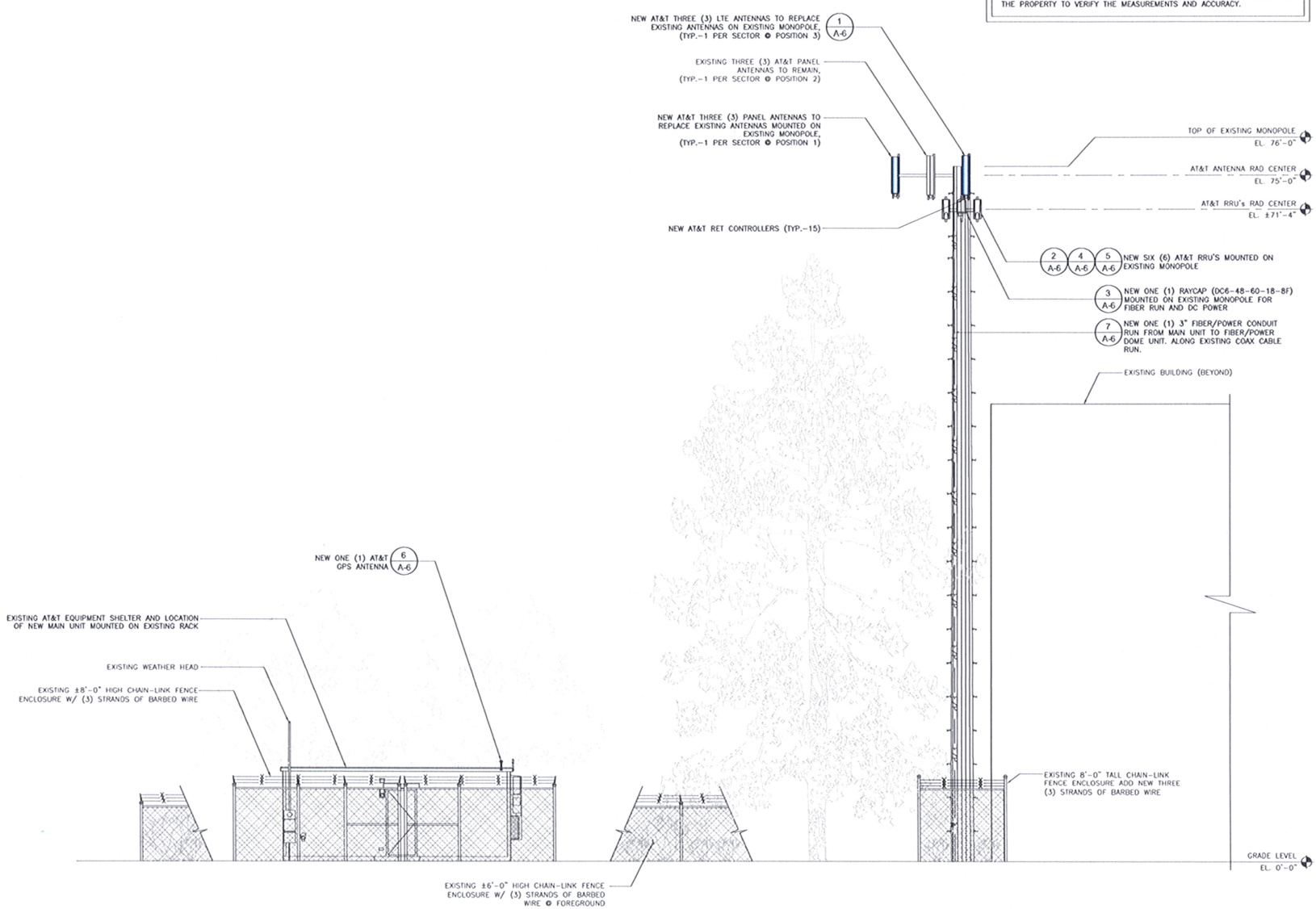

SOUTHEAST ELEVATION

0 3' 10' 15' SCALE 3/16" = 1'-0" 1

at&t
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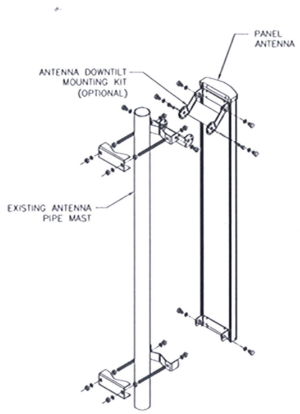
DRAWN BY:	CHK.:	APV.:
JD	PP	SAS

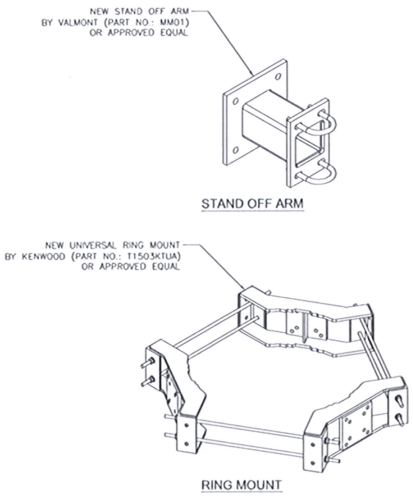
LICENSER:

SHEET TITLE:
SOUTHEAST ELEVATION

SHEET NUMBER:
A-5



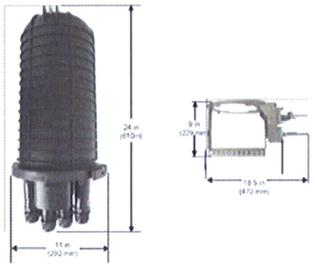
ANTENNA MOUNTING DETAIL | 1



RRU MOUNTING DETAIL | 2

DC6-48-60-18-8F

DC Power Surge Protection



Electrical Specifications	
Model Number	DC6-48-60-18-8F*
Nominal Operating Voltage	48 VDC
Nominal Discharge Current (I_n)	20 kA 8/20 µs
Maximum Discharge Current (I_{max}) per NEMA LS-1	60 kA 8/20 µs
Maximum Continuous Operating Voltage (U_c)	75 VDC
Voltage Protection Rating	400 V

*Module Assembly Part # : DC6-48-60-18-8F-U Field upgradable provided module package for 1 remote radio

Mechanical Specifications	
Suppressor Connection Method	Compression lug #2-#14 AWG Copper, #2-#12 Aluminum
Fiber Connection Method	LC-LC Single mode duplex
Environmental Rating	IP 68, 7m 72hrs
Operating Temperature	-40° C to + 80° C
Storage Temperature	-70° C to + 80° C
Cold Temperature Cycling	IEC 61300-2-22a: -30° C to + 60° C 200 hrs @ 5 psi
Resistance to Aggressive Materials	CEI IEC 61073-2 including acids and bases
UV Protection	ISO 4892-2 Method A Xenon Arc 2160 hrs

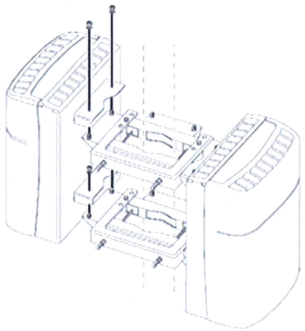
WEIGHT
System: 18.9 lbs (84.07 N)
Mount: 13.9 lbs (57.38 N)
Total: 32.8 lbs (141.45 N)

Stand-alone Module Assembly: 1 lb (4.45 N)

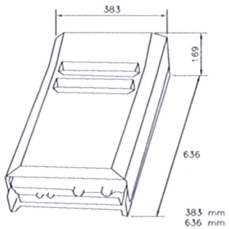
COMBINED WIND LOADING
150mph (sustained): 105.7 lbs (470 N)
195mph (gust): 213.6 lbs (950 N)

STANDARDS
Strikesorb modules are compliant to the following Surge Protection Device (SPD) Standards
- ANSI/IEEE 1449 - 3rd Edition
- IEEE C62.41
- NEMA LS-1, IEC 61643-11:2005 2nd Edition:2005
- IEC 61643-12
- EN 61643-11:2002 (including A11:2007)

DC6-48-60-18-8F SPECS | 3



RRU INSTALLATION DETAIL | 4



WEIGHT AND COLOR

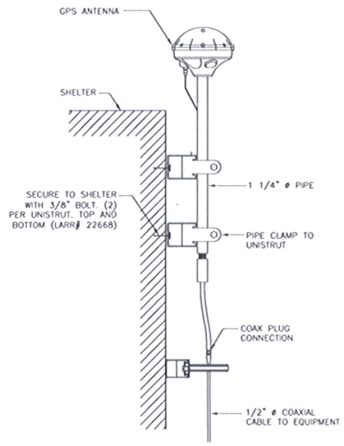
DESCRIPTION	VALUE
WEIGHT	
RRUS	20 kg
COLOR	
GRAY	NCS S2502-R

20 kg = 44.09 POUNDS

383 mm = 15.07 INCHES
636 mm = 25.03 INCHES
169 mm = 6.65 INCHES

UNIT MEASUREMENT mm

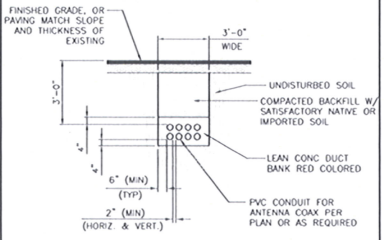
RRU SPECS | 5



NOTES:

1. LOCATION OF ANTENNA MUST HAVE CLEAR VIEW OF SOUTHERN SKY AND CANNOT HAVE ANY BLOCKAGES EXCEEDING 25% OF THE SURFACE AREA OF A HEMISPHERE AROUND THE GPS ANTENNA.
2. ALL GPS ANTENNA LOCATIONS MUST BE ABLE TO RECEIVE CLEAR SIGNALS FROM A MINIMUM OF FOUR (4) SATELLITES. VERIFY WITH HANDHELD GPS BEFORE FINAL LOCATION OF GPS ANTENNA.
3. THE WEIGHT OF THE ANTENNA MOUNT IS 6.5 LBS.
4. IF ICE BRIDGE OR SIMILAR POST IS NOT GROUNDED, GROUND WITH #2 AWG TINNED BARE COPPER WIRE EXOTHERMICALLY BONDED TO POST AND CONNECTED TO GROUND RING.

GPS MOUNTING DETAIL | 6



NOTE: PROVIDE PROPER BENDING RADIUS FOR CONDUITS AS REQUIRED BY THE COAXIAL CABLE MFR.

TRENCHING DETAIL | 7

at&t
4430 ROSEWOOD DRIVE
PLEASANTON, CA 94588

PROJECT INFORMATION:

CNU0168/CNU4378
LTE SITE: CCL00168
FA#: 10087949 USID: 12763
SOUTH BERKELEY
5427 TELEGRAPH
OAKLAND, CA 94609

CURRENT ISSUE DATE:
03/23/11

ISSUED FOR:
REV 3
CITY COMMENTS

REV.:	DATE:	DESCRIPTION:	BY:
A	07/26/10	90% CONSTRUCTION DRAWING	JD
0	09/17/10	100% CONSTRUCTION DRAWING	JD
1	01/07/11	CITY COMMENTS	PN
2	01/31/11	CITY COMMENTS	HT
3	03/23/11	CITY COMMENTS	HG

PLANS PREPARED BY:

PDC CORPORATION
1062 CONCANNON BLVD.
LIVERMORE, CA 94550
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CONSULTANT:

LYLE
3140 GOLD CAMP DR, SUITE 30
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DRAWN BY:	CHK.:	APV.:
JD	PP	SAS

LICENSER:

SHEET TITLE:
EQUIPMENT AND CONSTRUCTION DETAILS

SHEET NUMBER:
A-6

Radio Frequency – Electromagnetic Energy (RF-EME) Compliance Report

Prepared for:
AT&T Mobility, LLC
c/o The Lyle Company
3140 Gold Camp Drive Suite 30
Rancho Cordova, CA 95670

USID# 12763
Site No. CNU0168
~~South Berkeley~~
~~5427 Telegraph~~
Oakland, California 94710
Alameda County
37.840000; -122.262500 NAD83

EBI Project No. 62101396
September 24, 2010

RECEIVED
OCT 18 2010
City of Oakland
Planning & Zoning Division

EBI CONSULTING
Creating Value for Your Business

ATTACHMENT D

Reviewed and Approved by:

REGISTERED PROFESSIONAL ENGINEER
HERBERT J. STOCKINGER
23625
Exp. 12/31/11
CIVIL
STATE OF CALIFORNIA

H. Stockinger

Herbert J. Stockinger, PE
Senior Engineer

09/26/2010

Note that EBI's scope of work is limited to an evaluation of the Radio Frequency – Electromagnetic Energy (RF-EME) field generated by the antennas and broadcast equipment noted in this report. The engineering and design of the building and related structures, as well as the impact of the antennas and broadcast equipment on the structural integrity of the building, are specifically excluded from EBI's scope of work.

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Appendix B Antenna Inventory
Appendix C RoofView® Export File
Appendix D RoofView® Graphic
Appendix E Compliance/Signage Plan

EXECUTIVE SUMMARY

Purpose of Report

EnviroBusiness Inc. (dba EBI Consulting) has been contracted by AT&T Mobility, LLC to conduct radio frequency electromagnetic (RF-EME) modeling for AT&T Site CNU0168 located at 5427 Telegraph in Oakland, California to determine RF-EME exposure levels from proposed AT&T wireless communications equipment at this site. As described in greater detail in Section 2.0 of this report, the Federal Communications Commission (FCC) has developed Maximum Permissible Exposure (MPE) Limits for general public exposures and occupational exposures. This report summarizes the results of RF-EME modeling in relation to relevant FCC RF-EME compliance standards for limiting human exposure to RF-EME fields.

This report contains a detailed summary of the RF EME analysis for the site, including the following:

- Antenna Inventory
- Site Plan with antenna locations
- Antenna inventory with relevant parameters for theoretical modeling
- Graphical representation of theoretical MPE fields based on modeling
- Graphical representation of recommended signage and/or barriers

This document addresses the compliance of AT&T's transmitting facilities independently and in relation to all collocated facilities at the site.

Statement of Compliance

A site is considered out of compliance with FCC regulations if there are areas that exceed the FCC exposure limits <u>and</u> there are no RF hazard mitigation measures in place. Any carrier which has an installation that contributes more than 5% of the applicable MPE must participate in mitigating these RF hazards.

As presented in the sections below, based on worst-case predictive modeling, there are no modeled areas on any accessible ground-level walking/working surface related to the proposed antennas that exceed the FCC's occupational or general public exposure limits at this site.

AT&T Recommended Signage/Compliance Plan

AT&T's RF Exposure Policy guidance, dated March 31, 2009, requires that:

1. All sites must be analyzed for RF exposure compliance;
2. All sites must have that analysis documented; and
3. All sites must have any necessary signage and barriers installed.

Site compliance recommendations have been developed based upon protocols presented in AT&T's RF Exposure Policy guidance document, dated March 31, 2009, additional guidance provided by AT&T, EBI's understanding of FCC and OSHA requirements, and common industry practice. Barrier locations have been identified (when required) based on guidance presented in AT&T's RF Exposure Policy guidance document, dated March 31, 2009. The following signage is recommended at this site:

- Green INFO 1 sign posted on or next to the access gate.
- Yellow CAUTION sign posted at the base of monopole

The signage proposed for installation at this site complies with AT&T's RF Exposure Policy and therefore complies with FCC and OSHA requirements. No barriers are recommended for this site. More detailed information concerning site compliance recommendations is presented in Section 5.0 and Appendix E of this report.

1.0 SITE DESCRIPTION

This project involves the proposed installation of up to nine (9) wireless telecommunication antennas on a monopole in Oakland, California. There are three Sectors (A, B, and C) proposed at the site, with three (3) antennas that may be installed per sector. The current plans for the site include three (3) antennas per sector. To be conservative, modeling was performed assuming the full build-out. In each sector, there is proposed to be one GSM antenna transmitting in the 850 MHz and the 1900 MHz frequency ranges, one UMTS antenna transmitting in the 1900 MHz frequency range and one LTE antenna transmitting in the 700 MHz and the 1750 MHz frequency ranges. The Sector A antennas will be oriented 30° from true north. The Sector B antennas will be oriented 240° from true north. The Sector C antennas will be oriented 140° from true north. The bottoms of the antennas will be 70 feet above ground level. Appendix B presents an antenna inventory for the site..

Access to this site is accomplished Access to this site is accomplished via a gate in the fence surrounding the tower. Workers must be elevated to antenna level to access them, so these antennas are not accessible to the general public.

2.0 FEDERAL COMMUNICATIONS COMMISSION (FCC) REQUIREMENTS

The FCC has established Maximum Permissible Exposure (MPE) limits for human exposure to Radiofrequency Electromagnetic (RF-EME) energy fields, based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP) and, over a wide range of frequencies, the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc. (IEEE) and adopted by the American National Standards Institute (ANSI) to replace the 1982 ANSI guidelines. Limits for localized absorption are based on recommendations of both ANSI/IEEE and NCRP.

The FCC guidelines incorporate two separate tiers of exposure limits that are based upon occupational/controlled exposure limits (for workers) and general public/uncontrolled exposure limits for members of the general public.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/ controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general public/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

General public/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment-related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Table 1 and Figure 1 (below), which are included within the FCC's OET Bulletin 65, summarize the MPE limits for RF emissions. These limits are designed to provide a substantial margin of safety. They vary by frequency to take into account the different types of equipment that may be in operation at a

particular facility and are "time-averaged" limits to reflect different durations resulting from controlled and uncontrolled exposures.

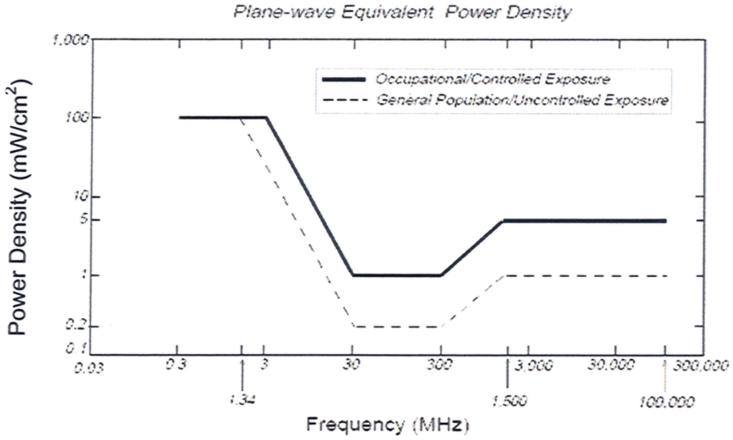
The FCC's MPEs are measured in terms of power (mW) over a unit surface area (cm^2). Known as the power density, the FCC has established an occupational MPE of 5 milliwatts per square centimeter (mW/cm^2) and an uncontrolled MPE of 1 mW/cm2 for equipment operating in the 1900 MHz frequency range. For the AT&T equipment operating at 850 MHz, the FCC's occupational MPE is 2.83 mW/cm^2 and an uncontrolled MPE of 0.57 mW/cm^2. These limits are considered protective of these populations.

Table 1: Limits for Maximum Permissible Exposure (MPE)

(A) Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	**Electric Field Strength (E) (V/m)**	**Magnetic Field Strength (H) (A/m)**	**Power Density (S) (mW/cm^2)**	**Averaging Time $[E]^2$, $[H]^2$, or S (minutes)**
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	($900/f^2$)*	6
30-300	61.4	0.163	1.0	6
300-1,500	--	--	f/300	6
1,500-100,000	--	--	5	6
(B) Limits for General Public/Uncontrolled Exposure				
Frequency Range (MHz)	**Electric Field Strength (E) (V/m)**	**Magnetic Field Strength (H) (A/m)**	**Power Density (S) (mW/cm^2)**	**Averaging Time $[E]^2$, $[H]^2$, or S (minutes)**
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1,500	--	--	f/1,500	30
1,500-100,000	--	--	1.0	30

f = Frequency in (MHz)
* Plane-wave equivalent power density

Figure 1. FCC Limits for Maximum Permissible Exposure (MPE)
Plane-wave Equivalent Power Density



Based on the above, the most restrictive thresholds for exposures of unlimited duration to RF energy for several personal wireless services are summarized below:

Personal Wireless Service	Approximate Frequency	Occupational MPE	Public MPE
Personal Communication (PCS)	1,950 MHz	5.00 mW/cm^2	1.00 mW/cm^2
Cellular Telephone	870 MHz	2.90 mW/cm^2	0.58 mW/cm^2
Specialized Mobile Radio	855 MHz	2.85 mW/cm^2	0.57 mW/cm^2
Most Restrictive Freq, Range	30-300 MHz	1.00 mW/cm^2	0.20 mW/cm^2

MPE limits are designed to provide a substantial margin of safety. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

Personal Communication (PCS) facilities used by AT&T in this area operate within a frequency range of 850-1900 MHz. Facilities typically consist of: 1) electronic transceivers (the radios or cabinets) connected to wired telephone lines; and 2) antennas that send the wireless signals created by the transceivers to be received by individual subscriber units (PCS telephones). Transceivers are typically connected to antennas by coaxial cables.

Because of the short wavelength of PCS services, the antennas require line-of-site paths for good propagation, and are typically installed above ground level. Antennas are constructed to concentrate energy towards the horizon, with as little energy as possible scattered towards the ground or the sky. This design, combined with the low power of PCS facilities, generally results in no possibility for exposure to approach Maximum Permissible Exposure (MPE) levels, with the exception of areas directly in front of the antennas.

3.0 AT&T RF Exposure Policy Requirements

AT&T's RF Exposure Policy guidance, dated March 31, 2009, requires that:

1. All sites must be analyzed for RF exposure compliance;
2. All sites must have that analysis documented; and
3. All sites must have any necessary signage and barriers installed.

Pursuant to this guidance, worst-case predictive modeling was performed for the site. This modeling is described below in Section 4.0. Lastly, based on the modeling and survey data, EBI has produced a Compliance Plan for this site that outlines the recommended signage and barriers. The recommended Compliance Plan for this site is described in Section 5.0.

4.0 Worst-Case Predictive Modeling

In accordance with AT&T's RF Exposure policy, EBI performed theoretical modeling using RoofView® software to estimate the worst-case power density at the site ground-level resulting from operation of the antennas. RoofView® is a widely-used predictive modeling program that has been developed by Richard Tell Associates to predict both near field and far field RF power density values for roof-top and tower telecommunications sites produced by vertical collinear antennas that are typically used in the cellular, PCS, paging and other communications services. The models utilize several operational specifications for different types of antennas to produce a plot of spatially-averaged power densities that can be expressed as a percentage of the applicable exposure limit.

For this report, EBI utilized antenna and power data provided by AT&T, and compared the resultant worst-case MPE levels to the FCC's occupational/controlled exposure limits outlined in OET Bulletin 65.

The assumptions used in the modeling are based upon information provided by AT&T, and information gathered from other sources. There are no other wireless carriers with equipment installed at this site.

Based on worst-case predictive modeling, there are no modeled areas on any accessible ground-level walking/working surface related to the proposed AT&T antennas that exceed the FCC's occupational or general public exposure limits at this site. At the nearest walking/working surfaces to the AT&T antennas, the maximum power density generated by the AT&T antennas is approximately 2.50 percent of the FCC's general public limit (0.50 percent of the FCC's occupational limit). The composite exposure level from all carriers on this site is approximately 2.50 percent of the FCC's general public limit (0.50 percent of the FCC's occupational limit) at the nearest walking/working surface to each antenna.

The inputs used in the modeling are summarized in the RoofView® export file presented in Appendix C. A graphical representation of the RoofView® modeling results is presented in Appendix D. It should be noted that RoofView is not suitable for modeling microwave dish antennas; however, these units are designed for point-to-point operations at the elevations of the installed equipment rather than ground level coverage.

5.0 RECOMMENDED SIGNAGE/COMPLIANCE PLAN

Signs are the primary means for control of access to areas where RF exposure levels may potentially exceed the MPE. As presented in the AT&T guidance document, the signs must:

- Be posted at a conspicuous point;
- Be posted at the appropriate locations;
- Be readily visible; and
- Make the reader aware of the potential risks prior to entering the affected area.

The table below presents the signs that may be used for AT&T installations.

Informational Signs		Alerting Signs	
	INFO 1		NOTICE
	INFO 2		CAUTION
at&t	INFO 3		WARNING
	INFO 4		

Based upon protocols presented in AT&T's RF Exposure Policy guidance document, dated March 31, 2009, and additional guidance provided by AT&T, the following signage is recommended on the site:

Recommended Signage:

- Green INFO 1 sign posted on or next to the access gate.
- Yellow CAUTION sign posted at the base of the monopole

No barriers are required for this site. Barriers may consist of rope, chain, fencing, or painted/taped stripes. The signage and any barriers are graphically represented in the Signage Plan presented in Appendix E.

6.0 SUMMARY AND CONCLUSIONS

EBI has prepared this Radiofrequency Emissions Compliance Report for the proposed AT&T telecommunications equipment at the site located at 5427 Telegraph in Oakland, California.

EBI has conducted theoretical modeling to estimate the worst-case power density from AT&T antennas to document potential MPE levels at this location and ensure that site control measures are adequate to meet FCC and OSHA requirements, as well as AT&T's corporate RF safety policies. As presented in the preceding sections, based on worst-case predictive modeling, there are no modeled exposures on any accessible ground-level walking/working surface related to proposed equipment in the area that exceed the FCC's occupational and general public exposure limits at this site. As such, the proposed AT&T project is in compliance with FCC rules and regulations.

Signage is recommended at the site as presented in Section 5.0 and Appendix E. Posting of the signage brings the site into compliance with FCC rules and regulations and AT&T's corporate RF safety policies.

7.0 LIMITATIONS

This report was prepared for the use of AT&T Mobility, LLC. It was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same locale under like circumstances. The conclusions provided by EBI are based solely on the information provided by the client. The observations in this report are valid on the date of the investigation. Any additional information that becomes available concerning the site should be provided to EBI so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report. No other warranty, expressed or implied, is made.

Appendix A

Certifications

Preparer Certification

I, Collin Johnston, state that:

- I am an employee of EnviroBusiness Inc. (d/b/a EBI Consulting), which provides RF-EME safety and compliance services to the wireless communications industry.
- I have successfully completed RF-EME safety training, and I am aware of the potential hazards from RF-EME and would be classified "occupational" under the FCC regulations.
- I am familiar with the FCC rules and regulations as well as OSHA regulations both in general and as they apply to RF-EME exposure.
- I have been trained in on the procedures outlined in AT&T's RF Exposure Policy guidance (dated 3/31/09) and on RF-EME modeling using RoofView® modeling software.
- I have reviewed the data provided by the client and incorporated it into this Site Compliance Report such that the information contained in this report is true and accurate to the best of my knowledge.

Appendix B

Antenna Inventory

Antenna Number	Operator	Antenna Type	TX Freq (MHz)	ERP (Watts)	Gain (dBd)	Model	Azimuth (deg.)	Length (ft)	Horizontal Beamwidth (Deg.)	X	Y	Z
ATT A1	AT&T	Panel	UMTS 850	250	11.9	Decibel TBXLHB-6565A-R2M	30	4.3	72	29	51	72.85
ATT A1	AT&T	Panel	UMTS1900	250	14.7	Decibel TBXLHB-6565A-R2M	30	4.3	65	29	51	72.85
ATT A1	AT&T	Panel	UMTS1900	250	14.7	Decibel TBXLHB-6565A-R2M	30	4.3	65	29	51	72.85
ATT A2	AT&T	Panel	GSM 850	519	11.85	Kathrein 742-264	30	4.84	68	34	48	72.58
ATT A2	AT&T	Panel	GSM1900	500	14.65	Kathrein 742-264	30	4.84	65	34	48	72.58
ATT A3	AT&T	Panel	LTE 700	247	11.3	Andrew DBXNH-6565A-R2M	30	4.23	68	38	45	72.885
ATT A3	AT&T	Panel	LTE 1710	516	14.5	Andrew DBXNH-6565A-R2M	30	4.23	65	38	45	72.885
ATT B1	AT&T	Panel	UMTS 850	250	11.9	Decibel TBXLHB-6565A-R2M	240	4.3	72	44	36	72.85
ATT B1	AT&T	Panel	UMTS1900	250	14.7	Decibel TBXLHB-6565A-R2M	240	4.3	65	44	36	72.85
ATT B1	AT&T	Panel	UMTS1900	250	14.7	Decibel TBXLHB-6565A-R2M	240	4.3	65	44	36	72.85
ATT B2	AT&T	Panel	GSM 850	519	11.85	Kathrein 742-264	240	4.84	68	40	33	72.58
ATT B2	AT&T	Panel	GSM1900	500	14.65	Kathrein 742-264	240	4.84	65	40	33	72.58
ATT B3	AT&T	Panel	LTE 700	247	11.3	Andrew DBXNH-6565A-R2M	240	4.23	68	35	29	72.885
ATT B3	AT&T	Panel	LTE 1710	516	14.5	Andrew DBXNH-6565A-R2M	240	4.23	65	35	29	72.885
ATT C1	AT&T	Panel	UMTS 850	250	11.9	Decibel TBXLHB-6565A-R2M	140	4.3	72	30	32	72.85
ATT C1	AT&T	Panel	UMTS1900	250	14.7	Decibel TBXLHB-6565A-R2M	140	4.3	65	30	32	72.85
ATT C1	AT&T	Panel	UMTS1900	250	14.7	Decibel TBXLHB-6565A-R2M	140	4.3	65	30	32	72.85
ATT C2	AT&T	Panel	GSM 850	519	11.85	Kathrein 742-264	140	4.84	68	28	37	72.58
ATT C2	AT&T	Panel	GSM1900	500	14.65	Kathrein 742-264	140	4.84	65	28	37	72.58

Antenna Number	Operator	Antenna Type	TX Freq (MHz)	ERP (Watts)	Gain (dBd)	Model	Azimuth (deg.)	Length (ft)	Horizontal Beamwidth (Deg.)	X	Y	Z
ATT C3	AT&T	Panel	LTE 700	247	11.3	Andrew DBXNH-6565A-R2M	140	4.23	68	26	42	72.885
ATT C3	AT&T	Panel	LTE 1710	516	14.5	Andrew DBXNH-6565A-R2M	140	4.23	65	26	42	72.885

1. Note that EBI uses an assumed set of antenna specifications and powers for unknown and other carrier antennas for modeling purposes.

Appendix C

Roofview® Export File

Map, Settings, Antenna, and Symbol Data Table .. Exported from workbook -> RoofView 4.15.xls
Done on 9/24/2010 at 2:16:14 PM.
Use this format to prepare other data sets for the RoofView workbook file.
You may use as many rows in this TOP header as you wish.
The critical point are the cells in COLUMN ONE that read 'Start...' (eg. StartMapDefinition)
If used, these (4) headers are required to be spelled exactly, as one word (eg. StartMapDefinition)
The very next row will be considered the start of that data block.
The first row of the data block can be a header (as shown below), but this is optional.
When building a text file for import, Add the Map info first, then the Antenna data, followed by the symbol data.
All rows above the first marker line 'Start...' will be ignored, no matter how many there are.
This area is for you use for documentation.
End of help comments.

You can place as much text here as you wish as long as you don't place it below
the Start Map Definition row below the blue line.
You may insert more rows using the Insert menu.
Should you need additional lines to document your project, simply insert additional rows
by highlighting the row number adjacent to the blue line below and then clicking on the Insert menu
and selecting rows.

tMapDefinition

Roof Max Y	Roof Max X	Map Max Y	Map Max X	Y Offset	X Offset	mber of Ar	envelope	List Of Areas
120	100	150	120	20	20	1	E$81:$DZ$;E$81:$DZ$200	$AE$81:$DZ$200

rtSettingsData

Standard	Method	Uptime	Scale Factoı	Low Thr	Low Color	Mid Thr	Mid Color	Hi Thr	Hi Color	Over Color	Ap Ht Mult	p Ht Method
4	2	1	1	100	1	500	4	5000	2	3	1.5	1

rtAntennaDátás advisable to provide an ID (ant 1) for all antennas

ID	Name	(MHz) Freq	Trans Power	Trans Count	Coax Len	Coax Type	Other Loss	Input Power	Calc Power	Mfg	Model	(ft) X	(ft) Y	(ft) Z	Type	(ft) Aper	dBd Gain	BWdth Pt Dir	Uptime Profile	ON flag
ATT A1	UMTS 850	850	26.47	1					26.47	Decibel	TBXLHB-6565A-R2M	29	51	72.85		4.3	11.9	72;30		ON•
ATT A1	UMTS 1900	1900	13.89	1					13.89	Decibel	TBXLHB-6565A-R2M	29	51	72.85		4.3	14.7	65;30		ON•
ATT A1	UMTS 1900	1900	13.89	1					13.89	Decibel	TBXLHB-6565A-R2M	29	51	72.85		4.3	14.7	65;30		ON•
ATT A2	GSM 850	850	13.9	4					55.6	Kathrein	742-264	34	48	72.58		4.84	11.85	68;30		ON•
ATT A2	GSM 1900	1900	7.03	4					28.12	Kathrein	742-264	34	48	72.58		4.84	14.65	65;30		ON•
ATT A3	LTE 700	700	30	1					30	Andrew	DBXNH-6565A-R2M	38	45	72.885		4.23	11.3	68;30		ON•
ATT A3	LTE AWS	1710	30	1					30	Andrew	DBXNH-6565A-R2M	38	45	72.885		4.23	14.5	65;30		ON•
ATT B1	UMTS 850	850	26.47	1					26.47	Decibel	TBXLHB-6565A-R2M	44	36	72.85		4.3	11.9	72;240		ON•
ATT B1	UMTS 1900	1900	13.89	1					13.89	Decibel	TBXLHB-6565A-R2M	44	36	72.85		4.3	14.7	65;240		ON•
ATT B1	UMTS 1900	1900	13.89	1					13.89	Decibel	TBXLHB-6565A-R2M	44	36	72.85		4.3	14.7	65;240		ON•
ATT B2	GSM 850	850	13.9	4					55.6	Kathrein	742-264	40	33	72.58		4.84	11.85	68;240		ON•
ATT B2	GSM 1900	1900	7.03	4					28.12	Kathrein	742-264	40	33	72.58		4.84	14.65	65;240		ON•
ATT B3	LTE 700	700	30	1					30	Andrew	DBXNH-6565A-R2M	35	29	72.885		4.23	11.3	68;240		ON•
ATT B3	LTE AWS	1710	30	1					30	Andrew	DBXNH-6565A-R2M	35	29	72.885		4.23	14.5	65;240		ON•
ATT C1	UMTS 850	850	26.47	1					26.47	Decibel	TBXLHB-6565A-R2M	30	32	72.85		4.3	11.9	72;140		ON•
ATT C1	UMTS 1900	1900	13.89	1					13.89	Decibel	TBXLHB-6565A-R2M	30	32	72.85		4.3	14.7	65;140		ON•
ATT C1	UMTS 1900	1900	13.89	1					13.89	Decibel	TBXLHB-6565A-R2M	30	32	72.85		4.3	14.7	65;140		ON•
ATT C2	GSM 850	850	13.9	4					55.6	Kathrein	742-264	28	37	72.58		4.84	11.85	68;140		ON•
ATT C2	GSM 1900	1900	7.03	4					28.12	Kathrein	742-264	28	37	72.58		4.84	14.65	65;140		ON•
ATT C3	LTE 700	700	30	1					30	Andrew	DBXNH-6565A-R2M	26	42	72.885		4.23	11.3	68;140		ON•
ATT C3	LTE AWS (1710)	1710	30	1					30	Andrew	DBXNH-6565A-R2M	26	42	72.885		4.23	14.5	65;140		ON•

irtSymbolData

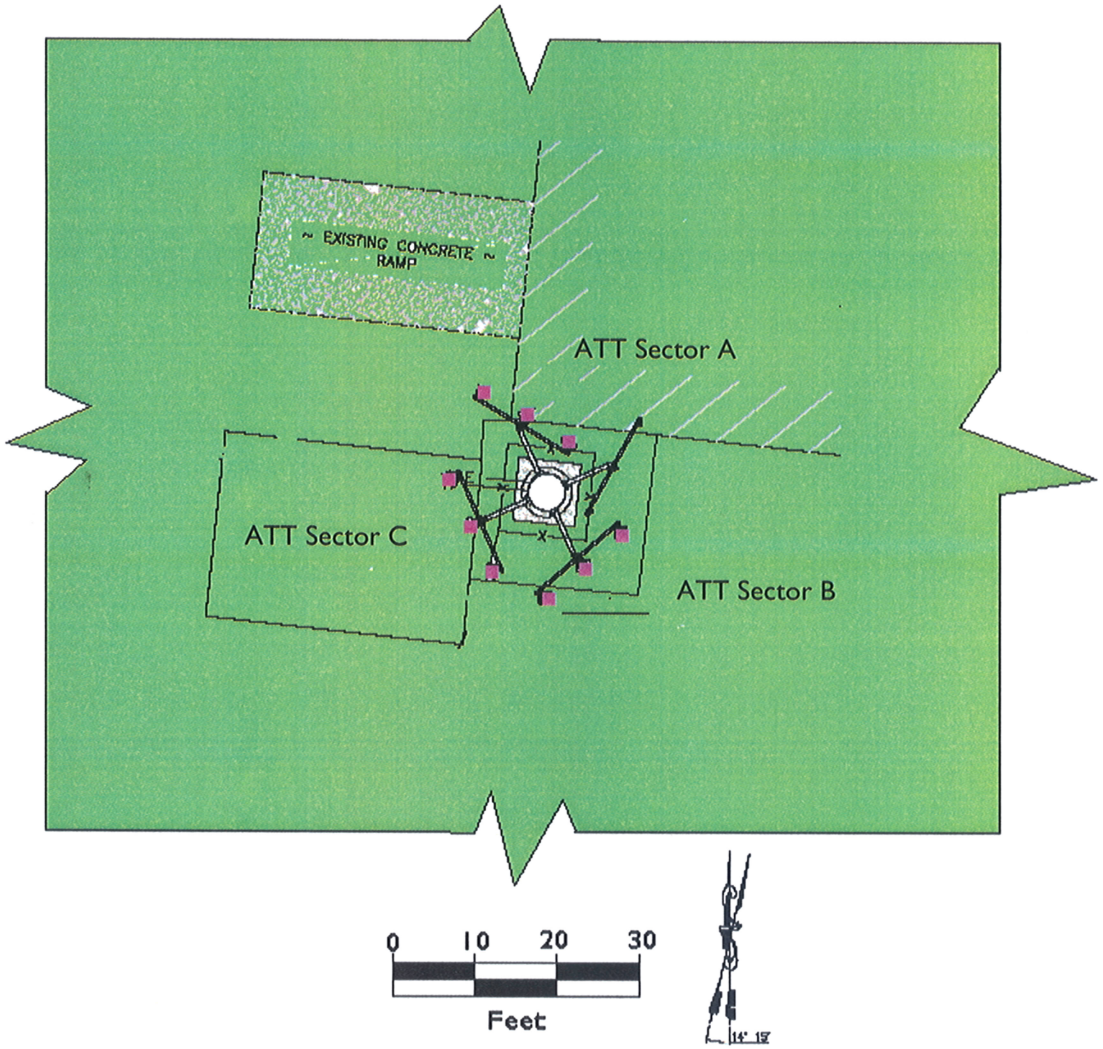
Sym	Map Marker	Roof X	Roof Y	Map Label	notes for this table only)
Sym		5	35	AC Unit	mple symbols
Sym		14	5	Roof Access	
Sym		45	5	AC Unit	
Sym		45	20	Ladder	

Appendix D

Roofview ® Graphics

% of FCC Public Exposure Limit

- Exposure Level ≥ 5,000
- 500 < Exposure Level ≤ 5000
- 100 < Exposure Level ≤ 500
- Exposure Level ≤ 100



- AT&T Antennas
- Other Carrier Antennas

Roofview: Composite Exposure Levels

Facility Operator: AT&T Mobility

Site Name: South Berkeley

AT&T Site Number: CNU0168

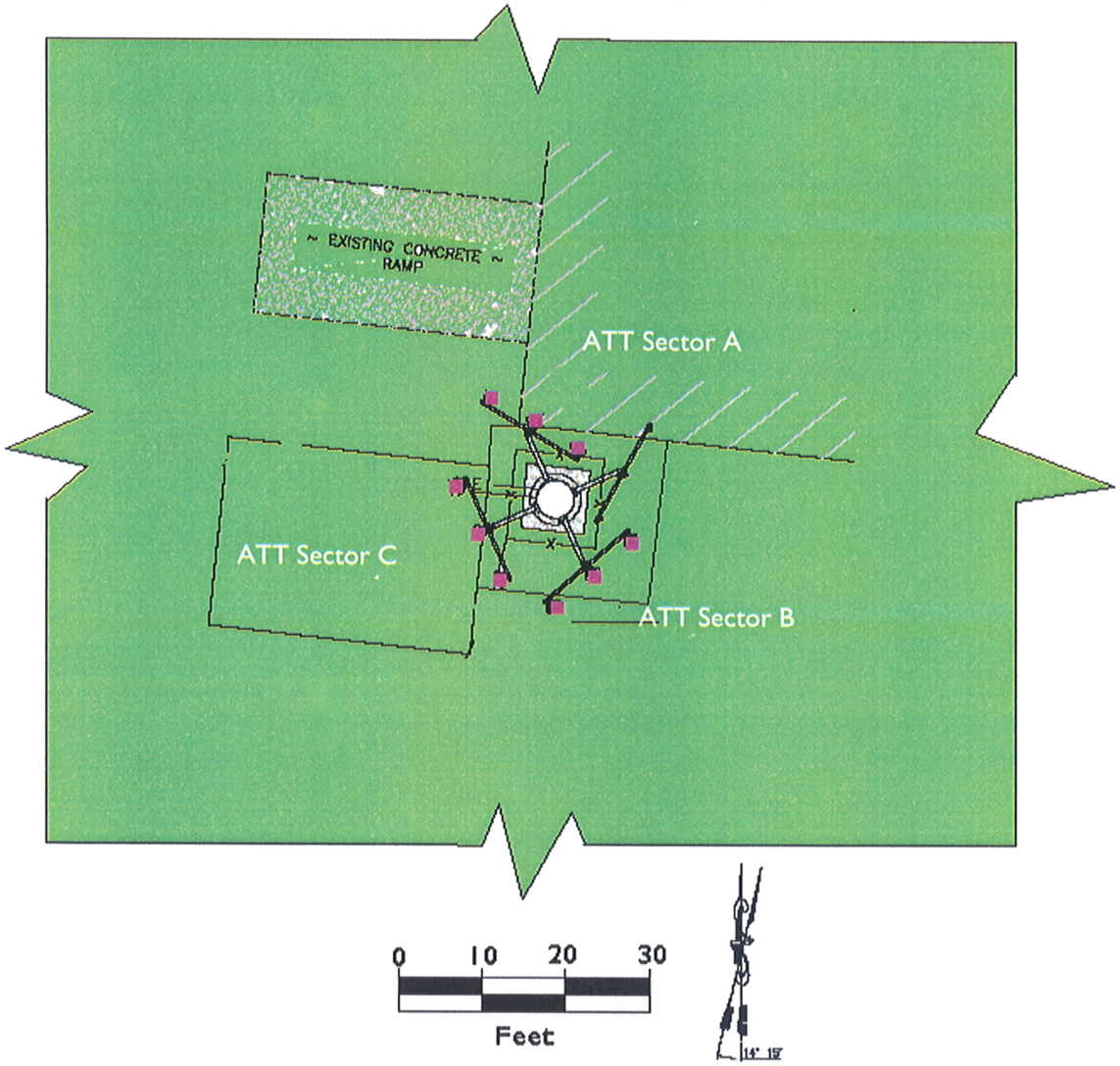
USID Number: 12763

Report Date: 09-24-10

EBI CONSULTING

% of FCC Public Exposure Limit

- Exposure Level >5
- Exposure Level ≤ 5



- AT&T Antennas
- Other Carrier Antennas

Roofview: AT&T Exposure Levels

Facility Operator: AT&T Mobility
Site Name: South Berkeley
AT&T Site Number: CNU0168
USID Number: 12763
Report Date: 09-24-10

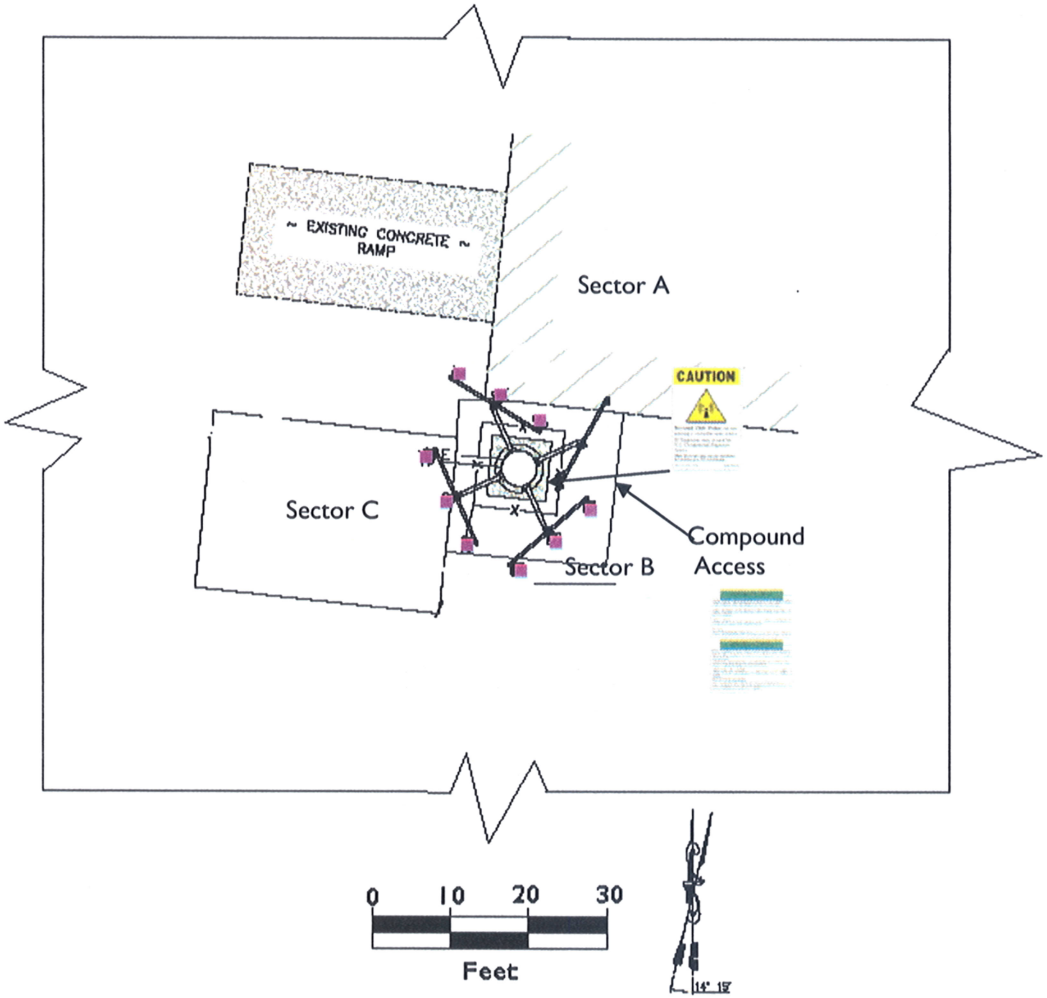
EBI CONSULTING

Appendix E

Compliance/Signage Plan

AT&T Antennas

Other Carrier Antennas



Sign Identification Legend	
	Denotes AT&T Informational Sign 1
	Denotes AT&T Informational Sign 2
	Denotes AT&T Informational Sign 3
	Denotes AT&T Informational Sign 4
	Denotes AT&T NOTICE Sign
	Denotes AT&T CAUTION Sign
	Denotes AT&T WARNING Sign

Compliance/Signage Plan

Facility Operator: AT&T Mobility

Site Name: South Berkeley

AT&T Site Number: CNU0168

USID Number: 12763

Report Date: 09-24-10

EBI CONSULTING

ATTACHMENT E

Existing

Proposed

view from 55th Street looking south at site

AT&T Wireless

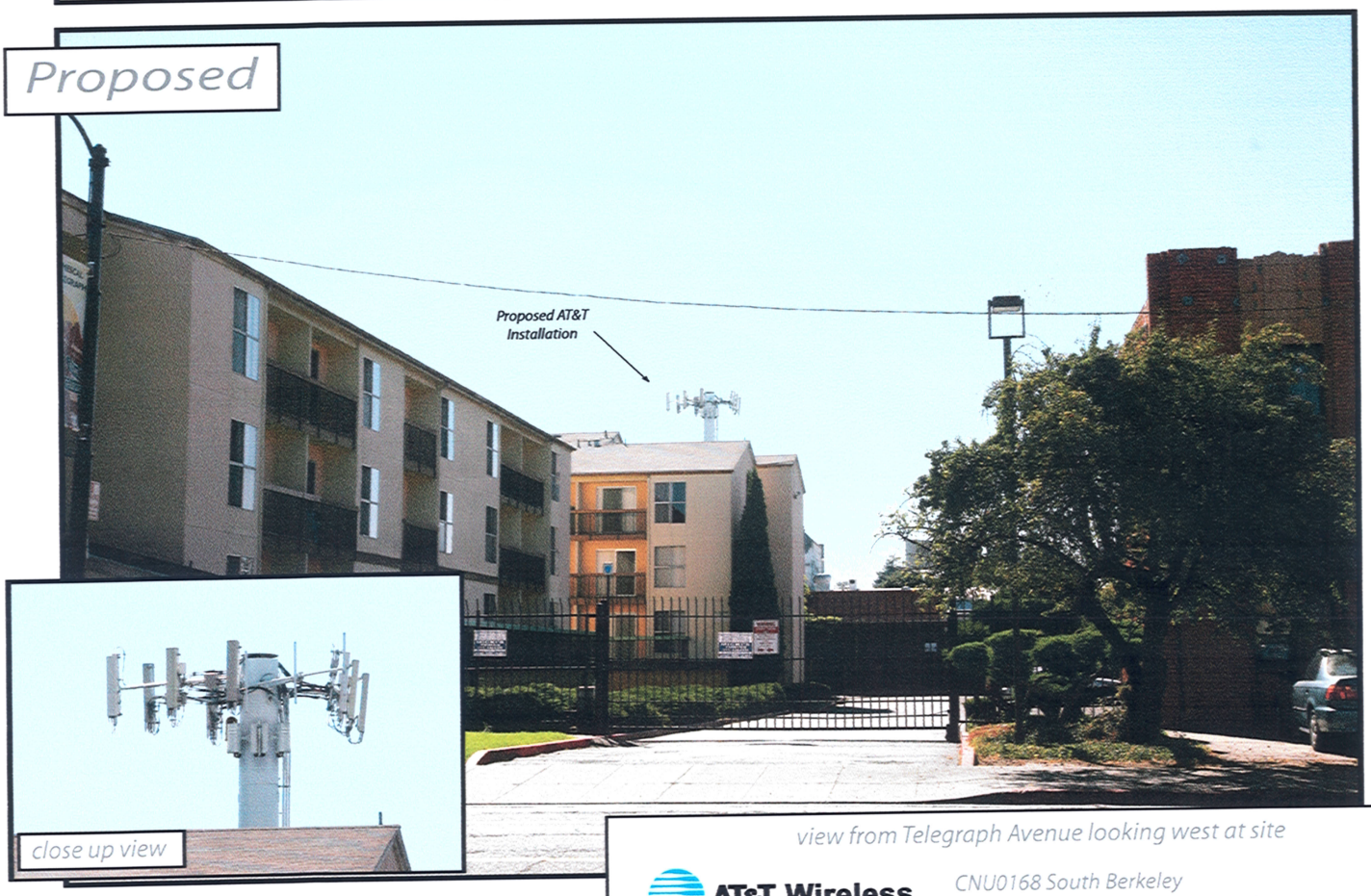
CNU0168 South Berkeley
5427 Telegraph Avenue, Oakland, CA

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

— RECEIVED: 10/18/10 —

Existing

Proposed



view from Telegraph Avenue looking west at site

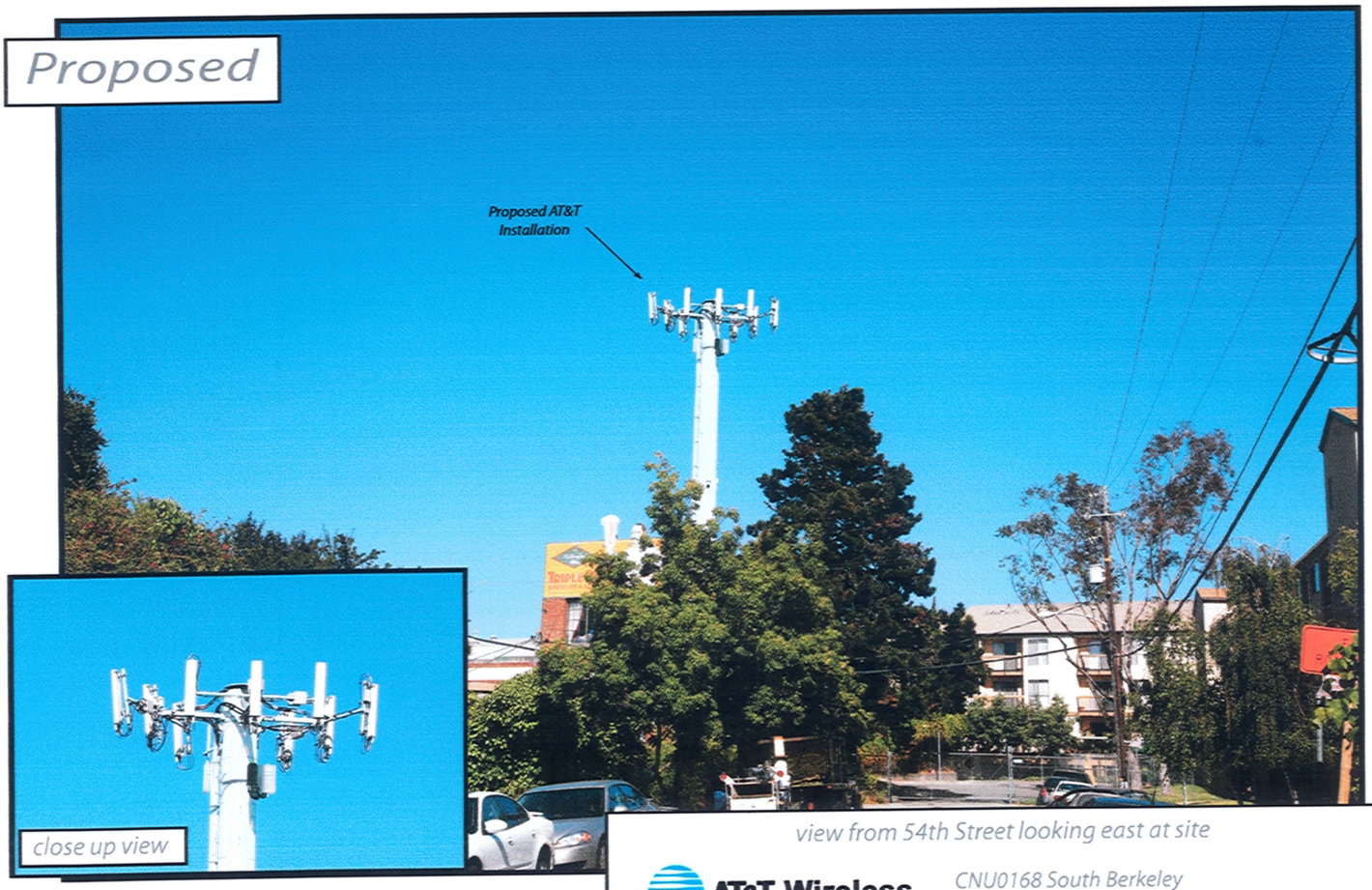
AT&T Wireless

CNU0168 South Berkeley
5427 Telegraph Avenue, Oakland, CA

AdvanceSim
Contact | 925 | 202 8507

Existing

Proposed



view from 54th Street looking east at site

AT&T Wireless

CNU0168 South Berkeley
5427 Telegraph Avenue, Oakland, CA

AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

January 26, 2011

City of Oakland
Planning and Zoning Services Division
250 Frank H Ogawa Plaza Suite 2114
Oakland CA 94612

RECEIVED
FEB 09 2011
City of Oakland
Planning & Zoning Division

RE: Planning File CMDV10-267. Location 5427 Telegraph Ave.
Alternative Site Design Analysis

Dear Planning Department:

4) Per Section 17.128.120(E) for Site Design Preferences of the Telecommunication Regulations it requires the submission of a site design alternative analysis. Please submit this information. See attached.

Please see the attached Site Inventory Map. In the immediate project vicinity are labeled as Candidates A, B, C, and D.

Candidate A: ATT Site Name: CHILDREN'S HOSPITAL ATT USID: 73634
Address: 744 52nd Street
Distance to Project Site: 0.27 miles

Candidate B: ATT Site Name: OAKLAND479 ATT USID: RFT40000
Address: 479 45th Street
Distance to Project Site: 0.45 miles

Candidate C: ATT Site Name: ROCKRIDGE ATT USID: 12766
Address: 5835 College Ave.
Distance to Project Site: 0.76 miles

Candidate D: ATT Site Name: OAKLAND ATT USID: 73360
Address: 5634 College Ave.
Distance to Project Site: 0.75 miles

As shown on the Site Inventory Map- the wireless facility at 5427 Telegraph Ave (ATT Site Name: SOUTH BERKELEY) serves wireless users primarily on the Highway 24 Corridor between 40th Street and College Ave. This site also provide wireless services to non-vehicular uses in the immediate project area. As shown on this map, 2candidates are located within 0.5 miles and two other sites are located within 0.75 miles.

Candidate A: This site is within 0.27 miles of the site- however, due to the rooftop location and volume of wireless uses in the area, Candidate A provides primary service south along High 24 and north to the adjacent residential neighborhoods.

Candidate B: This site is within 0.45 miles of the site- however, do to the structures between Candidate B and the project site, adequate coverage cannot be achieved through Candidate B alone. Candidate B provides in fill coverage along Highway 24.

Candidate C: This site is within 0.76 miles of the site- however due to the built structures and high volume of wireless traffic this site would not produce adequate coverage in the area.

Candidate D: This site is within 0.76 miles of the site- however, this site cannot provide adequate service in the project area due to the alignment of Highway 24 and the structural obstructions in the area.

3140 Gold Camp Drive, Suite 30
Rancho Cordova, CA 95670

ATTACHMENT F

- Site Inventory Map by AT&T -

BSD: 02/09/11