B

Type

X

Plans

BU05-2918

Permit Number

14100

Street Number

Bodega Hwy

Street Name

TW1

Community Code

026-130-016

APN

COUNTY OF SONOMA - PERMIT AND RESOURCE MANAGEMENT DEPARTMENT

2550 Ventura Avenue, Santa Rosa, CA 95403 (707) 565-1900 FAX (707) 565-1103

Please Print Your Name: Nicole Tenenbaum — Date Applied: 6/8/06

INFORMATION WITHIN HEAVY LINE TO BE COMPLETED BY APPLICANT

JOB ADDRESS: 14100 Bodega Hwy, TWI

SITE LOCATION INFORMATION - PRINT CLEARLY

Site Address: 14100 Bodega Highway — City: Bodega — ZIP: 94922

Cross-Street: Valley Ford Freestone Rd. — APN: 26-13-16 — Project Phone #: 707 953-0464 — Project Fax #: ( )

Directions: On the way to Bodega Bay off Hwy 12. — Subd. Name — Unit # — Lot #

Describe Project: Attaching antennas to an existing mono pole plus 4 eqmt. cabinets — Living Area / Garage / Decks: N/A — Contract Price: $50,000

OWNER NAME AND ADDRESS

Name: Adeline Blaa

Mailing Address: 14100 Bodega Highway

City: Bodega — State: CA — ZIP: 94922

Day Ph: 707 953-0464 — Fax: ( )

APPLICANT NAME AND ADDRESS

Name: Nicole Tenenbaum

Mailing Address: 436 14th St. #100

City: Oakland — State: CA — ZIP: 94612

Day Ph: (415 377-0194 — Fax: 510 208-3770

CONTRACTOR INFORMATION — To be provided

Company Name:

Address:

City: — State: — ZIP:

Day Ph: ( ) — Fax: ( )

OTHER PERSONS (ARCHITECT, ENGINEER, ETC.) — N/A

Name:

Address:

City: — State: — ZIP:

Day Ph: ( ) — Fax: ( )

License No: — Exp. Date:

WORKER'S COMPENSATION DECLARATION

I hereby affirm under penalty of perjury one of the following declarations:

☐ I have and will maintain a certificate of consent to self-insure for worker's compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

☐ I have and will maintain worker's compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My worker's compensation insurance carrier and policy number are:

Carrier

Policy No.

(This section need not be completed if the permit is for one hundred dollars ($100) or less).

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the worker's compensation laws of California, and agree that if I should become subject to the worker's compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Exp. Date: ______ Applicant: ______

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.

OWNER-BUILDER DECLARATION

I hereby affirm under penalty of perjury that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500).):

☐ I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his or her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he or she did not build or improve for the purpose of sale.).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law.).

☐ I am exempt under Sec. ______, B & P.C. for this reason ______

Date ______ Owner ______

LICENSED CONTRACTOR'S DECLARATION

I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Lic. Class ______ Lic. No. ______

Exp. Date ______ Contractor ______

ASBESTOS DECLARATION

Written asbestos notification pursuant to Part 61 of Title 40 of the Code of Federal Regulations is required when asbestos exists in buildings, or portions thereof, undergoing demolition. I hereby declare that demolition authorized by this permit is from construction that (☐ does) (☐ does not) contain asbestos, or that ☐ no demolition is authorized by this permit.

I certify that I have read this application and affirm under penalty of perjury that the above information is correct. I agree to comply with all local Ordinances and State laws relating to building construction. I hereby authorize representatives of the County of Sonoma to enter upon the above-mentioned property for inspection purposes. If, after making the Certificate of Exemption for the Worker's Compensation provision of the Labor Code I should become subject to such provisions, I will forthwith comply. In the event I do not comply with the Workman's Compensation law, this permit shall be deemed revoked.

N T [signature]

PERMITTEE SIGNATURE

436 14th St. #100 Oakland, CA 94612

ADDRESS — CITY — ZIP

☐ Contractor ☐ Owner ☐ Other Licensed Professional

CONSTRUCTION LENDING DECLARATION

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued, (Sec. 3097, Civ.C.).

Lenders Name ______

Lenders Address ______

FOR DEPARTMENT USE

Zoning: LEA 86-160, F1 OAH, BE, SR — Acres: 273.18

Existing Use/Structures: Various Farm Bldgs. (E) Mobile monopole

Proposed Use/Structures: 4 antennas & 4 equipment cabinets

Zoning Min. Yard Requirements: Front — Side — Right — Back

NOTE: Fire Safe Standards require all parcels greater than 1 Acre to have a min. 30' setback unless mitigated. ☐ Mitigation Required ☐ Address subject to change

Approval for Permit Issuance: — Approval for Occupancy

By: — By:

Date: — Date:

Conditions: (E) Monopole is 65 feet tall UPE05-0027 Appr. 5-3-05 *SR = Corridor - Bodega Hwy / Antennas shall be painted

Sewer Connection: ☐ Available ☐ Fees Paid

Approved by: * O.K. as per Doug ... Sewer

Road Encroachment: ☐ Fees Paid

Approved by: D Caldwell — Date: 6/8/05

Septic System Permit/Clearance #: SEP96-1204

Approved by: WEL — Date: 6-8-05

Flood Zone: ☐ Yes ☒ No — 100 Year Flood Elevation:

Site Review

Drainage Review:

Approved by: — Date:

Fire: — Approved by: JB M'Lure for J. Fardis — Date: 10/18/05

Code Enforcement Violation ☐ Yes ☒ No — Violation #

This permit is limited to ______ days.

Work Authorized: ADD 4 antennas to exist. Mono Pole plus equip cabinets to new slab.

☒ Plans Approved	☐ Post FIRM	☐ Alquist Priolo Report Available
☐ No Plans Subject to Field Inspection	☐ Pre FIRM	☐ Geotechnical report Available

Plancheck Cleared By	Date:	Type of Construction	Occupancy	No. of Stories	No. of Bedrooms
RC	10-13-05	VN	U2	—	
Permit Cleared for Issuance	Date:	Auto. Fire Sprinklers Req'd	No of Units	Certificate of Occupancy	
[signature]	10/18/05	NO			

PERMIT NUMBER: BLD05-2918

INSPECTION AREA: 7

PAYMENT REC'D

$ ______ Machine Apace for Permit Fee

OCT 18 2005

PERMIT AND RESOURCE MANAGEMENT DEPARTMENT COUNTY OF SONOMA

Final Date: — Inspector:

THIS PERMIT SHALL EXPIRE IN THREE(3) YEARS FROM DATE FEES ARE PAID UNLESS OTHERWISE NOTED BY CODE ENFORCEMENT

sonoma: informstat\CIS-007.cdr Revised: 4/8/2004

Distribution: White - File Canary - Applicant Pink - Audit Copy Blue - Assessor Cardstock - Inspector

131)	SPECIAL INSPECTION REQUIRED	☐ YES	☐ NO	IF YES, SEE ADDITIONAL SHEET

	INSPECTION RECORD	DATE	NAME
101)	ROUGH GRADING		
103)	FOUNDATION		
	FORMS/SETBACK		
	FOOTING	10/28/05	Syl
	WALLS		
106)	UFER GROUND #		
104)	CAISSONS/PIERS		
105)	SLAB		
107)	UNDERGROUND UTILITIES	10/58/05	Syl
110)	MASONRY		
109)	RETAINING WALLS		
113)	FIREPLACE		
	FOOTING		
	HEARTH/PROTECTION		
	THROAT		
114)	CHIMNEY		
120)	UNDERFLOOR/UNDERSLAB		
115)	HYDRONICS		
116)	U/F ELECTRICAL	10/28/05	Syl
117)	U/F MECHANICAL		
118)	U/F PLUMBING		
119)	U/F FRAMING		
139)	U/F INSULATION		
126)	SHEAR WALLS		
	☐ INTERIOR ☐ EXTERIOR		
127)	DIAPHRAGMS		
	☐ ROOF ☐ FLOOR		
134)	SIDING/SHEATHING		
125)	HOLD DOWNS		
132)	CLOSE-IN		
122)	ROUGH ELECTRICAL		
123)	ROUGH MECHANICAL		
124)	ROUGH PLUMBING		
128)	ROUGH FRAME		
160)	SMOKE DETECTORS		
139)	INSULATION		
142)	WALLBOARD		
143)	FIREWALLS		
135)	STUCCO/PLASTER		
	☐ LATH ☐ SCRATCH		
137)	ROOFING		
130)	TUB/SHOWER PAN		
162)	FIRE DAMPERS/DOORS		
164)	SUSPENDED CEILING		
	☐ ROUGH ELEC. ☐ ROUGH MECH.		
165)	EXITING - RAMPS/STAIRS		
163)	HANDRAILS/GUARDRAILS		
	CORRIDORS/DOORS		
166)	ACCESSIBILITY COMPLIANCE		
144)	WATER TANKS		
	☐ SLAB ☐ WALLS		
170)	TEMPORARY OCCUPANCY		
171)	TEMPORARY ELECTRICAL		
172)	TEMPORARY GAS		
174)	ELECTRIC METER AUTHORIZATION		
152)	PANEL BOARDS/SERVICE		
189)	SEPTIC ELECTRIC FINAL		
175)	GAS METER AUTHORIZATION		
153)	GAS PRESSURE TEST		
	HOUSE YARD		
190)	MANUF. HOME FOUNDATION		
191)	MANUF. HOME INSTALLATION		
	CONTINUITY		
	STAIRS/SKIRTS		
	RIDGE BOLTING		
193)	MANUF. HOME COND. FINAL		
	SWIMMING POOLS		
194)	PRE-GUNITE		
195)	PRE-DECK		
196)	PRE-PLASTER/FENCE		
197)	VINYL/FIBERGLASS POOL EXCAVATION		
102)	GRADING FINAL		
176)	ELECTRICAL FINAL		
177)	MECHANICAL FINAL		
178)	PLUMBING FINAL		
199)	FINAL		
	OCCUPANCY (OK TO OCCUPY)		

REMARKS

* NOTE ONLY 2 CINGULAR WIRELESS CABINETS (SOUTH SIDE) 2 NORTH CABINETS ARE FUTURE INSTALLATION.

Inspector - 6-8-05
Please ensure antennas are painted dark brown prior to final of bldg. permit. See Doug Zanow project planner x 2397.

650)	SUSMP INSPECTION	
651)	NPDES EROSION COMPLIANCE	
652)	NPDES SEDIMENT COMPLIANCE	
653)	NPDES DOCS/SWPPP	

	FIRE INSPECTION REQUIRED	DATE	NAME
	☐ Yes ☐ No		
759)	KNOX BOX		
760)	PROPANE TANK HOLD DOWNS		
770)	SPRINKLER FINAL		
771)	ABOVEGROUND HYDROSTATIC		
772)	UNDERGROUND HYDROSTATIC		
773)	UNDERGROUND FLUSH		
774)	THRUST BLOCKS		
775)	PIPE WELD		
776)	HYDRANTS/APPLIANCES		
777)	PUMP ACCEPTANCE		
778)	WATER SUPPLY/TANK		
779)	ALARM SYSTEM		
780)	HOOD & DUCT SYSTEM		
781)	ABOVEGROUND TANK/DISPENSER		
198)	FIRE FINAL		

CLEARANCES:

FIRE ☐ Local ☐ County

HEALTH DEPARTMENT

ZONING

SANITATION

PLAN RETENTION REQUIRED? ☐ Yes ☐ No

PERMIT # [illegible]

senni a CIS-008.cdr Rev. 04/15/04

County of Sonoma
Permit And Resource Management Department
2550 Ventura Avenue, Santa Rosa, CA 95403
Building Inspection Division

CORRECTION NOTICE

Permit # ~~BR05-2916~~ Owner ~~BLAKE~~

Inspection Code(s) 199

Job Address 14100 ~~BODEGA~~ HWY

☐ Other ☐ Foundation ☐ Underfloor ☐ Shear/Roof Nailing ☐ Close-In ☐ Final

I have inspected work under the above permit and have observed the following code violations:

(1) VERIFY ALL EQUIPMENT GROUNDING PER PLAN.

(2) INSTALL SIGNS PER PLAN (ALL 4 SIDES OF ENCLOSURE)

(3) VERIFY EQUIPMENT NOT INSTALLED IS FUTURE. (NOT ALL EQUIPMENT INSTALLED PER PLAN)

Make corrections before proceeding with other work. When corrections have been made, call 565-3551 or 565-1679 for reinspection.

☐ This Correction Notice must be brought in to PRMD with requested revisions.

Date 1.19.06 Inspector LAKE 707-565-3127

sennis CIS-004.cdr 08/07/03

White - Job Canary - Permit . Pink - Office

Building/Grading Application Submittal Checklist
CSS-003

14100 Bodega Highway | 210-13-16 | BLD05-2918
Project Address / City | APN # | BLD / GRD Permit #

Attaching Antennas to existing monopole | Nicole Tenenbaum
Project Description | Applicant / Contact Name

Plan Check Comments / Corrections ☐ Mail to applicant _____ ☒ Call to pick up _____

This form lists submittal requirements, approvals and development fees that apply to your application as submitted on this date, _____. Other requirements may be identified during the review process. All requirements must be cleared or approved and fees paid prior to permit issuance.

For Department Use Only - Do not write below this line until directed to sign

Required Plans

JH
- ☒ 4 complete sets of signed and / or stamped plans for building permits
- ☐ 5 complete sets of signed and / or stamped plans for grading permits
- ☐ 2 sets of legible site plan and floor plan for Well and Septic approvals

Mandatory Items

# Received	
___	Plot / Site Plan
___	Floor Plan (electrical, plumbing & mechanical)
___	Foundation Plan (footing details)
___	Elevations
___	Framing Plan
___	Cross Sections
✓	Structural Details
___	Signed Drawings (stamped if engineered)

Third Party Plan Check _____

Other Items Which May be Required

Required	# Received	
___	___	Title 24 Energy Calcs (2 signed, stamped sets)
JH ___	___	Engineering Calculations (2 signed, stamped sets)
___	___	Hydrology & Hydraulic Calcs (2 signed, stamped sets)
___	___	Geotechnical Report (2 signed, stamped sets)
___	___	Geotechnical Foundation Approval Letter
___	___	Truss Calcs and Layout (2 signed, stamped sets)
___	___	Flood Elevation Certificate
___	___	Flood Prone Urban Area (drainage review)
___	___	Special Inspection Form
___	___	Conditions of Planning Approval

JH Letter of Auth

PRMD Approvals Required for Permit Issuance

☐	Address Verification	☐	Road Name Application or Road Map		
4 ☐	Planning and Zoning	☒	Approved for Issuance 6-8-05	☐	Approved for Submittal staff sig. [illegible] date 6-8-05
7 ☐	Well and Septic	☒	Approved for Issuance	☐	Approved for Submittal staff sig. WE date 6-8-05
6 ☐	Road Encroachment	☒	Approved for Issuance Already Paid	☒	Approved for Submittal staff sig. [illegible] date 6-8-05
☐	Sewer / Water	☐	Approved for Issuance	☐	Approved for Submittal staff sig. date
3 ☐	Fire Services	☐	Approved for Issuance	☒	Approved for Submittal staff sig. [illegible] date 6/8/05
☐	Code Enforcement	☐	Approved for Issuance	☐	Approved for Submittal

☐ Investigation Fees ☐ Penalty Fees
staff sig. _____ date _____

Other PRMD Approvals Required For Permit Issuance

5 ☐ Drainage Review REQ'D 6/8/05 Kevin Bayer ☐ Project Review - Health _____
☐ Additional Requirements _____

Required Development Fees

HR ☐ School Mitigation Fee for _____ sq. ft.
Payable at: _____
☐ Fire Mitigation Fee
Payable at: _____
☐ Residential Traffic Mitigation Fee
☐ Commercial Traffic Mitigation Fee
☐ Park Mitigation Fee

Other Agency Clearances

These clearances may be required prior to permit issuance:

Required	Received	
☐	☐	Health Services - Food / Pool
☐	☐	Emergency Services - Hazardous Materials
☐	☐	Transport and Public Works
☐	☐	Water District _____
☐	☐	Sewer District _____

Air Quality District
- ☐ ☐ N. Sonoma County (433-5911)
- ☐ ☐ Bay Area (415-771-6000)

These clearances may be required for your project:

Contact these agencies directly.
- ☐ CA Regional Water Quality Board North Coast (576-2220)
- ☐ CA Regional Water Quality Board San Francisco Bay (510-622-2300)
- ☐ Architectural Review / Homeowner's Assoc. _____
- ☐ U.S. Army Corps of Engineers (415-977-8439)
- ☐ CA Dept. of Fish & Game (944-5000)
- ☐ CA Coastal Commission (415-904-5260)
- ☐ Other _____

The fees received on this date cover the cost of reviewing your plans prior to permit issuance. All required approvals must be obtained, and additional permit and development fees must be paid, before a building permit can be issued.

Applicant Signature | Staff Signature JH | Date 6-8-05

Sonoma County Permit and Resource Management Department
2550 Ventura Avenue ❖ Santa Rosa, CA ❖ 95403-2829 ❖ (707) 565-1900 ❖ Fax (707) 565-1103

COUNTY OF SONOMA
PERMIT AND RESOURCE MANAGEMENT DEPARTMENT

2550 Ventura Avenue, Santa Rosa, CA 95403
(707) 565-1900 FAX (707) 565-2210

Plan Check Revision & Clearance Notification

RECK

This form & redlined plans must be returned with resubmittals

Project Information:

14100 Bodega Highway
Project address

BLD05-2918
Building Permit Application # (Plancheck #)

Adeline Blasi
Owner's Name

~~[illegible]~~ TO PKG
Plan Checker's Name

☒ Pickup ☒ Phone# 415 377-0194 ☐ Mail to:

Applicant's Name: Nicole Tchenbaum Address

City, St Zip

Comments:

☐ Continuation sheet attached

PLEASE NOTE!

ALL CHECKED ITEMS MUST BE ADDRESSED OR YOUR RESUBMITTAL WILL NOT BE ACCEPTED.

Residential

☐ 4 complete sets of signed Plans

Commercial

☐ 4 complete sets of signed, stamped Plans

Krumbrubell & Diaz.

Plans

Redlined plans must be returned with resubmittals

Rqd.	Rcvd.	
☐	☐	Plans require correction. Revise original drawings per enclosed check prints. Return 3 revised sets of plans and **enclosed check print.**
☐	☐	Plot/Site Plan; Floor Plan (Electrical, Plumbing, Mechanical); Foundation Plan; Elevations; Framing Plan; Cross Sections; Structural Details, Signed (and stamped if "engineered") by designer.
☐	☐	Title 24 Energy Calculations (**2 signed**, stamped sets)
☐	☐	Engineering Calculations with revisions (**2 signed**, stamped sets)
☐	☐	Geotechnical Report (**2 signed**, stamped copies)
☐	☐	Geotechnical Plan/Foundation Review & **Approval Letter**
☐	☐	Truss Calculations & Layout Plan (**2 signed**, stamped sets) (Architect/Engineer review Required ☐)
☐	☐	Elevation Certificate (Sections A, B and C completed)
☐	☐	Grading Permit Required. Submit Separate Application.
☐	☐	Special Inspections Form, Completed and signed by Engineer or Architect. (Form enclosed ☐)
☐	☐	Peer Reviewer must review and approve revision prior to resubmittal.
☒	☐	These are revised plans, approved by planning to relocate equipment.
☐	☐	

PLEASE NOTE! Items marked below are required prior to building permit issuance.

Permit & Resource Management Dept.

Rqd.	Rcvd.	
☐	☐	Owner-Builder Form
☐	☐	Worker's Compensation verification
☐	☐	Zoning Clearance
☐	☐	Parcel Map Improvement Conditions
☐	☐	Grading Permit
☐	☐	Drainage Review
☐	☐	Residential Traffic Mitigation Fee
☐	☐	Commercial Traffic Mitigation Fee
☐	☐	Park Fee
☐	☐	Road Encroachment
☐	☐	Well & Septic
☐	☐	Sewer
☐	☐	Code Enforcement
☐	☐	Investigation Fees (Equal to total of bldg.,plmb.,elec.,mech. fees)
☐	☐	Penalties (Equal to total of bldg.,plmb.,elec.,mech. fees x _____)

Dept. Of Health Services

☐ ☐ Food Handling
☐ ☐ Hazardous Materials
☐ ☐ Public Pools & Spas

Special District

☐ ☐ Water _____
☐ ☐ Sewer _____

Fire Marshal

☐ ☐ F.S.S. Mitigation Approval Required (Residential)
☐ ☐ Review and Approval Letter (Non-Residential)

Air Pollution Control District

☐ ☐

School Mitigation Fee

☐ ☐ _____
School District Name

Other

☐ ☐ Utility Certificate (City of Santa Rosa)
☐ ☐ Architectural Committee Approval
☐ ☐ Coastal Commision

_____ _____ _____
Plans Examiner Phone Number (after 1:30) Date

sennis; F:\Forms\PCE\PCE-039.WPD Rev: 4/10/02 Dist.: White & Canary - Applicant Pink - PRMD Received by C2 Date 9/12/05

Grading Permit Questionnaire

BPC-017

Purpose: This form is used to determine if your project requires a grading permit in addition to a building permit. Grading is defined in Appendix Chapter 33 of the 2001 California Building Code (CBC) as "any excavating or filling or combination thereof." Grading can take the form of excavating and/or filling for foundations of structures, driveway construction and modification of topography. No person shall commence any grading without first having obtained a grading permit unless exempt as determined by the Permit and Resource Management Department (PRMD).

To determine if a project requires a grading permit, please answer the following questions. If you are unable to answer any questions, you should contact your design professional for assistance and/or consult with a PRMD plans examiner.

☐ Yes ☒ No ☐ Unknown	1.	Does the project include an excavation that (1) is 2 feet or more in depth or (2) creates a cut slope greater than 5 feet in height and steeper than 1 unit vertical in 1 ½ units horizontal that is not an excavation below finished grade for a basement, footing, retaining wall or other structure authorized by a valid building permit?
☐ Yes ☒ No ☐ Unknown	2.	Does the project include a fill 1 foot or more in depth **and** placed on natural terrain with a slope steeper than 1 unit vertical in 5 units horizontal?
☐ Yes ☒ No ☐ Unknown	3.	Does the project include a fill 3 feet or more in depth?
☐ Yes ☒ No ☐ Unknown	4.	Does the project include a fill that is intended to support structures?
☐ Yes ☒ No ☐ Unknown	5.	Does the project include a fill that exceeds 50 cubic yards on any one lot?
☐ Yes ☒ No ☐ Unknown	6.	Does the project include an excavation or fill that alters or obstructs a drainage course?
☐ Yes ☒ No ☐ Unknown	7.	Does the project include grading more than 5,000 cubic yards? (Soils report mandatory)

ACKNOWLEDGMENT

I, as the applicant, understand that a "YES" answer to **any** of the above questions means that I will need to apply for a grading permit. If any answers are "UNKNOWN" to me, I should contact my design professional immediately to determine if a grading permit is required.

I acknowledge that I will not be able to obtain a building permit for the site prior to issuance of the grading permit. I further acknowledge that obtaining a grading permit will add additional time to the review process.

N. Tenenbaum
Applicant Signature

6/8/05
Date

Nicole Tenenbaum
Applicant Printed Name

14100 Bodega Highway
Property Address

210-13-16
Assessor's Parcel Number(s)

BLD05-2918
Building Permit (BLD) Number

Sonoma County Permit and Resource Management Department
2550 Ventura Avenue ❖ Santa Rosa, CA ❖ 95403-2829 ❖ (707) 565-1900 ❖ Fax (707) 565-1103

FOR INTERNAL USE ONLY

Address: 14100 Bodega Hwy P.C.# BLD 05-0908

Inspector: JCR Date: 10/12/05

The proposed construction appears to be located in:

Flood Hazard:

- [ ] FIRM Flood Zone (ASFH) BFE = _____ ft. NGVD.
- Lowest finish floor at 12 above BFE = _____ft. NGVD.
- [ ] Design for moving water is recommended
- Section _____ is _____ Ft/sec
- Section _____ is _____ Ft/sec
- [ ] Area subject to flooding (not on adopted FIRM).
- [ ] Project is on flood zone major damage list.
- [ ] Flood Prone Urban Area defined by Ordinance #4906.
- [ ] Portions of property in flood zone but project site not in flood zone.
- [ ] Building is in FIRM Floodway
- [ ] Main building on site is Post-FIRM
- [ ] Sensitive drainage area, review by drainage section recommended.
- [ ] Appears to be a "substantial improvement" (40%), therefore flood regulations apply.
- [ ] Located inside the *Laguna de Santa Rosa* below elevation of 75 ft (Ord.#4906).

Geo-technical:

- [ ] Area of suspected slides, slumps, earth flow, or soil creep. (a.)
- [ ] Area of previous fill placement. (g.)
- [ ] Area of suspected expansive soil. (c.)
- [ ] Area without sufficient slope setback as set forth in UBC Section 1806. (b.)
- [ ] Area subject to possible liquefaction. (e.)
- [ ] Area of suspected soft, compressible, or organic soil with low bearing capacity.
- [ ] Area without recommended setback from stream (Drainage Division recommendations).
- [ ] Area of high moisture content in soil. (f.)
- [ ] Area subject to high erosion (water or wind).
- [ ] Area of soft soil due to past deep ripping or cultivation below minimum foundation depth. (h.)
- [ ] Area within 1000 feet of a solid waste disposal site.

Soils Investigation: Required [ ] Included [ ] Available [ ]

Geologic:

- [ ] Located in the Alquist-Priolo Special Studies Zone.
- [ ] Geologic report required (see CGS Publication 42).

General:

- [ ] Building addition will affect the required light and ventilation in an existing room.
- [ ] Existing electric meter must be replaced.
- [ ] Existing gas meter must be replaced.
- Slope is 8% to 10%
- [ ] Indications of existing substandard conditions that are not addressed by the proposed construction.
- [ ] Indications of past work done without a permit.
- [ ] Grading permit required for road, driveway, or site preparation.
- [X] Site is likely to be acceptable for conventional construction methods.

Wind: Exposure "B" (Exposure "C") Exposure "D"

N.S.C. Air Pollution Control District ..... [ ] Yes [ ] No

(1) Mono pole is existing. Check permit history & verify if (2) pole was done w/ permit

See Bld03-0796 for original Mono Pole antenna.

BL005 - 2918

OWNER AUTHORIZATION AGREEMENT

RETAIN

Market: California
Site Number: NB012-01
Site Name: Bodega Hwy & Hwy 12
Site Address: 14100 Bodega Highway, Bodega, California 94922

Re: Property described as: 14100 Bodega Highway, Bodega, California, 94922 (the "Property"). Adline A. Blasi, is the owner/representative of the Property (the "Owner") and has the authority to enter into a lease agreement with NEW CINGULAR WIRELESS PCS, LLC a Delaware limited liability company ("Carrier") concerning the portion of the Property that Carrier seeks to occupy.

Owner hereby grants Carrier and its agents a revocable right to enter the Property to perform any reasonable tests that Carrier deems desirable at Carrier's expense to determine the feasibility of constructing and operating its communications facility upon the Property, including but not limited to 1) radio frequency testing; 2) soils testing; 3) environmental audits; 4) boundary surveys; 5) on-site feasibility assessment; and 6) utilities ordering, coordination and installation; and/or 7) filing of zoning applications (the "Access Rights").

Owner may revoke the Access Rights at any time by delivering written notice to Carrier by certified mail, return receipt requested, at the following address:

New Cingular Wireless
4420 Rosewood Drive
Bldg. 2, 3rd Floor
Pleasanton, CA 94588
Attn: Network Deployment Manager

The termination notice will be effective three business (3) days after actual receipt by Carrier, provided, however, that Carrier may still enter the Property to remove any equipment it has placed there.
Carrier agrees to repair any damage to the Property caused by Carrier's use of the Access Rights. Carrier further agrees to indemnify, defend and hold Owner harmless from and against any and all damages, losses and expenses arising out of or resulting from any claim, action or other proceeding that is based upon any negligent act or omission or willful misconduct of Carrier or its employees or agents, arising in connection with the Access Right.

EACH PARTY ACKNOWLEDGES THAT THE OTHER HAS MADE NO REPRESENTATIONS OR COMMITMENTS THAT A LEASE AGREEMENT CONCERNING THE PROPERTY WILL BE ENTERED INTO IN THE FUTURE.

This agreement constitutes the entire understanding between the parties regarding the Access Rights. Any prior understandings, whether oral or written are superseded. This agreement is governed by the laws of the State in which the Property is located.

CARRIER

NEW CINGULAR WIRELESS PCS, LLC,
a Delaware limited liability company

Date: _____, 2005

By: _____
F. Kevin Flaherty

OWNER

ADLINE A. BLASI,

By: Adline A. Blasi

Name: Adline Blasi

Title: _____

Address 400 Pleasant Ave
Santa Rosa, CA
95403

Feb 9, 2005

Bill Casebeer

Reliable Crane & Rigging

1-800-222-7263

Cell 319-573-9463

Carl / Diamond Service -

BLDOS-2918 +

707-751-5900

1411 Bodega Hwy

Jackie -

996-66644 -

School fees +

P.O. Box 444

El Verano

Ca

95433

maybe R.C. never used rolled plans.

ICBO Evaluation Service, Inc.
5360 WORKMAN MILL ROAD • WHITTIER, CALIFORNIA 90601-2299
A subsidiary corporation of the International Conference of Building Officials

EVALUATION REPORT

ER-3987
Reissued July 1, 1998

Filing Category: FASTENERS—Concrete and Masonry Anchors (066)

HILTI HSL CARBON STEEL AND STAINLESS STEEL METRIC HEAVY DUTY CONCRETE ANCHORS

HILTI, INC.
5400 SOUTH 122ND EAST AVENUE
TULSA, OKLAHOMA 74146

1.0 SUBJECT

Hilti HSL Carbon Steel and Stainless Steel Metric Heavy Duty Concrete Anchors.

2.0 DESCRIPTION

2.1 HSL Metric:

2.1.1 General: Hilti HSL Carbon Steel and Stainless Steel Metric Heavy Duty Concrete Anchors are Type A (torque-set) anchors. Anchors are available in four styles, three of which are illustrated in Figure 1.

All carbon steel parts have a minimum 5-mil-thick galvanized zinc coating followed by a chromate treatment. Dimensions and installation criteria are set forth in Table 1. Drill bits and hammer drills are supplied by Hilti; drill bits comply with DIN 8035. Allowable shear and tension values are set forth in Tables 2 and 3.

2.1.2 HSL (Bolt): The anchor consists of a stud bolt, steel washer, steel sleeve, collapsible plastic sleeve, steel expansion sleeve and steel cone. This anchor is available in carbon steel only. The material specifications are as follows:

2.1.2.1 Bolt: Carbon steel per DIN 931, Grade 8.8.

2.1.2.2 Washer: Carbon steel per DIN 1544, Grade ST37.

2.1.2.3 Expansion Sleeve: Carbon steel per DIN 2393, Grade ST52-3.

2.1.2.4 Expansion Cone: Carbon steel per DIN 1654, Type CQ35.

2.1.2.5 Collapsible Sleeve: Acetal resin plastic.

The interaction of the bolt with the cone causes the expansion sleeve to expand. A defined tightening torque is produced by the friction among the bolt thread, cone, expansion sleeve, and base material. Torquing increases the expansion force in a controlled manner. When a tensile load acts along the longitudinal axis of the bolt, the cone slides further into the force-controlled expansion anchor. The collapsible sleeve is the only plastic part of the anchor. The washer is strain-hardened steel. To press the component being fastened against the base material, the plastic sleeve shears at the predetermined point and telescopes, thus overcoming gaps between the work surface and the component fastened. Also, ribs in the plastic sleeve prevent the anchor's turning in the hole during setting.

2.1.3 HSLG (Stud): The anchor consists of a steel threaded rod, steel nut, steel washer, steel sleeve, collapsible plastic sleeve, steel expansion sleeve and steel cone. It is available in both carbon and stainless steel. The material specifications are as follows:

2.1.3.1 Threaded Rod: Carbon steel per DIN 931, Grade T1-8.8, or stainless steel per DIN 267, Type A4-70.

2.1.3.2 Washer: Carbon steel per DIN 1544, Grade ST37, or stainless steel per DIN 17441 .

2.1.3.3 Expansion Sleeve: Carbon steel per DIN 2393, Grade ST52-3, or stainless steel per DIN 17440.

2.1.3.4 Expansion Cone: Carbon steel per DIN 1654, Type CQ35, or stainless steel per DIN 17440.

2.1.3.5 Nut: Carbon steel per DIN 934, Grade 8, or stainless steel per DIN 934-Stainless.

2.1.3.6 Collapsible Sleeve: Acetal resin plastic.

The working principle of the HSLG anchor corresponds to that of the HSL metric heavy-duty anchor. To prevent damage to the anchor threads during installation, the M8 and M10 anchor rods have an oversized thread lead-on, while the anchor rods of the M12 through M20 anchors have an impact section. A slot on the impact end of the threaded rod enables it to be removed and adjusted for standoff fastenings.

2.1.4 HSLB (Torque Indicator Bolt): The anchor consists of the same components as the HSL (bolt) with the addition of a torque cap nut. This anchor is available in carbon steel and only in 12 mm (0.47 inch) through 24 mm (0.94 inch) diameters. The torque cap is zinc alloy complying with DIN 1743. A hexagonal nut is fastened to the bolt head by three countersunk rivets. When the anchor is tightened, the torque is transmitted to the cap. When the torque required for correct anchor expansion is attained, the three countersunk rivets shear. A green seal then becomes visible, verifying proper torquing of the anchor.

2.1.5 HSL I M12 (Stud with Torque Indicating Nut): The anchor consists of carbon steel and is available in 12 mm (0.47 inch) diameter only. The components are similar to those of the HSLG with the addition of a torque indicating nut. The torque cap is zinc alloy complying with DIN 1743. The nut is hexagonal with a circular groove machined at the top, resulting in a reduced cross section. A free-spinning circular plastic sleeve covers the nut. As the anchor is tightened, torque is transmitted across the reduced cross section of the nut. When the required torque for anchor expansion is attained, the nut shears at the reduced cross section. The remaining portion of the hexagonal nut remains with the circular plastic sleeve. A slot on the exposed end of the threaded rod allows removal and adjustment for standoff fastenings.

2.2 Installation:

Installation details for the HSL, HSLB, HSL I M12, HSLG-N, and HSLG-12 are described in Tables 1 and 2 and in Figures 2 and 3. Drill bits used to predrill holes are supplied by Hilti, Inc. The HSLG I M12 must be installed with a Hilti HSL-I setting tool.

2.3 Design:

Allowable static shear and tension loads are described in Tables 3 and 4. Allowable loads for anchors subjected to combined shear and tension are determined by the following equation:

$$(P_s/P_t)^{5/3} + (V_s/V_t)^{5/3} \leq 1$$

where:

P_s = Applied tension load.

P_t = Allowable tension load.

V_s = Applied shear load.

V_t = Allowable shear load.

The anchors cannot be subjected to vibratory loads such as reciprocating engines, crane loads and moving loads due to vehicles.

2.4 Special Inspection:

Where special inspection is required, compliance with Section 1701.5.2 of the code is necessary. The special inspector must be on the jobsite continuously during anchor installation to verify anchor type, anchor dimensions, concrete type, concrete compressive strength, hole dimensions, anchor spacings, edge distances, slab thickness, anchor embedment, and tightening torque.

2.5 Identification:

The anchors are identified by packaging labeled with the manufacturer's name (Hilti, Inc.) and address, anchor name, anchor size, evaluation report number (ICBO ES ER-3987), and the name of the quality control agency, Underwriters Laboratories, Inc. The anchors have the letters HSL..M and the anchor size embossed on the sleeve.

3.0 EVIDENCE SUBMITTED

Data in accordance with the ICBO ES Acceptance Criteria for Expansion Anchors in Concrete and Masonry Elements (AC01), dated September 1997.

4.0 FINDINGS

That the Hilti HSL metric concrete anchors described in this report comply with the 1997 *Uniform Building Code*™, subject to the following conditions:

4.1 Anchor sizes, dimensions and minimum embedment depths are as set forth in the tables included with this report.

4.2 Allowable loads are as set forth in Section 2.3 of this report.

4.3 Calculations justifying that applied loads comply with this report must be submitted to the building official for approval.

4.4 Anchors are limited to installation in concrete not subjected to tensile stresses exceeding 170 psi (1.2 MPa).

4.5 Anchors are limited to nonfire-resistive construction unless appropriate data is submitted to demonstrate anchor performance is maintained in fire-resistive situations.

4.6 Special inspection is provided according to Section 2.4 of this report.

4.7 Anchors are manufactured by Hilti, Inc., at Plant 12, West Midlands, Great Britain, with quality control inspections by Underwriters Laboratories Inc. (AA-637).

4.8 Use of zinc-coated carbon steel anchors is limited to dry, interior locations. Use of stainless steel anchors is permitted in exterior-exposure or damp environments.

4.9 Use of anchors in resisting earthquake or wind loads is permitted within the scope of this report, and tabulated values may be increased $33^1/_3$ percent for short-term loading.

4.10 Anchors are not subject to vibratory loads such as those created by reciprocating engines, crane loads, and moving loads due to vehicles.

This report is subject to re-examination in two years.

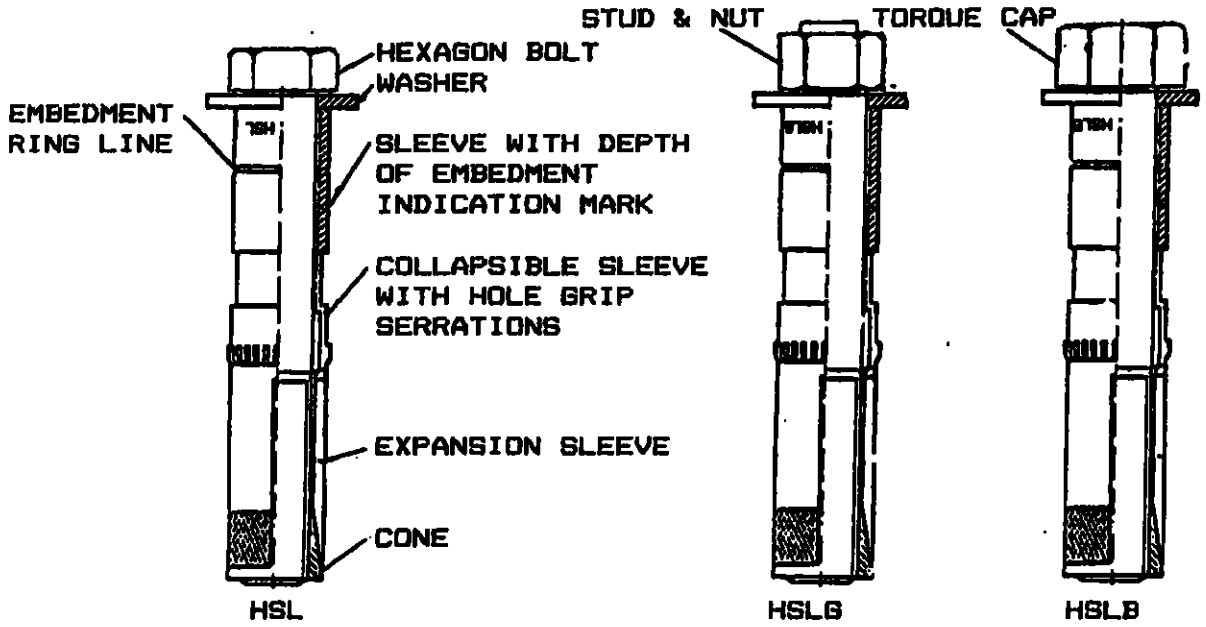
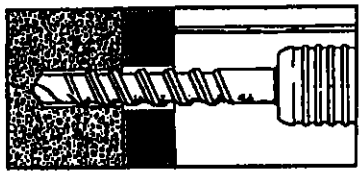
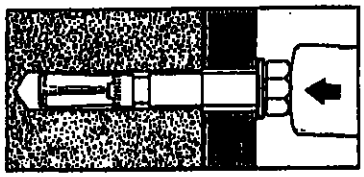


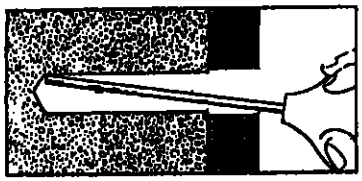
FIGURE 1—HSL METRIC CONCRETE ANCHORS



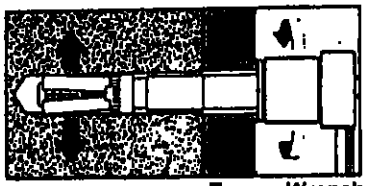
1. Drill a hole with the prescribed Hilti bit. Note: the HSL can be installed in a bottomless hole.



3. Using a hammer, tap the preassembled anchor through the object being anchored and into the hole. The anchor should be seated firmly against the base plate. Note: do not expand the anchor by hand before tapping it into the hole.

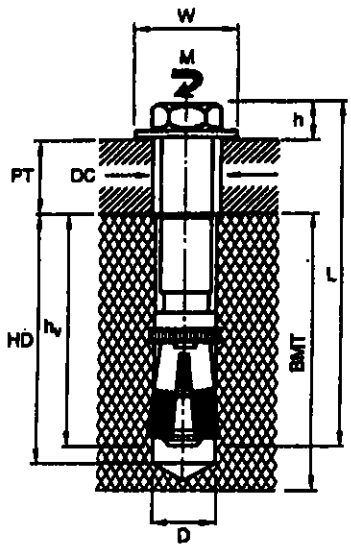


2. Clean the hole using a blowout bulb or compressed air.



4. Tighten the anchor bolt to the specified torque., using a torque wrench. The bolt must be tightened firmly to ensure the anchor is expanded sufficiently.

FIGURE 2—HSL INSTALLATION INSTRUCTIONS



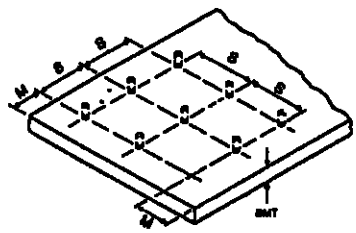


TABLE 1—HSL METRIC DIMENSIONS INSTALLATION CRITERIA, ANCHOR SPACING AND EDGE DISTANCES

SETTING DETAILS / ANCHOR SIZE	M8/20	M8/40	M10/20	M10/40	M12/25	M12/50	IM12	M16/25	M16/50	M20/30	M20/60	M24/30	M24/60
D (mm) drill bit diameter	12		15		18			24		28		32	
HD (mm) hole depth	75		85		100			125		150		175	
h_v (mm) minimum depth of embedment	65		75		80			105		130		155	
M_{cr} Edge distance required to obtain maximum working load (mm)	162		187		200			262		325		387	
M_{min} Minimum allowable edge distance (mm)	65		75		80			105		130		155	
PT (mm) max. thickness fastened	20	40	20	40	25	50	—	25	50	30	60	30	60
L (mm) anchor length	95	115	107	127	120	145	—	148	173	183	213	205	235
h (mm) head height + washer	7.5		10		11		—	14		17		19	
M (ft.-lbs.) max. tightening torque	20		40		60		—	150		300		525	
M (ft.-lbs.) min. tightening torque	17		34		51		—	125		255		445	
Max. gap (mm)	4		5		8		—	9		12		16	
Wrench size (mm) HSL	13		17		19		19	24		30		36	
Wrench size (mm) HSLB	—		—		24			30		36		41	
DC (mm) clearance hole	14-15		17-18		20-21		—	26-28		31-33		35-37	
W (mm) washer diameter	20		25		30		—	40		45		50	
BMT (mm) minimum base material thickness	120		140		160		—	180		220		270	
Drill bit	TE-C12/20 TE-F-12/34		TE-C-15/25 TE-F-15/34		TE-C-18/20 TE-F-18/34		—	TE-C-24/25 TE-F-24/32		TE-F-28/37		TE-F-32/37	

(Continued)

8

TABLE 1—HSL METRIC DIMENSIONS INSTALLATION CRITERIA, ANCHOR SPACING AND EDGE DISTANCES—(Continued)

SETTING DETAILS / ANCHOR SIZE	M8/20	M8/40	M10/20	M10/40	M12/25	M12/50	IM12	M16/25	M16/50	M20/30	M20/60	M24/30	M24/60
Hammer drill	TE10, TE12S TE22, TE52, TE72		TE10, TE12S TE22, TE52 TE72		TE10, TE12S TE22, TE52 TE72, TE92		—	TE22, TE52 TE72, TE92		TE52, TE72 TE92		TE52, TE72 TE92	

For SI: 1 ft-lb = 1.36 N·m.
For pound-inch units: 1 mm = 0.039 inch.

Notes:

1. then using s_{min} and the load is a tension load, reduce the working load by 30%.
2. then using s_{min} and the load is a shear load, reduce the working load by 10%.
3. then using m_{min} and the load is a tensile load, reduce the working load by 30%.
4. then using m_{min} and the load is a shear load, reduce the load by 70%.

TABLE 2
CARBON STEEL HSL
EDGE DISTANCE AND ANCHOR SPACING GUIDELINES

maximum working load (mm)	195	225	240	315	390	465
s_{min} = Minimum allowable spacing between anchors[1] (mm)	1.0 x h_v 65	1.0 x h_v 75	1.0 x h_v 80	1.0 x h_v 105	1.0 x h_v 130	1.0 x h_v 155
m_{cr} = Edge distance required for maximum working load (mm)	2.5 x h_v 162.5	2.5 x h_v 187.5	2.5 x h_v 200	2.5 x h_v 262.5	2.5 x h_v 325	2.5 x h_v 387.5
m_{min} = Minimum allowable edge distance[3,4] (mm)	h_v 65	h_v 75	h_v 80	h_v 105	h_v 130	h_v 155

TABLE 3
CARBON STEEL HSL METRIC—ALLOWABLE TENSION AND SHEAR LOAD VALUES (lb)[1,2]
NORMAL WEIGHT CONCRETE

ANCHOR	EMBEDMENT DEPTH (mm)	f'c = 2,000 psi			f'c = 4,000 psi			f'c = 6,000 psi		
		TENSION		SHEAR	TENSION		SHEAR	TENSION		SHEAR
		SP. INSP.[3]	UNINSP.		SP. INSP.[3]	UNINSP.		SP. INSP.[3]	UNINSP.	
HSL M8	65	1310	655	1780	1730	865	1065	1730	865	2125
HSL M10	75	1710	855	2620	2475	1240	2935	2785	1390	2935
HSL M12	80	2295	1145	4085	2905	1450	4415	3855	1925	4415
HSL I M12	80	2295	1145	2225	2905	1450	2225	3855	1925	2505
HSL M16	105	3905	1950	6175	5060	2530	7940	6630	3315	8090
HSL M20	130	5415	2710	7240	7780	3890	12220	8905	4455	12220
HSL M24	155	6550	3275	14255	10170	5085	—	10455	5255	18480

For SI: 1 lb-ft = 4.45 N, 1 psi = 6.89 kPa.
For pound-inch units: 1 mm = 0.039 inch.

[1]The tabulated tension and shear loads apply to anchors complying with this evaluation report and installed in normal-weight concrete having the prerequisite concrete compressive strength at the time of anchor installation.

[2]Installation requirements are noted in Section 2.2.

[3]Tension loads apply when anchors are installed with special inspection as set forth in Section 2.3.

TABLE 4
STAINLESS STEEL HSL METRIC—ALLOWABLE TENSION AND SHEAR LOAD VALUES (lb)[1,2]
NORMAL WEIGHT CONCRETE

ANCHOR	EMBEDMENT DEPTH (mm)	f'c = 2,000 psi			f'c = 4,000 psi			f'c = 6,000 psi		
		TENSION		SHEAR	TENSION		SHEAR	TENSION		SHEAR
		SP. INSP.[3]	UNINSP.		SP. INSP.[3]	UNINSP.		SP. INSP.[3]	UNINSP.	
HSLG-R M8	65	1110	555	1790	1485	745	—	1485	745	2245
HSLG-R M10	75	1380	690	2780	2315	1160	—	2355	1175	
HSLG-R M12	80	1760	880	4085	2795	1395	—	3535	1765	5055
HSLG-R M16	105	3570	1785	7020	4900	2450	—	6205	3105	
HSLG-R M20	130	5085	2540	10705	7355	3680	—	9005	4500	13035

For footnotes, see Table 3.

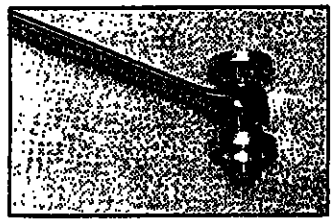
HILTI®

INSTALLATION INSTRUCTIONS FOR

HSL-I M12

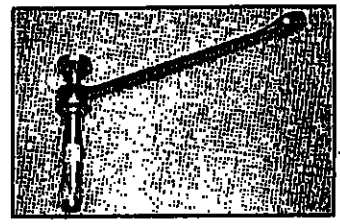
HSL-I M12 INTERNALLY THREADED ANCHOR (ITEM #002171742) INSTALL ONLY WITH HILTI HSL-I SETTING TOOL (ITEM #002171767)

1.



Remove threaded bushing from setting tool and reassemble with box end of wrench on setting tool. ***Always ensure that 4-6 threads are projecting below the bushing as shown.***

2.

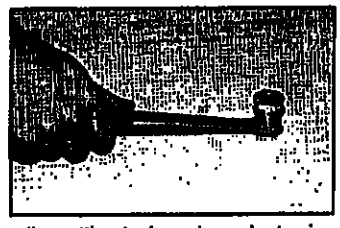


Thread the assembled setting tool into the anchor by turning the anchor clockwise onto the tool, until the bushing contacts the top of the anchor sleeve. Do not overtighten.

3.

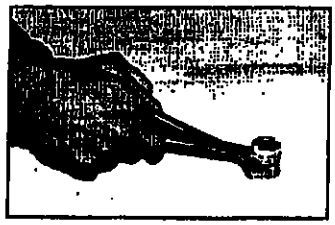
Drill an 18mm hole, at least 100mm (4") into the concrete. Clean the hole thoroughly using compressed air. Tap the anchor/setting tool combination into the hole until the flange on the setting tool firmly contacts the concrete surface.

4.



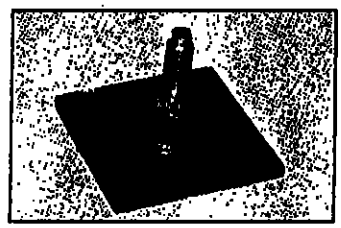
Tighten the bottom nut on the setting tool as shown by turning clockwise, until snug. Do not overtighten.

5.



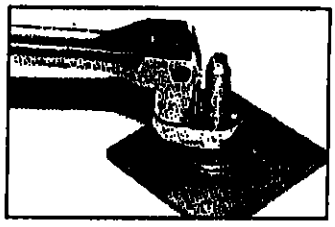
Slide the box wrench to the top nut of the setting tool. Release the setting tool from the anchor by holding the bottom nut with a ***19mm*** wrench, and turning the top nut counter-clockwise until the setting tool releases. Back the setting tool out of the anchor.

6.



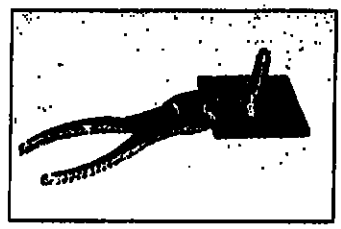
Slide the fixture or equipment into place, to align with the installed anchor. ***Do not allow dirt or debris to fall into anchor.*** Thread the slotted rod, with torque nut and washer, into the anchor until it bottoms out, always ensuring that at least 5 threads engage in the installed anchor. Thread the torque nut down until firm contact is established.

7.



Use a flare nut wrench or box wrench only to turn the exposed top portion of the torque nut clockwise - ***do not use an open ended wrench***, which may distort the torque nut and affect the setting torque. Use a breaker bar or other device capable of safely generating 60 ft.-lbs. of torque. Use of an improperly sized wrench may cause injury.

8.



Continue torquing until the exposed top portion of the torque nut shears off, leaving only the bottom portion with red plastic cover. Red plastic cover can be broken off with pliers if access to the bottom nut is required.

Installation of the HSL-I M12 anchor without the specified setting tool may result in reduced anchor performance

HILTI®

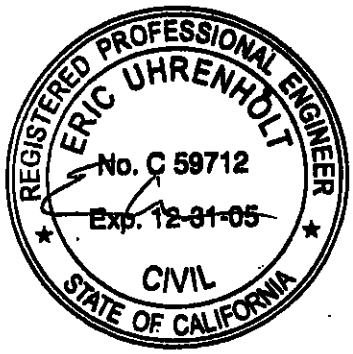
N-9482

FIGURE 3

Diamond Services
Design, Engineering & Testing
3860 Industrial Way
Benicia, CA 94510
Tel: (707) 751-5900
Fax: (707) 751-5901

STRUCTURAL CALCULATIONS FOR CINGULAR WIRELESS SITE NB-012-01 BLASI PROPERTY 14100 BODEGA HWY BODEGA BAY, CA

FOR
CINGULAR WIRELESS
4420 Rosewood Drive
Bldg. 2, Third Floor
PLEASANTON, CA



DS# C40005004
NB-012-01

May 11, 2005
BENICIA, CALIFORNIA

Diamond Services
Design, Engineering & Testing
3860 Industrial Way
Benicia, CA 94510
Tel: (707) 751-5900
Fax: (707) 751-5901

DESIGN CRITERIA

Code: Uniform Building Code 1997
Wind Exposure = C
Basic Wind Speed = 80 mph.
Seismic Zone: 4 , I = 1

Materials (unless noted otherwise)

Reinf. Steel ASTM A615, Grade 60 UNO, Grade 40 #4 and smaller and all CMU Walls.

Structural Steel & Misc Metals:	Shapes & Plates.....	ASTM A-36
	HSS.....	ASTM A-500 Grade B

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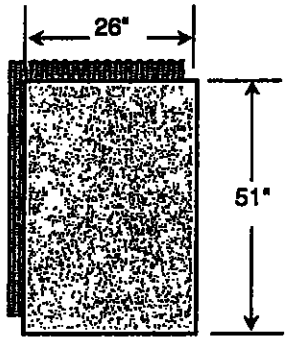
STRUCTURAL CALCULATIONS

Seismic Load Calculations for new Cingular Wireless Antenna:



Dead load of Antenna = 50 lbs

Z = 0.4 Soil Type = S_d

$Fp = 4\ C_a\ I_p\ W_p$

$Ca = 0.44\ N_a$ N_a = 1.3

F_p = 114.4 lbs.

Therefore, F_s = 81.7 lbs.

Wind Load Calculations for new Cingular Wireless Antenna:

$P = C_e * C_q * q_s * I_w$

C_e = 1.43 C_q = 1.4 q_s = 16.4 psf

Therefore, P = 32.8 psf

Wind exposed area = 4.6 ft^2

Hence Wind Load = 151 lbs ← GOVERNS

Hence wind load governs.

Assuming 75% of antenna area exposed to wind = 113 lbs
Wind Load for additional four antennas = 453 lbs

Moment due to Antenna Load = $P_{sols.}$ x Horizontal distance above ground
= 453 lbs. x 52.875 ft x 12 in.
= 287 kip. in.

Moment carrying capacity of existing pole:

(Diameter of pole is 20")

S_{xx} = 120.1 in^3
Allowable Bending Stress for pole = 0.66 * F_y * 1.33
= 31.6 ksi

Hence, Moment carrying capacity of existing pole = 3795 kip. in.

Hence, ratio of $M_{wind.}$ / M_{pole} is given by = 0.07

Since the (N) antenna load on existing pole is very small (7% of pole design value), the existing pole is structurally qualified.

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EQUIPMENT ANCHORAGE TO CONCRETE SLAB

Seismic Forces: 97 UBC Section 1632

$Z = 0.4$ $I_p = 1.0$ $h_x = 0.30$ ft.

$N_a = 1.3$ $h_r = 0.30$ ft.

Table 16-Q = 0.44

Table 16-O: $a_p = 2.5$ $R_p = 3.0$

$W_p = 1700$ lbs Cabinet Dimensions; Width (ft.) = 2.33
Height(ft.) = 5.50

UBC Sec.1632.2: $C_a=(N_a)x(\text{Table 16-Q})=$ 0.57

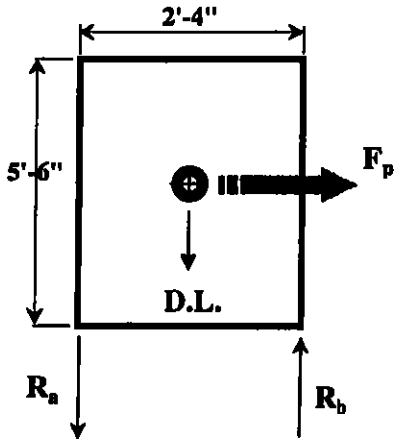
Eqn. 32-2: $F_p=\dfrac{[(a_p)x(C_a)x(I_p)](1+3h_x/h_r)}{R_p}$ x W_p = 1.91

Eqn. 32-3:

Lower Boundary $0.7(C_a)(I_p)W_p=$ 0.4 Therefore F_p = 1.91 W_p

Upper Boundary $4.0(C_a)(I_p)W_p=$ 2.3 Therefore F_p = 1.91 W_p

$F_s = F_p/1.4 =$ 1.91 $W_p/1.4 =$ 2315 lbs = 2.3 kips



O.T.M. = $(F_s)(H_t/2)$ = 6.4 kip-ft.
R.M. = $(W/2)(0.9*W_p)$ = 1.8 kip-ft.

R.M./O.T. = 0.28 <1.5 N.G., Ck Conn

R_a =(OTM-RM)/Width = 2.0 kips

t, per Anchor = $R_a/2$ = 0.98 kips **Use HILTI HSL-I M12**
v, per anchor = $F_p/4$ = 0.58 kips **Embed = 4" (min)**

T, allow = 1.145 kips V, allow = 2.22 kips

$(t/T)^{5/3} + (v/V)^{5/3} =$ 0.88 **O.K.**

NO special inspection

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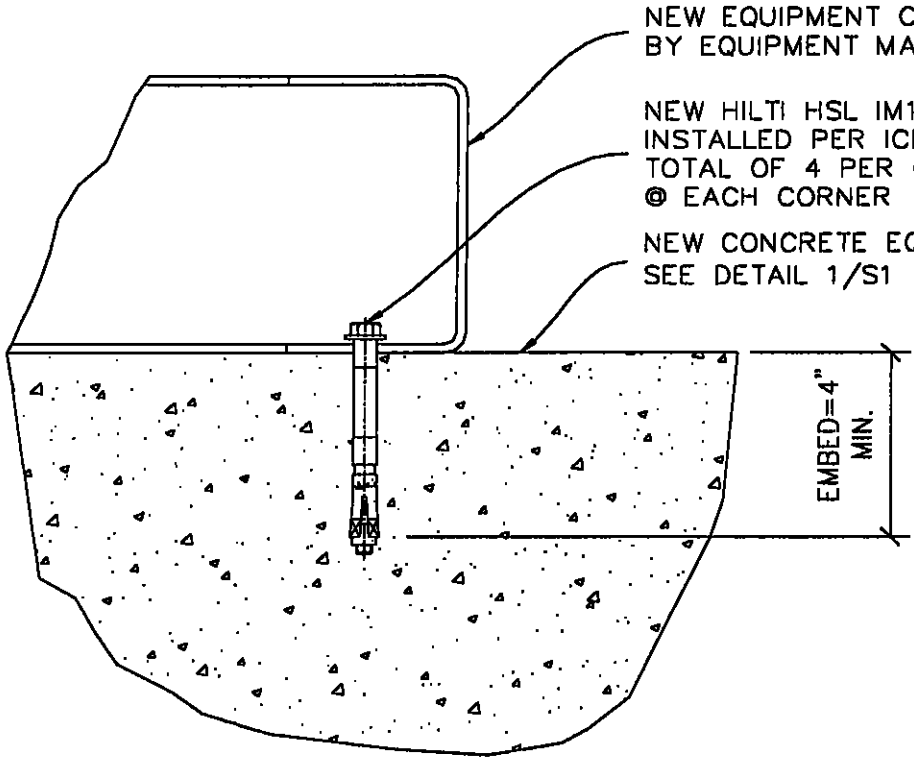
Job #: NB-012-01
BY: AV

BTS EQUIPMENT ATTACHMENT



★ APPROVED ★
OCT 13 2005
PERMIT AND RESOURCE MANAGEMENT DEPARTMENT