CITY OF MORRO BAY
PLANNING COMMISSION
AGENDA

The City of Morro Bay is dedicated to the preservation and enhancement of the quality of life. The City shall be committed to this purpose and will provide a level of municipal service and safety consistent with and responsive to the needs of the public.

Regular Meeting - Wednesday, November 20, 2013
Veteran's Memorial Building - 6:00 P.M.
209 Surf Street, Morro Bay, CA

Chairperson Rick Grantham
Vice-Chairperson John Solu — Commissioner John Fennacy
Commissioner Michael Lucas — Commissioner Robert Tefft

ESTABLISH QUORUM AND CALL TO ORDER
MOMENT OF SILENCE / PLEDGE OF ALLEGIANCE
PLANNING COMMISSIONER ANNOUNCEMENTS

PUBLIC COMMENT PERIOD
Members of the audience wishing to address the Commission on matters not on the agenda may do so at this time. In a continual attempt to make the public process open to members of the public, the City also invites public comment before each agenda item. Commission hearings often involve highly emotional issues. It is important that all participants conduct themselves with courtesy, dignity and respect. All persons who wish to present comments must observe the following rules to increase the effectiveness of the Public Comment Period:

- When recognized by the Chair, please come forward to the podium and state your name and address for the record. Commission meetings are audio and video recorded and this information is voluntary and desired for the preparation of minutes.
- Comments are to be limited to three minutes so keep your comments brief and to the point.
- All remarks shall be addressed to the Commission, as a whole, and not to any individual member thereof. Conversation or debate between a speaker at the podium and a member of the audience is not permitted.
- The Commission respectfully requests that you refrain from making slanderous, profane or personal remarks against any elected official, commission and/or staff.
- Please refrain from public displays or outbursts such as unsolicited applause, comments or cheering.
- Any disruptive activities that substantially interfere with the ability of the Commission to carry out its meeting will not be permitted and offenders will be requested to leave the meeting.
- Your participation in Commission meetings is welcome and your courtesy will be appreciated.

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Public Services' Administrative Technician at (805) 772-6291. Notification 24 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. There are devices for the hearing impaired available upon request at the staff's table.

PRESENTATIONS

Informational presentations are made to the Commission by individuals, groups or organizations, which are of a civic nature and relate to public planning issues that warrant a longer time than Public Comment will provide. Based on the presentation received, any Planning Commissioner may declare the matter as a future agenda item in accordance with the General Rules and Procedures. Presentations should normally be limited to 15-20 minutes.

A. CONSENT CALENDAR

A-1 Approval of minutes from Planning Commission meeting of October 16, 2013
Staff Recommendation: Approve minutes as submitted.

A-2 Approval of minutes from Joint City Council / Planning Commission meeting of October 29, 2013
Staff Recommendation: Approve minutes as submitted.

B. PUBLIC HEARINGS

Public testimony given for Public Hearing items will adhere to the rules noted above under the Public Comment Period. In addition, speak about the proposal and not about individuals, focusing testimony on the important parts of the proposal; not repeating points made by others.

B-1 **Case No.:** UP0-368
Site Location: 800 Quintana
Proposal: Modifications to an existing telecommunications facility. Remove (3) antennas, replace with (12) antennas, (1) TMA unit on commercial building rooftop.
CEQA Determination: Categorically exempt, Class 1
Staff Recommendation: Conditionally approve
Staff Contact: Cindy Jacinth, Associate Planner, (805) 772-6577

B-2 **Case No.:** N/A
Site Location: City Wide
Proposal: Review and provide comments on the Urban Forest Management Plan (UFMP). The UFMP serves as a guide for perpetuating and enhancing Morro Bay's public trees. For the purposes of this plan, public trees are those located within the City Rights of Way (Street Trees). This plan establishes guiding principles and associated goals that result in specific strategies for addressing the needs of the public trees. These goals were developed from community input, City needs, environmental and urban conditions. They are flexible enough to account for future changes.
CEQA Determination: Exempt.
Staff Recommendation: Review and provide comments to be forwarded to City Council with a favorable recommendation.
Staff Contact: Damaris Hanson, Engineering Tech, (805) 772-6265

B-3 **Case No.:** N/A
Site Location: 2783 Coral
Proposal: Determination that the sale of an undeveloped piece of City owned property located at 2783 Coral Avenue (APN 065-386-015) is consistent with the City's General Plan (California Government Code 65402) and Local Coastal Plan.
CEQA Determination: Mitigated Negative Declaration (SCH#2007061081)
Staff Recommendation: Continue to December 4, 2013 meeting.
Staff Contact: Kathleen Wold, Planning Manager, (805) 772-6211

C. UNFINISHED BUSINESS

C-1 Current and Advanced Planning Processing List
Staff Recommendation: Receive and file.
Upcoming Projects: To be determined.

D. NEW BUSINESS - None

E. DECLARATION OF FUTURE AGENDA ITEMS

F. ADJOURNMENT
Adjourn to the a next regularly scheduled Planning Commission meeting at the Veteran's Memorial Building, 209 Surf Street, on Wednesday, December 4, 2013, at 6:00 p.m.

PLANNING COMMISSION MEETING PROCEDURES

This Agenda is subject to amendment up to 72 hours prior to the date and time set for the meeting. Please refer to the Agenda posted at the Public Services Department, 955 Shasta Avenue, for any revisions or call the department at 772-6291 for further information.

Written testimony is encouraged so it can be distributed in the Agenda packet to the Commission. Material submitted by the public for Commission review prior to a scheduled hearing should be received by the Planning Division at the Public Services Department, 955 Shasta Avenue, no later than 5:00 P.M. the Tuesday (eight days) prior to the scheduled public hearing. Written testimony provided after the Agenda packet is published will be distributed to the Commission but there may not be enough time to fully consider the information. Mail should be directed to the Public Services Department, Planning Division.

Materials related to an item on this Agenda are available for public inspection during normal business hours in the Public Services Department, at Mill's/ASAP, 495 Morro Bay Boulevard, or the Morro Bay Library, 695 Harbor, Morro Bay, CA 93442. Materials related to an item on this Agenda submitted to the Planning Commission after publication of the Agenda packet are available for inspection at the Public Services Department during normal business hours or at the scheduled meeting.

This Agenda may be found on the Internet at: www.morro-bay.ca.us/planningcommission or you can subscribe to Notify Me for email notification when the Agenda is posted on the City's website. To subscribe, go to www.morro-bay.ca.us/notifyme and follow the instructions.

The Brown Act forbids the Commission from taking action or discussing any item not appearing on the agenda, including those items raised at Public Comment. In response to Public Comment, the Commission is limited to:

1. Responding to statements made or questions posed by members of the public; or
2. Requesting staff to report back on a matter at a subsequent meeting; or
3. Directing staff to place the item on a future agenda. (Government Code Section 54954.2(a))

Commission meetings are conducted under the authority of the Chair who may modify the procedures outlined below. The Chair will announce each item. Thereafter, the hearing will be conducted as follows:

1. The Planning Division staff will present the staff report and recommendation on the proposal being heard and respond to questions from Commissioners.
2. The Chair will open the public hearing by first asking the project applicant/agent to present any points necessary for the Commission, as well as the public, to fully understand the proposal.
3. The Chair will then ask other interested persons to come to the podium to present testimony either in support of or in opposition to the proposal.
4. Finally, the Chair may invite the applicant/agent back to the podium to respond to the public testimony. Thereafter, the Chair will close the public testimony portion of the hearing and limit further discussion to the Commission and staff prior to the Commission taking action on a decision.

APPEALS

If you are dissatisfied with an approval or denial of a project, you have the right to appeal this decision to the City Council up to 10 calendar days after the date of action. Pursuant to Government Code §65009, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the Commission, at, or prior to, the public hearing. The appeal form is available at the Public Services Department and on the City's web site. If legitimate coastal resource issues related to our Local Coastal Program are raised in the appeal, there is no fee if the subject property is located with the Coastal Appeal Area. If the property is located outside the Coastal Appeal Area, the fee is $250 flat fee. If a fee is required, the appeal will not be considered complete if the fee is not paid. If the City decides in the appellant's favor then the fee will be refunded.

City Council decisions may also be appealed to the California Coastal Commission pursuant to the Coastal Act Section 30603 for those projects that are in their appeals jurisdiction. Exhaustion of appeals at the City is required prior to appealing the matter to the California Coastal Commission. The appeal to the City Council must be made to the City and the appeal to the California Coastal Commission must be made directly to the California Coastal Commission Office. These regulations provide the California Coastal Commission 10 working days following the expiration of the City appeal period to appeal the decision. This means that no construction permit shall be issued until both the City and Coastal Commission appeal period have expired without an appeal being filed. The Coastal Commission's Santa Cruz Office at (831) 427-4863 may be contacted for further information on appeal procedures.

AGENDA ITEM:	A-1
DATE:	November 6, 2013
ACTION:	

SYNOPSIS MINUTES – MORRO BAY PLANNING COMMISSION
REGULAR MEETING – OCTOBER 16, 2013
VETERANS MEMORIAL HALL – 6:00 PM

Chairperson Grantham called the meeting to order at 6:00 p.m.

PRESENT:	Rick Grantham	Chairperson
	John Solu	Vice-Chairperson
	John Fennacy	Commissioner
	Michael Lucas	Commissioner
	Robert Tefft	Commissioner
STAFF:	Rob Livick	Public Services Department
	Kathleen Wold	Planning Manager
	Cindy Jacinth	Associate Planner

ESTABLISH QUORUM AND CALL TO ORDER
MOMENT OF SILENCE / PLEDGE OF ALLEGIANCE
PLANNING COMMISSIONER ANNOUNCEMENTS

PUBLIC COMMENT

Chairperson Grantham opened Public Comment period and, seeing none, closed Public Comment period.

PRESENTATIONS – None.

Unless an item is pulled for separate action by the Planning Commission, the following actions are approved without discussion.

CONSENT CALENDAR

A-1 Approval of minutes from Planning Commission meeting of September 18, 2013
Staff Recommendation: Approve minutes as submitted.

MOTION: Commissioner Fennacy moved to approve the Consent Calendar.

Commissioner Tefft seconded and the motion passed unanimously. (5-0).

Rob Livick, Public Services Director, announced the City is preparing for the annual state water maintenance shutdown which will occur from November 1, 2013 through November 26, 2013. The City will be off of state water during that time, and the City will be making water at the desalination plant, using the brackish water reverse osmosis system. The water supply will be supplemented with water from the Morro Valley wells, and if necessary, the City has an emergency exchange agreement with the California Men's Colony to supply the City with water. Livick encouraged the public to limit outside water use as much as possible and run irrigation systems on as-needed basis.

Grantham asked Livick to report on the nitrate levels in the wells. Livick stated the levels fluctuate but they are probably a little higher right now because there is less water coming into the basin.

Chairperson Grantham opened Public Comment period, and seeing none, closed Public Comment period.

B. PUBLIC HEARINGS

B-1 **Case No.:** Amended #UP0-342
Site Location: 901-915 Embarcadero and 945 (waterside) Embarcadero
Proposal: Applicant has proposed various amendments to previously issued Conditional Use Permit #UP0-342 regarding waterside and landside improvements which would result in a total floor area of 6,852 sf and total walkway area of 1,279 sf. The modifications include constructing a new retail unit, remodeling and enlarging two existing restrooms, converting glass court outdoor dining to general public seating, enlarging existing harbor walkway, installing floating docks with slips and gangway, restriping existing parking spaces and minor building façade improvements**.**
CEQA Determination: Mitigated Negative Declaration (State Clearinghouse #2012091063)
Staff Recommendation: Conditionally Approve Amended Conditional Use Permit #UP0-342 and adopt the Mitigated Negative Declaration
Staff Contact: Cindy Jacinth, Associate Planner, (805) 772-6577

Jacinth presented the staff report.

Lucas asked staff if the lease for this site has been negotiated yet. Jacinth stated City Council will discuss at the November 12, 2013 City Council meeting the request by the Harbor Department to have lease site boundaries amended.

Lucas expressed concern that the proposed project should be heard by the Harbor Advisory Board, and not the Planning Commission, because it involves a lease site in the harbor. Livick stated the Planning Commission hears projects both on land and in the harbor. Lucas clarified with staff that the City Council authorized the City Manager to sign the landowner's consent form and move forward with the lease line adjustment before the lease was negotiated.

Commissioner Lucas asked staff if the set of conditions for noise mitigation for pile driving is standard for this operation. Wold stated the set of conditions provided is not standard but the

City is using NOAA's methodology to devise a reasonable set of conditions that is not overly burdensome to the applicant but still protects marine wildlife. The process is ever-evolving.

Commissioner Solu asked staff if the City Council made any other modifications to the proposed project aside from the façade height. Jacinth stated the façade height was likely the only alteration.

Chairperson Grantham opened Public Comment period.

Cathy Novak, applicant's representative, provided a brief history of the project background and explained the project was approved by the City Council on December 11, 2012. Per the request of the California Coastal Commission, the project was modified in the following ways:

1. The view deck has been eliminated.
2. The floating finger dock slip links have been reduced and the floating docks have been pushed westward.
3. The gangway has been relocated to the west.
4. The size of the three new retail units have been reduced, as has the existing retail unit in order to make two retail shops of reasonable size.
5. The harbor walk is now eight feet wide, and has been increased to 10 feet wide on the southern portion of site.

Novak stated the applicant was given the opportunity to expand the dock project to include a portion of an adjacent water lease site. With direction from the City, the applicant revised the project description to include new dock area behind Roca's lease site.

Novak also stated Fire condition #10 needs to be modified because it does not clearly indicate that sprinklers need to be installed under the wharf behind Rocca's. The condition will be requested to be modified when presented to City Council for adoption.

Chairperson Grantham closed Public Comment period.

Commissioner Fennacy expressed support for the project.

Commissioner Lucas expressed concern regarding the proposed height of the façade and stated he did not understand the need for the long fascia on the Embarcadero side.

Commissioner Tefft confirmed with staff the restrooms on site will be open to the public. He confirmed with Novak that signage will be installed to inform the public that there are restrooms available in the passageway. Tefft stated he would like to see this language included in the project description when the project is presented to the City Council.

Commissioner Tefft expressed concern regarding the lateral access and stated he would like to see a Planning condition included which states that furniture must be arranged in way that leaves five feet for clear space for pedestrian transit. Novak clarified the dimensions of all access ways and noted the smallest clearance will be five feet. She stated she will be working with the Coastal Commission in order to determine appropriate public seating arrangements for the proposed

project. She will report back to the Planning Commission with more information when the precise plan is presented at a later date.

Commissioner Solu expressed support for the project. He also asked for clarification regarding why the City does not require applicants to remove abandoned pilings. Novak clarified that when a piling is "abandoned," it is cut off at the mud line and only the remainder is left in the ground.

Chairperson Grantham expressed support for the project. He also asked who is responsible for mandating the rental costs of the slips. Livick stated the landlord mandates the rental costs.

MOTION: Commissioner Fennacy moved to adopt the following actions:

A. Adopt the amended Draft Mitigated Negative Declaration (SCH#2012091063) in accordance with the applicable provisions of the California Environmental Quality Act (Public Resources Code 21000 et. Seq.) and adopt the Findings included as Exhibit "A," including findings required by the California Environmental Quality Act (CEQA); and
B. Approve Amendment of Conditional Use Permit #UP0 -342 subject to the Conditions included as Exhibit "B" and the site development plans dated May 30, 2013.

Livick requested the motion be modified to include the phasing request as well as direction to work with the Fire Department to modify Condition #10. Commissioner Fennacy approved the modified motion.

Chairperson Grantham seconded and the motion passed unanimously. (5-0).

B-2 Item continued from the September 18, 2013 meeting.
Case No.: A00-013 (Text Amendment)
Site Location: Citywide
Request: Zoning Text Amendment proposing to amend Section 17.48.320 (Secondary Units) modifying the section to be consistent with State regulations.
CEQA Determination: Mitigated Negative Declaration.
Staff Recommendation: Forward a favorable recommendation to the City Council to approve the proposed Zoning Text Amendment and adopt the Mitigated Negative Declaration.
Staff Contact: Kathleen Wold, Planning Manager (805) 772-6211

Wold presented the staff report.

Chairperson Grantham opened Public Comment period, and seeing none, closed Public Comment period.

Commissioner Tefft expressed concern about the proposed parking regulations for secondary units and stated tandem parking is not workable in any case. He stated parking in the front yard setback may be acceptable as long as there is appropriate screening.

Commissioner Solu stated secondary units are not causing the parking problems in the City; rather the illegal units and the multiple cars per household are causing the problems. Solu stated he favors using the side yard or front yard setbacks as parking options.

Commissioner Lucas stated the difference between allowing 900 square feet and 1,200 square feet is the difference of an additional bedroom which may cause greater parking impacts to the neighborhood. He stated he would like to see cars screened if they are to be allowed in the front or side yard setbacks.

Commissioner Fennacy stated secondary units and parking should not be examined together because they are separate issues. He stated residential parking is difficult to regulate. He also stated the discussion of square footage is irrelevant because each property in the City is uniquely situated and has different constraints. Lastly, Fennacy stated he supports allowing parking in the front yard setback.

Commissioner Tefft made the following comments:

1. He stated enforcement is always difficult, but if the City ensures that secondary units have a guaranteed off-street parking space, enforcement becomes less difficult.
2. While there are many different types of parking issues in the City, it would be beneficial to start addressing parking issues related to secondary units. This way, the City can solve the problem one issue at a time.
3. Tefft stated he supports allowing Conditional Use Permits for secondary units over 900 square feet on a case-by-case basis.

MOTION: Commissioner Tefft moved to reduce the allowable size of secondary units to 900 square feet with an allowable size up to 1,200 square feet with a Conditional Use Permit and to eliminate the section of the ordinance which allows for tandem parking for secondary units.

Commissioner Fennacy seconded the motion.

Commissioner Solu asked staff to confirm the State regulations regarding the allowable size and lot coverage requirements for secondary units. Wold explained these regulations pursuant to California Government Code Section §65852.2. She stated the City's existing ordinance is consistent with State law. She also explained the State's intention is to make affordable units easier to permit, so long as they are consistent with the City's standards.

Commissioner Solu confirmed with staff the City's standards for secondary units do not differ depending on whether the unit is *attached* or *detached*.

AMENDED MOTION: Commissioner Tefft moved to amend the initial motion to exclude the language regarding tandem parking, and address only the allowable size of secondary units.

Commissioner Lucas seconded the motion.

Commissioner Solu stated the amended motion restricts landowners from using their property to its fullest potential and thus he does not support the amended motion.

Chairperson Grantham and Commissioner Lucas expressed support for reviewing the allowable square footage of secondary unit projects on a case-by-case basis.

The motion passed (4-1), with Commissioner Solu dissenting.

SECOND MOTION: Commissioner Tefft moved to revise the motion to state tandem parking should not be prohibited outright, but should be allowed with a conditional use permit.

Commissioner Lucas seconded the motion.

Commissioner Tefft confirmed with Livick that the Director does not have the right to deny tandem parking on a specific piece of property because it is permitted by code. Livick added the Director's permission is granted via the permit process that includes a certain degree of analysis.

Wold stated Findings could be included in the secondary residential unit ordinance which states that tandem parking may be allowed only if there is no other way to accommodate the parking.

Commissioner Tefft stated he would like the consideration for tandem parking for secondary units to be done at the Planning Commission level.

The motion passed (4-1), with Commissioner Fennacy dissenting.

UNFINISHED BUSINESS

C-1 Current and Advanced Planning Processing List
Staff Recommendation: Receive and file.
Upcoming Projects: To be determined.

Wold reviewed the Work Program with the Commission.

NEW BUSINESS

D-1 Joint Meeting City Council/Planning Commission Discussion Items

DECLARATION OF FUTURE AGENDA ITEMS

- The Climate Action Plan will be presented to the Commission at one of the November meetings; it will then be presented to the City Council in December.
- The bridge project will be presented to the Commission at the December meeting.
- The housing element update will also be presented to the Commission at an upcoming meeting.

ADJOURNMENT
The meeting adjourned at 7:43 pm to the next regularly scheduled Planning Commission meeting at the Veteran's Hall, 209 Surf Street, on Wednesday, November 6, 2013 at 6:00 pm.

_____
Rick Grantham, Chairperson

ATTEST:

_____
Rob Livick, Secretary

AGENDA NO: A-2

MEETING DATE: 11/12/13

MINUTES – MORRO BAY CITY COUNCIL/PLANNING COMMISSION
JOINT MEETING – OCTOBER 29, 2013
VETERANS MEMORIAL HALL – 6:00 P.M.

PRESENT:	Jamie Irons	Mayor
	George Leage	Councilmember
	Christine Johnson	Councilmember
	Nancy Johnson	Councilmember
	Noah Smukler	Councilmember
	Rick Grantham	Chairperson
	John Solu	Vice-Chairperson
	John Fennacy	Commissioner
	Michael Lucas	Commissioner
	Robert Tefft	Commissioner
STAFF:	Rob Livick	Public Services Department
	Kathleen Wold	Planning Manager
	Cindy Jacinth	Associate Planner
	Katie Mineo	Assistant Planner/Administrative Technician

Mayor Irons called the meeting to order at 6:00 p.m.

ESTABLISH QUORUM AND CALL TO ORDER
MOMENT OF SILENCE
PLEDGE OF ALLEGIANCE
MAYOR & COUNCILMEMBERS' REPORTS, ANNOUNCEMENTS, & PRESENTATIONS

PUBLIC PRESENTATIONS – None

PUBLIC COMMENT

Mayor Irons opened Public Comment, and seeing none, closed Public Comment.

JOINT MEETING DISCUSSION ITEMS

I. Discussion of Various City Specific and Master Plans:

- **Beach Street Specific Plan (BSSP)**
- **North Main Street Specific Plan (NMSP)**
- **Parking Management Plan (PMP)**
- **Waterfront Master Plan (WMP)**

Planning Manager, Kathleen Wold presented the staff report.

Mayor Irons stated he would like staff to discuss the significance of the specific plans and how the specific plans will be addressed during the update of the General Plan and Local Coastal Program. Irons stated he would like all four plans agendized in 2014 and he would like the Council to review them one by one.

Councilmember Christine Johnson asked staff how the Planning Division utilizes the plans. Public Services Director, Rob Livick stated the specific plans are used as guides for development and redevelopment. He then provided examples for how each plan has been implemented. Ms. Wold added that that the NMSP and the BSSP are formally adopted rules and regulations, whereas only one chapter of the WMP has been adopted and the remainder of the document is used as guidelines.

Commissioner Tefft made the following comments:

1. Regarding the BSSP, he stated the plan is dated and does not define the character of the neighborhood very well. The provisions of the plan could be incorporated into the Zoning Ordinance or could even potentially be eliminated.
2. Regarding the NMSP, virtually all development north of San Jacinto Street is multi-family residential whereas development south of San Jacinto Street is commercial. Because the neighborhood has witnessed varied development patterns, the City should re-examine how utilities infrastructure is provided in that area.
3. Regarding the WMP, Tefft stated only certain parts need to be revised.
4. Regarding the PMP, he stated the City should move away from requiring on-site parking and instead move toward providing more common parking areas.

Commissioner Lucas stated it is important to consider how all of the plans work together, especially in terms of how the Wastewater Treatment Plant will impact development in the vicinity of Atascadero Road.

Commissioner Fennacy stated the specific plans are living documents and he would like to receive direction from staff on how to more effectively interpret them. If any changes are to be made to the documents, he would prefer that the plans not get more restrictive than State statutes so that they do not adversely impact reasonable growth.

Commissioner Solu and Chairperson Grantham stated they would like direction from staff and Council in order to determine the order in which the plans should be re-evaluated in 2014.

Councilmember Smukler asked how the process of updating the specific plans would affect the update of the General Plan/Local Coastal Program (GP/LCP) which is the principal priority in the upcoming year. Mr. Livick stated the GP/LCP update is the long range planning focus, but the specific plans are the next level of regulation under the GP/LCP. The City will provide various opportunities for public input for the GP/LCP update, and one topic of discussion could be the specific plans and whether their regulations could be incorporated into the GP/LCP. Ms.

Wold added it would be valuable to have someone review the specific plans and identify sections that should be updated, eliminated, or remain as they are. These recommendations could then be reflected in the GP/LCP update.

Councilmember Leage expressed concern about parking and development issues in the Embarcadero area.

Councilmember Christine Johnson expressed support for the specific plan and GP/LCP update process.

Mayor Irons asked staff about the possibility of reviewing one specific plan per quarter. He would like the Commission and staff to examine the successes and barriers of each of the plans. Ms. Wold stated it would be beneficial to have a staff member conduct background research on the specific plans which would then be presented to the Commission.

Mayor Irons and staff discussed the importance of updating the specific plans so as to provide consistency with the GP/LCP.

Chairperson Grantham stated he would like to review the specific plans in the following order: Beach Street Specific Plan, Waterfront Master Plan, Parking Management Plan, and North Main Specific Plan.

Mayor Irons made a recommendation to move forward with the review of the four specific plans under the guidance of staff.

Mr. Livick clarified that Council's intention is to review the plans in the context of the GP/LCP update and to ensure vertical consistency in all regulations.

II. Update on the GP/LCP Status to include status on grant applications

Planning Manager Kathleen Wold and Public Services Director Rob Livick presented the staff report.

Chairperson Grantham asked staff to clarify the type of grants the City is pursuing. Ms. Wold confirmed the City is pursuing mostly State grants.

Chairperson Grantham asked staff if the City ever seeks outside assistance, or assistance from interns, when preparing grant applications. Mr. Livick stated the City often hires consultants to help prepare grant applications. Ms. Wold explained that because grant applications often require a degree of expertise, interns are not asked to prepare the applications, but interns are helpful in acquiring letters of support for grant applications and for establishing relationships with local organizations.

Commissioner Lucas asked staff if the City has the ability to change its Local Agency Formation Commission (LAFCO) sphere of influence to better incorporate the agricultural corridor along

Highway 41. Mr. Livick explained the City recently met with LAFCO and is in the process of updating its sphere of influence. He explained Morro Bay is fairly well-constrained around its boundary, however, and there are not many areas remaining that are easily developable.

Staff discussed with the Commission how the Coastal Commission is assisting cities throughout California in the LCP update process.

Commissioner Solu asked for clarification regarding how much the GP/LCP will cost the City and how much the City is requesting in grant funding. Mr. Livick explained the update will cost approximately $900,000 and the City is pursuing various grant opportunities to fund it. Ms. Wold explained the strategy of the City in regard to achieving the GP/LCP update is to structure a program whereby each grant builds upon the first one. Therefore, it is not the same work program submitted for each grant, although they may appear similar. Structuring the work program in this manner will allow for incremental pieces to be conducted while maintaining the overall work program.

Councilmember Smukler asked Mr. Livick to clarify the status of Chevron property in terms of development. Livick stated Chevron has completed the remediation processes and is likely going to market the property for development.

Councilmember Christine Johnson discussed the importance of fostering creative strategies to address climate change issues in order to make the City's grant applications more competitive.

Mayor Irons discussed the importance of looking to neighboring cities for innovative ways to make the City more competitive.

Mayor Irons asked staff to discuss the City's funding priorities. He outlined three programs for how the City could achieve the GP/LCP update: fully funded, partially funded, or in-house. Ms. Wold explained that if the update is partially funded, it will be necessary to fund the technical studies first and then work on establishing a program where the City could backfill the work with City staff and perhaps interns, or hire a Cal Poly studio class to complete the work. Ms. Wold then explained how the update would proceed if it is to be completed in-house. She noted the importance of defining the study area up-front due to LAFCO policies.

Mr. Livick explained the difficulties of developing technical studies. Councilmember Christine Johnson asked Mr. Livick to provide an example of a technical study and Mr. Livick discussed several examples, including traffic studies and wetlands studies.

Staff explained an EIR will likely be required for the GP/LCP update and thus staff is currently working to prepare several technical studies which will be incorporated in the EIR. Mr. Livick noted one document in particular, the Climate Action Plan, is nearing completion and will be presented to the City Council in December 2013.

III. Update on the "West Atascadero Road" (North Embarcadero to Cloisters) Rezone

Planning Manager Kathleen Wold presented the staff report.

Commissioner Tefft stated this project necessitates an examination of all land uses in the area of West Atascadero Road, not just of the subject site. Ms. Wold then explained the process and politics associated with conducting a rezone.

Commissioner Lucas asked staff, Council, and the Commission to consider how the property belonging to the power plant will be utilized in the future. He wants to ensure that it is developed at its greatest potential and does not become a wasted industrial area. Councilmember Smukler added that the property belonging to the City's Corporation Yard should also be examined for a potential rezone in the future.

ADJOURNMENT
The meeting adjourned at 7:40 pm.

Recorded by:

Katie Mineo
Administrative Technician

AGENDA NO: B-1

MEETING DATE: November 20, 2013

Staff Report

TO: **Planning Commissioners** **DATE: November 14, 2013**

FROM: **Cindy Jacinth, Associate Planner**

SUBJECT: Conditional Use Permit (UP0-368) and Coastal Development Permit (CP0-413) for modifications to an existing telecommunications facility to remove three antennas, replace with 12 antennas and one TMA unit on commercial building rooftop.

RECOMMENDATION:
CONDITIONALLY APPROVE THE PROJECT by adopting a motion including the following action(s):

A. Adopt Planning Commission Resolution 01-13 which includes the Findings and Conditions of Approval for the project depicted on site development plans dated October 14, 2013.

APPLICANT/AGENT: Volk/ Tricia Knight, MetroPCS

LEGAL DESCRIPTION/APN: 066-280-015

PROJECT DESCRIPTION: The applicant is requesting conditional use permit and coastal development permit approval to make modifications to an existing telecommunications facility (aka "unmanned cell site") located at 800 Quintana. The modifications include removing three antennas, and replacing with 12 antennas and one TMA unit on a commercial building rooftop in order to increase AT&T wireless capacity and upgrade the technology. The existing height of the building is 30 feet 2 inches with the height of the omni whip antennas at 59 inches for a total overall height of 35 feet 1 inch. The antennas will be replaced with shorter 23.3 inch antenna with the building roofline raised to conceal the wireless antennas. As a result, although the antennas themselves will be shorter in height, the new building height will be 33 feet 2 inches for a total building height increase of 3 feet.

PROJECT SETTING:

Prepared By:___CJ_____ Department Review: _____

Adjacent Zoning/Land Use			
North:	C-1/S.4	South:	C-1/S.4
East:	C-2	West:	C-1

Site Characteristics	
Site Area	Approximately 12,000 square feet (Property size 0.9 acre)
Existing Use	Commercial parcel
Terrain	Level. Paved and developed
Vegetation/Wildlife	No vegetation
Archaeological Resources	Site is not located within 300 feet of an archeological resource
Access	Quintana Road

General Plan, Zoning Ordinance & Local Coastal Plan Designations	
General Plan/Coastal Plan Land Use Designation	General Commercial
Base Zone District	C-1
Zoning Overlay District	S-4
Special Treatment Area	N/A
Combining District	N/A
Specific Plan Area	N/A
Coastal Zone	Located in the Coastal Zone, however not in the Appeals Jurisdiction nor Original Jurisdiction

PROJECT ANALYSIS:

Background

The commercial building at 800 Quintana was originally approved in 2002 by Planning Commission to construct three omni whip antennas on the roof of a two-story office building. (CUP03-02/CDP11-02R). The Applicant is now applying to upgrade the technology for these existing antennas in order to wireless capacity. The project scope includes the following actions:

- Remove 3 existing roof mounted 59" height omni antennas
- 12 new LTE/GSM/UMTS 23.3" height panel antennas concealed behind new FRP parapet extension
- 12 new RRU units and 12 new TMA units at existing building roof
- 1 new 6601 LTE equipment rack within existing equipment room and radio kit additions to existing 3206 cabinet for 2C scope and 3 RRUS01 cabinets for 3C scope
- Fiber and coax transmission lines from new equipment cabinets to new panel antennas.
- Power to be provided from existing sources.

The new antennas are proposed to be sited in the three corners of the rooftop. However, the proposed parapet extension will be constructed to match all four building corners for symmetry. The Applicant is requesting to upgrade the existing antennas in order to allow for greater capacity to improve the AT&T network in and around the City of Morro Bay. The upgrade of wireless technology serves to meet the increasing needs of expanding wireless usage.

U.S. Federal Communications Commission

The project has been designed to be in compliance with FCC regulations. The Federal Communications Commission (FCC) regulates interstate and international communications by radio, television, wire, satellite and cable. It was established by the Communications Act of 1934 and operates as an independent U.S. government agency overseen by Congress. Section 332(c)(7) of the Communications Act was added by Congress in the Telecommunications Act of 1996 which imposes limitations on local governments that they may not unreasonable discriminate among providers of functionally equivalent services, may not prohibit provision of personal wireless services, must act on requests within a reasonable period of time, must make any denial decision in writing, supported by substantial evidence, and may not regulate radio frequency (RF), but may require applicant to satisfy FCC rules.

In accordance with the FCC requirements, the Applicant has submitted a Radio Frequency Site Compliance Report dated August 18, 2013 and Site Compliance letter dated August 21, 2013 which is attached as an exhibit to this staff report. The compliance report analyzes the site from the maximum anticipated exposure level. Because the Applicant is proposing to increase the number of antennas, the radio frequency level will be higher than what currently exists. Based on the outcomes of the Site Compliance Report by Sitesafe, the report recommends that rooftop access be restricted and that barriers, signs and restrictions be installed. Staff has incorporated these recommendations as conditions of approval to the project.

Wireless Facilities LCP Amendment

Pursuant to Council direction, Staff has submitted an Local Coastal Plan (LCP) amendment to the California Coastal Commission which would update the Zoning Ordinance. The City Council has approved the amendment but the LCP amendment has not yet been certified by Coastal Commission. Until the amendment is certified by Coastal, the existing regulations for wireless facilities remain in effect.

Environmental Determination

Environmental review was performed for this project which staff determined meets the required for a Categorical Exemption Class 3, CEQA Guidelines Section 15303 (e), (New construction of small structures). This exemption applies to the construction and location of limited numbers of new, small facilities or structures and temporary use of land having no permanent effects on the environment. There are no known sensitive environmental resources on the project site; consequently, this exemption is appropriate for this project.

Zoning Ordinance Standards

	Standards	Proposed
Front Yard Setback		No change to setback
Side Yard Setback		No change to setback
Rear Yard Setback		No change to setback
Lot Coverage	90% allowed	No expansion of lot coverage proposed
Height	30 feet except 25 feet within 20 feet of a residential district other than R-4	**33 feet 2 inches** (which includes roof parapet)
S.4 overlay standard	Visual illustrations required	**See Exhibit C**

The Applicant's proposal includes a request for a height exception to exceed the 30 foot maximum building height allowed in the C-1 (Central Business) zoning district. The Zoning Ordinance at Section 17.48.070 cites the following, "Where…radio and other towers, water thanks, church steeples and similar structures, mechanical appurtenances, roof furniture and roof equipment are permitted in a district, height limits may be exceeded upon the securing of a minor use permit herein before specified for such use."

The Applicant's request to exceed the height limit of 30 feet by an additional 3 feet 2 inches is due to the design of the antenna installation. The request for a height exception seeks to accomplish three goals. First, the antenna signals are a one way direction and will transmit in an outward direction. Therefore, placing the roof-mounted antenna along the edge of the roof will allow for greater effectiveness. Second, the placement of the antennas along the roof edge will allow them to sited as far from the center of the roof where existing mechanical equipment such as the HVAC is located, in an attempt to minimize any potential exposure to radio frequency electromagnetic fields. And third, the parapet extension of the roof addresses aesthetics by concealing the proposed additional antennas.

PUBLIC NOTICE: Notice of this item was published in the San Luis Obispo Tribune newspaper on November 8, 2013 and all property owners of record within 300 feet and occupants within 100 feet of the subject site were notified of this evening's public hearing and invited to voice any concerns on this application.

CONCLUSION: The project as proposed is consistent with the General Plan, Local Coastal Plan, and Municipal Code for development standards. The Applicant is requesting a height exception of 3 feet 2 inches to allow for a roof parapet extension which would conceal the proposed antennas and also place the antennas away from existing mechanical equipment.

Staff recommends that the Planning Commission approve the requested Conditional Use Permit and Coastal Development Permit for removal of 3 existing roof mounted antennas to be replaced

with 12 new LTE panel antennas concealed behind new rooftop parapet extension with the incorporation of the conditions of approval attached herein.

EXHIBITS:

Exhibit A – Planning Commission Resolution 01-13
Exhibit B – Graphics/Plan Reductions dated October 14, 2013
Exhibit C – Visual Simulation, Existing and Proposed
Exhibit D – Site Safe Radio Frequency Compliance Report and Letter dated August 21, 2013

EXHIBIT A

RESOLUTION NO. PC 01-13

A RESOLUTION OF THE MORRO BAY PLANNING COMMISSION APPROVING CONDITIONAL USE PERMIT (UP0-368) AND COASTAL DEVELOPMENT PERMIT (CP0-413) FOR MODIFICATION TO AN EXISTING TELECOMMUNICATIONS FACILITY TO REMOVE THREE ANTENNAS, REPLACE WITH 12 ANTENNAS AND ONE TMA UNIT ON COMMERCIAL BUILDING ROOFTOP INCLUDING A REQUEST TO EXCEED THE MAXIMUM BUILDING HEIGHT BY 3 FEET 2 INCHES AT 800 QUINTANA

WHEREAS, the Planning Commission of the City of Morro Bay conducted a public hearing at the Morro Bay Veteran's Hall, 209 Surf Street, Morro Bay, California, on November 20, 2013, for the purpose of considering Conditional Use Permit #UP0-368 and Coastal Development Permit #CP0-413; and

WHEREAS, notices of said public hearing were made at the time and in the manner required by law; and

WHEREAS, the Planning Commission has duly considered all evidence, including the testimony of the applicant, interested parties, and the evaluation and recommendations by staff, presented at said hearing.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of the City of Morro Bay as follows:

Section 1: Findings. Based upon all the evidence, the Commission makes the following findings:

California Environmental Quality Act (CEQA)

1. That for purposes of the California Environmental Quality Act, Case No. UP0-368/CP0-413 qualifies for a categorical exemption per Section 15303, Class 3, New construction or conversion small structures. Class 3 consists of…"installation of small new equipment and facilities in small structures..." for which the replacement and upgrade of wireless antennas would apply.

Coastal Development Permit Findings

2. The project as proposed is consistent with the applicable provisions of the certified Local Coastal Plan. The Local Coastal Plan is consistent with the General Plan and the project meets minimum density requirements and therefore meets the LCP.

3. For every development between the nearest public road and the sea or the shoreline of any body of water, the Planning Commission shall make a specific finding that such development is in conformity with the public access and public recreation policies of Chapter 3 of the California Coastal Act. *The project is not located between the nearest public road and the sea or the shoreline of any body of water, therefore does not apply.*

Conditional Use Permit Findings

4. That the project is an allowable use in its zoning district and is also in accordance with the certified Local Coastal Program and the General Plan for the City of Morro Bay. "Antennas" and "Public Utility Facilities" are both listed as uses that may be permitted in any zone district with an approved Conditional Use Permit (Zoning Ordinance Section 17.30.0030 (F) & (P), respectively). In addition, where towers, similar structures (i.e. elevator shafts), mechanical appurtenances, roof furniture and roof equipment are allowed in a zone, height limits may be exceeded upon the securing of a Minor Use Permit, or Conditional Use Permit if the project is before the Planning Commission (Zoning Ordinance Section 17.48.070); and

5. The establishment, maintenance, or operation of the use applied for will, under the circumstances of the particular case, will not be detrimental to the health, safety, morals, comfort and general welfare of the persons residing or working in the neighborhood of such proposed use in that the project will be consistent with all applicable zoning and plan requirements as indicated in the attached staff report dated November 14, 2013.

6. The use will not be injurious or detrimental to property and improvements in the neighborhood or the general welfare of the City since the project, as conditioned, will be conducted consistent with all applicable City regulations, as indicated in the attached staff report dated November 14, 2013.

Section 2. Action. The Planning Commission does hereby approve Conditional Use Permit #UP0-368 and Coastal Development Permit #CP0-413 subject to the following conditions:

STANDARD CONDITIONS

1. This permit is granted for the land described in the staff report dated November 14, 2013, for the project depicted on plans dated October 14, 2013 on file with the Public Services Department, as modified by these conditions of approval, and more specifically described as follows:

Site development, including all buildings and other features, shall be located and designed substantially as shown on plans, unless otherwise specified herein.

2. Inaugurate Within Two Years: Unless the construction or operation of the structure, facility, or use is commenced not later than two (2) years after the effective date of this approval and is diligently pursued thereafter, this approval will automatically become null and void; provided, however, that upon the written request of the applicant, prior to the expiration of this approval, the applicant may request up to two extensions for not more than one (1) additional year each. Said extensions may be granted by the Public Services Director, upon finding that the project complies with all applicable provisions of the Morro Bay Municipal Code, General Plan and Local Coastal Program Land Use Plan (LCP) in effect at the time of the extension request.

3. Changes: Minor changes to the project description and/or conditions of approval shall be subject to review and approval by the Public Services Director. Any changes to this

approved permit determined not to be minor by the Director shall require the filing of an application for a permit amendment subject to Planning Commission review.

4. Compliance with the Law: (a) All requirements of any law, ordinance or regulation of the State of California, City of Morro Bay, and any other governmental entity shall be complied with in the exercise of this approval, (b) This project shall meet all applicable requirements under the Morro Bay Municipal Code, and shall be consistent with all programs and policies contained in the certified Coastal Land Use Plan and General Plan for the City of Morro Bay.

5. Hold Harmless: The applicant, as a condition of approval, hereby agrees to defend, indemnify, and hold harmless the City, its agents, officers, and employees, from any claim, action, or proceeding against the City as a result of the action or inaction by the City, or from any claim to attack, set aside, void, or annul this approval by the City of the applicant's project; or applicants failure to comply with conditions of approval. Applicant understands and acknowledges that City is under no obligation to defend any legal actions challenging the City's actions with respect to the project.This condition and agreement shall be binding on all successors and assigns.

6. Compliance with Conditions: The applicant's establishment of the use and/or development of the subject property constitutes acknowledgement and acceptance of all Conditions of Approval. Compliance with and execution of all conditions listed hereon shall be required prior to obtaining final building inspection clearance. Deviation from this requirement shall be permitted only by written consent of the Public Services Director and/or as authorized by the Planning Commission. Failure to comply with these conditions shall render this entitlement, at the discretion of the Director, null and void. Continuation of the use without a valid entitlement will constitute a violation of the Morro Bay Municipal Code and is a misdemeanor.

7. Compliance with Morro Bay Standards: This projects shall meet all applicable requirements under the Morro Bay Municipal Code, and shall be consistent with all programs and policies contained in the certified Coastal Land Use plan and General Plan for the City of Morro Bay.

8. Conditions of Approval on Building Plans: Prior to the issuance of a Building Permit, the final Conditions of Approval shall be attached to the set of approved plans. The sheet containing Conditions of Approval shall be the same size as other plan sheets and shall be the last sheet in the set of Building Plans.

FIRE CONDITIONS

1. Fire Safety During Construction and Demolition. This chapter prescribes minimum safeguards for construction, alteration and demolition operations to provide reasonable safety to life and property from fire during such operations (CFC Chapter 14). Compliance with NFPA 241 is required for items not specifically addressed herein.
2. Address identification. New and existing buildings shall have approved address numbers or building numbers placed in a position to be plainly legible from the street or road

fronting the property (CFC 505). **Provide approved address numbers 4 inches high with ½ inch stroke in contrasting numbers.**

3. Knox key box. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the fire code official is authorized to require a key box to be installed in an approved location (CFC 506). **Provide a Knox Box on exterior of the structure, in an approved location. Please obtain a Knox application from Morro Bay Fire Department during business hours.**
4. Fire extinguishers. **Provide 1 wall mounted class 10-B: C fire extinguisher and signage, in accordance with California Code of Regulations, Title 19, Division 1, inside the doorway of the equipment room.**
5. Stationary storage battery systems, room ventilation, and equipment room and building signage shall be in accordance with 2010 California Fire Code, (Section 608) and will be examined closely during Building Permit phase of the permitting process.

BUILDING CONDITIONS

1. Prior to construction, the applicant shall submit a complete application to the Building Department and obtain the required Building Permit.

PLANNING CONDITIONS

1. Signage shall be posted at all access points leading to rooftop access restricting rooftop access to the general public. Signage shall also inform any maintenance personnel of the General Public Maximum Permissible Exposure (MPE) levels.

2. A post construction site compliance report shall be submitted to the Public Services Director prior to receiving a final from Planning on the building permit or within 30 days of construction completion, whichever date occurs earlier. The results of the actual General Public Maximum Permissible Exposure (MPE) levels shall be summarized on site signage as described in Planning Condition 1.

PASSED AND ADOPTED by the Morro Bay City Council at a regular meeting thereof held on this 10th day of December, 2013 on the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

EXHIBIT A

Rick Grantham, Chairperson

ATTEST

Rob Livick, Planning Secretary

The foregoing resolution was passed and adopted this 20th day of November 2013.

EXHIBIT B

EXHIBIT C

SLG40/ CLU1240
MORRO BAY DT QUINTANA

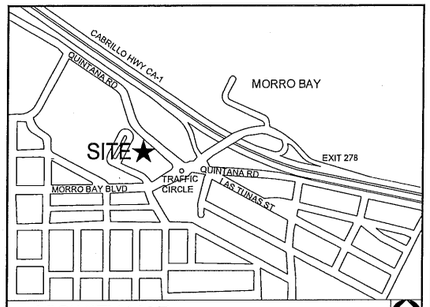
PROJECTS: LTE (3551316159) / UMTS 2C (3551288373) / UMTS 3C (3551450086)

800 QUINTANA ROAD
MORRO BAY, CA 93442
COUNTY OF SAN LUIS OBISPO

RECEIVED

OCT 14 2013

City of Morro Bay
Public Services Department



VICINITY MAP

THE PROJECT INVOLVES:

- (3) EXISTING ROOF MOUNTED 59" HT. OMNI ANTENNAS TO BE REMOVED.
- (12) NEW LTE/ GSM/ UMTS 23.3" HT. PANEL ANTENNAS CONCEALED BEHIND NEW FRP PARAPET EXTENSION, (12) NEW RRU UNITS AND (12) NEW TMA UNITS AT EXISTING BUILDING ROOF.
- (1) NEW 6601 LTE EQUIPMENT RACK WITHIN EXISTING EQUIPMENT ROOM AND RADIO KIT ADDITIONS TO EXISTING 3206 CABINET FOR 2C SCOPE AND (3) RRUS01 CABINETS FOR 3C SCOPE.
- FIBER AND COAX TRANSMISSION LINES FROM NEW EQUIPMENT CABINETS TO NEW PANEL ANTENNAS.
- POWER TO BE PROVIDED FROM EXISTING SOURCES.

PROJECT DESCRIPTION

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 CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING CODES.

- 2010 CALIFORNIA BUILDING CODE, TITLE 24 PART 2
- 2010 CALIFORNIA ADMINISTRATIVE CODE, TITLE 24 PART 1
- 2010 CALIFORNIA ELECTRICAL CODE, TITLE 24 PART 3
- 2010 CALIFORNIA MECHANICAL CODE, TITLE 24 PART 4
- 2010 CALIFORNIA PLUMBING CODE, TITLE 24 PART 5
- 2010 CALIFORNIA ENERGY CODE, TITLE 24 PART 6
- 2010 CALIFORNIA FIRE CODE, TITLE 24 PART 9
- ANSI/TIA-222-G
- 2012 NFPA 101, LIFE SAFETY CODE
- 2010 NFPA 72, NATIONAL FIRE ALARM CODE
- 2010 NFPA 13, SPRINKLER CODE
- CITY/ COUNTY ORDINANCES

CODE COMPLIANCE

SHEET	DESCRIPTION	REV.
T-1	TITLE SHEET	5
T-2	APPLICABLE CODES, SYMBOLS, ABBREVIATIONS	5
T-3	ANTENNA SPECIFICATIONS, ANTENNA CONFIG. SCHEDULE	5
C-1	SITE SURVEY	0
A-1	EXISTING SITE PLAN/ ROOF PLAN	5
A-2	ENLARGED PROJECT AREA PLAN AT ROOF	5
A-3	PROPOSED ANTENNA LAYOUTS, EXISTING/ PROPOSED EQUIP. LAYOUT	5
A-4	ELEVATIONS	5
A-5	ELEVATIONS	5

SHEET INDEX

DIRECTIONS FROM 12900 PARK PLAZA DRIVE, CERRITOS, CA:

- TAKE CA-91 W 2.1 MI
- TAKE EXIT 17B TO MERGE ONTO I-605 N 2.0 MI
- TAKE EXIT 9B FOR I-105 W/CENTURY FWY 1.4 MI
- MERGE ONTO INTERSTATE 105 W/CENTURY FWY 14.6 MI
- TAKE EXIT 2B FOR I-405 N TOWARD SANTA MONICA 1.1 MI
- TURN RIGHT ONTO I-405 N 16.9 MI
- TAKE THE EXIT ONTO US-101 N TOWARD VENTURA 24.3 MI
- SLIGHT LEFT TO STAY ON US-101 N 58.5 MI
- TAKE EXIT 101B FOR STATE STREET TOWARD CALIFORNIA 154/CACHUMA LAKE 0.2 MI
- MERGE ONTO CALLE REAL 0.3 MI
- TURN RIGHT ONTO CA-154 W/CALIFORNIA STATE ROUTE 154/SAN MARCOS PASS RD 32.5 MI
- TURN RIGHT TO MERGE ONTO US-101 N 56.9 MI
- TAKE EXIT 203B MERGE ONTO CA-1 N/TORO ST TOWARD MORRO BAY/HEARST CASTLE 0.1 MI
- TAKE FIRST RIGHT @ CA-1 N/CABRILLO HWY/SANTA ROSA ST. FOLLOW CA-1 N/CABRILLO HWY 11.8 MI
- TAKE EXIT 278 MERGE ONTO MORRO BAY BLVD. 0.4 MI
- AT TRAFFIC CIRCLE TAKE FIRST EXIT ONTO QUINTANA RD. DESTINATION WILL BE ON LEFT.

DRIVING DIRECTIONS

DO NOT SCALE DRAWINGS

THESE DRAWINGS ARE FORMATTED TO BE FULL-SIZE AT 24"X36". CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR MATERIAL ORDERS OR BE RESPONSIBLE FOR THE SAME.

GENERAL CONTRACTOR NOTES

APPLICANT/LESSEE

AT&T MOBILITY
12900 PARK PLAZA DRIVE
CERRITOS, CA 90703

LEASING MANAGER

JOHN MERRITT
WFI
PHONE: (805) 788-0866
EMAIL: JOHN.MERRITT@WFINET.COM

ZONING MANAGER

TRICIA KNIGHT
WFI
PHONE: (805) 448-4221
EMAIL: TRICIA.KNIGHT@WFINET.COM

CONSTRUCTION MANAGER

KEITH YORK
WFI
PHONE: (650) 303-7737
EMAIL: KEITH.YORK@WFINET.COM

PROPERTY INFORMATION

OWNER:	DAVID M. VOLK
ADDRESS:	P.O. BOX 12160 SAN LUIS OBISPO, CA 93401
CONTACT:	DALE ANDERSON
PHONE:	805-781-3092
AREA OF CONSTRUCTION:	N/A
OCCUPANCY TYPE:	S-2
CONSTRUCTION TYPE:	TYPE VB
CURRENT ZONING:	RR
LAT:	35° 22' 00.9" N
LONG:	-120° 50' 33.5" W
A.P.N.:	066-280-015
SITE ID CASPER:	3551316159
FA CODE:	10548025
ACCESSIBILITY REQUIREMENTS:	FACILITY IS UN-MANNED AND NOT FOR HUMAN HABITATION. DISABLED ACCESS NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 2, VOL. 1, CHAPTER 11B, SECTION 1103B, EXCEPTION 1.

PROJECT DATA

ARCHITECT

JAMES VACCARO ARCHITECT, INC.
201 MANGELS AVENUE
SAN FRANCISCO, CA 94131
CONTACT: JAMES VACCARO, AIA
CONTACT NUMBER: (415) 608-3670
FAX NUMBER: (415) 963-4471
EMAIL: JVACCARO@JVARCHITECT.COM

SURVEYOR

SMITHCO SURVEYING ENGINEERING
P.O. BOX 81626
BAKERSFIELD, CA 93380
CONTACT: GREG SMITH
CONTACT NUMBER: (661) 393-1217
FAX NUMBER: (661) 393-1218

PROJECT TEAM

TITLE	SIGNATURE
ZONING	
LEASING	
CONSTRUCTION	
WFI RF ENGINEER	
LANDLORD	
AT&T PM APPROVAL	
AT&T RF APPROVAL	
AT&T CM APPROVAL	

SIGNATURE BLOCK

JAMES VACCARO ARCHITECT, INC.
201 MANGELS AVENUE
SAN FRANCISCO | CA | 94131
415.608.3670 PHONE | 415.963.4471 FAX
INFO@JVARCHITECT.COM
WWW.JVARCHITECT.COM

CLIENT

WIRELESS FACILITIES, INC.
321 BERNOULI CIRCLE
OXNARD, CA 93030

12900 PARK PLAZA DRIVE
CERRITOS, CA 90703

SLG40/ CLU1240
MORRO BAY DT QUINTANA
800 QUINTANA ROAD
MORRO BAY, CA 93442
APN 066-280-015

REV	DATE	ISSUE
1	1/18/2013	90% ZONING
2	1/28/2013	95% ZONING
3	2/18/2013	95% ZONING REV.
4	7/03/2013	95% ZONING REV.
5	7/29/2013	100% ZONING

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

EXHIBIT B

&	AND	CONC. FL.	CONCRETE FLOOR	FIG	FIGURE	MLDG	MOULDING	REQD	REQUIRED	V	VOLT
"L"	ANGLE	COND	CONDENSER	FIN	FINISH	MOD	MODULAR	RESIL	RESILIENT	V.B.	VALVE BOX
@	AT	COND	CONDITION	FIXT	FIXTURE	MSB	MAIN SWITCHBOARD	RET	RETURN	V.I.F.	VERIFY IN FIELD
/	BY	CONN	CONNECT	FLASH	FLASHING	MTD	MOUNTED	REV	REVISION	V.T.R.	VENT THROUGH ROOF
℄	CENTERLINE	CONST	CONSTRUCTION	FLEX	FLEXIBLE	MTG	MOUNTING	RFG	ROOFING	VAR	VARIABLE
°	DEGREE	CONT	CONTIUOUS	FLG	FLOORING	MTG. HT.	MOUNTING HEIGHT	RGTR	REGISTER	VENT	VENTILATE
Ø	DIAMETER	CONTR	CONTRACT	FLR	FLOOR	MTL	METAL	RM	ROOM	VERT	VERTICAL
=	EQUAL	CONTR	CONTRACTOR	FLOUR	FLOURESCENT	MUL	MULLION	RR	RAILROAD	VEST	VESTIBULE
(E)	EXISTING	COR	CORRIDOR	FPRF	FIREPROOF(ING)	MULT	MULTIPLE	RRU	REMOTE RADIO UNIT	VIN	VINYL
'	FEET	CORR	CORRUGATED	FR	FRAME	MUT	MUNTIN	S	SINK	VOL	VOLUME
"	INCH(ES)	CPG	COPING	FT	FEET	N	NORTH	S	SOUTH	W	WEST
#	NUMBER	CPR	COPPER	FTG	FOOTING	N.C.	NONCORROSIVE	S.A.D.	SEE ARCHITECTURAL	W	WIDE
/	PER	CPT	CARPET	FUR	FURRED	N.I.C.	NOT IN CONTRACT		DRAWINGS	W. CAB.	WALL CABINET
%	PERCENT	CR	CRUSHED	FURN	FURNACE	N.S.	NONSLIP	S.B.	SPLASH BLOCK	W. GL.	WIRE GLASS
℄	PLATE	CSG	CASING	FUT	FUTURE	N.T.S.	NOT TO SCALE	S.C.	SOLID CORE	W.C.	WATER CLOSET
±	PLUS/ MINUS	CSK	COUNTERSINK	G.B.	GRAB BAR	NFPA	NATIONAL FIRE	S.D.	STORM DRAIN	WF	WIDE FLANGE
A.B.	ANCHOR BOLT	CSMT	CASEMENT	G.C.	GENERAL CONTRACTOR		PROTECTION ASSOCIATION	S.F.	SQUARE FOOT	W.H.	WALL HYDRANT
ACOUST	ACOUSTICAL	CTG	COATING	G.F.	GRANULAR FILL	NO	NUMBER	S.F.	STORE FRONT	W.H.	WATER HEATER
A.E.	ARCHITECT/ ENGINEER	CTR	CENTER	G.I.	GALVANIZED IRON	NOM	NOMINAL	S.G.	SEMIGLOSS	W.L.	WATER LINE
ALT.	ALTERNATE	CU	CUBIC	G.R.	GUARDRAIL	NORM	NORMAL	S.G.D.	SLIDING GLASS DOOR	W.R.	WATER-RESISTANT
ASSOC.	ASSOCIATION	CY	CUBIC YARD(S)	G.S.	GALVANIZED STEEL	NRC	NOISE REDUCTION	S.H.	SHOWER HEAD	W.S.	WEATHER STRIPPING
ASSY.	ASSEMBLY	D.C.A.	DRAINAGE CONDUCTOR	G.W.B.	GYPSUM WALL BOARD		COEFFICIENT	S.Y.	SQUARE YARD	W.T.W.	WALL TO WALL
AUTO	AUTOMATIC	D.F.	DRINKING FOUNTAIN	GA	GAGE	O. TO O.	OUT TO OUT	SC	SCALE	WWF	WELDED WIRE FABRIC
AVER	AVERAGE	DF	DOUGLAS FIR	GA	GAUGE	O.C.	ON CENTER(S)	SCH	SCHEDULE	WWM	WELDED WIRE MESH
AWG	AMERICAN WIRE GAUGE	D.H.	DOUBLE HUNG	GAL	GALLON	O.D.	OUTSIDE DIAMETER	SEAL	SEALANT	W/	WITH
B.A.	BOTH FACES	D.L.	DEAD LOAD	GALV	GALVANIZED	O.F.C.I.	OWNER FURNISH,	SECT	SECTION	W/O	WITHOUT
B.M.	BENCH MARK	D.O.	DOOR OPENING	GD	GUARD		CONTRACTOR INSTALLED	SEP	SEPERATION	WD	WOOD
B.O.	BOTTOM OF	D.S.P.	DRY STANDPIPE	GEN	GENERAL	O.F.O.I.	OWNER FURNISH,	SERV	SERVICE	WHSE	WAREHOUSE
B.O.	BY OTHERS	D.W.	DRYWALL	GSM	GLOBAL SYSTEM FOR		OWNER INSTALL	SF. GL.	SAFETY GLASS	WNDW	WINDOW
B.P.	BASE PLATE	DBL	DOUBLE		MOBILE COMMUNICATIONS	O.F.S.	OUTSIDE FACE OF STUD	SH	SHELF	WP	WATERPROOF
B.U.	BUILT-UP	DEG	DEGREE	HDG	HOT DIPPED	O/	OVER	SHT	SHEET	WSCT	WAINSCOT
B.U.R.	BUILT-UP ROOFING	DEMO	DEMOLITION		GALVANIZED	O2	OXYGEN	SHTHG	SHEATHING	WT	WEIGHT
B.W.	BOTH WAYS	DEPT	DEPARTMENT	HEX	HEXAGONAL	OA	OVERALL	SHWR	SHOWER	X	BY (AS IS 6'X8')
BATT	BATTERY	DET	DETAIL	HOSP	HOSPITAL	OBS	OBSOLETE	SIM	SIMILAR	Y.P.	YIELD POINT
BB	BASEBOARD	DIA	DIAMETER	HT	HEIGHT	OFF	OFFICE	SKL	SKYLIGHT	Y.S.	YIELD STRENGTH
BD	BOARD	DIAG	DIAGONAL	HTG	HEATING	OH	OVERHEAD	SL	SLAB	YD	YARD
BDRM	BEDROOM	DIM	DIMENSION(S)	HVAC	HEATING, VENTILATION	OPNG	OPENING	SOF	SOFFIT		
BEL	BELOW	DISP	DISPENSER		AND AIR CONDITIONING	OPP	OPPOSITE	SPC	SPACER		
BET	BETWEEN	DIST	DISTANCE	HVY	HEAVY	OPPH	OPPOSITE HAND	SPCG	SPACING		
BEV	BEVELED	DISTR	DISTRIBUTED	HWY	HIGHWAY	ORIG	ORIGINAL	SPEC	SPECIFICATION		
BEY	BEYOND	DIV	DIVIDER	I.D.	INSIDE DIAMETER	ORN	ORNAMENT	SPECS	SPECIFICATIONS		
BITUM	BITUMINOUS	DN	DOWN	IMPR	IMPREGNATE	OVHG	OVERHANG	SPKR	SPEAKER		
BLDG	BUILDING	DOC	DOCUMENTS	IN	INCHE(S)	OWN.	OWNER FURNISHED	SQ	SQUARE		
BLK	BLOCK	DP	DAMPPROOFING	INCAND	INCANDESCENT	FURN.		SQ. IN.	SQUARE INCH		
BLKG	BLOCKING	DR	DOOR	INCL	INCLUDE	P	PAGE	SS	STAINLESS STEEL		
BLVD	BOULEVARD	DS	DOWNSPOUT	INFO	INFORMATION	P.B.	PANIC BAR	ST	STREET		
BM	BEAM	DW	DISHWASHER	INSL	INSULATION	P.C.P.	PORTLAND CEMENT	STAG	STAGGERED		
BOT	BOTTOM	DWG	DRAWING	INST	INSTALL		PLASTER	STC	SOUND TRANSMISSION		
BRG	BEARING	E	EAST	INT	INTERIOR	P.L.	PROPERTY LINE		CLASS		
BRK	BRICK	E. TO E.	END TO END	INTERM	INTERMEDIATE	P. LAM.	PLASTIC LAMINATED	STD	STANDARD		
BRKT	BRACKET	E.B.	EXPANSION BOLT	INV	INVERT	PT	PRESSURE TREATED	STIFF	STIFFENER		
BSMT	BASEMENT	E.C.	ELECTRICAL CONDUIT	ISOL	ISOLATE	PAR	PARALLEL	STIR	STIRRUP		
BTH	BATHROOM	E.C.	ELECTRICAL CONTRACTOR	J.B.	JUNCTION BOX	PART. BD.	PARTICLE BOARD	STL	STEEL		
BTN	BATTEN	E.F.	EACH FACE	JAN	JANITORS CLOSET	PCF	POUND PER CUBIC	STOR	STORAGE		
BVL	BEVEL	EGR	EMERGENCY GENERATOR	JCT	JUNCTION		FOOT	STR	STRUCTURAL		
C	CHANNEL		RECEPTACLE	JNT	JOINT	PED	PEDESTAL	SUB	SUBSTITUTE		
C	COURSE	E.J.	EXPANSION JOINT	JST	JOIST	PERF	PERFORATED	SUP	SUPPLY		
C. TO C.	CENTER TO CENTER	E.C.	ELECTRICAL PANEL	K	KIP (1,000 LBS)	PERM	PERMANENT	SUP	SUPPORT		
C.B.	CATCH BASIN	E.W.	EACH WAY	K. PL.	KICK PLATE	PERP	PERPENDICULAR	SUPP	SUPPLEMENT		
C.F.C.I	CONTRACTOR FURNISH/	EA	EACH	K.D.	KNOCK DOWN	PH	PHASE	SUR	SURFACE		
	CONTRACTOR INSTALL	EIFS	EXTERIOR INSULATION	K.O.	KNOCK OUT	PKWY	PARKWAY	SUSP	SUSPENDED		
C.G.	CORNER GUARD		AND FINISH SYSTEM	KIT	KITCHEN	PL	PLATE	SUSP.	SUSPENDED CEILING		
C.I.	CAST IRON	EL	ELEVATION	KW	KILOWATT	PLAS	PLASTER	CLG.			
C.I.P.	CAST IRON PIPE	ELAST	ELASTOMERIC	L	LENGTH	PLAT	PLATFORM	SW	SWITCH		
C.J.	CONSTRUCTION JOINT	ELB	ELBOW	L	LONG	PLF	PLATFORM	SWBD	SWITCHBOARD		
C.J.	CONTROL JOINT	ELEC	ELECTRICAL	L.B.	LAG BOLT	PLYWD	PLYWOOD	SYM	SYMMETRICAL		
C.L.	CENTERLINE	ELEV	ELEVATOR	L.F.	LINEAR FOOT	PNL	PANEL	SYS	SYSTEM		
C.L.F.	CHAINLINK FENCE	EMER	EMERGENCY	L.G.	LEAD GLASS	PNT	PAINT	T	TREAD		
C.M.P.	CORRUGATED METAL PIPE	ENC	ENCLOSURE	L.H.	LEFT HAND	PORT	PORTABLE	T&B	TOP AND BOTTOM		
C.O.	CLEAN OUT	ENGR	ENGINEER	L.L.	LIVE LOAD	PPC	POWER PROTECTION	T&G	TONGUE AND GROOVE		
C.R.	COLD ROLLED	ENT	ENTRANCE	L.L.H.	LONG LEG		CABINET	T.Y.	TOWEL BAR		
C.R.S.	COLD ROLLED STEEL	EQ	EQUAL		HORIZONTAL	PREFAB	PREFABRICATED	T.G.	TEMPERED GLASS		
C.T.	CERAMIC TILE	EQUIP	EQUIPMENT	L.L.V.	LONG LEG VERTICAL	PREFIN	PREFINISHED	T.O.	TOP OF		
C.W.	COLD WATER	EST	ESTIMATE	L.P.	LOW POINT	PREP	PREPARATION	T.O.C.	TOP OF CURB		
C.W.	CONCRETE WALK	EXC	EXCAVATE	L.RM.	LIVING ROOM	PROJ	PROJECT	T.O.M.	TOP OF MASONRY		
C/O	CASED OPENING	EXH	EXHAUST	L.W.C.	LIGHT WEIGHT	PROP	PROPERTY	T.O.W.	TOP OF WALL		
CAB	CABINET	EXIST	EXISTING		CONCRETE	PSF	POUNDS PER SQUARE	T.P.	TOP OF PAVEMENT		
CALK	CAULK	EXP	EXPANSION	LAD	LADDER		FOOT	TS	TUBE STEEL		
CEM	CEMENT	EXPD	EXPOSED	LAM	LAMINATE	PSI	POUNDS PER SQUARE	TECH	TECHNICAL		
CEM	CEMENTITIOUS	EXT	EXTENSION	LAV	LAVATORY		INCH	TELCO	TELEPHONE COMPANY		
CEM.		EXT	EXTERIOR	LB	POUND	PT	PART	TEMP	TEMPERATURE		
PLAS	CEMENT PLASTER	EZBFO	BATTERY CABINET	LOC	LOCATION	PT	POINT	TEMP	TEMPORARY		
CER	CERAMIC	F	FACE	LT	LIGHT	PTD	PAINTED	TERM	TERMINATE		
CIR	CIRCLE	F. HYD.	FIRE HYDRANT	LTE	LONG TERM EVOLUTION	PVC	POLYVINYL CHLORIDE	TERR	TERRACE		
CIR	CIRCUMFERENCE	F. TO F.	FACE TO FACE	LVR	LOUVER	PVMT	PAVEMENT	THD	THREAD		
CL. GL.	CLEAR GLASS	F.A.	FIRE ALARM	M	THOUSAND	PWR	POWER	THK	THICK		
CL.		F.B.	FLAT BAR	M.B.	MACHINE BOLT	QTY	QUANTITY	THR	THRESHOLD		
W. GL.	CLEAR WIRE GLASS	F.D.	FLOOR DRAIN	M.C.	MECHANICAL	R	RADIUS	THRU	THROUGH		
CLG	CEILING	F.D.C.	FIRE DEPARTMENT		CONTRACTOR	R.C.	RETURN AIR	TLT	TOILET		
CLKG	CAULKING		CONNECTION	M.C.	STRUCTURAL SHAPE	R.D.	RUBBER BASE	TMA	TOWER MOUNTED AMPLIFIER		
CLO	CLOSET	F.E.	FIRE EXTINGUISHER	M.E.	MATCH EXISTING	R.D.	ROOF DRAIN	TRANS	TRANSFORMER		
CLR	CLEAR	F.E.C.	FIRE EXTINGUISHER	M.H.	MANHOLE	R.H.	RIGHT HAND	T'STAT	THERMOSTAT		
CLR	CLEARANCE		CABINET	M.L.	METAL LATH	R.H.R	RIGHT HAND REVERSE	TYP.	TYPICAL		
CLRM	CLASSROOM	F.F.	FINISH FLOOR	MACH	MACHINE	R.O.	ROUGH OPENING	U.N.O.	UNLESS NOTED		
CMU	CONCRETE	F.H.	FIRE HOSE	MAS	MASONRY	R.W.C.	RAIN WATER LEADER		OTHERWISE		
	MASONRY UNIT	F.H.	FLAT HEAD	MAT.	MATERIAL	RAD	RADIUS	U.O.N.	UNLESS OTHERWISE		
CNTR	COUNTER	F.H.C.	FIRE HOSE CABINET	MAX	MAXIMUM	RD	ROAD		NOTED		
CO	COMPANY	F. JT.	FLUSH JOINT	MECH	MECHANICAL	RE	REFER	UC	UNDERCUT		
CO2	CARBON DIOXIDE	F.O.	FACE OF	MED	MEDIUM	RECOMM	RECOMMENDATION	UG	UNDERGROUND		
COL	COLUMN	F.O.C.	FACE OF CONCRETE	MEMB	MEMBRANE	RECP	RECEPTACLE	UL	UNDERWRITERS		
COMB	COMBINATION	F.O.F.	FACE OF FINISH	MEZZ	MEZZANINE	RECT	RECTANGLE		LABORATORIES		
COMP	COMPUTER	F.O.M.	FACE OF MASONRY	MFR	MANUFACTURER	REF	REFERENCE		INCORPORATED		
COMPR	COMPRESSED	F.O.S.	FACE OF STUDS	MGR	MANAGER	REFG	REFRIGERATOR	ULT	ULTIMATE		
COMPR	COMPRESSOR	FAB	FABRICATE	MIN	MINIMUM	REINF	REINFORCEMENT	UMTS	UNIVERSAL MOBILE		
COMPT	COMPARTMENT	FBD	FIBERBOARD	MIR	MIRROR	REPR	REPAIR		TELECOMMUNICATIONS SYSTEM		
CON	CONFERENCE	FD	FIRE DAMPER	MISC	MISCELLANEOUS	REPRO	REPRODUCE	UNEX	UNEXCAVATED		
CONC	CONCRETE	FDN	FOUNDATION	MK	MARK	REQ	REQUIRE	UNF	UNFINISHED		

ABBREVIATIONS 3

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.

- 2010 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
- 2010 CALIFORNIA BUILDING CODE(CBC), PART 2, TITLE 24, C.C.R. (2009 INTERNATIONAL BUILDING CODE AND 2010 CALIFORNIA AMENDMENTS)
- 2010 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2008 NATIONAL ELECTRICAL CODE AND 2010 CALIFORNIA AMENDMENTS)
- 2010 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R. (2009 INTERNATIONAL MECHANICAL CODE AND 2010 CALIFORNIA AMENDMENTS)
- 2010 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R. (2009 INTERNATIONAL PLUMBING CODE AND 2010 CALIFORNIA AMENDMENTS)
- 2010 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R. (2009 INTERNATIONAL FIRE CODE AND 2010 CALIFORNIA AMENDMENTS)
- 2010 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
- TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHALL REGULATIONS

APPLICABLE CODES 1

ROOM — ROOM NAME
OOO — ROOM NUMBER
01 — DOOR TAG
1 — WINDOW TAG
SECTION REFERENCE: X — SECTION NUMBER; X-X — SHEET NUMBER
DETAIL REFERENCE: X — DETAIL NUMBER; X-X — SHEET NUMBER
ELEVATION REFERENCE: X — ELEVATION NUMBER; X-X — SHEET NUMBER
INTERIOR ELEVATION REFERENCE: X-X — SHEET NUMBER; X — ELEVATION NUMBER
X — WALL TAG
000 — EQUIPMENT TAG
Standard — COLUMN TAG
1 — REVISION NUMBER
REVISION CLOUD
±0.0000 — SPOT ELEVATION
X — GRID REFERENCE
MATCH LINE — MATCH LINE
BREAK LINE
PIPE BREAK MARK
℄ — CENTERLINE
PROPERTY/ LEASE LINE

EARTH
CRUSHED STONE/ GRAVEL
SAND
CONCRETE
PRECAST CONCRETE
BRICK
CONCRETE MASONRY UNIT
DIMENSIONAL LUMBER (CONTINUOUS)
WOOD BLOCKING (DISCONTINUOUS)
FINISHED WOOD
PLYWOOD
GLULAM
STEEL
BATT INSULATION
RIGID INSULATION
FOAM/SPRAY INSULATION
GYPSUM WALLBOARD
CEMENT PLASTER AND WIRE MESH
GLASS/ GLAZING

SYMBOLS 2

JAMES VACCARO ARCHITECT, INC.
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at&t mobility
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CERRITOS, CA 90703

SLG40/ CLU1240
MORRO BAY DT QUINTANA
800 QUINTANA ROAD
MORRO BAY, CA 93442
APN 066-280-015

REV	DATE	ISSUE
1	1/18/2013	90% ZONING
2	1/28/2013	95% ZONING
3	2/18/2013	95% ZONING REV.
4	7/03/2013	95% ZONING REV.
5	7/29/2013	100% ZONING

SHEET TITLE

APPLICABLE CODES, SYMBOLS, ABBREVIATIONS

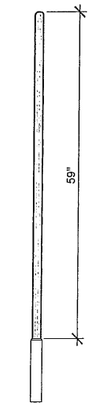
SHEET NUMBER

T-2

EXHIBIT B

Site #		RF Engineer		Date	
RF Checklist					
Carrier	List of Items for Check list	Existing (GSM / UMTS)	PICD - Proposed (LTE)	ZD Proposed	CD Final
AT&T	Antenna Tip Height by Sector				
AT&T	# of Antenna by Sector				
AT&T	Size of Antenna by Sector				
AT&T	AZ by Sector				
AT&T	LTE RRU Location by Sector				
		Antenna Tip Height		Antenna Toe Height	
Verizon	Antenna Tip/Toe Height				
TMO	Antenna Tip/Toe Height				
Sprint	Antenna Tip/Toe Height				
Metro PCS	Antenna Tip/Toe Height				

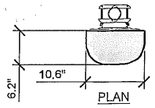
RF CHECKLIST | SCALE: N.T.S | 4



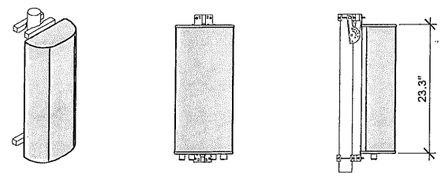
ELEVATION

DECIBEL DB 586 DIMENSIONS	
HEIGHT	59"
DIAMETER	1.5"
DECIBEL DB 586 WEIGHT	
ANTENNA WEIGHT	±8.5 LBS.

EXISTING ANTENNA SPECIFICATIONS | SCALE: N.T.S | 3



PLAN



ISOMETRIC | FRONT ELEVATION | SIDE ELEVATION

KATHREIN SCALA 840 10525 DIMENSIONS	
HEIGHT	23.3"
WIDTH	10.6"
DEPTH	6.2"
KATHREIN SCALA 840 10525 WEIGHT	
ANTENNA WEIGHT	±20.3 LBS.

PROPOSED ANTENNA SPECIFICATIONS | SCALE: N.T.S | 1

ANTENNA CONFIGURATION SCHEDULE

ANTENNA SECTOR	MARK	# OF ANTENNAS	AZIMUTH	RAD CENTER	ANTENNA MAKE/ MODEL	TMA UNIT	RRU UNIT	MAIN CABLE LENGTH	FEEDER	COLOR CODE	NO. OF RUNS	COMMENTS
ALPHA	A1	1	50°	±31'-8" A.G.L.	KATHREIN SCALA 840 10525	N/A	(2)-RRUS11	(75m)-246' PRE-CUT LENGTH	FIBER	RED	1	NEW LTE ANTENNA
ALPHA	A2	1	50°	±31'-8" A.G.L.	KATHREIN SCALA 840 10525	(2)KRY 112 75/1	N/A	±210'	LDF5	RED	4	NEW GSM ANTENNA
ALPHA	A3	1	50°	±31'-8" A.G.L.	KATHREIN SCALA 840 10525	(2)KRY 112 75/1	N/A	±210'	LDF5	RED	4	NEW UMTS ANTENNA
ALPHA	A4	1	50°	±31'-8" A.G.L.	KATHREIN SCALA 840 10525	N/A	(2)-RRUS11	(75m)-246' PRE-CUT LENGTH	FIBER	RED	1	NEW LTE ANTENNA
BETA	B1	1	170°	±31'-8" A.G.L.	KATHREIN SCALA 840 10525	N/A	(2)-RRUS11	(50m)-164' PRE-CUT LENGTH	FIBER	BLUE	1	NEW LTE ANTENNA
BETA	B2	1	170°	±31'-8" A.G.L.	KATHREIN SCALA 840 10525	(2)KRY 112 75/1	N/A	±125'	LDF5	BLUE	4	NEW GSM ANTENNA
BETA	B3	1	170°	±31'-8" A.G.L.	KATHREIN SCALA 840 10525	(2)KRY 112 75/1	N/A	±125'	LDF5	BLUE	4	NEW UMTS ANTENNA
BETA	B4	1	170°	±31'-8" A.G.L.	KATHREIN SCALA 840 10525	-	(2)-RRUS11	(50m)-164' PRE-CUT LENGTH	FIBER	BLUE	1	NEW LTE ANTENNA
GAMMA	C1	1	290°	±31'-8" A.G.L.	KATHREIN SCALA 840 10525	N/A	(2)-RRUS11	(15m)-49.2' PRE-CUT LENGTH	FIBER	GREEN	1	NEW LTE ANTENNA
GAMMA	C2	1	290°	±31'-8" A.G.L.	KATHREIN SCALA 840 10525	(2)KRY 112 75/1	N/A	±45'	LDF5	GREEN	4	NEW GSM ANTENNA
GAMMA	C3	1	290°	±31'-8" A.G.L.	KATHREIN SCALA 840 10525	(2)KRY 112 75/1	N/A	±45'	LDF5	GREEN	4	NEW UMTS ANTENNA
GAMMA	C4	1	290°	±31'-8" A.G.L.	KATHREIN SCALA 840 10525	-	(2)-RRUS11	(15m)-49.2' PRE-CUT LENGTH	FIBER	GREEN	1	NEW LTE ANTENNA

ANTENNA CONFIGURATION SCHEDULE | 2

JAMES VACCARO ARCHITECT, INC.
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at&t mobility

12900 PARK PLAZA DRIVE
CERRITOS, CA 90703

SLG40/ CLU1240
MORRO BAY DT QUINTANA
800 QUINTANA ROAD
MORRO BAY, CA 93442
APN 066-280-015

REV	DATE	ISSUE
1	1/18/2013	90% ZONING
2	1/28/2013	95% ZONING
3	2/18/2013	95% ZONING REV.
4	7/03/2013	95% ZONING REV.
5	7/29/2013	100% ZONING

SHEET TITLE

ANTENNA SPECS., ANTENNA CONFIG. SCHEDULE

SHEET NUMBER

T-3

EXHIBIT B

NOTES

OWNER(S): DAVID M. VOLK

APN: 066-280-015

THE INFORMATION SHOWN HEREON IS BASED UPON A FIELD SURVEY AND A COMPILATION OF AVAILABLE RECORD AND TITLE INFORMATION. UNLESS NOTED OTHERWISE, PROPERTY LINES ARE DERIVED FROM RECORD INFORMATION. THE INTENT OF THIS DRAWING IS FOR EXAMINATION ONLY. THIS IS NOT A BOUNDARY SURVEY.

THE EASEMENTS (IF ANY) THAT APPEAR ON THIS MAP HAVE BEEN PLOTTED BASED SOLELY ON INFORMATION CONTAINED IN THE CONDITION OF TITLE REPORT BY: XXXXXXX TITLE COMPANY, TITLE NO. XXXXX, DATED XXXX X, 2013. WITHIN SAID TITLE REPORT THERE ARE XXXX (XX) EXCEPTIONS LISTED, XXXX (XX) OF WHICH ARE EASEMENTS AND XXXX (XX) OF WHICH CAN NOT BE PLOTTED.

THE UNDERGROUND UTILITIES (IF ANY) THAT APPEAR ON THIS MAP HAVE BEEN LOCATED BY FIELD OBSERVATION. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES STATE THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE.

THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD RATE MAP FOR COMMUNITY NO. 060307, PANEL NO. 1027G, DATED NOVEMBER 16, 2012 SHOWS THAT THE LOCATION OF THIS SITE FALLS WITHIN ZONE X, WHICH ARE AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

THE LATITUDE AND LONGITUDE AT THE LOCATION AS SHOWN WAS DETERMINED BY GPS OBSERVATIONS.

LAT. 35°22'00.9" N. NAD 83
LONG. 120°50'33.5" W. NAD 83
ELEV. 138.4 NAVD 88 (BASIS OF DRAWING)

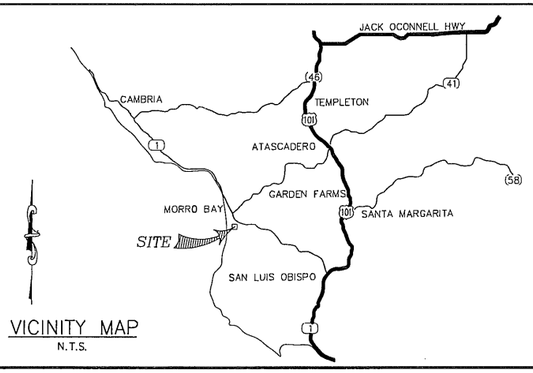
The information shown above meets or exceeds the requirements set forth in FAA order 8260.19D for 1--A accuracy (± 20' horizontally and ± 3' vertically). The horizontal datum (coordinates) are expressed as degrees, minutes and seconds, to the nearest tenth of a second. The vertical datum (heights) are expressed in feet and decimals thereof and are determined to the nearest 0.1 foot.

LESSOR'S PROPERTY LEGAL DESCRIPTION PER TITLE REPORT;

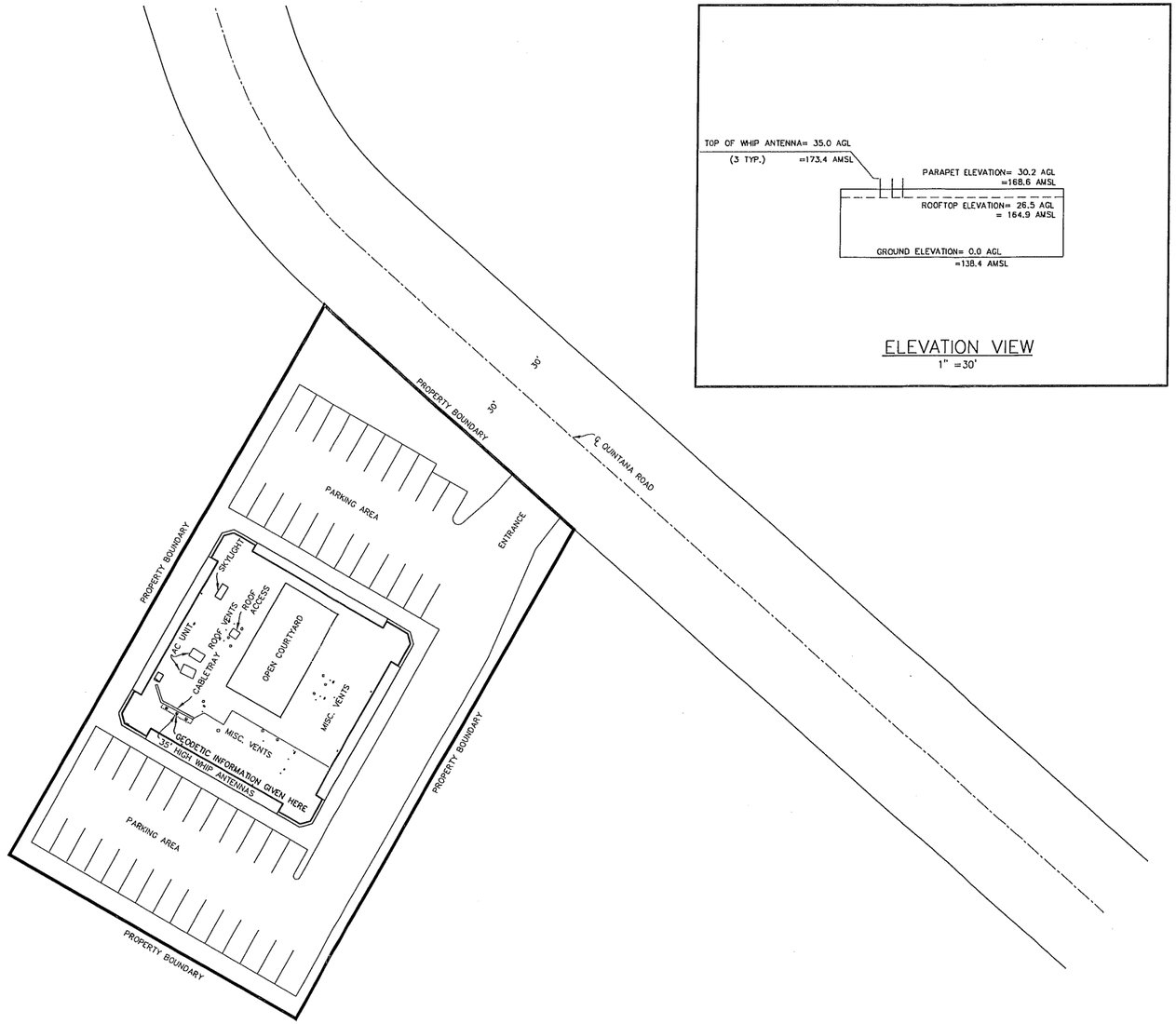
T.B.D.

EASEMENTS PER TITLE REPORT;

T.B.D.



VICINITY MAP
N.T.S.



ELEVATION VIEW
1" =30'

APN: 066-280-015
OWNER(S): DAVID M. VOLK

LEGEND

- SITE BOUNDARY LINE
- OVERHEAD UTILITY LINES
- PROPERTY LINE (PER RECORD DATA)
- +100.00 POWER POLE
- GROUND ELEVATION
- EDGE OF PAVEMENT
- CONCRETE PAD

OVERALL SITE MAP
1" =30'

AT&T
AT&T WIRELESS SERVICES
12900 PARK PLAZA DRIVE
CERRITOS, CA 90703

wireless facilities, inc.
321 BERNOULLI CIRCLE
OXNARD, CA 93030

SMITHCO
SURVEYING ENGINEERING
P.O. BOX 81626 BAKERSFIELD, CA 93380
PHONE (661) 393-1217 FAX: (661) 393-1218

SPACE RESERVED FOR PROFESSIONAL SEAL

REVISION			
NO.	DESCRIPTION	BY	DATE
0	PRELIM. ISSUE	FAA	01/22/13

DRAWN BY:	FAA
CHECKED BY:	GJS
DATE DRAWN:	01/22/13
SMITHCO JOB #:	90-052

SITE NAME

SLG40
MORRO BAY

SITE ADDRESS

800 QUINTANA ROAD
MORRO BAY, CA. 93442
SAN LUIS OBISPO COUNTY

SHEET TITLE

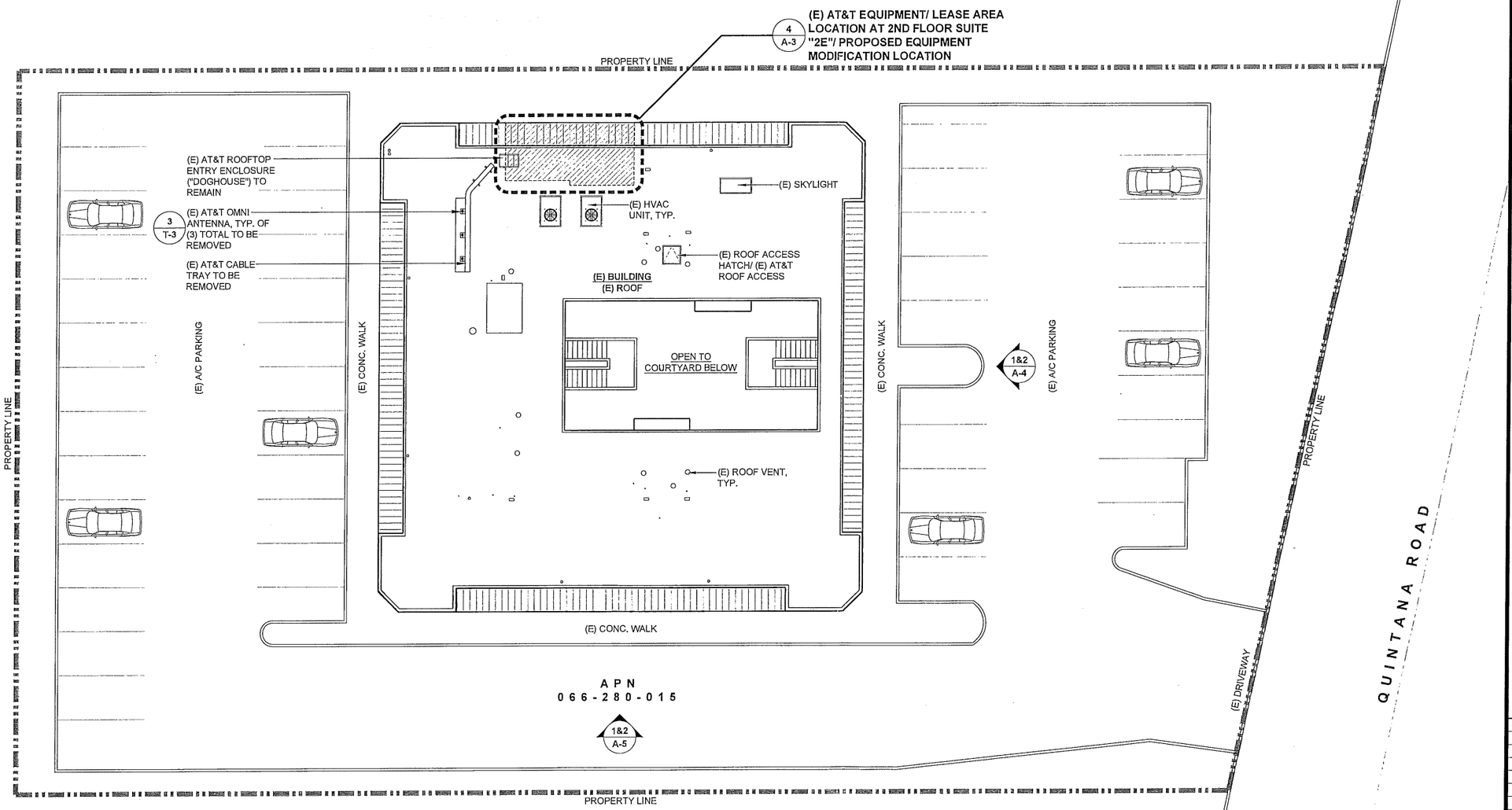
SITE SURVEY

FOR EXAMINATION ONLY

SHEET

C-1

EXHIBIT B



JAMES VACCARO
ARCHITECT, INC.
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OXNARD, CA 93030

at&t mobility
12900 PARK PLAZA DRIVE
CERRITOS, CA 90703

SLG40/ CLU1240
MORRO BAY DT QUINTANA
800 QUINTANA ROAD
MORRO BAY, CA 93442
APN 066-280-015

REV	DATE	ISSUE
1	1/18/2013	90% ZONING
2	1/28/2013	95% ZONING
3	2/18/2013	95% ZONING REV.
4	7/03/2013	95% ZONING REV.
5	7/29/2013	100% ZONING

SHEET TITLE

EXISTING SITE/ ROOF PLAN

SHEET NUMBER

A-1

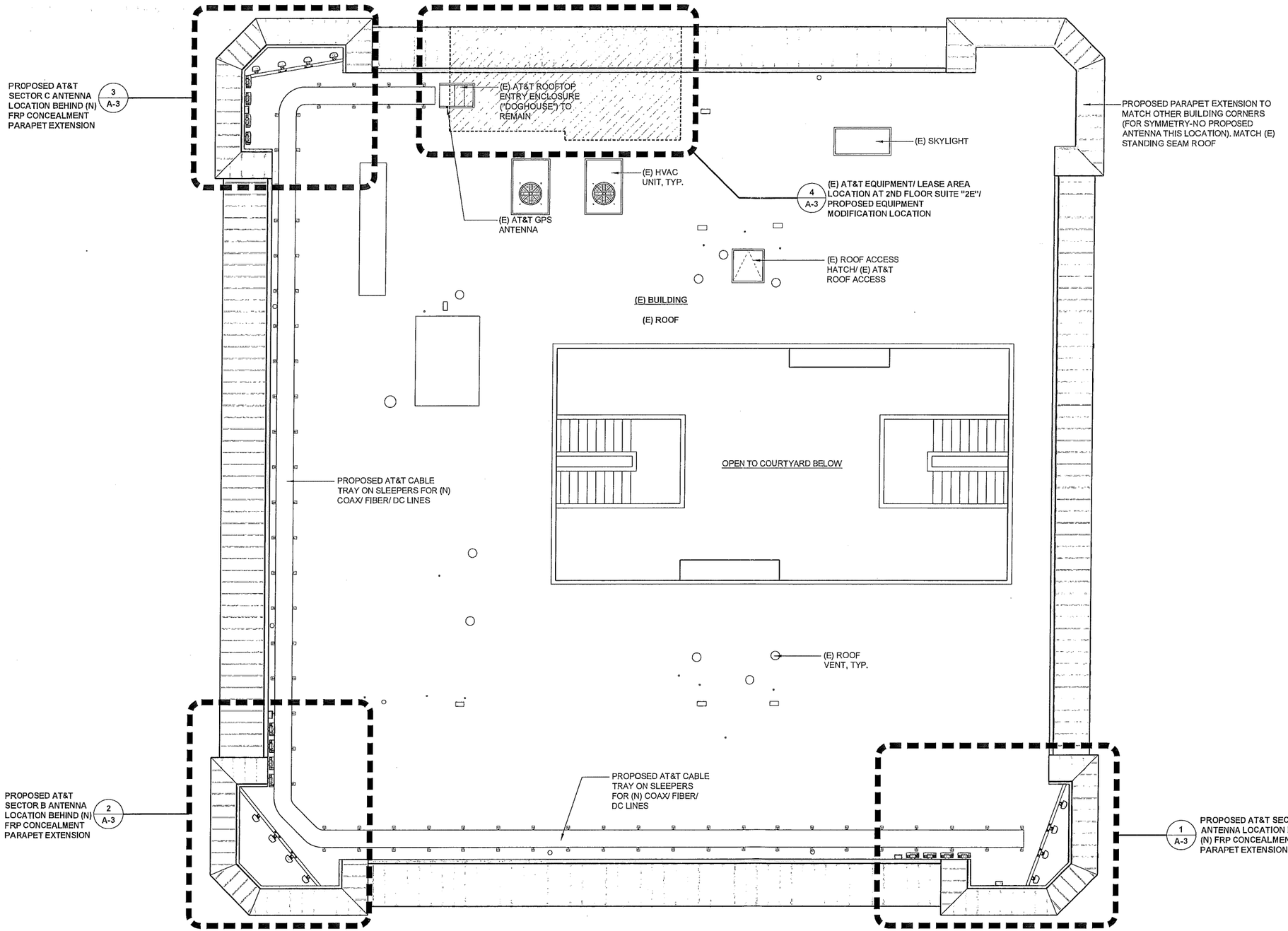
EXISTING SITE/ ROOF PLAN

SCALE: 3/32"=1'-0"

4' 8' 20'

1

EXHIBIT B



ENLARGED PROJECT AREA PLAN AT ROOF

SCALE: 3/16"=1'-0" 4' 8' 12'

1

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4	7/03/2013	95% ZONING REV.
5	7/29/2013	100% ZONING

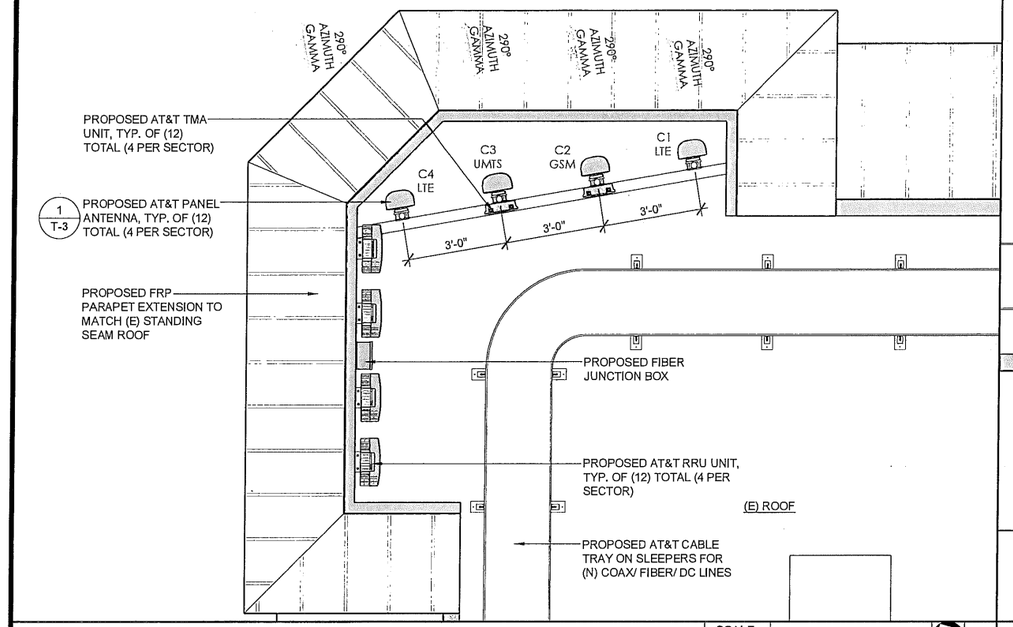
SHEET TITLE

ENLARGED PROJECT AREA PLAN AT ROOF

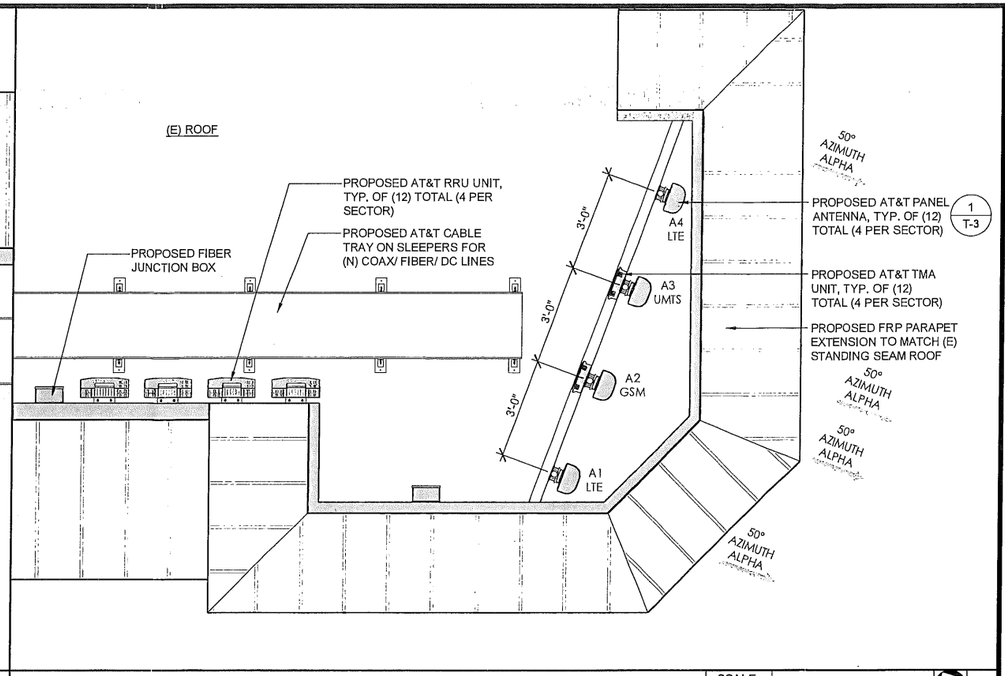
SHEET NUMBER

A-2

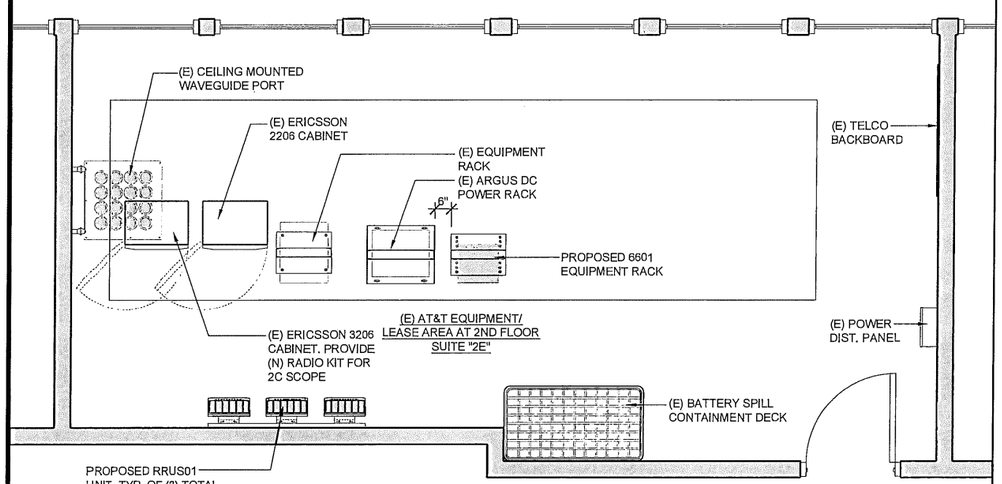
EXHIBIT B



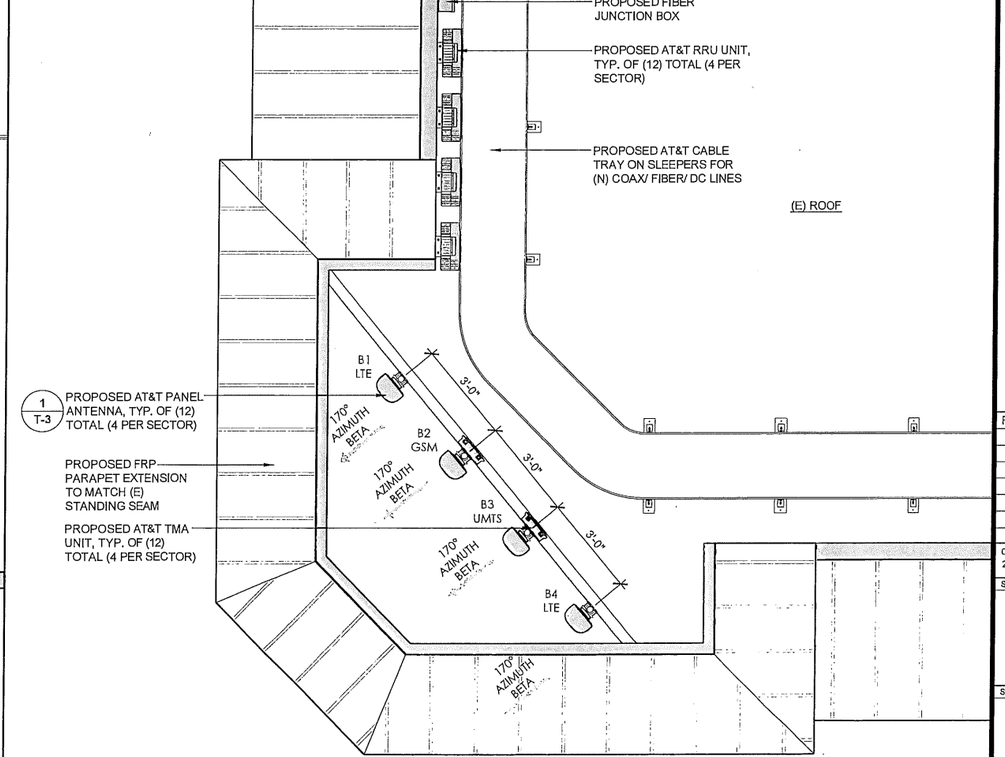
PROPOSED ANTENNA LAYOUT-SECTOR C — SCALE: 1/2"=1'-0" — 3



PROPOSED ANTENNA LAYOUT-SECTOR A — SCALE: 1/2"=1'-0" — 1



EXISTING/ PROPOSED EQUIPMENT LAYOUT — SCALE: 1/2"=1'-0" — 4



PROPOSED ANTENNA LAYOUT-SECTOR B — SCALE: 1/2"=1'-0" — 2

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APN 066-280-015

REV	DATE	ISSUE
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3	2/18/2013	95% ZONING REV.
4	7/03/2013	95% ZONING REV.
5	7/29/2013	100% ZONING

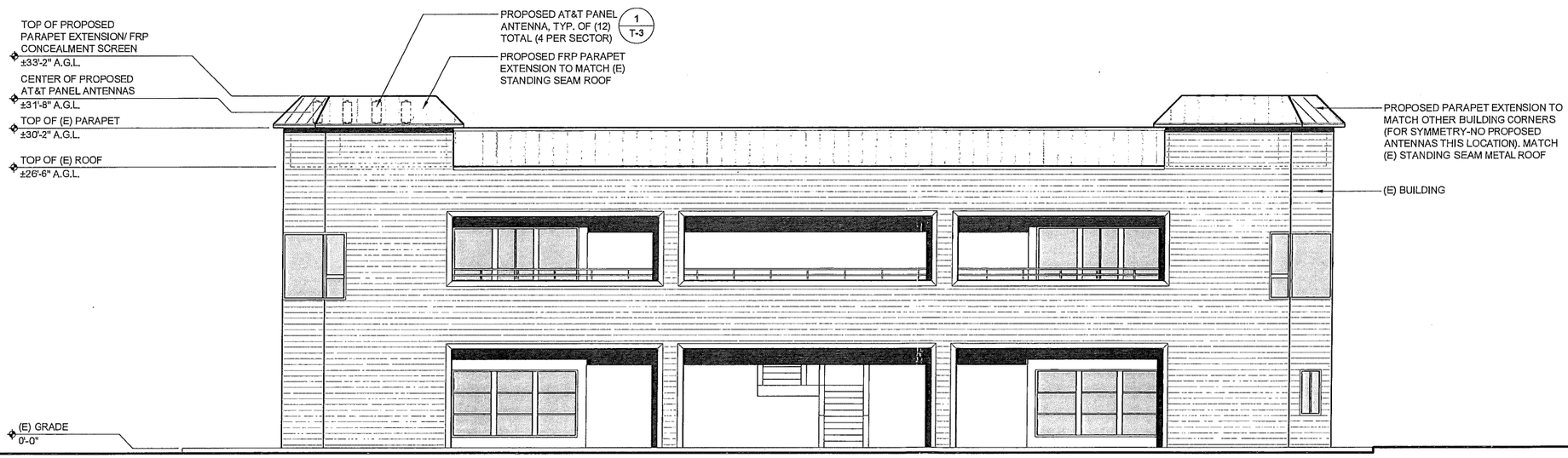
SHEET TITLE
PROPOSED ANTENNA LAYOUTS/ EXISTING/ PROPOSED EQUIP. LAYOUT

SHEET NUMBER
A-3

EXHIBIT B

EXISTING NORTH ELEVATION

SCALE: 3/16"=1'-0" 4' 8' 12' 1



PROPOSED NORTH ELEVATION

SCALE: 3/16"=1'-0" 4' 8' 12' 2

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3	2/18/2013	95% ZONING REV.
4	7/03/2013	95% ZONING REV.
5	7/29/2013	100% ZONING

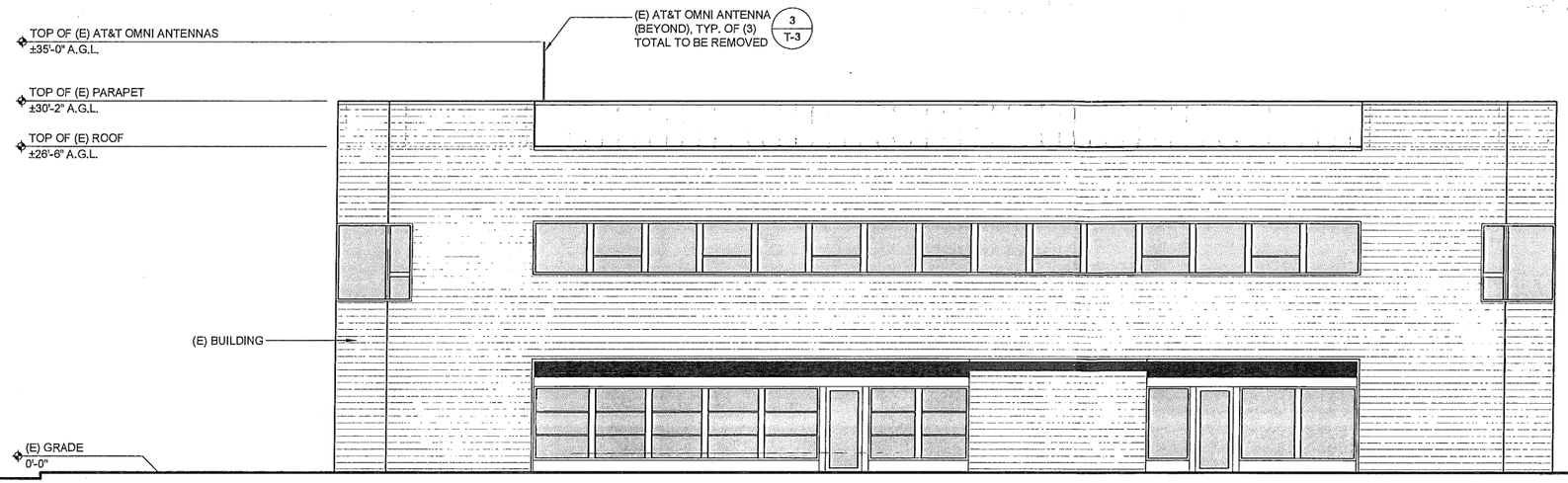
SHEET TITLE

ELEVATIONS

SHEET NUMBER

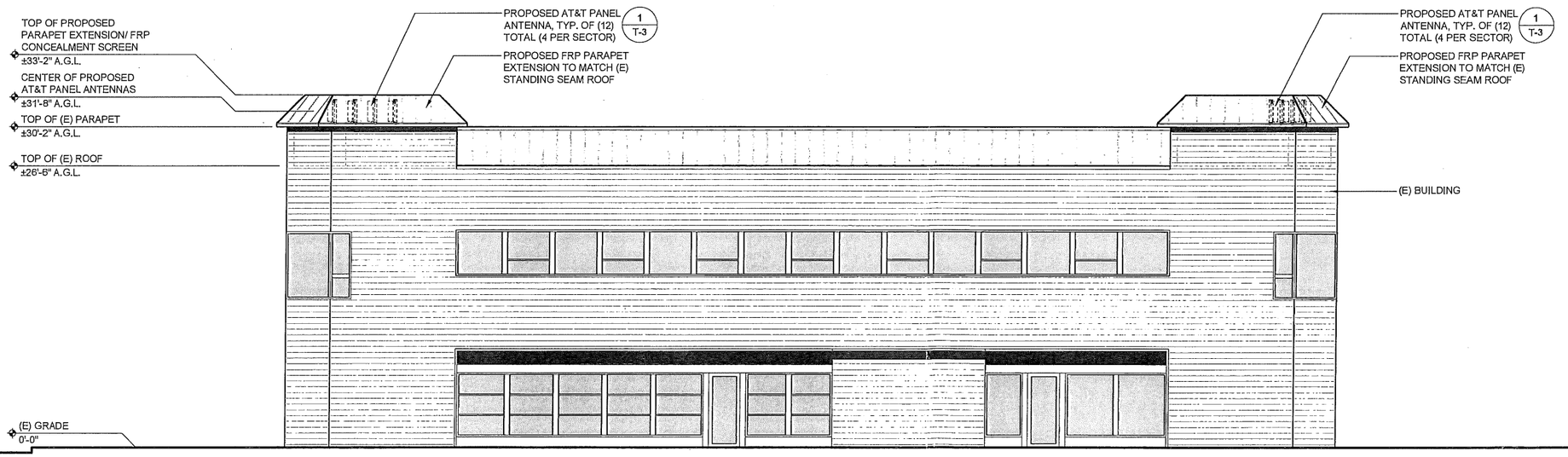
A-4

EXHIBIT B



EXISTING EAST ELEVATION

SCALE: 3/16"=1'-0" 4' 8' 12' 1



PROPOSED EAST ELEVATION

SCALE: 3/16"=1'-0" 4' 8' 12' 2

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REV	DATE	ISSUE
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4	7/03/2013	95% ZONING REV.
5	7/29/2013	100% ZONING

SHEET TITLE

ELEVATIONS

SHEET NUMBER

A-5

Photograph Taken October 17, 2012
Simulation Date August 8, 2013

EXHIBIT C

Photosimulation of the view looking southwest from the nearest point along Quintana Road.

Photograph Taken October 17, 2012
Simulation Date August 8, 2013

EXHIBIT C

Photosimulation of the view looking due north from the nearest point along Morro Bay Blvd, using a standard lens.

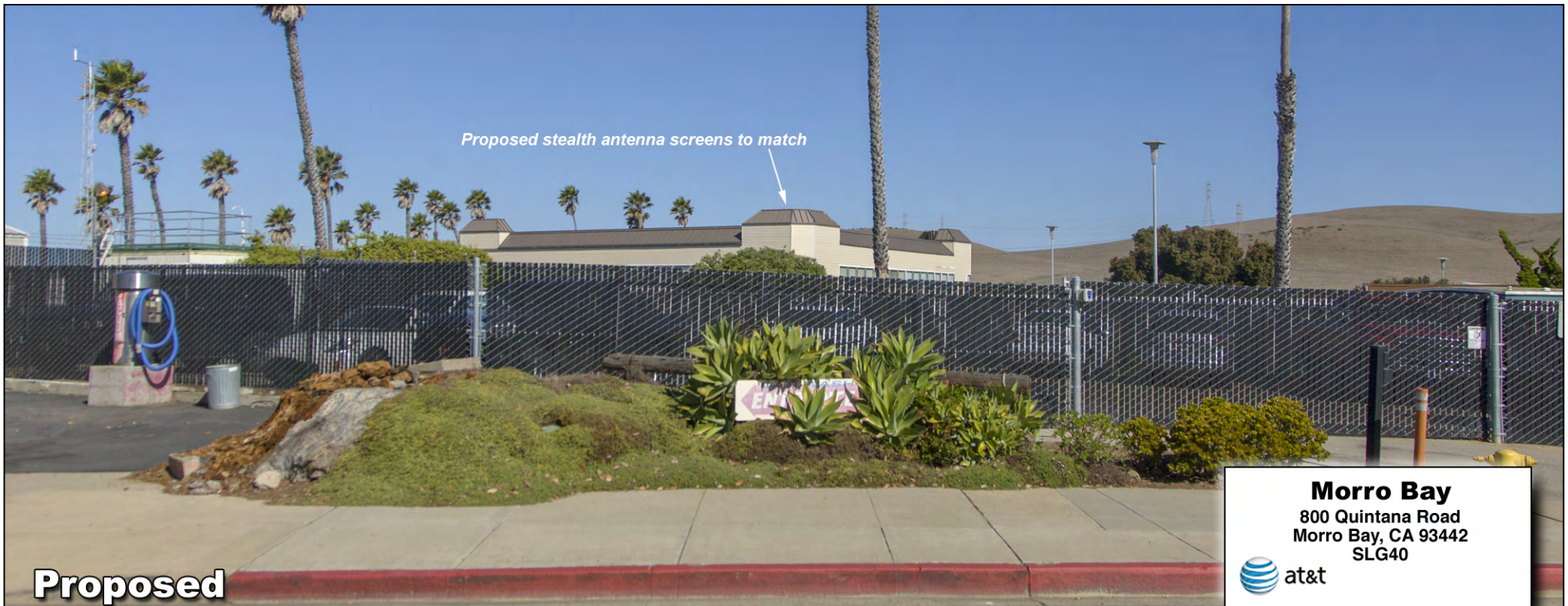


EXHIBIT D

sitesafe
rf compliance experts

200 North Glebe Road, Suite 1000
Arlington, VA 22203-3728

Tricia Knight
TEK Consulting Inc.
Permit Processing Services
123 Seacliff Dr.
Pismo Beach, CA 93449

Subject: Morro Bay DT Quintana, 800 Quintana Rd, Morro Bay, CA, 93442

Date: 21 August 2013

Dear Ms. Knight:

This letter will summarize the findings of the Site Compliance Report, dated 18 August 2013, especially the General Public Maximum Permissible Exposure (MPE) modeling of the subject site.

The modeling of the site shows the highest level on the site to be 3,869% of the General Public MPE or 773.9% of the Occupational MPE. Sitesafe has advised that barriers and signage be posted near the antennas protect the General Public from emissions greater than the General Public MPE. In addition, Sitesafe has recommended that roof access be restricted. When the barriers, signs, and restrictions are installed per Section 3.2 of the Site Compliance Report, the site will be compliant with FCC guidelines.

If you have any questions regarding this report, please contact me at (719) 434-0700 or dcotton@sitesafe.com.

REGISTERED PROFESSIONAL ENGINEER
DAVID CHARLES COTTON, JR
NO. 18838
EXP. 06/30/2015
ELECTRICAL
STATE OF CALIFORNIA

David Charles Cotton, Jr.
Registered Professional Engineer (Electrical)
State of California, 18838, Expires 30-Jun-2015
Date: 2013-August-21
Director, RF Compliance

EXHIBIT D

sitesafe
rf compliance experts

200 North Glebe Road, Suite 1000, Arlington, VA 22203-3728
703.276.1100 • 703.276.1169 fax
info@sitesafe.com • www.sitesafe.com

WFI on behalf of
AT&T Mobility, LLC
Site FA – 10548025-114216
Site ID- SLG40
USID – CLU1240
Site Name – Morro Bay DT Quintana
Site Compliance Report

800 Quintana Road
Morro Bay, CA 93442

Latitude: N35-22-00.96
Longitude: W120-50-32.94
Structure Type: Rooftop

Report generated date: August 15, 2013
Report by: Scott Hoy
Customer Contact: Tricia Knight

AT&T Mobility, LLC Will Be Compliant based on FCC Rules and Regulations.

REGISTERED PROFESSIONAL ENGINEER
DAVID CHARLES COTTON, JR.
NO. 18838
EXP. 06/30/2015
ELECTRICAL
STATE OF CALIFORNIA

David Charles Cotton, Jr.
Registered Professional Engineer (Electrical)
State of California, 18838, Expires 30-Jun-2015
Date: 2013-August-18

EXHIBIT D

sitesafe
rf compliance experts

WFI on behalf of AT&T Mobility, LLC
Morro Bay DT Quintana - 10548025-114216-SLG40-CLU1240
Radio Frequency (RF) Site Compliance Report

800 Quintana Road, Morro Bay, CA 93442

200 N. Glebe Road • Suite 1000 • Arlington, VA 22203-3728
703.276.1100 • info@sitesafe.com

EXHIBIT D

sitesafe
rf compliance experts

Table of Contents

1 Executive Summary

WFI on behalf of AT&T Mobility, LLC has contracted with Sitesafe, Inc. (Sitesafe), an independent Radio Frequency (RF) regulatory and engineering consulting firm, to determine whether the proposed communications site, 10548025-114216-SLG40-CLU1240 - Morro Bay DT Quintana, located at 800 Quintana Road, Morro Bay, CA, is in compliance with Federal Communication Commission (FCC) Rules and Regulations for RF emissions.

This report contains a detailed summary of the RF environment at the site including:

- diagram of the site;
- inventory of the make / model of all antennas
- theoretical MPE based on modeling.

This report addresses exposure to radio frequency electromagnetic fields in accordance with the FCC Rules and Regulations for all individuals, classified in two groups, "Occupational or Controlled" and "General Public or Uncontrolled." This **site will be compliant** with the FCC rules and regulations, as described in OET Bulletin 65.

This document and the conclusions herein are based on the information provided by AT&T Mobility, LLC.

If you have any questions regarding RF safety and regulatory compliance, please do not hesitate to contact Sitesafe's Customer Support Department at (703) 276-1100.

2 Site Compliance

2.1 Site Compliance Statement

Upon evaluation of the cumulative RF emission levels from all operators at this site, Sitesafe has determined that:

This **site will be compliant** with the FCC rules and regulations, as described in OET Bulletin 65.

The compliance determination is based on theoretical modeling, RF signage placement recommendations, proposed antenna inventory and the level of restricted access to the antennas at the site. Any deviation from the AT&T Mobility, LLC's proposed deployment plan could result in the site being rendered non-compliant.

2.2 Actions for Site Compliance

Based on common industry practice and our understanding of FCC and OSHA requirements, this section provides a statement of recommendations for site compliance. RF alert signage recommendations have been proposed based on theoretical analysis of MPE levels. Barriers can consist of locked doors, fencing, railing, rope, chain, paint striping or tape, combined with RF alert signage.

This site will be compliant with the FCC rules and regulations.

Sitesafe found one or more issues that led to our determination. The site will be made compliant if the following changes are implemented:

- Restricted access to the site (by lock, alarm or sign-in sheet), preventing anyone from the general public access to the site;

  and,

- Posting RF signs that a person could read and understand the signs prior to accessing the site;

Site Access Location

Put lock on Site Access Hatch
Information Sign 1 required, in English.
Information Sign 1 required, in Spanish.
Yellow caution sign required.

AT&T Mobility, LLC Proposed Alpha Sector Location

Information Sign 1 required, in English.
Information Sign 1 required, in Spanish.
Yellow caution sign required.

AT&T Mobility, LLC Proposed Beta Sector Location

Information Sign 1 required, in English.
Information Sign 1 required, in Spanish.
Yellow caution sign required.

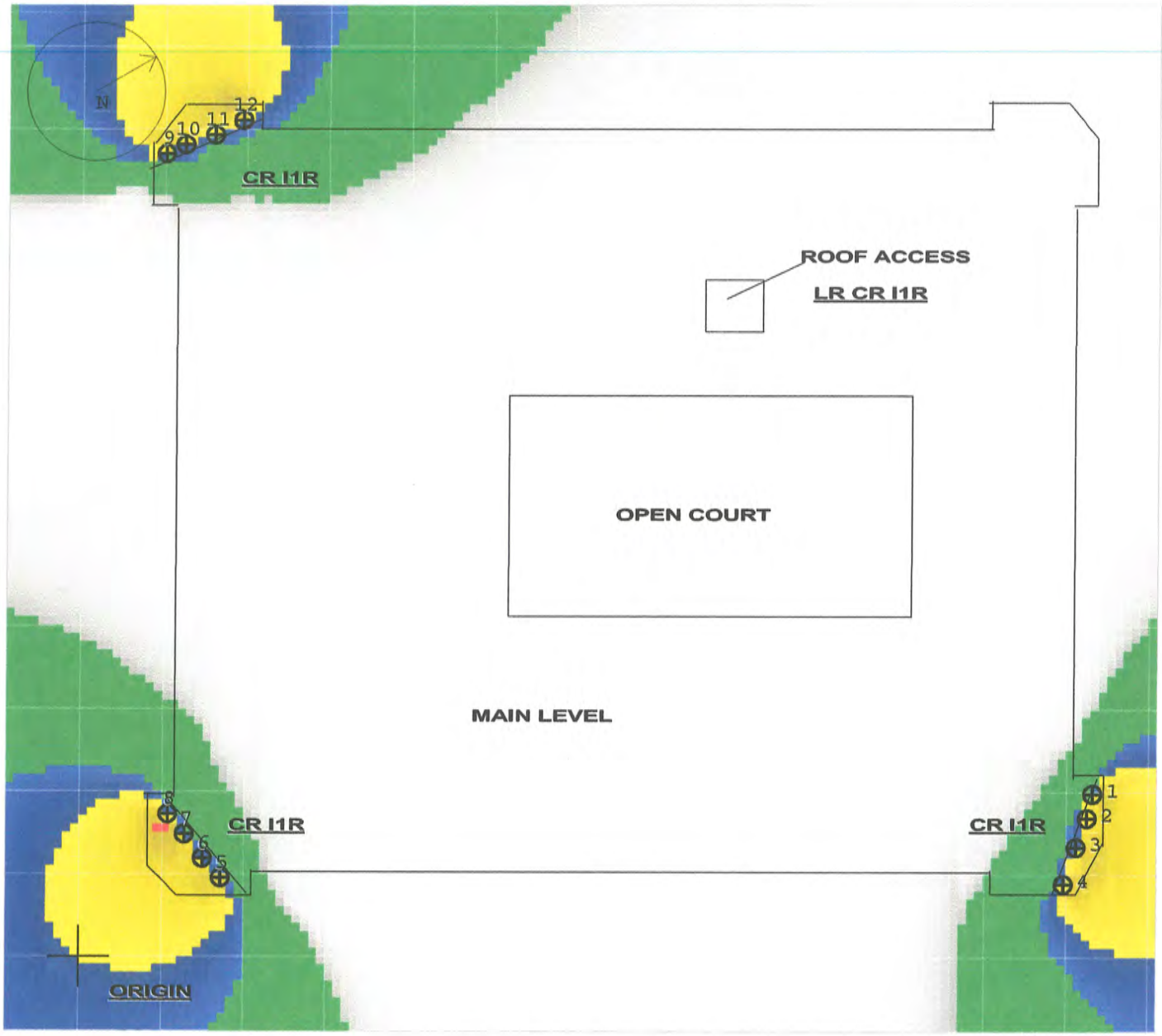
AT&T Mobility, LLC Proposed Gamma Sector Location

Information Sign 1 required, in English.
Information Sign 1 required, in Spanish.
Yellow caution sign required.

Table 1: RF Signage and Barrier Key					
RF Signage			Barriers		
Type	Existing Location	Recommended Location	Type	Existing Location	Recommended Location
Notice	NE	NR	Locked Door	LE	LR
Caution	CE	CR	Fencing	RE	RR
Warning	WE	WR	Rope Chain		
Info Sign 1	I1E	I1R	Paint Stripes		
Info Sign 2	I2E	I2R	Tape		
Info Sign 3	I3E	I3R			
Info Sign 4	I4E	I4R			
NOC Information	INOCE	INOCR			
10 Step Guideline	10SE	10SR			

EXHIBIT D

RF Emissions Diagram for: Morro Bay DT Quintana
Main Level



% of FCC Public Exposure Limit
Average from 0 feet above to 6 feet above origin

	5000 <= X
	500 <= X < 5000
	100 <= X < 500
	5 <= X < 100
	X <= 5

sitesafe
www.sitesafe.com
Sitesafe ID# 114522
Site Name: Morro Bay DT Quintana

Feet
10 0 10 20
Grid Size is 10.0

2.3 Antenna Inventory

The Antenna Inventory shows all transmitting antennas at the site. This inventory was provided by the customer, and was utilized by Sitesafe to perform theoretical modeling of RF emissions. The inventory coincides with the site diagrams in this report, identifying each antenna's location at 10548025-114216-SLG40-CLU1240 - Morro Bay DT Quintana. The antenna information collected includes the following information:

- Licensee or wireless operator name
- Frequency or frequency band
- Transmitter power – Effective Radiated Power ("ERP"), or Equivalent Isotropic Radiated Power ("EIRP") in Watts
- Antenna manufacturer make, model, and gain

For other carriers at this site, the use of "Generic" as an antenna model, or "Unknown" for an operator means the information with regard to carrier, their FCC license and/or antenna information was not available nor could it be secured while on site. Equipment, antenna models and nominal transmit power were used for modeling, based on past experience with radio service providers.

Table 3: Antenna Inventory												
Ant #	Operated By	TX Freq (MHz)	ERP (Watts)	Antenna Gain (dBd)	Az (Deg)	Antenna Model	Ant Type	Len (ft)	Horizontal Half Power Beamwidth (Deg)	Location		
										X	Y	Z
8	AT&T Mobility LLC (Proposed)	746	373	7.94	170	Kathrein-Scala 84010525	Panel	2	72	11'	17'	2'
8	AT&T Mobility LLC (Proposed)	2100	873	10.38	170	Kathrein-Scala 84010525	Panel	2	68	11'	17'	2'
9	AT&T Mobility LLC (Proposed)	746	373	7.94	290	Kathrein-Scala 84010525	Panel	2	72	10'	97'	2'
9	AT&T Mobility LLC (Proposed)	2100	873	10.38	290	Kathrein-Scala 84010525	Panel	2	68	10'	97'	2'
10	AT&T Mobility LLC (Proposed)	850	161	9.06	290	Kathrein-Scala 84010525	Panel	2	63	13'	98'	2'
11	AT&T Mobility LLC (Proposed)	850	644	9.06	290	Kathrein-Scala 84010525	Panel	2	63	16'	99'	2'
11	AT&T Mobility LLC (Proposed)	1900	1099	11.38	290	Kathrein-Scala 84010525	Panel	2	64	16'	99'	2'
12	AT&T Mobility LLC (Proposed)	746	373	7.94	290	Kathrein-Scala 84010525	Panel	2	72	19'	101'	2'
12	AT&T Mobility LLC (Proposed)	2100	873	10.38	290	Kathrein-Scala 84010525	Panel	2	68	19'	101'	2'

NOTE: X, Y and Z indicate relative position of the antenna to the origin location on the site, displayed in the model results diagram. Specifically, the Z reference indicates antenna height above the main site level unless otherwise indicated. ERP values provided by the client and used in the modeling may be greater than are currently deployed. For other carriers at this site the use of "Generic" as an antenna model or "Unknown" for a wireless operator means the information with regard to carrier, their FCC license and/or antenna information was not available nor could it be secured while on site. Equipment, antenna models and nominal transmit power were used for modeling, based on past experience with radio service providers.

EXHIBIT D

AGENDA NO: B-2

MEETING DATE: November 20, 2013

Staff Report

TO: **Planning Commission** **DATE: November 20, 2013**

FROM: **Rob Livick, PE/PLS – Public Services Director/City Engineer**
Damaris Hanson – Engineering Technician IV

SUBJECT: **Urban Forest Management Plan**

RECOMMENDATION

Staff recommends that the Planning Commission review the Urban Forest Management Plan and provides any recommendations to City Council.

FISCAL IMPACT

No direct fiscal impact at this time other than staff time only in the preparation of the plan.

SUMMARY

The Urban Forest Management Plan (UFMP) will guide the City toward a healthy, sustainable urban forest. As part of the plan, the trees in the commercial districts have been surveyed using a Geographic Positioning System (GPS) unit and incorporated into a Geographic Information System (GIS) mapping program. This enables the City to have a better idea of the health, age, species diversity, and the overall quality of the trees in this area. The UFMP will help to determine specific levels of funding needed for tree maintenance and tree planting over a multi-year period. The plan developed goals which provide objectives and actions in order to achieve these goals. The plan is a living document that will grow with the urban forest and evolve with new goals, objectives and actions as needed.

The UFMP was taken to the Public Works Advisory Board (PWAB) on April 19, 2013 where it was continued to the June 20, 2013 meeting. At this meeting PWAB moved to forward the UFMP to the City Council and recommend approval with the following recommended changes:

1. Eliminate the proposal to change the responsibility of the tree maintenance for City-owned trees from the City to residents; and
2. Add language to include as an objective under Goal 5 "Tree Conversation" that makes explicit the need to protect existing and future trees.

Additionally, the amount of expenditures for residential tree maintenance has been clarified with additional data from the Maintenance Superintendent from Recreation and Parks. The amount spent on an annual base to maintain the urban forest in the residential area is approximately $20,000 per year.

Prepared By:___DH_____ Department Review: _____

BACKGROUND

The urban forest contributes to the well-being of the residents, businesses, and visitors of Morro Bay in many ways. Trees provide economic, environmental and social benefits.

Economic benefits:

- Research shows that business on treescaped streets show 20% higher income streams, compared to businesses in strip mall settings.
- Home and business values increase $15,000-25,000 with street trees verses streets with no trees.

Environmental benefits:

- Trees contribute to improving our air quality, water quality, and providing wildlife habitat.
- Tree leaf and branch structures absorb approximately 30% of precipitation, allowing for evaporation back into the atmosphere.
- Carbon dioxide is absorbed for the photosynthetic process, but other emissions such as nitrogen oxides, carbon monoxide, and volatile organic compounds are reduced significantly from the proximity to trees.
- Trees provide a canopy for birds to enjoy, a root structure and setting important for insects and bacterial life below the surface.

Social benefits:

- Trees make the urban life more aesthetically pleasing environment by providing a buffer from the buildings and hardscape of urban infrastructure.
- Trees have been credited with improving the health, emotion and wellbeing for people. The advantage of trees goes beyond the physical benefits, by creating a more calming, visually pleasing environment.

DISCUSSION

The Urban Forest Management Plan serves as a guide for perpetuating and enhancing Morro Bay's public trees. For the purposes of this plan, public trees are those located within the City Rights of Way (Street Trees). This plan establishes guiding principles and associated goals that result in specific strategies for addressing the needs of the public trees. These goals were developed from community input, City needs, environmental and urban conditions. They are flexible enough to account for future changes.

This plan is essential in guiding the City toward a healthy sustainable urban forest. Proper tree selection and placement is vital to our Urban Forest future. An Urban Forest Management Plan is an essential tool for protecting this valuable resource. This plan discusses the makeup of our tree population through the tree inventory. It looks at the health of our trees and addresses the questions:

- Is this the right tree in the right place?
- Is there adequate species diversity?
- How can we improve age diversity with our aging population of trees?

The management plan will contribute to public safety by managing the risk related to the public's infrastructure. The tree inventory will help generate lists of trees requiring priority removal and pruning that staff can carry out within the limits of budget and time constraints. The plan will help determine the right tree for the right place, by identifying specific tree species that grow better in the different microclimates areas in Morro Bay. City Council's adoption of the UFMP is the next significant step in Morro Bay's efforts to enhance the beautification of Morro Bay.

The UFMP has developed goals that have objectives and actions to follow in order to implement the goals.

Goal 1: Defining Public trees

The City has wide Rights of Way and therefore much of the public treats sections of unpaved Rights of Way as an extension of their property. For the most part the trees planted in the residential Rights of Way were planted by the residents for their personal pleasure/benefit. Due to the vast number of trees planted in these wide Rights of Way in the residential areas, it is a large financial and liability burden to the City. The City spends most of the annual tree budget on these trees, approximately $20,000. The City would like to encourage residents to continue to plant and maintain these trees. In order to enhance and maintain the urban forest to the desired level, the City will need to limit the scope of trees to one that the City can manage. With the cost savings of not maintaining public trees in the residential areas, more money could be spent on replanting and maintaining public trees in the commercial/downtown districts. Currently the City has guidelines for private trees, but in order to protect private trees the City would need to adopt a tree ordinance for private trees.

Goal 2: Enhancing the Urban Forest

The enhancement of the Urban Forest considers the life cycle of the urban forest and recognizes that it is a dynamic, natural system. Establish and maintain an optimal level of age and species diversity and increased levels of trees to maximize ecosystem benefits provided by the urban forest, (maintain air quality, reduce energy use, moderate stormwater runoff, and provide a favorable environment for city residents).

Goal 3: Protecting Wildlife

Morro Bay is a bird sanctuary and therefore protecting the nesting birds is essential. Further define the nesting season and explore Best Management Practices for the nesting birds and tree trimming.

Goal 4: Educate the Public on the Benefits of Trees

Provide the public with a general understanding of the value and benefits that the Urban Forest provides. Educate residents, business owners, and the development community with Best management practices, including planting and care of trees.

Goal 5: Tree Conservation

Conservation of the Urban Forest is important to preserve the forest for future generations. The conservation efforts include maintenance standards for ongoing management of trees. The City's urban forest should be maintained with standards that are consistent with good cultural best management practices.

CONCLUSION

The urban forest is a dynamic natural system that is constantly changing. The UFMP establishes guiding principles and associated goals that result in specific strategies for address the needs of public trees. The residents and visitors of Morro Bay deserve a healthy urban forest that is conserved for future generations. Therefore sound guardianship of this unique and attractive community is necessary if the quality of life is to be maintained.

ATTACHMENT

ATTACHMENT 1: Urban Forest Management Plan

Urban Forest Management Plan

"A Plan for the Public Trees of Morro Bay"

Morro Bay City Tree species is the Monterey Cypress (Cupressus macrocarpa)

When one tugs at a single thing in nature, he finds it attached to the rest of the world.

--John Muir--

Acknowledgements

City Council

Jamie Irons, Mayor
Noah Smukler, Vice Mayor
Nancy Johnson, Councilmember
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URBAN FOREST MANAGEMENT PLAN - "A PLAN FOR THE PUBLIC TREES OF MORRO BAY"

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Executive Summary

The preservation of the natural environment is essential to the resident and visitors of Morro Bay. The coastal setting and its stunning beauty of this area attracts people to visit and live here. The residents and visitors of Morro Bay deserve a healthy urban forest that is conserved for future generations. Therefore sound guardianship of this unique and attractive community is necessary if the quality of life is to be maintained. Many of such measures will have to be in the area of conservation and the maintenance of the urban forest. The Urban Forest Management Plan (UFMP) is a living document and a long range policy guide that will respond and develop over time.

The UFMP will require close partnership between policy makers, staff and the community. The UFMP will help the Public Services and the Recreation and Parks Departments define the goals for City of Morro Bay public trees. This UFMP is the road map for these departments and the Tree Committee to follow in order to get the desired results for the trees located in the public right of ways. The UFMP establishes guiding principles and associated goals that result in specific strategies for address the needs of public trees.

Vision Statement

A healthy urban forest with a thriving, sustainable mix of tree species which are cared for and valued by both the City and citizens of Morro Bay. As an essential environmental, economical and community asset, the urban forest provides an attractive location for businesses, residents and visitors. The Urban Forest Management Plan seeks to increase age and species diversity in the public tree population, and enhance the character and aesthetics of our City for the people who live and work here.

Mission Statement

The Urban Forest Management Plan seeks to ensure that all benefits of a healthy urban forest are available to Morro Bay's residents and visitors for future generations. The UFMP accomplishes this by increasing age and species diversity in the public tree population, augmenting biomass and canopy coverage, and enhancing the character and aesthetics of our City by achieving exemplary conservation and sustainable practices for the public trees from all who live, work and visit here.

Why we need an UFMP

The Urban Forest Management Plan serves as a guide for perpetuating and enhancing Morro Bay's public trees. Public trees are the trees located within the City Rights of Way. This UFMP establishes guiding principles and associated goals that result in specific strategies for addressing the needs of public trees. These goals were developed from community input, City needs, environmental and urban conditions. They are flexible enough to account for future changes.

The discipline of urban forestry strongly advocates for species and age diversity in the urban forest so that an invasive species cannot devastate the entire urban forest. From the picture below you can see that most trees present in 1931 were the Blue Gum Eucalyptus and were planted primarily as wind breaks.

Image 1: Morro Bay Aerial Photo (1931)

Morro Bay's entire urban forest has more than 1,500 trees. There are 675 trees in the City Rights of Way (public trees). The tree population is aging and these trees will eventually need to be removed and replaced. Of the Monterey Pines that were planted in the 1950's, many have succumbed to the turpentine beetle, and the few that are left have begun to reach the end of their useful life. Removal of these trees is a big "hit" to the community since they are so large and also provide a larger canopy cover compared to the small 15 gallon tree that planted in their place. The Red flowering eucalyptuses, while a beautiful tree, are in small undersized tree wells and the trees drop woody seed capsules on the sidewalk posing a hazard to pedestrians.

This UFMP is essential in guiding the City toward a healthy sustainable urban forest. Proper tree selection and placement is vital to our Urban Forest future. An Urban Forest Management Plan is an essential tool for protecting this valuable resource. This UFMP discusses the makeup of our tree population through the tree inventory. It looks at the health of our trees and addresses the questions:

- Is this the right tree in the right place?
- Is there adequate species diversity?
- How can we improve age diversity with our aging population of trees?

The management plan will increase the public safety by managing the risk related to the public's infrastructure. The UFMP and tree inventory will provide lists of trees requiring priority removal and pruning that staff can carry out within the limits of a budget and

time. Adoption of this UFMP is the next significant step in Morro Bay's efforts to enhance the beautification of Morro Bay.

Historical Context

"Morro Bay was always the stuff of which dreams were made. A spectacular setting, with its magnificent rock, its rolling breakers in the outer bay, its sandspit and quiet inner bay, its picturesque shoreline extending as far as the eye can see". (Gates, Morro Bay Yesterdays)

In 1542, Juan Rodrigues Cabillo, a Portuguese navigator, sailed in the bay he named "Los Esteros" to anchor near the rock he named "El Moro" to supply his ship with wood and fresh water. Cabrillo was credited as the first European to discover the land of upper California, including the area now known as Estero Bay and Morro Bay.

Morro Bay's history has provided a foundation for the manner in which this community has grown over the years. Morro Bay originally developed because it provided access to shipping, an important asset to nearby farmers and ranchers. In the late 19th century, it became apparent to City founders that this bay offered economic potential, so they began to develop the harbor. If it had not been for a slump in the national economy at this time, Morro Bay could have easily become a miniature San Francisco. Instead, Morro Bay grew to be an important fishing port and an attraction to the touring public. (Gates)

Prior to about 1850 the only known trees in the area were the California Bay, Arroyo Willow, Fremont Cottonwood, California Sycamore, California Box Elder, Monterey Cypress, Tanbark Oak, Coat Live Oak, and Monterey Pine. After about 1875 the first home was built in Morro Bay by Franklin Riley at the intersection of Morro Bay Boulevard and Main Street. The home was made of the native willows. After the first few years, Riley realized the need for trees in the area. He made the first nursery at the intersection of Harbor Street and Morro Avenue where he grew Monterey Cypress and Blue Gum Eucalyptus. These trees were vital in stopping the sand filled wind and created a layer of topsoil as well as fire wood.

ARNOLD SCHNEIDER

First house built in Morro, it had two rooms and consisted of willow pines chinked with adobe clay. Franklin Riley, builder-owner, situated his home in what is now the locality of Main Street and Morro Bay Boulevard. He founded the town.

Image 2: Franklin Riley house, (Gates)

The City was incorporated in July of 1964 and the first tree ordinance was adopted in July of 1966. This ordinance has much of

the same language as the present day tree ordinance. Around the 1950's the Boy Scouts planted Monterey Pines throughout Morro Bay and in the early 1980's Mayor Warren Dorn had the Red Flowering Eucalyptus trees planted as street trees in the downtown area. After about 1985 the first Morro Bay Tree Committee was formed and created the first City master tree list. This list consisted of native drought tolerant and/or California native tree species. Also during this time the first Adopt A-Tree program was started. The tree committee was eventually eliminated and members of this committee were combined with the franchise committee to form the Public Works Advisory Board. In 2009, another Tree Committee was formed, a volunteer committee, which is very active in planting trees around the community. The Volunteer Tree Committee has developed a revised City master tree list, and also suggested trees for residential properties and open space.

Benefits of trees

Economic benefits - The urban forest contributes to the well-being of the residents of Morro Bay in many ways. Trees add value to adjacent homes and business. Research shows that businesses on treescaped streets show 20% higher income streams, which is often the essential competitive edge needed for "main street" store success, versus competition from plaza discount store prices. Realtor based estimates of street tree versus non street tree comparable streets relate a $15-25,000 increase in home and business value (Burden). This in turn adds to the tax base and operations budgets of a City allowing for added street maintenance.

Environmental benefits - Trees contribute to improving our air quality, water quality, and providing wildlife habitat. Trees leaf and branch structure absorb the first 30% of most precipitation, allowing evaporation back into the atmosphere. This moisture never hits the ground. Another 30% of precipitation is absorbed back into the ground and taken in and held onto by the root structure, then absorbed and transpired back to the air. Trees provide rain, sun and heat protection shielding wildlife, humans and structures. Tree coverage offers shade from direct sunlight, shelter from the rain and lowering the air temperatures by 5-15 degrees. Air quality is improved by trees and shrubs by absorbing carbon dioxide and other pollutants, removing dust and sand particulates, and releasing oxygen. Carbon dioxide is absorbed for the photosynthetic process, but other emissions such as nitrogen oxides, carbon monoxide, and volatile organic compounds are reduced significantly from the proximity to trees (Burden). The leaves and shrubs filter the air from moving dust and sand particles. Urban street trees provide a canopy, for birds to enjoy, a root structure and setting important for insect and bacterial life below the surface; at grade for pets and people to enjoy, all of which connects the urban human to the natural environment.

Social benefits – Trees seem to make life more pleasant in a couple of ways. They convert the streets, parking, and buildings into a more aesthetically pleasing environment. The paved roads, parking lots and structures that create cities are a grey visual and harsh environment without the trees and shrubs to soften and relieve the eye sore. Trees also improve health, emotion, and wellbeing for all ages. Studies have shown that trees can reduce stress, and that views of trees can speed the recovery of surgical patients (Burden). The advantage of trees expands past their physical benefits, by creating a more calming, visually pleasing environment for all to gain from.

Relationship to other City documents

General Plan- The UFMP is supported by elements of the City of Morro Bay's General Plan; Land Use Open Space, and Conservation Element. The City's General Plan, adopted in 1988, is a vintage document and the City will be updating this document in the coming years and incorporating new policies which also support the need for a strong urban forest program.

One of the "issues" identified in the Land Use, Conservation and Open Space element is: the maintenance of the natural image portrayed by the City and its surroundings must be guaranteed if one of the primary reasons people live in Morro Bay is to remain intact. The UFMP strives to do just this, by managing the trees and preserving the natural beauty in Morro Bay.

Morro Bay has taken steps to preserve the natural environment which could have easily been lost. As such, the City has attracted a population who has come not because it is close to where they work, but because of its qualities. Many of these qualities are environmental, but an equal amount has been created by such things as the atmosphere of the fishing port and its isolation from the faster paces of life. It is because the people of Morro Bay have more than a casual desire to live here that the need to take every measure possible to maintain this sense of identity is accentuated. Many of such measures will have to be in the area of conservation and the maintenance of the environment. It is also important to realize that the current residents were attracted, so too will the future residents be attracted. Therefore, sound guardianship of this unique and attractive community is necessary if the quality of life is to be maintained. (Land use, conservation open space element)

Municipal Code- The City of Morro Bay's Municipal Code addresses street trees regulations (MBMC 12.08). The regulations include provisions on tree removal by City for cause, tree care, planting and replanting. The City also has a bird nesting season from February 1st through June 30th. No trees within the public right of way can be removed or trimmed during this time except in the case of an emergency as determined by the Director of Public Services. The municipal code also has a section on frontage improvements which require property owners and/or applicants for significant development permits to install frontage improvements. These frontage improvements require a street tree to be planted and the tree to be one from the City's approved street tree list. The City recently adopted a Landmark tree ordinance which provides the guidelines for residents to nominate a tree within the public right of way as a landmark tree. Currently there are several nominees but these trees have not yet been approved by City Council.

Tree City USA- The City has been recognized for over twenty years, since 1989, by Tree City USA. In order to meet the Tree City USA recognition the City must have a tree board or department, a tree care ordinance, a community forestry program with at least an annual budget of $2 per capita and an Arbor Day observance and proclamation.

TREE CITY USA

Environmental Setting

Morro Bay and its surrounding regions combine to form an environmental sensitive and delicate mixture of land, air, water and life. From Morro Rock, the sand spit, Black Hill, Morro, Chorro and Toro creeks down to the estuary itself, all make up the geologic region of Morro Bay. Morro Bay is part of the Franciscan Formation. It is made up of complex igneous, metamorphic and sedimentary rock layers formed in the Cretaceous period, 75 to 195 million years ago. The Morro's, or Seven Sister, including Morro Rock are volcanic plugs formed in the Pleistocene Period and are made up of serpentine and/or porphyritic dacite.

Soils

There are seven major soils groups that underline the City. These soils are Baywood Fines, Concepcion, Cropely, Diablo, Dune, Los Osos and Marimel. The most fertile areas in the Morro Bay area can be found in the valleys where most of the agriculture occurs. Streams have eroded soils upstream and have transported and deposited then along the valleys. There are two types of alluviums in Morro Bay. The older alluvium, characterized by course textured soils, is generally found in the Los Osos Creek Valley and coastal Plains of Morro Bay consisting of old stabilized dunes. These soils are subject to excessive drainage, rapid permeability, and wind and water erosion. The soils are generally not fertile and are used mainly for urban uses. The newer alluvium can be found in the Toro, Morro, and Chorro Valleys. These soils are characterized by level, but poorly drained clays.

The foothills of Morro Bay have been generally categorized as shallow uplands. Within this category, two soils groups can be identified. One consists of upland soils formed from firm shales, sandstones or mudslides and is highly prone to erosion. The second group is a clayey upland soil formed on shale or igneous bedrock. Situated on gently rolling terrain, erosion is moderate and the soil permeability is low.

Image 3: North Morro Bay's Soils

Image 4: South Morro Bay's Soils

104-106, Baywood fine sands series consist of deep, somewhat excessively drained soils in old sand dunes near the coast.

120, Conception series consists of a shallow loam layer with an abrupt textural change to a thick claypan limiting the transmittal of water.

128, Cropley series consists of moderately deep clay soils over silty clay loam soils, moderately well drained soils formed from alluvium.

128-132, Diablo series consists of moderately deep clay soils, poorly drained with weathered bedrock at around 58 inches.

134, Dune series consists of sand; these areas are the dune and beach areas.

158-161, Los Osos series consists of shallow loam soil over clay to sandy loam soils, moderately drained with weathered bedrock at about 39 inches.

*Soils information was acquired from the USDA Natural Resources Conservation Service (NRCS), see Appendix 2 for full soils description.

Climate

Morro Bay experiences a mild Mediterranean climate. Plants here seldom suffer a frost of any consequence. Morro Bay's climate is cool, wet winters, and cool summers with frequent fog or wind. The fog tends to come in high and fast, interposing a cooling and humidifying blanket between the sun and the earth, reducing the intensity of the light and sunshine.

Figure 1: Average Rainfalls in Morro Bay

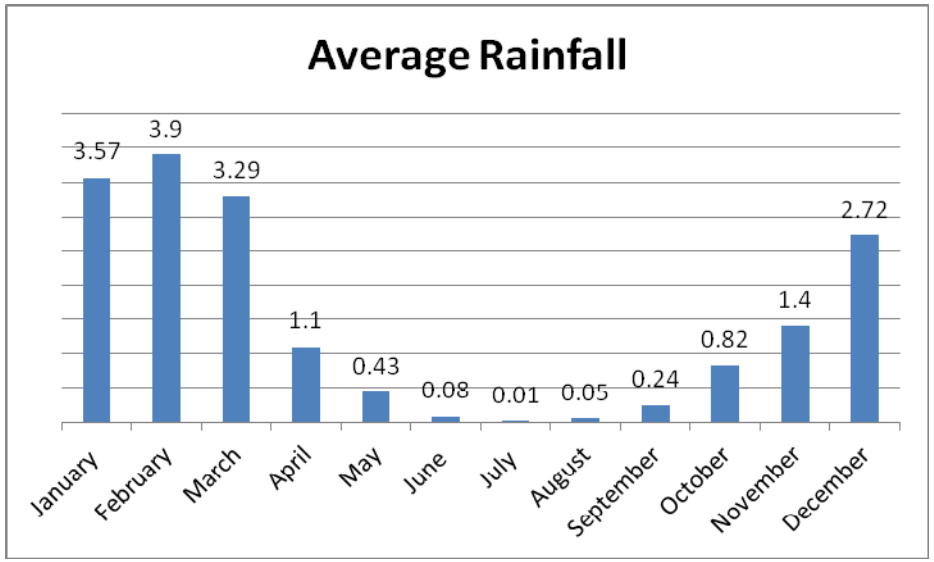
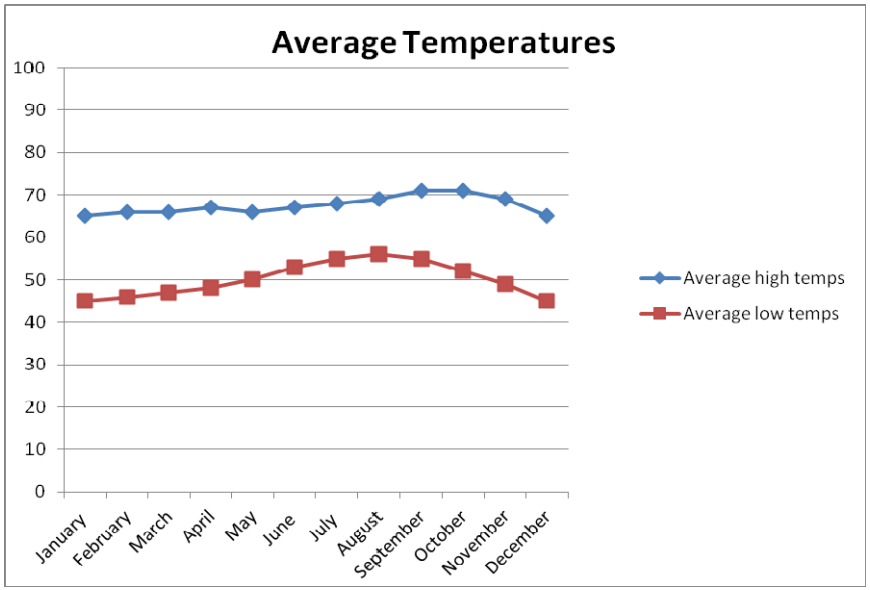


Figure 2: Average Temperatures in Morro Bay



The average temperature year round is 65 ^{0}F, typically with warmer winters and cooler foggy summers. Morro Bay does have several microclimates (see map below) which can affect the tree selection in various areas of town. For example several zones experience high winds with salt spray which can affect certain trees negatively. Therefore the tree selection in these areas should take into consideration the microclimates present here in Morro Bay.

The City has seven microclimate zones identified by the "A Yards and Neighbors Brochure for California's Central Coastal Morro Bay Area". These microclimates areas have distinct weather conditions. In this brochure different trees are identified as to which microclimate it best suits. This logic and information can be used to help specify specific tree lists for different areas of town according to their microclimate, soils and surrounding environment.

Image 5 shows the different microclimates for Morro Bay. Zones 1 and 2 are located on the beach and directly adjacent to the beach where there is little protection from the wind and salt spray. These two zones have the most extreme conditions for trees, and only a select variety can survive with good health and vigor. Zones 3, 4 and 5 are located in the residential and downtown areas in Morro Bay. They receive some wind and salt spray blockage from the frontage buildings and trees, which increases the number of tree species that can tolerate the conditions. Zones 6 and 7 stretch out to the city limits. Highway 41 is considered zone 6, and Little Morro Creek Road is zone 7. These zones have a higher frost potential and receive strong winds. These zones have a large list of tree species that can tolerate the conditions.

The following two tables were generated to show which tree species could tolerate the different microclimate zones for both street tree locations and open space locations. Street trees need to primarily be a single stem tree, with a canopy high enough to walk and drive under, in addition to a tree with deeper roots and doesn't drop a lot of litter. Open space locations can include tree characteristics that are not favorable for street tree locations. All the tree species identified in the inventory along with potential trees were separated into the different zones. They were separated by current trees performances within the zones, along with tolerance ratings and suitable location information collected on each individual species.

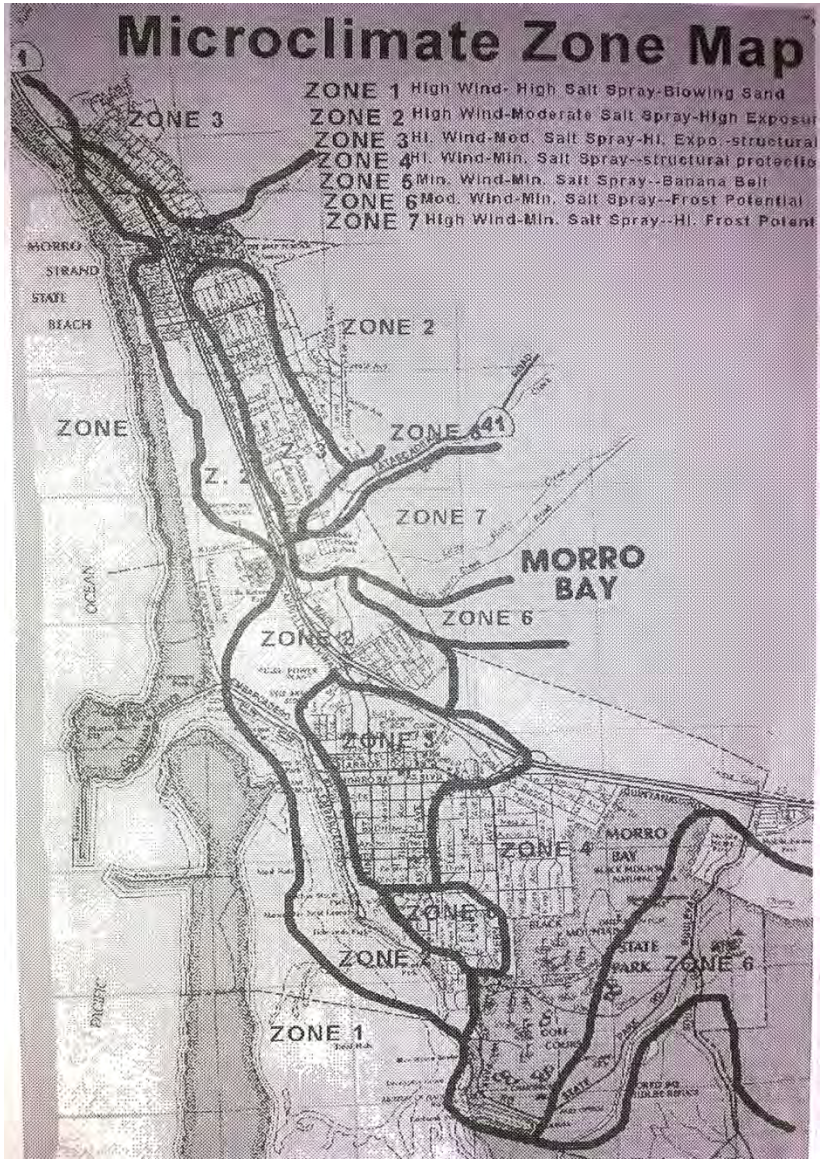


Image 5: Morro Bay Microclimate Zone Map

Table 1: Street Tree List

Zones 1-2		Zones 3-5		Zones 6-7	
Scientific name	**Common name**	**Scientific name**	**Common name**	**Scientific name**	**Common name**
Agonis flexuosa	Peppermint willow	Agonis flexuosa	Peppermint willow	Agonis flexuosa	Peppermint willow
Cupressus macrocarpa	Monterey cypress	Arbutus marina	Strawberry madrone	Arbutus marina	Strawberry madrone
Leptospermum laevigatum	Australian tea tree	Callistemon citrinus	Lemon Bottlebrush	Callistemon citrinus	Lemon Bottlebrush
Mitrosideros excelsus	New Zealeand Xmas tree	Callistemon viminals	weeping bottlebrush	Callistemon viminals	weeping bottlebrush
		Ceanothus 'Ray Hartman'	California Lilac	Ceanothus 'Ray Hartman'	California Lilac
		Cupaniopsis anacardioides	carrot wood	Cupaniopsis anacardioides	carrot wood
		Cupressus macrocarpa	Monterey cypress	Cupressus macrocarpa	Monterey cypress
		Eucalyptus citriodora	lemon scented gum	Eucalyptus citriodora	lemon scented gum
		Eucalyptus gunnii	cider gum	Eucalyptus gunnii	cider gum
		Eucalyptus nicholii	willow leafed peppermint	Eucalyptus nicholii	willow leafed peppermint
Current tree list		Eucalyptus tricarpa	red ironbark	Eucalyptus tricarpa	red ironbark
Inventoried trees		Geijera parviflora	Australian willow	Geijera parviflora	Australian willow
		Ginko biloba	maiden hair tree	Ginko biloba	maiden hair tree
		Lagunaria patersonii	Primrose tree	Lagunaria patersonii	Primrose tree
		Leptospermum laevigatum	Australian tea tree	Leptospermum laevigatum	Australian tea tree
		Lyonothamnus floribundus	Catalina ironwood	Lyonothamnus floribundus	Catalina ironwood
		Melaleuca nesophila	Pink Melaleuca	Melaleuca nesophila	Pink Melaleuca
		Melaleuca quinquenervia	Paper bark tea tree/Cajeput tree	Melaleuca quinquenervia	Paper bark tea tree/Cajeput tree
		Mitrosideros excelsus	New Zealeand Xmas tree	Mitrosideros excelsus	New Zealeand Xmas tree
		Pinus carnariensis	Canary Island pine	Persea americana	Avocado
		Pinus pinea	Italian stone pine	Phoenix canariensis	Canary Island Date palm
		Pittosporum undulatum	victorian box	Pinus carnariensis	Canary Island pine
		Prunus cerasifera	purple leafed plum	Pinus pinea	Italian stone pine
		Pyrus calleryana	ornamental pear	Pinus radiata	Monterey pine
		Quercus agrifolia	Coast live oak	Pittosporum undulatum	victorian box
		Quercus tomentella	Channel island oak	Prunus cerasifera	purple leafed plum
		Quercus virginiana	southern live oak	Pyrus calleryana	ornamental pear
		Rhus integrifolia	Lemonade sumac/Lemonade berry	Quercus agrifolia	Coast live oak
		Rhus lancae	African sumac	Quercus tomentella	Channel island oak
		Tristania laurina	Tristania	Quercus virginiana	southern live oak
		Tristiana conferta	Brush box	Rhus integrifolia	Lemonade sumac/Lemonade berry
		Ulmus parvifolia	Chinese elm	Rhus lancae	African sumac
				Syagrus romanzoffianum	Queen palm
				Tristania laurina	Tristania
				Tristiana conferta	Brush box
				Ulmus parvifolia	Chinese elm

Table 2: Open Space Tree List

Zones 1-2	
Scientific name	Common name
Cupressus macrocarpa	Monterey cypress
Eucalyptus globulus	Blue Gum
Juniperus chinensis 'Torulosa'	Hollywood juniper
Pinus pinea	Italian stone pine
Phoenix canariensis	Canary Island Date palm
Syagrus romanzoffianum	Queen palm
Yucca aloifolia	Spanish bayonet
Current tree list	
Inventoried trees	

Zones 3-5	
Scientific name	Common name
cupressocyparis leylandii	leyland cypress
Cupressus macrocarpa	Monterey cypress
Eucalyptus cornuta	Yate tree
Eucalyptus erythrocorys	red cap gum
Eucalyptus globulus	blue gum
Eucalyptus gunnii	cider gum
Eucalyptus rudis	desert gum
Heteromeles arbutifolia	Toyon/Holly
Juniperus chinensis 'Torulosa'	Hollywood juniper
Persea americana	Avocado
Phoenix canariensis	Canary Island Date palm
Pinus pinea	Italian stone pine
Pinus radiata	Monterey pine
Prunus lyonii	Catalina cherry
Quercus agrifolia	Coast live oak
Quercus tomentella	Channel island oak
quercus virginiana	southern live oak
Rhus lancae	African sumac
Syagrus romanzoffianum	Queen palm
Yucca aloifolia	Spanish bayonet

Zones 6-7	
Scientific name	Common name
cupressocyparis leylandii	leyland cypress
Eucalyptus erythrocorys	red cap gum
Eucalyptus ficifolia	Red flowering eucalyptus
Eucalyptus globulus	blue gum
Eucalyptus lehmannii	Bushy yate
Eucalyptus rudis	desert gum
Heteromeles arbutifolia	Toyon/Holly
Juniperus chinensis 'Torulosa'	Hollywood juniper
Yucca aloifolia	Spanish bayonet

Inventory

In the early planning of the Urban Forest Management Plan, it was decided that a complete inventory of all city owned trees in the commercial zones was needed. Data from prior sample inventories and tree maintenance records were useful, but in order to get a more accurate and updated impression of the urban forest, a complete inventory was completed with specific criteria surveyed for the data analysis process. The objective of the inventory was to collect information describing the characteristics and condition of the trees that later could be imported and analyzed in ArcMap and i-Tree Streets to create graphs, maps, and tables for forest management decisions. Environmental Systems Research Institute (Esri) is a supplier of GIS software applications. ArcMap is component of Esri's geospacial processing programs, which allows users to view, edit, create, and analyze geospacial data. ArcMap allows users to symbolize features and create maps. I-Tree is software developed by the USDA Forest Service that provides urban forestry analysis and benefits assessment.

Data Collection

The inventory was completed with a Topcon data collector, which has Global Positioning System (GPS) for identifying the location of the trees and ArcPad software for data collection. ArcPad is a mobile field mapping and data collections software developed by ESRI. The zones where trees were surveyed consisted of commercial areas including C-1, C-2, C-VS, G-O, MCR, and R-4. The inventory consisted of 672 trees in the public right of way, and at each tree, information on 25 different fields was gathered. The 25 fields included: Tree ID number, Street name, building address, Species common name, Species scientific name, Diameter at breast height (DBH), Height, Live crown ratio, Canopy spread, number of trunks, Hazard rating, Health, Age class, Site type, Crown class, Open tree well, Use under tree, Occupancy, Defect, Defect present, Pruning required, Conflicts, Photo, Date collected, and Comments.

The tree ID number is a very important field, because it gives each tree a unique identification. Each tree received a tag with a number punched into it starting at 1001. The tags were either, nailed into the base of the trunk of the tree, nailed into the post holding up a young tree, or hammered into the curb directly in front of the tree. Unique tree identification numbers and tags allows for easy explanation of which tree is being discussed or need maintenance.

Image 6: Tree Identification Tag

Street name and building address are two fields that identify what street the tree is on and what building it is in front of. These fields allow for locating the tree and explaining what side of a building it is on.

Species common/scientific name are two fields that are very useful and important for making forest management decisions. Identifying each tree species permits combing data to find the overall health of a species, what species grows best in specific locations, or even what species is causing the most sidewalk pavement damage.

The tree height and tree diameter fields were collected using tools. The diameter field was completed with a D-tape, and measured at DBH which is 4.5 feet above the base of the tree on the uphill side. Direct readings were used and measured in inches. Tree height was measure at each tree using a clinometer. Surveying tree heights allows for finding growth rates of trees, proximity to power lines, and other important issues.

Live crown ratio, canopy spread, and number of trunks were fields that were collected at each tree through pacing and observing. Live crown ratio is found by observing the lowest alive branch on the tree and comparing that height to the height of the entire tree. Canopy spread was found by pacing from the trunk of the tree to the furthest out reaching branch multiple. Finding the canopy spread allows for finding the amount of storm water retention, and amount of shade produced. The number of trunks was recorded based on the number of trunks each tree had that split below DBH.

The hazard rating and health fields were identified by observing the tree from all sides and from different distances. The hazard rating field gives each tree a risk rating ranging from low to extreme risk. The risk rating is a number from 3-12 and each number has an interpretation and implication. The health field is also indentified by observing the tree. Depending on the foliage, tree height, bark and more factors each tree is given a health rating of one of the following: excellent, average, fair, or poor.

Age class, site type, crown class, open tree well, use under tree, and occupancy are all fields that are quick to identify. The age class field is used in replace of an increment borer. Each tree was examined and grouped in one of the following age classes: Over-mature, mature, semi-mature, and young. The site type field explains what each tree is planted in. The majority of the trees surveyed in this inventory were planted in sidewalk tree wells, but the other options to choose from were open areas (lawn), raised bed, or a container. The crown class field identifies the height of each individual tree compared to the trees/buildings surrounding it. This field determines the amount of sunlight each tree receives. The options to choose from in the field were; dominate, co-dominate, intermediate, and suppressed. The open tree well field was created as a yes/no field to be able to locate all the open sidewalk tree wells that can be replanted. The use under tree field identifies what lies directly underneath that tree canopy. The options to choose from included: pedestrian, parking, recreation, traffic, utility lines, building, and landscape. In many cases there was more than one of the options underneath the tree canopy, and in those circumstances that most frequency use was selected. The occupancy field was created to identify how frequently human activity occurred under the tree canopy. The options to choose from in the field were; frequent use, occasional use, constant use, or intermittence use.

The defect, defect present, pruning required, and conflicts fields were all important for the data analysis process. The defect field gives each tree a rating based on the amount of defect evident on the tree. The defect present field has a long list of defects that are common and can be selected if the tree has evidence of the particular defect. The pruning field both identifies if the tree need pruning, and states what type of pruning needs to be performed. The conflicts field has a list of common conflicts that occur in unban forests. The most frequent conflict was sidewalk pavement damage.

Finally, the photo, date collected, and comments fields were all created for easier organization and identifying what time of the year the trees were surveyed, and in order to identify if a particular tree had anything out of the ordinary.

Inventory Results

A tree inventory establishes baseline data for a complete analysis of its street tree population by using ArcMap and software developed by the US Forest Service called i-Tree streets. ArcMap allows for detailed information to be combined and searched, to find specific criteria. By combining the data collected in the inventory along with city GIS information many important tree management queries can be answered including: where each tree species is growing best, which tree species is creating the least sidewalk damage, location of open tree wells along with what tree species will thrive in that location, and even what tree species is the least hazardous. In addition, the programs used in the data collector are only compatible with ArcMap for data extraction. The ArcMap software is also capable of creating maps with multiple layers showing the GPS location of every tree inventoried. The i-Tree streets analysis provides a dollar value indication of the environmental benefits provided by each tree. While i-Tree streets analysis provides information on the environmental performance of the entire forest, analyzing individual species provides detailed information on the performance of individual species. The i-tree streets software takes the information from the inventory and calculates the pounds of carbon absorbed, gallons of stormwater retained, and the amount of energy in kilowatt hours saved.

STREETS:

Running a STRATUM Analysis

Species and Population Distribution

Data from the inventory indicates that the commercial zones in Morro Bay are comprised of over 40 different species of trees. The large majority of the urban forest is consisting of the Red Flowering Eucalyptus (Eucalyptus ficifolia). Of the 673 trees collected in the inventory, 259 of them were Eucalyptus ficifolia, which can be seen in Figure 4 and is over 38% of the tree population. Fifty Cajeput (Melaleuca quinquenervia) trees and thirty-two Blue gum eucalyptus (Eucalyptus globolus) trees were surveyed. The most frequently inventoried trees are shown in the figure 3 and figure 4, which comprise of 71.4% of the entire survey. The rest of species surveyed had populations of 13 or fewer and together comprised of 28.6% of the trees surveyed. The distribution of tree species throughout the commercial zones is uniform for some species and isolated for others. The Red flowering eucalyptus tree is highly concentrated in the downtown area of Main Street, Morro Bay Boulevard, and Harbor Street, as well as scattered throughout the rest of the commercial zones on south Quintana, and north Main. The large Blue gum eucalyptus trees are distributed either on the Embarcadero, directly above the Embarcadero, or along the bike path at the Main street/Quintana road intersection. The following four maps show the location and distribution of individual trees by species for the entire inventory.

Figure 3: Populations of the 10 Most Common Tree Species

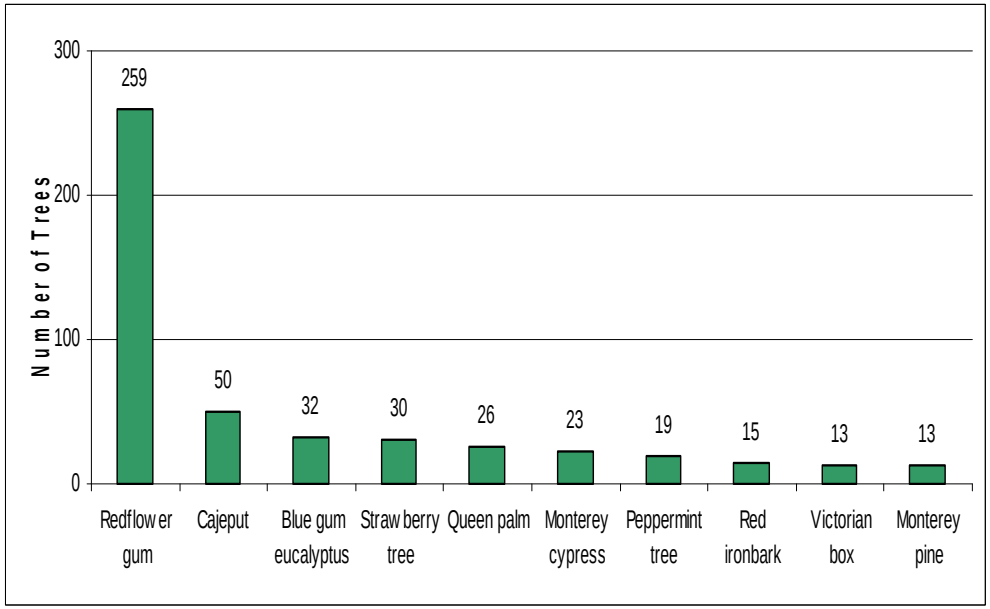


Figure 4: Species Distribution of Public Trees

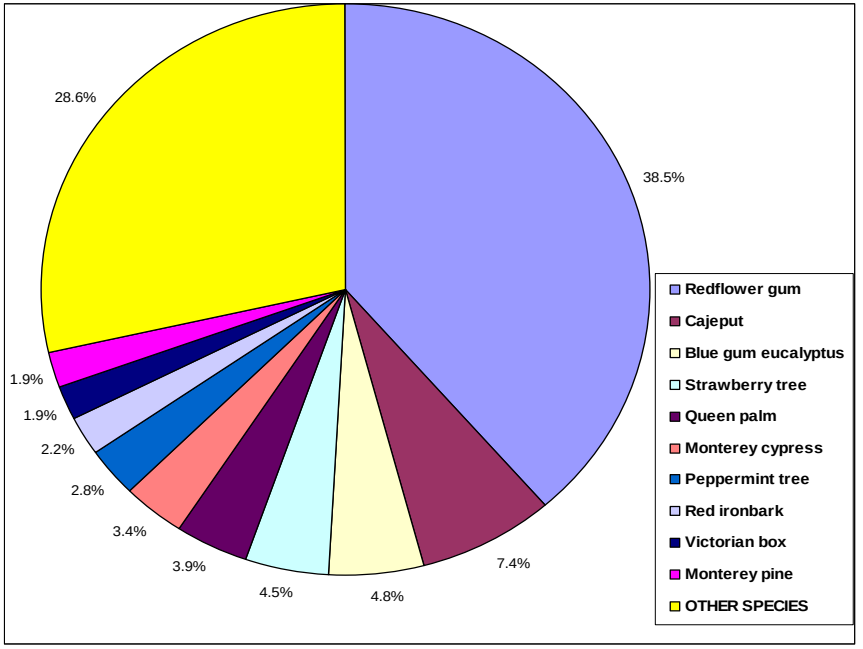


Figure 5: Tree Map of Upper North Main Area

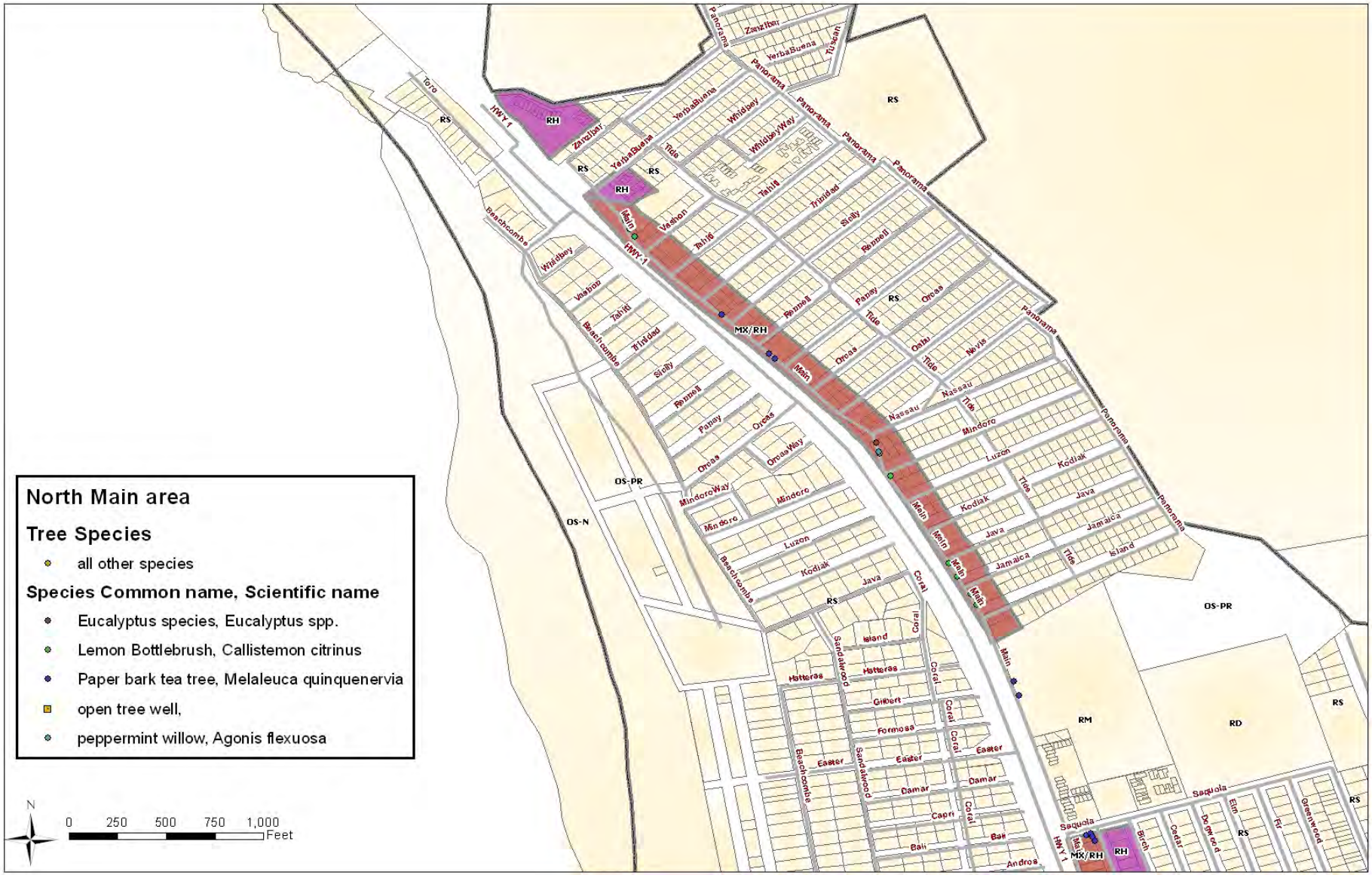


Figure 6: Tree Map of Lower North Main Area

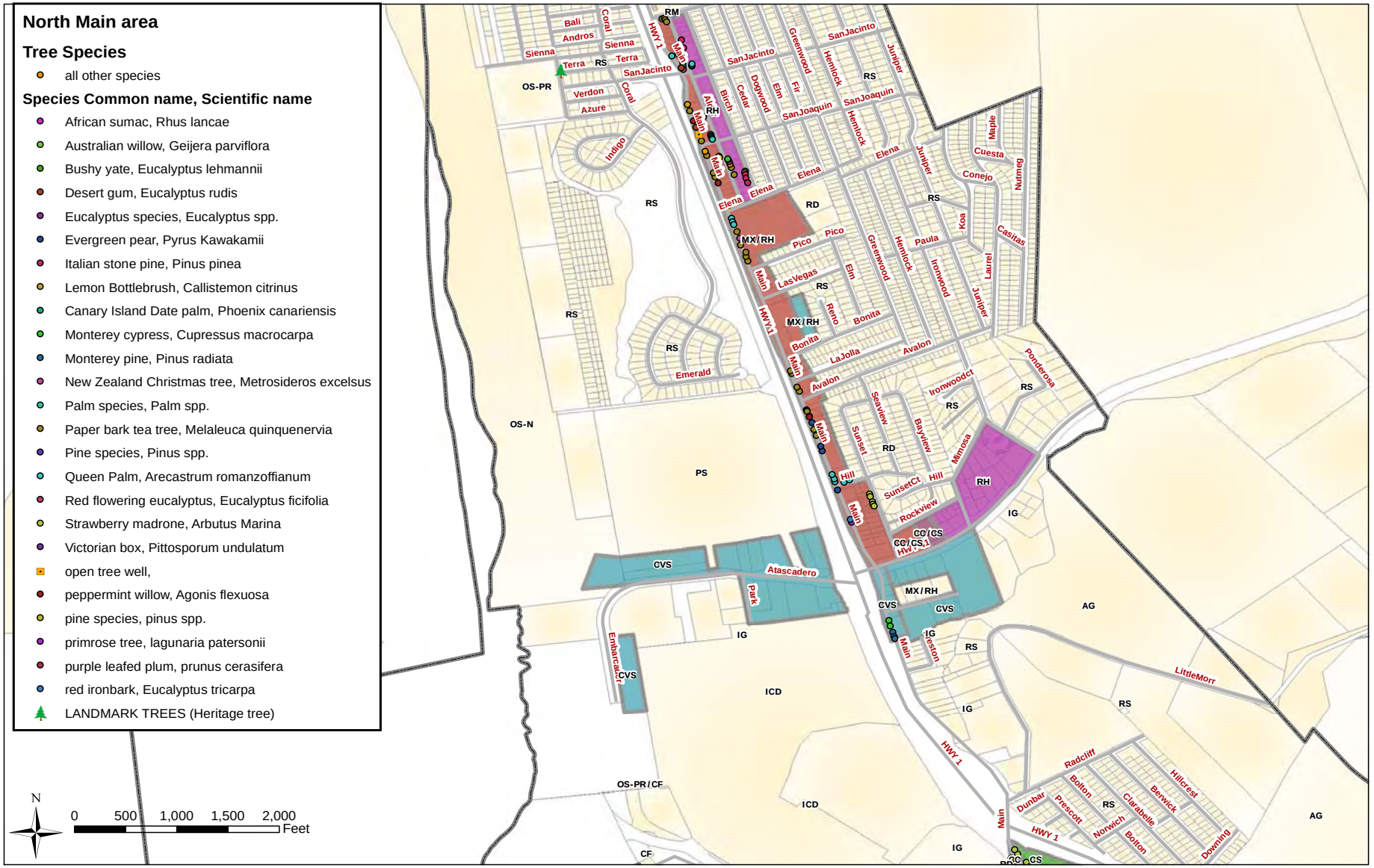


Figure 7: Tree Map of Downtown/Embarcadero Area

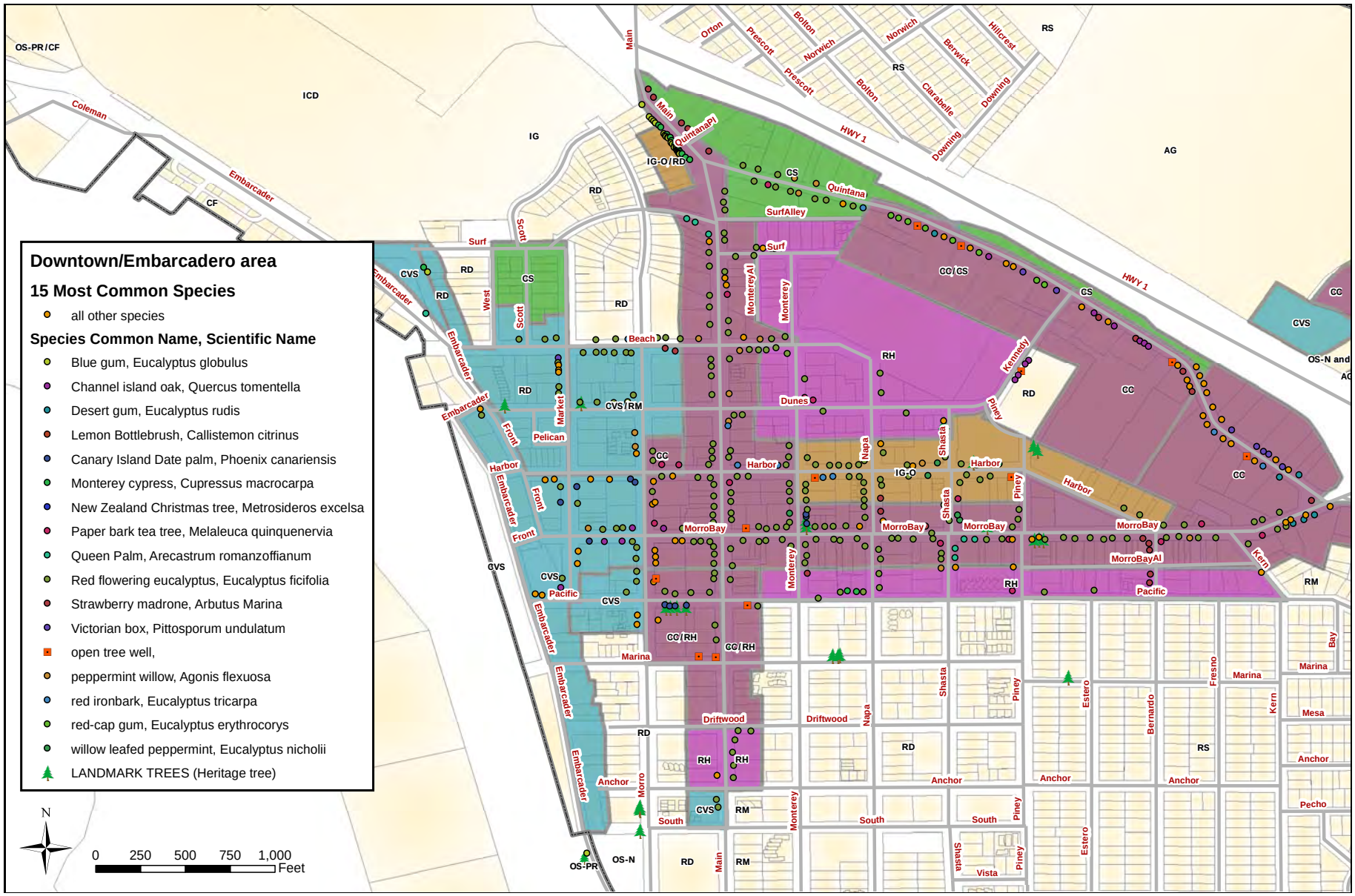
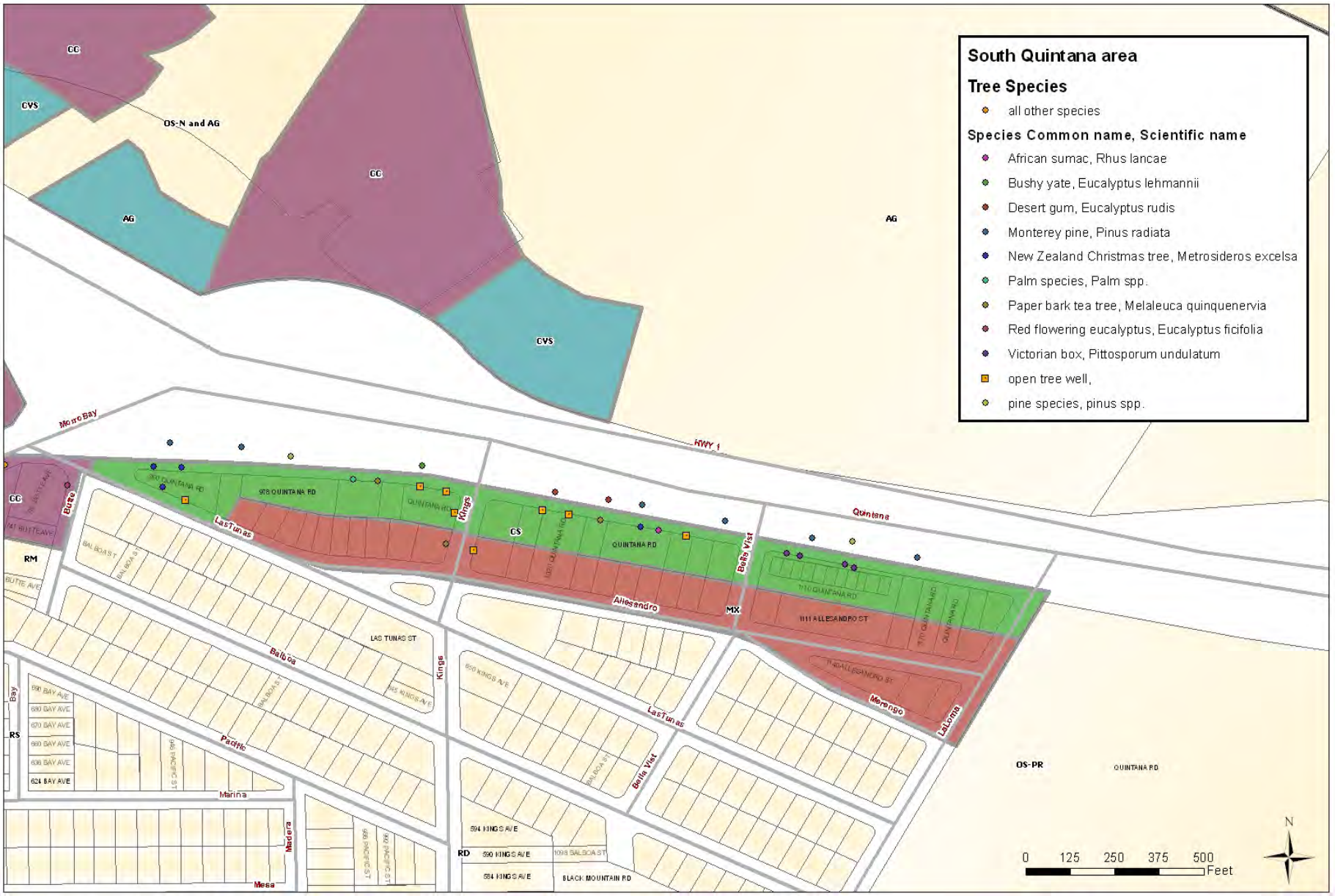


Figure 8: Tree Map of South Quintana Area



Tree Characteristics

The data collected on tree characteristics from the inventory, was analyzed and put into tables that present the numbers clearly. The following four tables are express information on tree diameter, tree height, and canopy spread. More tables on tree characteristics can be found in the appendix.

Tree diameters were collected at every tree inventoried. Later the diameters were grouped into diameter classes in order to find the distribution of diameters citywide. In the diameter class distribution table on the right it shows that the 58.55% of the commercial zone trees have a diameter between 6 inches and 24 inches. The table also shows that less that 6% of the inventoried trees have diameters greater than 36 inches

Table 3: Diameter Class Distribution

diameter class distribution	
Diameter class	Citywide total
0-3	9.06%
3-6	9.21%
6-12	19.02%
12-18	20.51%
18-24	19.02%
24-30	12.92%
30-36	4.46%
36-42	3.42%
>42	2.38%

Tree height is another important tree characteristic that was measured at every tree inventoried. Each tree heights was measured down to the foot, during the survey, and afterwards placed into height classes with 15 foot intervals. The tree height table on the right shows that 297 trees had a between 15 feet and 30 feet.

Table 4: Tree Height

Tree Height		
Tree height classes	**Tree count**	**% of public trees**
0'-15'	134	19%
15'-30'	297	44%
30'-45'	177	26%
45'-60'	19	3%
60'+	35	5%
N/A	11	2%

Canopy spread data was measured at each tree, and then later placed into canopy spread classes with 10 foot intervals. This table can be found in the appendix labeled “Canopy spread”. The canopy cover table on the right was produced from the canopy spread data and city street information. The table shows that 4.42% of the .45sq mi area surveyed is covered with tree canopy. The table also illustrates that 11.54% of the 13 linear miles sidewalk is shaded by tree canopy as well.

Table 5: Canopy Cover

Canopy cover	canopy cover as %of total land area	Canopy Cover as % of Total streets and sidewalkws
	4.42	11.54

The condition of each tree was recorded during the survey, and later placed in a table showing the number of excellent, average, fair or poor condition trees each species has. This table can be found in the appendix labeled “condition of trees”. With this information we are able to identify if particular tree species grow better or can withstand the different microclimates. For example, the Cajeput tree (Melaleuca quinquenervia) has 19 trees that are either labeled fair or poor, 12 of which are located on the North main street pas HWY 41.

Environmental Benefits Results

Trees make our cities more attractive and provide many ecosystem services, including atmospheric carbon dioxide reduction, energy conservation, and stormwater interception. The information from the inventory was ran through software (i-tree streets) which calculated the pounds of carbon absorbed, amount of energy in kilowatt hours saved, and the gallons of stormwater retained annually by the urban forest. The size of the trees are included in the calculations to give an accurate representation of the current urban forest.

Figure 9: Pounds of Atmospheric Carbon Removed Annually by Individual Species

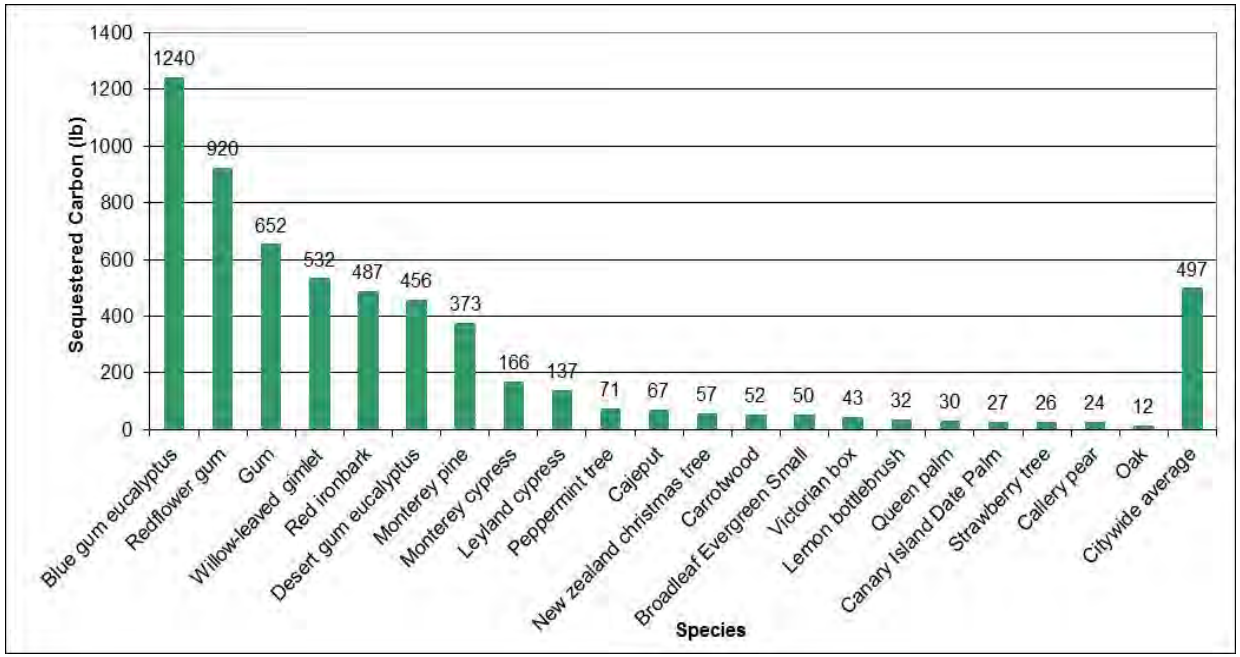


Image 7: Large Blue Gum Eucalyptus (Eucalyptus globulus) sequester more carbon than the other species

Carbon Sequestration Analysis

Carbon sequestration is the process by which carbon dioxide (CO2) is absorbed out of the atmosphere through trees trunks, branches, leaves, and roots as they grow. Urban forests can act as a carbon sink when there are enough trees to store more carbon than is released over time (McPherson). The figure above shows the pounds of carbon each individual species tree is absorbing annually. The trees in the commercial zone areas together are absorbing 334,655 pounds of carbon each year. The graph illustrates that one Blue gum eucalyptus is annually absorbing 1240 lbs. of carbon each year. The Blue gum is the largest tree species in the urban forest, increasing its productivity. A Red flowering eucalyptus absorbs 920 lbs. of carbon annually making it the second most efficient species. In general the Eucalyptus species is a great carbon sequester. From the large Blue gum eucalyptus to the shorter willow leafed gimlet, red ironbark, Desert gum eucalyptus, and red flowering eucalyptus, they all are on the top for the amount of carbon absorbed each year making them important contributors to the environment and reduction of emissions. The citywide average for one individual tree is 497 lbs. sequestered each year.

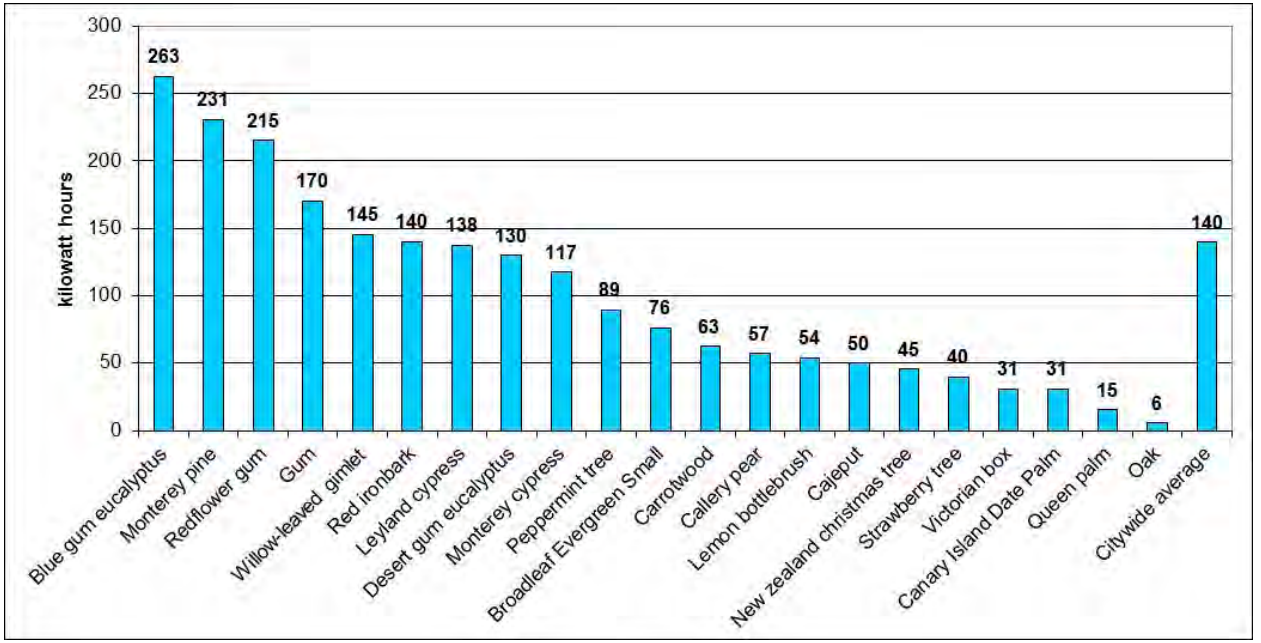
Energy Savings Analysis

Trees modify temperatures and conserve building energy use in three principal ways: shading, evaportranspiration, and wind speed reduction. The shade from tree canopies cools an area and reduces the amount of heat absorbed and stored by buildings. Evapotranspiration converts liquid water to water vapor which cools air that would otherwise result in heated air from the sun. Furthermore, a trees canopy slows cold winter winds thereby reducing the amount of heat loss from a home, especially where conductivity is high such as windows or skylights.

The shade and protection provided by the urban trees in the commercial areas save 93,900 kilowatt hours per year. The Monterey pine (Pinus radiata) is the second highest ranked species to reduce annual energy consumption saving 231 KWh each year by a single tree. The Monterey pine trees in Morro Bay have large dense canopies that create shade in addition to overlapping branches that form a wind break. Figure 4 below shows the number of kilowatt hours a single tree saves annually by species. The Blue gum eucalyptus saves 263 kilowatt hours annually, and the citywide average is 140 kilowatt hours.

Image 8: The Monterey Pine (Pinus radiata) shown above produces shading and protection for the building behind

Figure 10: Annual Savings of Kilowatt Hours of Electricity by Individual Species



Stormwater Interception Analysis

Urban stormwater runoff flows directly into the bay and ocean. The urban forest plays an important role in reducing the amount of pollutants entering the bay and ocean each year. Trees reduce runoff in several ways including: intercepting and storing rainfall on their leaves and branches, roots increase the rate at which rainfall infiltrates soil, tree canopies reduce soil erosion, and transpiration through tree leaves reduce soil moisture. The commercial zone trees alone intercept 1,375,118 gallons annually from entering the bay. Mature Monterey pine and Red Flowering Eucalyptus trees both can retain over 3,000 gallons of stormwater in a year compared to the palms downtown that retain less than 300 gallons. Figure 5 below shows the citywide average for stormwater retained annually to be 2043 gallons. Considering Morro Bay's 18" of rain per year average generates over 140,000,000 gallons of stormwater on the commercial areas alone, the stormwater interception and retention benefit from unban trees is the most effective solution in reducing the amount of stormwater entering the bay and ocean.

Figure 11: Average Gallons of Stormwater Retained Annually by Individual Species

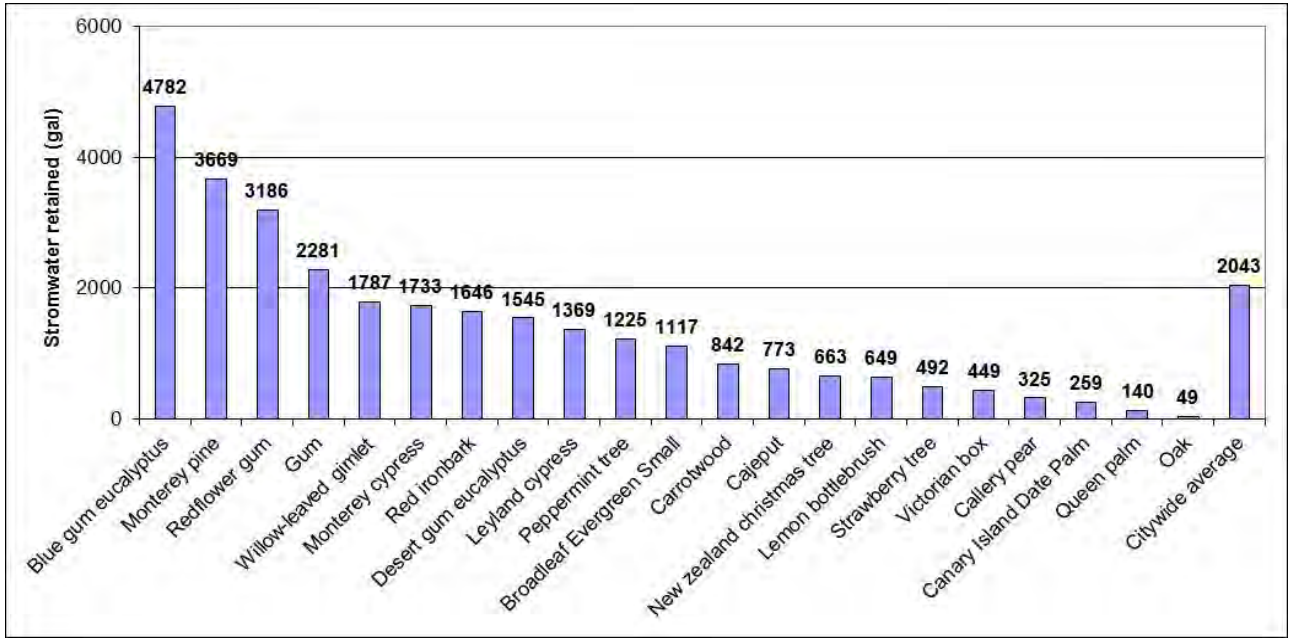
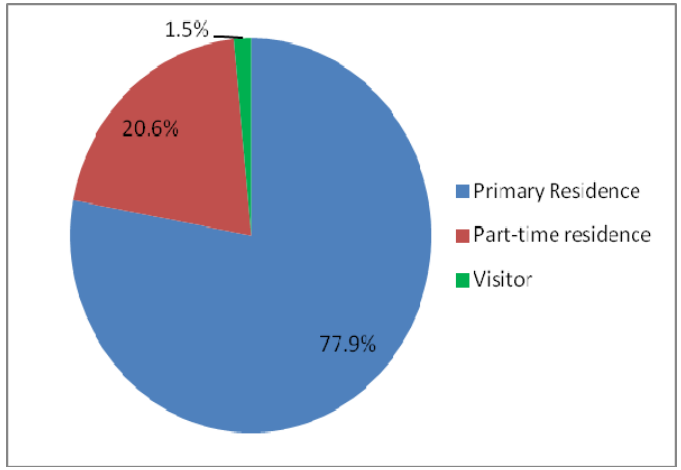


Image 9: The Red Flowering Eucalyptus shown above retains 3186 gallons of stormwater annually.

Stakeholders' Attitudes – Community Views of the Urban Forest

The wishes, attitudes and views of the community, have a large impact on our Urban Forest Management Plan. The City chose to conduct a survey to gather the community's input towards the UFMP and help develop various goals. The surveys were mailed with the water bills; therefore we reached a mix of residents, non residents, part-time residents and business owners.

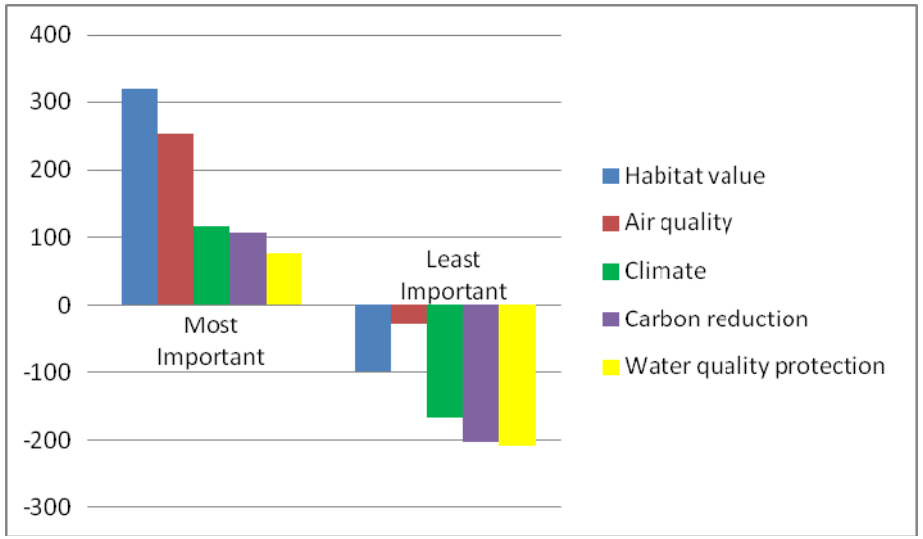
Figure 12: Survey Question 1



Survey Question 1 showed most of the respondents live in Morro Bay, but a portion, 21%, are part-time residents.

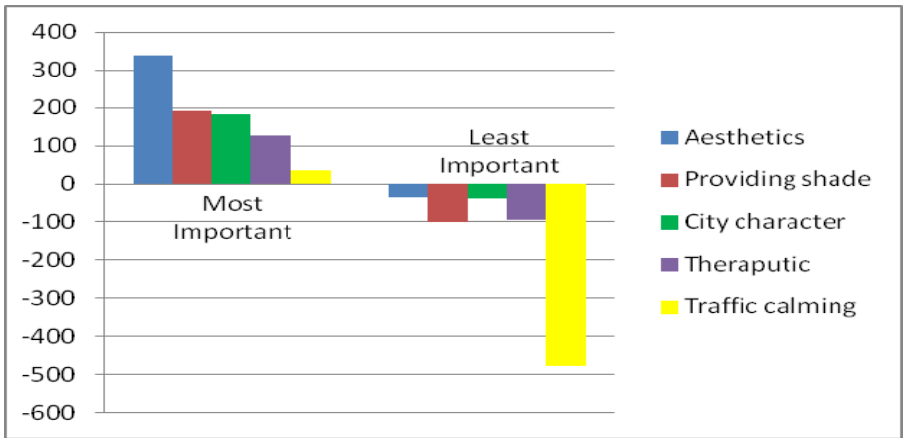
Typically with mailed surveys the response rate is low, less than 10%. The response rate of these surveys was very good, approximately 30% of surveys were returned. The survey results identified environmental benefits, social and economic qualities.

Figure 13: Survey Question 2



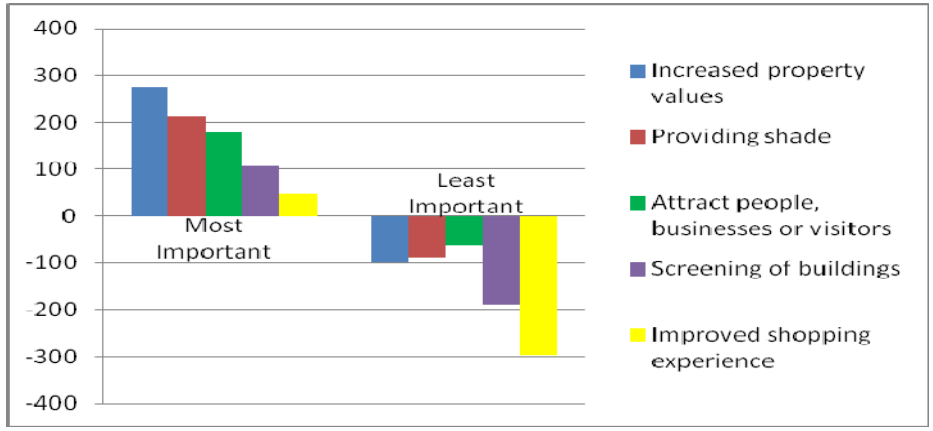
Survey respondents were asked in Question 2 what the most important environmental benefits are provided by public trees. Air quality and Habitat Value were viewed as the most important Environmental benefits provided by public trees.

Figure 14: Survey Question 3



Survey respondents were asked in Question 3 what the most important social benefit provided by public trees. The aesthetics and beauty of the City was viewed as the top social benefit given off by public trees.

Figure 15: Survey Question 4



Survey respondents were asked in Question 4 what is the most important economic benefit provided by public trees. Increased property value was viewed as the most important.

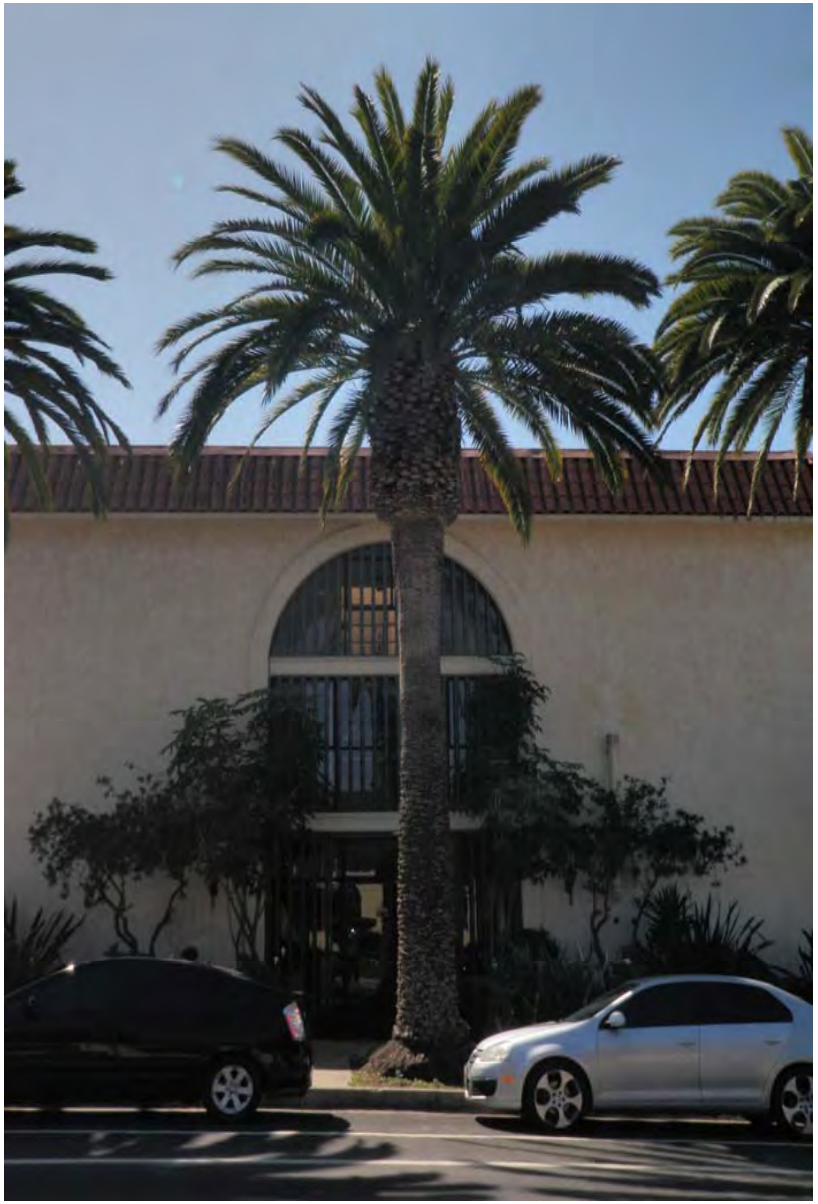
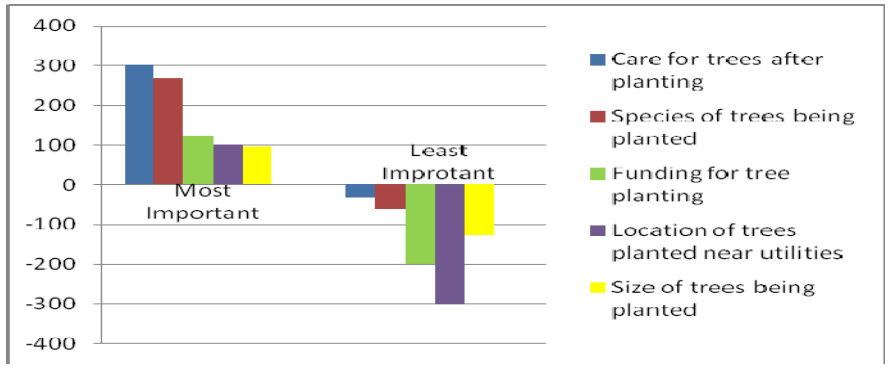


Image 10: Canary Island Date Palm

Figure 16: Survey Question 5



Survey participants were asked in Question 5 what the most important concern related to public tree planting. Both care of trees after planting and choosing the species of tree being planted were very important. Location of trees planted near utilities was viewed as the least important.

Figure 17: Survey Question 6

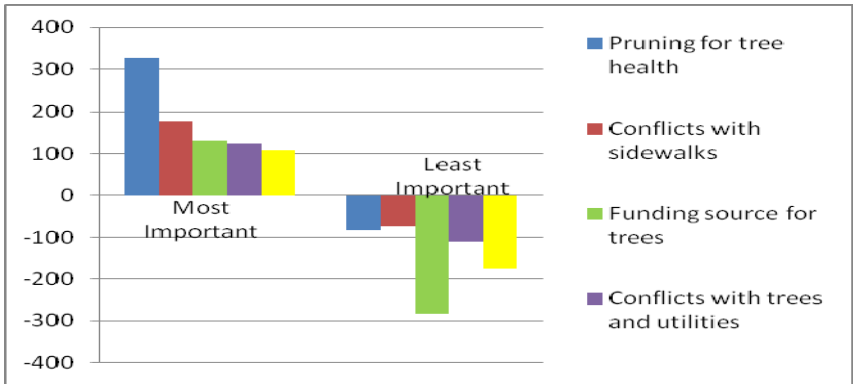


Image 11: Pruning for Good Shape

Survey participants were asked in Question 6; what are the most important considerations to you related to public tree maintenance and removal. Pruning for good shape and vigor as well as to stimulate new growth of the tree was viewed as the most important consideration.

Survey participants were asked in Question 9, in their neighborhood do they feel there are too many or two few public trees. Most thought there were not enough trees in their neighborhoods, compared to very few participants felt that there were too many trees.

Figure 18: Survey Question 9

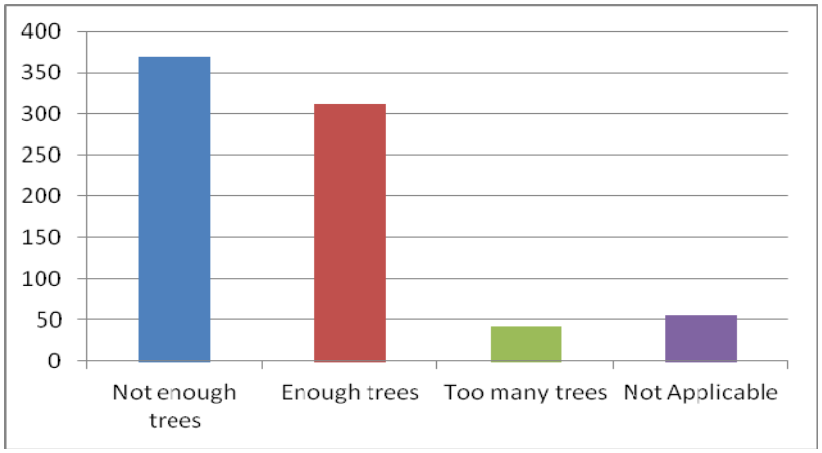


Image 12: Street View of Trees

The participants were also asked in Question 8; across the City are there too many or too few trees. Again most participants said there are not enough trees in the City.

Figure 19: Survey Question 8

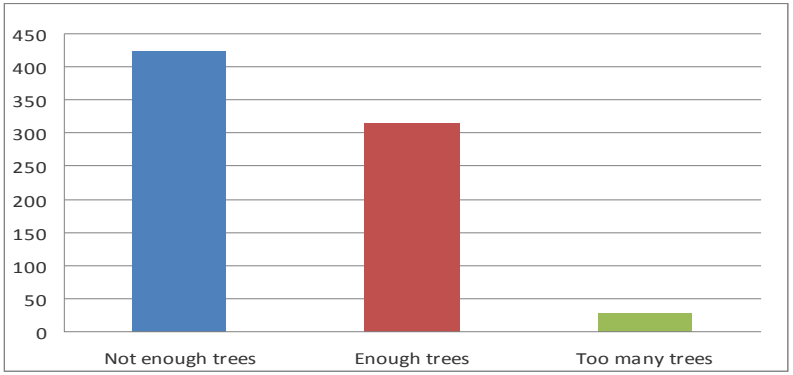


Image: 13 Aerial View of Trees

Survey participants were asked in Question 10, how they perceive the condition or health of public trees in the City. Over six hundred of the respondents believed that the public tree conditions are either moderate health or average health.

Figure 20: Survey Question 10

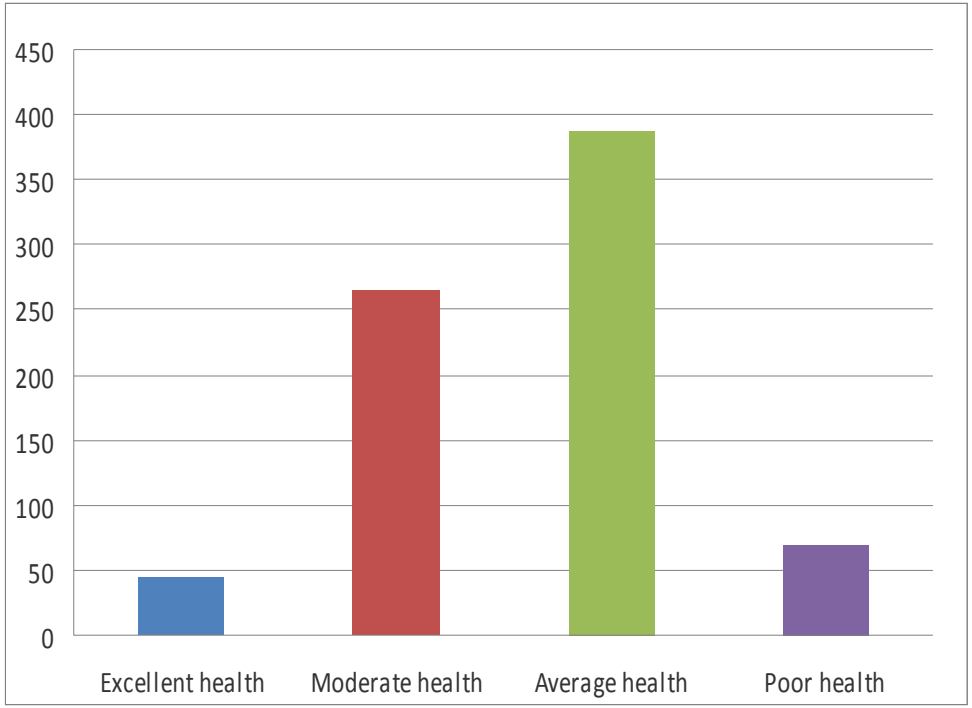
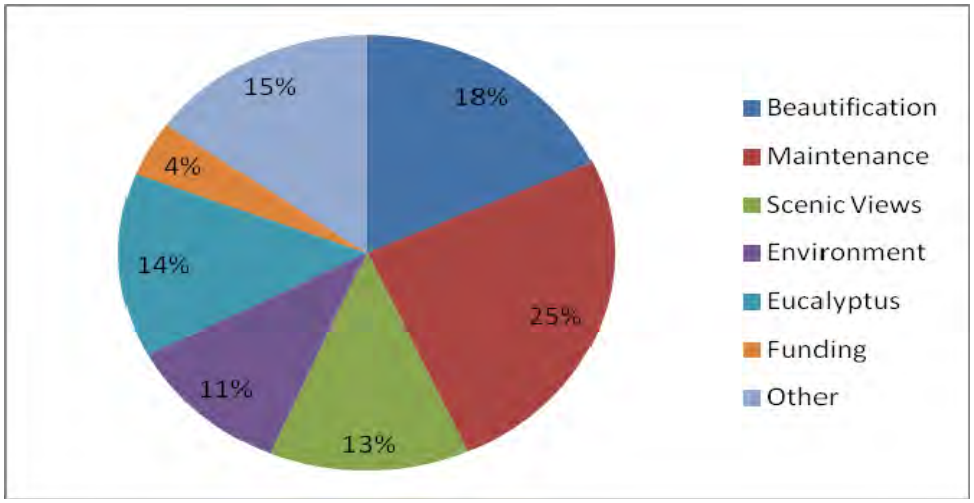


Image 14: Young Oak Tree

Figure 21: Common Resident Concerns



The community was asked what the number one goal of the Urban Forest Management Plan should be. The input ranged from broad ideas to specific policy changes. The topics that survey participants brought up the most are shown in Figure 14.

Maintenance was the number one topic express as a goal for the UFMP. Ideas within the maintenance topic included: adding more trees, sidewalk damage, root damage, trimming/pruning, removal of trees, keeping branches away from power lines, and care of trees after planting.

Beautification was the second highest topic expressed as a goal for the UFMP. The beautification ideas incorporated: tree shape, colorful flowers, aesthetics, aiding the beatification of the city, nice landscaping, planting beautiful looking trees, replacing ugly trees with nice ones, and improving the appearances of the entryways to the city.

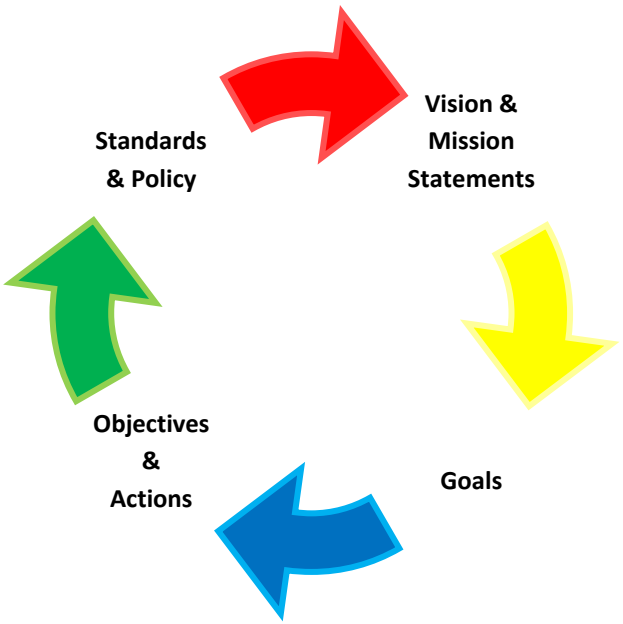
Scenic views were another topic commonly expressed for a goal of the UFMP. Responses for this topic included: removing tree for views, stop blocking ocean views, screening fence along Highway 1, planting trees on the barren hills, planting more short trees, blocking the wind, blocking views of mobile home parks, and decreasing property value.

Another topic that was expressed by citizens as a goal for the UFMP fell under the Eucalyptus topic. This topic was mainly referring to the hazards Blue gum and Red flowering eucalyptus, but also included: getting rid of the downtown trees, removing red sappy trees, plant more variety than eucalyptus, remove smelly eucalyptus, plant native trees instead of eucalyptus, plant trees that don't make you trip, leaving the eucalyptus tree along.

The environment was a topic that 11% of the respondents thought should be the number one goal for the UFMP. Ideas within the topic included: reducing carbon, providing habitat for birds, less pollen, native wildlife habitats, trees that resist pests, providing shade, drought tolerant trees, improve air quality, and Stormwater treatment.

The other topic expressed as a goal was funding for the UFMP. Combined I they consisted of 19% of the responses, but only a handful were about the same specific idea or problem. Many of the responses were either off topic or about a problem relating to a specific tree on their property.

Strategic Plan



Developing Policy and Standards through the Urban Forest Goals

The goals were developed through the Stakeholders survey results and further refined through the Vision and Mission statements. The goals define the objectives and actions which give the road map on implementing this UFMP. These goals provide opportunities for continuous improvement and flexibility in the future. As the urban forest continues to grow and evolve, new strategies that develop will be incorporated as part of this living document.

The City of Morro Bay's public trees are an important part of the City's infrastructure. Public trees located along the City streets offset the impacts of the urban environment and provide residents and tourist a healthy, sustainable, peaceful place for recreation or social interaction while providing habitat for urban wildlife. Trees are an important part of the City's infrastructure by treating stormwater runoff, shading streets and buildings to reduce the urban heat island effect, reduces air pollution, controls erosion, stores and sequesters carbon, and provides human and wildlife habitat.

The Citizens who participated in the survey expressed tree maintenance as the number one goal for the Urban Forest Management Plan. The City agrees maintenance of the trees is vital for the long term sustainability of the urban forest. Due to the limited funding available to maintain the City's street trees one solution could be to limit the areas where the City is responsible to maintain trees, therefore Goal #1, defining public trees was developed. The survey participants expressed beautification as the second goal for the urban forest management plan. In order for the City to achieve this goal the City developed goal #2, enhancing the Urban Forest. The other goals expressed by the survey participants are integrated into all the goals of the UFMP, e.g. scenic view, goal #1, Eucalyptus goal #2 and the environment in goal #2 and goal #3.

Goal 1: Defining Public trees

The City has wide Right of Ways and therefore much of the public treats sections of unpaved Rights of Way as an extension of their property. For the most part the trees planted in the residential Rights of Way were planted by the residents for their personal pleasure/benefit. Due to the vast number of trees planted in these wide Rights of Way in the residential areas, it is a large financial and liability burden to the City. The City spends approximately 15% of the annual tree budget on these trees. The City would like to encourage residents to continue to plant and maintain these trees. In order to enhance and maintain the urban forest to the desired level, the City will need to limit the scope of trees to one that the City can manage. With the cost savings of not maintaining public trees in the residential areas, more money could be spent on replanting and maintaining public trees in the commercial/downtown districts. Currently the City has guidelines for private trees, but in order to protect private trees the city would need to adopt a tree ordinance.

Objective 1.1

Define the Downtown and Commercial Right of Way areas where the City will maintain the trees. Propose an ordinance revision which requires the City to maintain those trees in the Right of Ways of the Downtown and commercial sections of town. The trees in the residential areas will be maintained by the adjoining property owners.

Action 1.1

The Public Services Department will define these trees areas and develop the ordinance by 2015.

Objective 1.2

Maintain tree inventory in Downtown and commercially zoned areas.

Action 1.2

The Public Services Department will complete the inventory by 2014 and maintain the inventory on an ongoing basis.

Objective 1.3

Develop regulations for the private trees that will protect and enhance the urban forest over time. Define the public trees that the City will maintain.

Action 1.3

Adopt a private tree ordinance by 2016 that will accomplish the goals of the urban forest for the private trees in Morro Bay. Include in this ordinance the defined public trees that will be the City's responsibility to maintain.

Goal 2: Enhancing the Urban Forest

The enhancement of the Urban Forest considers the life cycle of the urban forest and recognizes that it is a dynamic, natural system. Establish and maintain an optimal level of age and species diversity and increased levels of trees to maximize ecosystem benefits provided by the urban forest, (maintain air quality, reduce energy use, moderate stormwater runoff, and provide a favorable environment for city residents).

Objective 2.1

Plant the appropriate species of tree in vacant or replacement locations with diligent consideration of age diversity, climate, soil type, wind, salt spray, utilities, and public safety. Utilizing the

existing street tree list, add additional species, if needed, of trees to provide more diversity, focusing in the seven microclimates.

Action 2.1

The Public Services and Recreation and Parks Departments will develop and define a list of trees suitable for the appropriate location. These departments will work with the Tree Committee to determine a list of tree species for each different zone in Morro Bay. This will begin in 2014.

Objective 2.2

Develop a master tree planting scheme for the commercial areas within the City focusing on species diversity, and microclimates.

Action 2.2

The Public Services and Recreation and Parks Departments will work with the Tree Committee to develop the tree planting scheme plan, to be completed by 2016.

Objective 2.3

In order to diversify the tree species, new trees should always be planted as trees are removed. Identify vacant tree wells in downtown areas, and work with the Tree Committee to find volunteer residents who are willing to care for the tree for the first 2 years. Develop a subcommittee of the Volunteer Tree Committee and a staff member to determine which tree species to plant for a given tree well and define the watering for the trees survival.

Action 2.3

The Public Services Department will work with the Recreation and Parks Department and the Tree Committee to define this subcommittee and implement a tree watering program. This will be completed by 2015.

Objective 2.4

Monitor canopy cover every five years. Compare with previous data.

Action 2.4

The Public Services Department will check will Cal Fire in March 2015 to see if State-provided information is available on canopy cover and when it is available, compare coverage every 5 years.

Objective 2.5

Assess the progress regarding environmental benefits gained from the urban forest. Prepare a report on these environmental benefits and provide it on the City's website.

Action 2.5

The baseline has been established in the inventory section, and the Public Services Department will update the information every 5 years on the website.

Goal 3: Protecting Wildlife

Morro Bay is a bird sanctuary and therefore protecting the nesting birds is essential. Further define the nesting season and explore Best Management Practices for the nesting birds and tree trimming.

Objective 3.1

Research and determine the appropriate time frame for nesting birds throughout the Central Coast.

Action 3.1

The Public Services Department will research the appropriate nesting season for Morro Bay by 2015.

Objective 3.2

Identify pruning needs of various tree species and the appropriate time of year trimming. Investigate Best Management Practices (BMP) for trimming and or removals during nesting season. Develop a policy and protocol that integrates the bird nesting patterns and the appropriate timing for trimming the trees.

Action 3.2

The Public Services Department will research the appropriate time of year for trimming trees, BMPs for trimming and removals during these times and correlate this with the nesting season, by 2015.

Goal 4: Educate the Public on the Benefits of Trees

Provide the public with a general understanding of the value and benefits that the Urban Forest provides. Educate residents, business owners, and the development community with Best Management Practices, including planting and care of trees.

Objective 4.1

Provide information on the City's website regarding the City's tree care program, benefits of trees, landmark trees, and proper tree care.

Action 4.1

The Public Services Department will make available this information on the City website by 2014.

Objective 4.2

Continue the partnership with the Volunteer Tree Committee.

Action 4.2

The Public Services and the Recreation and Parks Departments will continue this partnership with the UFMP adoption and throughout the entire life of the UFMP.

Objective 4.3

Enhance the City's Arbor Day program and its Tree City USA status.

Action 4.3

The Recreation and Parks Department will ensure the City keep the Tree City USA status and continue with the Arbor Day program from the UFMP adoption and throughout the entire life of the UFMP.

Goal 5: Tree Conservation

Conservation of the Urban Forest is important to preserve the forest for future generations. The conservation efforts include maintenance standards for ongoing management of trees. The City's urban forest should be maintained with standards that are consistent with good cultural best management practices.

Objective 5.1

Maintain trees using tree care guidelines provided in Appendix 3, in order to get the maximum benefits possible from the urban forest. City crews are to be trained in these maintenance practices.

Action 5.1

Recreation and Parks Department will train staff on these standards in Appendix 3 in year 2015.

Objective 5.2

Maintain the comprehensive GIS data base of all public trees in the City. Routine data will be entered into the database as trees are pruned, removed or planted.

Action 5.2

A comprehensive update will be performed by the Public Services

Department every 7 years.

Objective 5.3

Develop a tree care program that includes appropriate trimming schedules, integrated pest management policy.

Action 5.3

The Recreation and Parks Department will develop this program by 2016.

References

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APPENDIX 1

Tree Inventory

Morro Bay

Annual Energy Benefits of Public Trees By Species

2/4/2013

Species	Total Electricity (MWh)	Electricity ($)	Total Natural Gas (Therms)	Natural Gas ($)	Total ($)	Standard Error	% of Total Trees	% of Total $	Avg. $/tree
Redflower gum	55.7	7,375	1,310.5	1,710	9,085	(N/A)	38.5	59.8	35.08
Cajeput	2.5	333	35.7	47	380	(N/A)	7.4	2.5	7.60
Blue gum eucalyptus	8.4	1,110	158.1	206	1,316	(N/A)	4.8	8.7	41.12
Strawberry tree	1.2	157	26.1	34	191	(N/A)	4.5	1.3	6.36
Queen palm	0.4	53	12.1	16	69	(N/A)	3.9	0.5	2.66
Monterey cypress	2.7	361	56.2	73	434	(N/A)	3.4	2.9	18.88
Broadleaf Evergreen	1.6	214	32.2	42	256	(N/A)	3.1	1.7	12.19
Gum	3.4	443	82.7	108	551	(N/A)	3.0	3.6	27.56
Peppermint tree	1.7	221	32.2	42	263	(N/A)	2.8	1.7	13.82
Oak	0.1	10	2.7	4	14	(N/A)	2.7	0.1	0.77
Red ironbark	2.1	279	57.7	75	354	(N/A)	2.2	2.3	23.62
Lemon bottlebrush	0.7	90	14.7	19	110	(N/A)	1.9	0.7	8.43
Monterey pine	3.0	394	58.0	76	470	(N/A)	1.9	3.1	36.14
Victorian box	0.4	58	6.8	9	67	(N/A)	1.9	0.4	5.15
Mexican fan palm	0.4	48	10.9	14	62	(N/A)	1.9	0.4	4.76
Willow-leaved gimlet	1.6	217	43.8	57	274	(N/A)	1.6	1.8	24.89
New zealand christmas	0.5	63	6.4	8	72	(N/A)	1.6	0.5	6.50
Desert gum eucalyptus	1.3	173	35.4	46	219	(N/A)	1.5	1.5	21.95
Carrotwood	0.5	64	9.7	13	77	(N/A)	1.2	0.5	9.62
Leyland cypress	1.1	147	26.1	34	182	(N/A)	1.2	1.2	22.69
Callery pear	0.4	48	8.8	12	60	(N/A)	1.0	0.4	8.50
OTHER STREET TREES	4.3	562	88.6	116	678	(N/A)	7.9	4.5	12.79
Citywide total	93.9	12,422	2,115.6	2,760	15,182	(N/A)	100.0	100.0	22.56

Morro Bay

Canopy Spread for Public Trees by Zone

2/4/2013

Zone	Canopy Spread	Tree Count	Standard Error	% of Zone	% of Public Trees
1	0'-10'	174	(N/A)	25.85	25.85
	10'-20'	182	(N/A)	27.04	27.04
	20'-30'	198	(N/A)	29.42	29.42
	30'-40'	70	(N/A)	10.40	10.40
	40'-50'	35	(N/A)	5.20	5.20
	50'+	12	(N/A)	1.78	1.78
	N/A	2	(N/A)	0.30	0.30
	Total	673	(N/A)	100.00	100.00
Citywide	0'-10'	174	(N/A)	25.85	25.85
	10'-20'	182	(N/A)	27.04	27.04
	20'-30'	198	(N/A)	29.42	29.42
	30'-40'	70	(N/A)	10.40	10.40
	40'-50'	35	(N/A)	5.20	5.20
	50'+	12	(N/A)	1.78	1.78
	N/A	2	(N/A)	0.30	0.30
	Total	673	(N/A)	100.00	100.00

Morro Bay

Structural (Woody) Condition of Public Trees by Species

2/4/2013

Species	Condition	Tree Count	Standard Error	% of Species	% of Public Trees
African sumac	excellent	0	(N/A)	0.00	0.00
	average	2	(N/A)	100.00	0.30
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	2	(N/A)	100.00	0.30
Aloe yucca	excellent	0	(N/A)	0.00	0.00
	average	1	(N/A)	100.00	0.15
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	1	(N/A)	100.00	0.15
Araucaria	excellent	1	(N/A)	50.00	0.15
	average	0	(N/A)	0.00	0.00
	fair	1	(N/A)	50.00	0.15
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	2	(N/A)	100.00	0.30
Avocado	excellent	0	(N/A)	0.00	0.00
	average	1	(N/A)	50.00	0.15
	fair	0	(N/A)	0.00	0.00
	poor	1	(N/A)	50.00	0.15
	N/A	0	(N/A)	0.00	0.00
	Total	2	(N/A)	100.00	0.30
Bailey acacia	excellent	0	(N/A)	0.00	0.00
	average	1	(N/A)	100.00	0.15
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	1	(N/A)	100.00	0.15
Blue gum eucalyptus	excellent	19	(N/A)	59.38	2.82
	average	13	(N/A)	40.63	1.93
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	32	(N/A)	100.00	4.75
Brisbane box	excellent	4	(N/A)	100.00	0.59
	average	0	(N/A)	0.00	0.00
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	4	(N/A)	100.00	0.59
Broadleaf Evergreen Small	excellent	9	(N/A)	42.86	1.34
	average	9	(N/A)	42.86	1.34
	fair	3	(N/A)	14.29	0.45
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	21	(N/A)	100.00	3.12
Bushy yate	excellent	1	(N/A)	100.00	0.15
	average	0	(N/A)	0.00	0.00
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	1	(N/A)	100.00	0.15

Morro Bay

Structural (Woody) Condition of Public Trees by Species

2/4/2013

Species	Condition	Tree Count	Standard Error	% of Species	% of Public Trees
Cajeput	excellent	10	(N/A)	20.00	1.49
	average	21	(N/A)	42.00	3.12
	fair	12	(N/A)	24.00	1.78
	poor	7	(N/A)	14.00	1.04
	N/A	0	(N/A)	0.00	0.00
	Total	50	(N/A)	100.00	7.43
Callery pear	excellent	0	(N/A)	0.00	0.00
	average	6	(N/A)	85.71	0.89
	fair	1	(N/A)	14.29	0.15
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	7	(N/A)	100.00	1.04
Carrotwood	excellent	1	(N/A)	12.50	0.15
	average	4	(N/A)	50.00	0.59
	fair	1	(N/A)	12.50	0.15
	poor	2	(N/A)	25.00	0.30
	N/A	0	(N/A)	0.00	0.00
	Total	8	(N/A)	100.00	1.19
Cherry plum	excellent	1	(N/A)	25.00	0.15
	average	2	(N/A)	50.00	0.30
	fair	1	(N/A)	25.00	0.15
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	4	(N/A)	100.00	0.59
Cicer gum eucalyptus	excellent	1	(N/A)	100.00	0.15
	average	0	(N/A)	0.00	0.00
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	1	(N/A)	100.00	0.15
Coast redwood	excellent	1	(N/A)	100.00	0.15
	average	0	(N/A)	0.00	0.00
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	1	(N/A)	100.00	0.15
Conifer Evergreen Medium	excellent	2	(N/A)	40.00	0.30
	average	2	(N/A)	40.00	0.30
	fair	0	(N/A)	0.00	0.00
	poor	1	(N/A)	20.00	0.15
	N/A	0	(N/A)	0.00	0.00
	Total	5	(N/A)	100.00	0.74
Conifer Evergreen Small	excellent	2	(N/A)	50.00	0.30
	average	1	(N/A)	25.00	0.15
	fair	0	(N/A)	0.00	0.00
	poor	1	(N/A)	25.00	0.15
	N/A	0	(N/A)	0.00	0.00
	Total	4	(N/A)	100.00	0.59
Deodar cedar	excellent	0	(N/A)	0.00	0.00
	average	1	(N/A)	50.00	0.15
	fair	1	(N/A)	50.00	0.15
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	2	(N/A)	100.00	0.30

Morro Bay

Structural (Woody) Condition of Public Trees by Species

2/4/2013

Species	Condition	Tree Count	Standard Error	% of Species	% of Public Trees
Desert gum eucalyptus	excellent	1	(N/A)	10.00	0.15
	average	7	(N/A)	70.00	1.04
	fair	2	(N/A)	20.00	0.30
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	10	(N/A)	100.00	1.49
Evergreen pear	excellent	0	(N/A)	0.00	0.00
	average	4	(N/A)	100.00	0.59
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	4	(N/A)	100.00	0.59
Ginkgo	excellent	2	(N/A)	100.00	0.30
	average	0	(N/A)	0.00	0.00
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	2	(N/A)	100.00	0.30
Gum	excellent	5	(N/A)	25.00	0.74
	average	9	(N/A)	45.00	1.34
	fair	6	(N/A)	30.00	0.89
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	20	(N/A)	100.00	2.97
Hawthorn	excellent	0	(N/A)	0.00	0.00
	average	1	(N/A)	100.00	0.15
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	1	(N/A)	100.00	0.15
Itailian stone pine	excellent	4	(N/A)	66.67	0.59
	average	1	(N/A)	16.67	0.15
	fair	1	(N/A)	16.67	0.15
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	6	(N/A)	100.00	0.89
Lemon bottlebrush	excellent	3	(N/A)	23.08	0.45
	average	6	(N/A)	46.15	0.89
	fair	4	(N/A)	30.77	0.59
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	13	(N/A)	100.00	1.93
Lemonscented gum	excellent	1	(N/A)	100.00	0.15
	average	0	(N/A)	0.00	0.00
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	1	(N/A)	100.00	0.15
Leyland cypress	excellent	0	(N/A)	0.00	0.00
	average	5	(N/A)	62.50	0.74
	fair	1	(N/A)	12.50	0.15
	poor	2	(N/A)	25.00	0.30
	N/A	0	(N/A)	0.00	0.00
	Total	8	(N/A)	100.00	1.19

Morro Bay

Structural (Woody) Condition of Public Trees by Species

2/4/2013

Species	Condition	Tree Count	Standard Error	% of Species	% of Public Trees
Live oak	excellent	0	(N/A)	0.00	0.00
	average	2	(N/A)	100.00	0.30
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	2	(N/A)	100.00	0.30
Lyontree	excellent	0	(N/A)	0.00	0.00
	average	0	(N/A)	0.00	0.00
	fair	2	(N/A)	100.00	0.30
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	2	(N/A)	100.00	0.30
Mexican fan palm	excellent	11	(N/A)	84.62	1.63
	average	2	(N/A)	15.38	0.30
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	13	(N/A)	100.00	1.93
Monterey cypress	excellent	16	(N/A)	69.57	2.38
	average	6	(N/A)	26.09	0.89
	fair	1	(N/A)	4.35	0.15
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	23	(N/A)	100.00	3.42
Monterey pine	excellent	2	(N/A)	15.38	0.30
	average	8	(N/A)	61.54	1.19
	fair	3	(N/A)	23.08	0.45
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	13	(N/A)	100.00	1.93
New zealand christmas tree	excellent	6	(N/A)	54.55	0.89
	average	5	(N/A)	45.45	0.74
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	11	(N/A)	100.00	1.63
Oak	excellent	1	(N/A)	5.56	0.15
	average	14	(N/A)	77.78	2.08
	fair	2	(N/A)	11.11	0.30
	poor	1	(N/A)	5.56	0.15
	N/A	0	(N/A)	0.00	0.00
	Total	18	(N/A)	100.00	2.67
Palm Evergreen Medium	excellent	0	(N/A)	0.00	0.00
	average	1	(N/A)	100.00	0.15
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	1	(N/A)	100.00	0.15
Peppermint tree	excellent	9	(N/A)	47.37	1.34
	average	8	(N/A)	42.11	1.19
	fair	2	(N/A)	10.53	0.30
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	19	(N/A)	100.00	2.82

Morro Bay

Structural (Woody) Condition of Public Trees by Species

2/4/2013

Species	Condition	Tree Count	Standard Error	% of Species	% of Public Trees
Primrose tree; cow itch tree	excellent	1	(N/A)	100.00	0.15
	average	0	(N/A)	0.00	0.00
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	1	(N/A)	100.00	0.15
Queen palm	excellent	10	(N/A)	38.46	1.49
	average	13	(N/A)	50.00	1.93
	fair	2	(N/A)	7.69	0.30
	poor	0	(N/A)	0.00	0.00
	N/A	1	(N/A)	3.85	0.15
	Total	26	(N/A)	100.00	3.86
Red ironbark	excellent	2	(N/A)	13.33	0.30
	average	12	(N/A)	80.00	1.78
	fair	1	(N/A)	6.67	0.15
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	15	(N/A)	100.00	2.23
Redflower gum	excellent	59	(N/A)	22.78	8.77
	average	164	(N/A)	63.32	24.37
	fair	25	(N/A)	9.65	3.71
	poor	9	(N/A)	3.47	1.34
	N/A	2	(N/A)	0.77	0.30
	Total	259	(N/A)	100.00	38.48
Strawberry tree	excellent	24	(N/A)	80.00	3.57
	average	5	(N/A)	16.67	0.74
	fair	1	(N/A)	3.33	0.15
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	30	(N/A)	100.00	4.46
Victorian box	excellent	0	(N/A)	0.00	0.00
	average	10	(N/A)	76.92	1.49
	fair	1	(N/A)	7.69	0.15
	poor	2	(N/A)	15.38	0.30
	N/A	0	(N/A)	0.00	0.00
	Total	13	(N/A)	100.00	1.93
Wilga; australian willow	excellent	1	(N/A)	33.33	0.15
	average	2	(N/A)	66.67	0.30
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	3	(N/A)	100.00	0.45
Willow-leaved gimlet	excellent	1	(N/A)	9.09	0.15
	average	10	(N/A)	90.91	1.49
	fair	0	(N/A)	0.00	0.00
	poor	0	(N/A)	0.00	0.00
	N/A	0	(N/A)	0.00	0.00
	Total	11	(N/A)	100.00	1.63

Morro Bay

Population Summary of Public Trees

2/4/2013

Species	DBH Class (in) 0-3	3-6	6-12	12-18	18-24	24-30	30-36	36-42	>42	Total	Standard Error
Broadleaf Deciduous Large (BDL)											
Oak	18	0	0	0	0	0	0	0	0	18	
BDL OTHER	0	0	0	0	0	0	0	0	0	0	
Total	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**(±NaN)**
Broadleaf Deciduous Medium (BDM)											
Callery pear	0	6	1	0	0	0	0	0	0	7	
BDM OTHER	0	2	0	0	0	0	0	0	0	2	
Total	**0**	**8**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**(±NaN)**
Broadleaf Deciduous Small (BDS)											
BDS OTHER	1	3	1	0	0	0	0	0	0	5	
Total	**1**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**(±NaN)**
Broadleaf Evergreen Large (BEL)											
Blue gum eucalyptus	1	1	0	5	5	3	2	5	10	32	
Gum	0	0	6	7	3	2	1	1	0	20	
Red ironbark	0	0	4	9	2	0	0	0	0	15	
Desert gum eucalyptus	0	1	3	4	2	0	0	0	0	10	
BEL OTHER	1	3	2	1	1	0	0	0	0	8	
Total	**2**	**5**	**15**	**26**	**13**	**5**	**3**	**6**	**10**	**85**	**(±NaN)**
Broadleaf Evergreen Medium (BEM)											
Redflower gum	7	1	4	51	96	66	19	13	2	259	
Cajeput	1	7	23	18	1	0	0	0	0	50	
Victorian box	0	8	3	2	0	0	0	0	0	13	
Willow-leaved gimlet	0	0	3	5	3	0	0	0	0	11	
New zealand christmas	1	1	6	3	0	0	0	0	0	11	
BEM OTHER	0	0	7	2	0	0	0	0	0	9	
Total	**9**	**17**	**46**	**81**	**100**	**66**	**19**	**13**	**2**	**353**	**(±NaN)**
Broadleaf Evergreen Small (BES)											
Strawberry tree	14	7	7	1	1	0	0	0	0	30	
Broadleaf Evergreen	4	3	8	3	0	1	1	0	1	21	
Peppermint tree	0	4	6	8	1	0	0	0	0	19	
Lemon bottlebrush	1	5	7	0	0	0	0	0	0	13	
Carrotwood	3	1	2	1	1	0	0	0	0	8	
BES OTHER	0	0	6	1	0	0	0	0	0	7	
Total	**22**	**20**	**36**	**14**	**3**	**1**	**1**	**0**	**1**	**98**	**(±NaN)**
Conifer Evergreen Large (CEL)											
Monterey cypress	6	3	3	2	2	5	0	1	1	23	
Monterey pine	0	0	0	1	4	2	3	1	2	13	
CEL OTHER	1	0	4	0	2	2	1	1	0	11	
Total	**7**	**3**	**7**	**3**	**8**	**9**	**4**	**3**	**3**	**47**	**(±NaN)**
Conifer Evergreen Medium (CEM)											
Leyland cypress	0	1	1	3	3	0	0	0	0	8	
CEM OTHER	0	1	2	1	1	0	0	0	0	5	
Total	**0**	**2**	**3**	**4**	**4**	**0**	**0**	**0**	**0**	**13**	**(±NaN)**
Conifer Evergreen Small (CES)											
CES OTHER	1	1	1	0	0	0	0	1	0	4	
Total	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**(±NaN)**
Palm Evergreen Large (PEL)											
PEL OTHER	0	0	0	0	0	0	0	0	0	0	
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**(±NaN)**
Palm Evergreen Medium (PEM)											
PEM OTHER	0	0	1	0	0	0	0	0	0	1	

Morro Bay

Population Summary of Public Trees

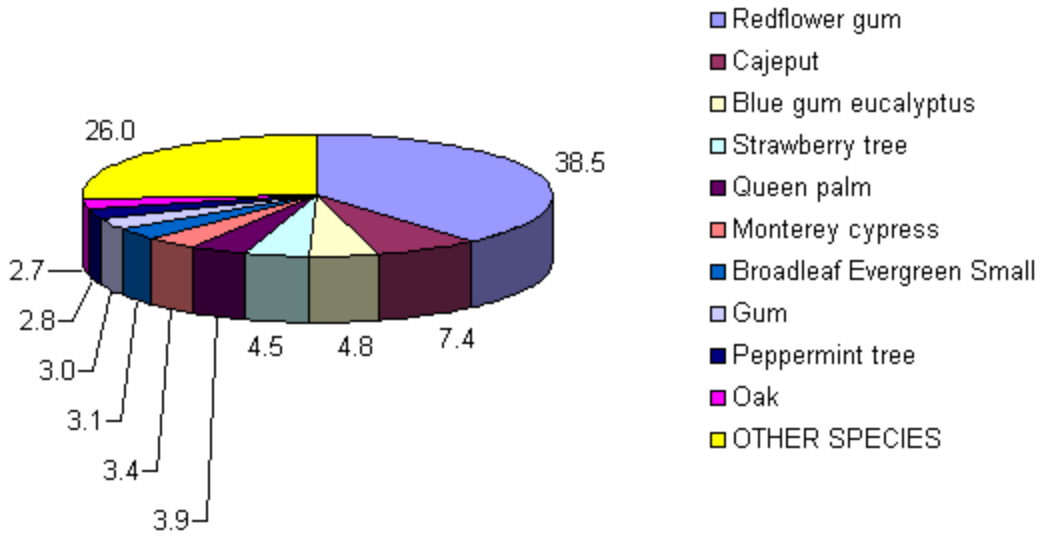
2/4/2013

Species	DBH Class (in) 0-3	3-6	6-12	12-18	18-24	24-30	30-36	36-42	>42	Total	Standard Error
Total	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**(±NaN)**
Palm Evergreen Small (PES)											
Queen palm	1	2	12	10	0	1	0	0	0	26	
Mexican fan palm	0	0	5	0	0	5	3	0	0	13	
PES OTHER	0	1	0	0	0	0	0	0	0	1	
Total	**1**	**3**	**17**	**10**	**0**	**6**	**3**	**0**	**0**	**40**	**(±NaN)**
Grand Total	**61**	**62**	**128**	**138**	**128**	**87**	**30**	**23**	**16**	**673**	**(±0)**

Morro Bay

Species Distribution of All Trees (%)

2/4/2013

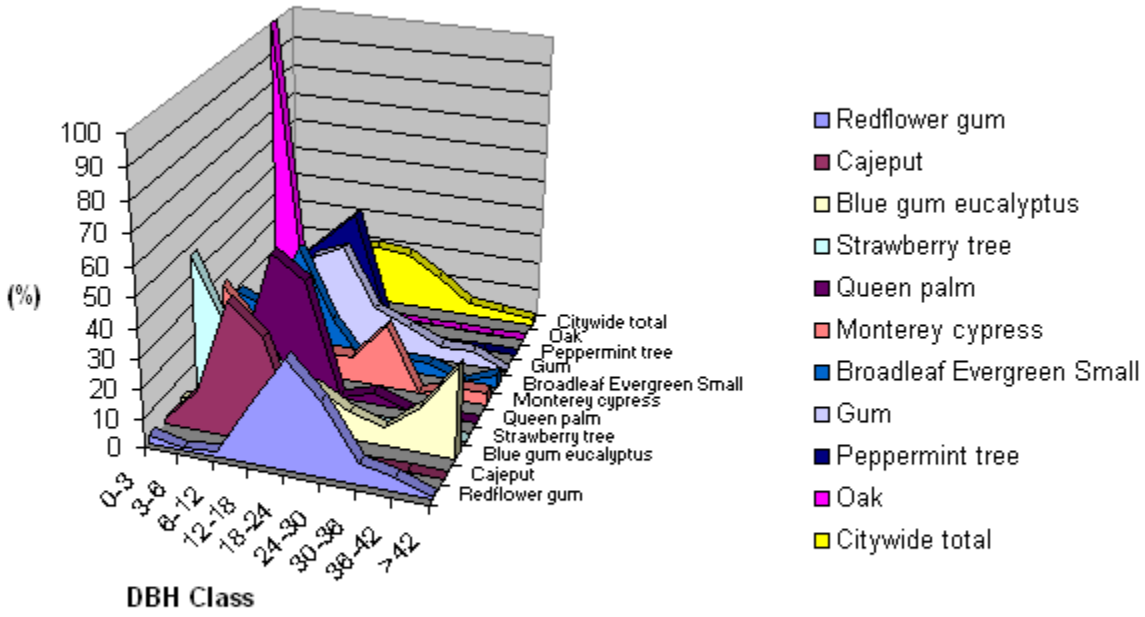


Species	Percent
Redflower gum	38.5
Cajeput	7.4
Blue gum eucalyptus	4.8
Strawberry tree	4.5
Queen palm	3.9
Monterey cypress	3.4
Broadleaf Evergreen	3.1
Gum	3.0
Peppermint tree	2.8
Oak	2.7
OTHER SPECIES	26.0
Total	100.0

Morro Bay

Relative Age Distribution of Top 10 Public Tree Species (%)

2/4/2013



	DBH class (in)								
Species	0-3	3-6	6-12	12-18	18-24	24-30	30-36	36-42	>42
Redflower gum	2.70	0.39	1.54	19.69	37.07	25.48	7.34	5.02	0.77
Cajeput	2.00	14.00	46.00	36.00	2.00	0.00	0.00	0.00	0.00
Blue gum eucalyptus	3.13	3.13	0.00	15.63	15.63	9.38	6.25	15.63	31.25
Strawberry tree	46.67	23.33	23.33	3.33	3.33	0.00	0.00	0.00	0.00
Queen palm	3.85	7.69	46.15	38.46	0.00	3.85	0.00	0.00	0.00
Monterey cypress	26.09	13.04	13.04	8.70	8.70	21.74	0.00	4.35	4.35
Broadleaf Evergreen	19.05	14.29	38.10	14.29	0.00	4.76	4.76	0.00	4.76
Gum	0.00	0.00	30.00	35.00	15.00	10.00	5.00	5.00	0.00
Peppermint tree	0.00	21.05	31.58	42.11	5.26	0.00	0.00	0.00	0.00
Oak	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Citywide total	9.06	9.21	19.02	20.51	19.02	12.93	4.46	3.42	2.38

Morro Bay

Annual CO_2 Benefits of Public Trees by Species

2/4/2013

Species	Sequestered (lb)	Sequestered ($)	Decomposition Release (lb)	Maintenance Release (lb)	Total Released ($)	Avoided (lb)	Avoided ($)	Net Total (lb)	Total Standard ($) Error	% of Total Trees	% of Total $	Avg. $/tree
Redflower gum	238,345	1,788	-31,993	-30	-240	46,860	351	253,182	1,899 (N/A)	38.5	69.1	7.33
Cajeput	3,355	25	-512	-6	-4	2,118	16	4,954	37 (N/A)	7.4	1.4	0.74
Blue gum eucalyptus	39,688	298	-8,588	-4	-64	7,049	53	38,146	286 (N/A)	4.8	10.4	8.94
Strawberry tree	780	6	-66	-4	-1	995	7	1,705	13 (N/A)	4.5	0.5	0.43
Queen palm	777	6	-172	-3	-1	339	3	941	7 (N/A)	3.9	0.3	0.27
Monterey cypress	3,815	29	-624	-3	-5	2,293	17	5,481	41 (N/A)	3.4	1.5	1.79
Broadleaf Evergreen	1,059	8	-207	-2	-2	1,359	10	2,209	17 (N/A)	3.1	0.6	0.79
Gum	13,047	98	-1,558	-2	-12	2,816	21	14,303	107 (N/A)	3.0	3.9	5.36
Peppermint tree	1,357	10	-143	-2	-1	1,401	11	2,613	20 (N/A)	2.8	0.7	1.03
Oak	207	2	-2	-2	0	66	0	268	2 (N/A)	2.7	0.1	0.11
Red ironbark	7,307	55	-533	-2	-4	1,773	13	8,546	64 (N/A)	2.2	2.3	4.27
Lemon bottlebrush	418	3	-27	-2	0	575	4	964	7 (N/A)	1.9	0.3	0.56
Monterey pine	4,846	36	-919	-2	-7	2,505	19	6,430	48 (N/A)	1.9	1.8	3.71
Victorian box	565	4	-66	-2	-1	369	3	865	6 (N/A)	1.9	0.2	0.50
Mexican fan palm	348	3	-120	-2	-1	303	2	529	4 (N/A)	1.9	0.1	0.31
Willow-leaved gimlet	5,848	44	-464	-1	-3	1,376	10	6,758	51 (N/A)	1.6	1.9	4.61
New zealand christmas	622	5	-89	-1	-1	401	3	932	7 (N/A)	1.6	0.3	0.64
Desert gum eucalyptus	4,558	34	-345	-1	-3	1,101	8	5,313	40 (N/A)	1.5	1.5	3.98
Carrotwood	412	3	-45	-1	0	409	3	774	6 (N/A)	1.2	0.2	0.73
Leyland cypress	1,097	8	-110	-1	-1	937	7	1,923	14 (N/A)	1.2	0.5	1.80
Callery pear	169	1	-8	-1	0	305	2	465	3 (N/A)	1.0	0.1	0.50
OTHER STREET	6,035	45	-704	-6	-5	3,573	27	8,897	67 (N/A)	7.9	2.4	1.26
Citywide total	334,655	2,510	-47,298	-79	-355	78,922	592	366,199	2,747 (N/A)	100.0	100.0	4.08

Morro Bay

Stored CO2 Benefits of Public Trees by Species

2/4/2013

Species	Total Stored CO2 (lbs)	Total ($)	Standard Error	% of Total Trees	% of Total $	Avg. $/tree
Redflower gum	3,332,603	24,995	(N/A)	38.5	67.6	96.50
Cajeput	53,318	400	(N/A)	7.4	1.1	8.00
Blue gum	894,538	6,709	(N/A)	4.8	18.2	209.66
Strawberry tree	6,919	52	(N/A)	4.5	0.1	1.73
Queen palm	17,922	134	(N/A)	3.9	0.4	5.17
Monterey cypress	65,048	488	(N/A)	3.4	1.3	21.21
Broadleaf	21,580	162	(N/A)	3.1	0.4	7.71
Gum	162,315	1,217	(N/A)	3.0	3.3	60.87
Peppermint tree	14,879	112	(N/A)	2.8	0.3	5.87
Oak	250	2	(N/A)	2.7	0.0	0.10
Red ironbark	55,514	416	(N/A)	2.2	1.1	27.76
Lemon bottlebrush	2,792	21	(N/A)	1.9	0.1	1.61
Monterey pine	95,718	718	(N/A)	1.9	1.9	55.22
Victorian box	6,922	52	(N/A)	1.9	0.1	3.99
Mexican fan palm	12,551	94	(N/A)	1.9	0.3	7.24
Willow-leaved	48,379	363	(N/A)	1.6	1.0	32.99
New zealand	9,315	70	(N/A)	1.6	0.2	6.35
Desert gum	35,905	269	(N/A)	1.5	0.7	26.93
Carrotwood	4,735	36	(N/A)	1.2	0.1	4.44
Leyland cypress	11,479	86	(N/A)	1.2	0.2	10.76
Callery pear	818	6	(N/A)	1.0	0.0	0.88
OTHER STREET	33,287	550	(N/A)	7.9	1.5	10.38
Citywide total	4,926,885	36,952	(N/A)	100.0	100.0	54.91

The value of stored carbon dioxide is calculated as the total amount of carbon dioxide sequestered annually over the life of each tree, summed for the population. This value should not be added to the Replacement Value or double-counting of the carbon dioxide storage benefit will occur.

Morro Bay

Annual Stormwater Benefits of Public Trees by Species

2/4/2013

Species	Total rainfall interception (Gal)	Total ($)	Standard Error	% of Total Trees	% of Total $	Avg. $/tree
Redflower gum	825,234	3,301	(N/A)	38.5	60.0	12.75
Cajeput	38,642	155	(N/A)	7.4	2.8	3.09
Blue gum eucalyptus	153,032	612	(N/A)	4.8	11.1	19.13
Strawberry tree	14,747	59	(N/A)	4.5	1.1	1.97
Queen palm	3,628	15	(N/A)	3.9	0.3	0.56
Monterey cypress	39,870	159	(N/A)	3.4	2.9	6.93
Broadleaf Evergreen Small	23,459	94	(N/A)	3.1	1.7	4.47
Gum	45,611	182	(N/A)	3.0	3.3	9.12
Peppermint tree	23,273	93	(N/A)	2.8	1.7	4.90
Oak	880	4	(N/A)	2.7	0.1	0.20
Red ironbark	24,683	99	(N/A)	2.2	1.8	6.58
Lemon bottlebrush	8,443	34	(N/A)	1.9	0.6	2.60
Monterey pine	47,697	191	(N/A)	1.9	3.5	14.68
Victorian box	5,838	23	(N/A)	1.9	0.4	1.80
Mexican fan palm	3,373	13	(N/A)	1.9	0.3	1.04
Willow-leaved gimlet	19,654	79	(N/A)	1.6	1.4	7.15
New zealand christmas tree	7,288	29	(N/A)	1.6	0.5	2.65
Desert gum eucalyptus	15,446	62	(N/A)	1.5	1.1	6.18
Carrotwood	6,738	27	(N/A)	1.2	0.5	3.37
Leyland cypress	10,949	44	(N/A)	1.2	0.8	5.47
Callery pear	2,272	9	(N/A)	1.0	0.2	1.30
OTHER STREET TREES	54,360	217	(N/A)	7.9	4.0	4.10
Citywide total	1,375,118	5,501	(N/A)	100.0	100.0	8.17

Morro Bay

Tree Height for Public Trees by Zone

2/4/2013

Zone	Tree Height	Tree Count	Standard Error	% of Zone	% of Public Trees
1	0'-15'	134	(N/A)	19.91	19.91
	15'-30'	297	(N/A)	44.13	44.13
	30'-45'	177	(N/A)	26.30	26.30
	45'-60'	19	(N/A)	2.82	2.82
	60'+	35	(N/A)	5.20	5.20
	N/A	11	(N/A)	1.63	1.63
	Total	673	(N/A)	100.00	100.00
Citywide	0'-15'	134	(N/A)	19.91	19.91
	15'-30'	297	(N/A)	44.13	44.13
	30'-45'	177	(N/A)	26.30	26.30
	45'-60'	19	(N/A)	2.82	2.82
	60'+	35	(N/A)	5.20	5.20
	N/A	11	(N/A)	1.63	1.63
	Total	673	(N/A)	100.00	100.00

APPENDIX 2

Soils


120° 52' 45"
120° 50' 12"
35° 24' 58"
35° 24' 55"
35° 22' 9"
35° 22' 6"
120° 52' 49"
120° 50' 16"
693000
693600
694200
694800
695400
696000
3921000
3920400
3919800
3919200
3918600
3918000
3917400
3916800
3916200
Toro Creek
Beachcomber St
Sandalwood Ave
San Jacinto St
Elena St
Greenwood Ave
Ironwood Ave
Main St
Avalon St
State Hwy 41
Morro Creek
Little Morro Creek
Quintana Rd
Beach St
Map Scale: 1:24,900 if printed on A size (8.5" x 11") sheet.
N
Meters
0 200 400 800 1,200
Feet
0 500 1,000 2,000 3,000

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Units

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features
- Gully
- Short Steep Slope
- Other

Political Features
- Cities

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads

MAP INFORMATION

Map Scale: 1:24,900 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 10N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

Date(s) aerial images were photographed: 6/6/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

San Luis Obispo County, California, Coastal Part (CA664)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
107	Beaches	71.7	2.6%
110	Briones-Tierra complex, 15 to 50 percent slopes	34.2	1.3%
120	Concepcion loam, 2 to 5 percent slopes	199.6	7.3%
127	Cropley clay, 0 to 2 percent slopes	6.2	0.2%
128	Cropley clay, 2 to 9 percent slopes	227.3	8.3%
129	Diablo clay, 5 to 9 percent slopes	5.8	0.2%
130	Diablo and Cibo clays, 9 to 15 percent slopes	83.7	3.1%
131	Diablo and Cibo clays, 15 to 30 percent slopes	81.2	3.0%
132	Diablo and Cibo clays, 30 to 50 percent slopes	148.7	5.5%
133	Diablo-Lodo complex, 15 to 50 percent slopes	64.8	2.4%
134	Dune land	176.4	6.5%
142	Gaviota fine sandy loam, 15 to 50 percent slopes	69.6	2.6%
148	Lodo clay loam, 15 to 30 percent slopes	53.2	2.0%
149	Lodo clay loam, 30 to 50 percent slopes	100.1	3.7%
150	Lodo clay loam, 50 to 75 percent slopes	7.6	0.3%
156	Lopez very shaly clay loam, 30 to 75 percent slopes	33.3	1.2%
160	Los Osos loam, 15 to 30 percent slopes	39.8	1.5%
161	Los Osos loam, 30 to 50 percent slopes	98.5	3.6%
164	Los Osos-Diablo complex, 15 to 30 percent slopes	6.6	0.2%
165	Los Osos-Diablo complex, 30 to 50 percent slopes	72.8	2.7%
170	Marimel silty clay loam, drained	49.3	1.8%
178	Nacimiento silty clay loam, 30 to 50 percent slopes	10.5	0.4%
183	Obispo-Rock outcrop complex, 15 to 75 percent slopes	115.4	4.2%
192	Psamments and Fluvents, occasionally flooded	156.9	5.8%
198	Salinas silty clay loam, 2 to 9 percent slopes	112.6	4.1%
223	Xerorthents, escarpment	2.8	0.1%
Subtotals for Soil Survey Area		**2,028.9**	**74.5%**
Totals for Area of Interest		**2,723.5**	**100.0%**

(South Morro Bay)

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Units

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features
- Gully
- Short Steep Slope
- Other

Political Features
- Cities

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads

MAP INFORMATION

Map Scale: 1:25,200 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 10N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

Date(s) aerial images were photographed: 6/6/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

San Luis Obispo County, California, Coastal Part (CA664)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
101	Aquolls, saline	105.3	3.2%
104	Baywood fine sand, 2 to 9 percent slopes	493.6	15.1%
105	Baywood fine sand, 9 to 15 percent slopes	462.7	14.2%
106	Baywood fine sand, 15 to 30 percent slopes	11.8	0.4%
107	Beaches	40.6	1.2%
109	Briones-Pismo loamy sands, 9 to 30 percent slopes	7.7	0.2%
110	Briones-Tierra complex, 15 to 50 percent slopes	41.1	1.3%
128	Cropley clay, 2 to 9 percent slopes	56.7	1.7%
129	Diablo clay, 5 to 9 percent slopes	177.6	5.4%
130	Diablo and Cibo clays, 9 to 15 percent slopes	54.2	1.7%
131	Diablo and Cibo clays, 15 to 30 percent slopes	276.3	8.5%
132	Diablo and Cibo clays, 30 to 50 percent slopes	45.2	1.4%
134	Dune land	231.7	7.1%
141	Gaviota sandy loam, 50 to 75 percent slopes	74.1	2.3%
148	Lodo clay loam, 15 to 30 percent slopes	8.7	0.3%
149	Lodo clay loam, 30 to 50 percent slopes	2.5	0.1%
158	Los Osos loam, 5 to 9 percent slopes	19.7	0.6%
160	Los Osos loam, 15 to 30 percent slopes	44.4	1.4%
161	Los Osos loam, 30 to 50 percent slopes	16.7	0.5%
183	Obispo-Rock outcrop complex, 15 to 75 percent slopes	13.9	0.4%
192	Psamments and Fluvents, occasionally flooded	180.0	5.5%
195	Rock outcrop-Lithic Haploxerolls complex, 30 to 75 percent slopes	139.0	4.3%
197	Salinas silty clay loam, 0 to 2 percent slopes	61.1	1.9%
223	Xerorthents, escarpment	0.3	0.0%
226	Zaca clay, 30 to 50 percent slopes	18.0	0.6%
228	Water	361.8	11.1%
Subtotals for Soil Survey Area		**2,944.5**	**90.3%**
Totals for Area of Interest		**3,259.6**	**100.0%**

San Luis Obispo County, California, Coastal Part

104—Baywood fine sand, 2 to 9 percent slopes

Map Unit Setting

Elevation: 0 to 500 feet
Mean annual precipitation: 15 to 20 inches
Mean annual air temperature: 57 degrees F
Frost-free period: 325 to 350 days

Map Unit Composition

Baywood and similar soils: 85 percent
Minor components: 12 percent

Description of Baywood

Setting

Landform: Dunes
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Eolian sands

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability (nonirrigated): 6e
Ecological site: SANDY (R014XD059CA)

Typical profile

0 to 36 inches: Fine sand
36 to 90 inches: Fine sand

Minor Components

Oceano sand

Percent of map unit: 3 percent

Unnamed

Percent of map unit: 3 percent

Unnamed

Percent of map unit: 3 percent

Baywood/concepcion
Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

105—Baywood fine sand, 9 to 15 percent slopes

Map Unit Setting

Elevation: 0 to 500 feet
Mean annual precipitation: 15 to 20 inches
Mean annual air temperature: 57 degrees F
Frost-free period: 325 to 350 days

Map Unit Composition

Baywood and similar soils: 85 percent
Minor components: 12 percent

Description of Baywood

Setting

Landform: Dunes
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Eolian sands

Properties and qualities

Slope: 9 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability (nonirrigated): 6e
Ecological site: SANDY (R014XD059CA)

Typical profile

0 to 36 inches: Fine sand
36 to 90 inches: Fine sand

Minor Components

Oceano sand

Percent of map unit: 3 percent

Unnamed

Percent of map unit: 3 percent

Capistrano sandy loam

Percent of map unit: 3 percent

Fine sand over loam soil
Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

106—Baywood fine sand, 15 to 30 percent slopes

Map Unit Setting

Elevation: 0 to 500 feet
Mean annual precipitation: 15 to 20 inches
Mean annual air temperature: 57 degrees F
Frost-free period: 325 to 350 days

Map Unit Composition

Baywood and similar soils: 85 percent
Minor components: 12 percent

Description of Baywood

Setting

Landform: Dunes
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Eolian sands

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 3.4 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability (nonirrigated): 6e
Ecological site: SANDY (R014XD059CA)

Typical profile

0 to 36 inches: Fine sand
36 to 90 inches: Fine sand

Minor Components

Oceano sand

Percent of map unit: 3 percent

Unnamed

Percent of map unit: 3 percent

Capistano sandy loam

Percent of map unit: 3 percent

Garcy

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

120—Concepcion loam, 2 to 5 percent slopes

Map Unit Setting

Elevation: 10 to 800 feet
Mean annual precipitation: 17 to 24 inches
Mean annual air temperature: 57 degrees F
Frost-free period: 300 to 330 days

Map Unit Composition

Concepcion and similar soils: 85 percent
Minor components: 12 percent

Description of Concepcion

Setting

Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: 10 to 21 inches to abrupt textural change
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability (nonirrigated): 3e
Ecological site: LOAMY CLAYPAN (R014XD105CA)

Typical profile

0 to 19 inches: Loam
19 to 47 inches: Clay
47 to 63 inches: Sandy clay loam

Minor Components

Cropley clay

Percent of map unit: 3 percent

Los osos loam

Percent of map unit: 3 percent

Tierra loam
Percent of map unit: 3 percent

San simeon sandy loam
Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

128—Cropley clay, 2 to 9 percent slopes

Map Unit Setting

Elevation: 100 to 700 feet
Mean annual precipitation: 14 to 20 inches
Mean annual air temperature: 57 degrees F
Frost-free period: 250 to 330 days

Map Unit Composition

Cropley and similar soils: 85 percent
Minor components: 6 percent

Description of Cropley

Setting

Landform: Alluvial flats, alluvial fans
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Moderate (about 8.0 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability (nonirrigated): 3s
Ecological site: CLAYEY (R014XD001CA)

Typical profile

0 to 36 inches: Clay
36 to 60 inches: Silty clay loam

Minor Components

Los osos loam

Percent of map unit: 3 percent

Salinas silty clay loam
Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

129—Diablo clay, 5 to 9 percent slopes

Map Unit Setting

Elevation: 200 to 600 feet
Mean annual precipitation: 14 to 25 inches
Mean annual air temperature: 59 degrees F
Frost-free period: 275 to 350 days

Map Unit Composition

Diablo and similar soils: 85 percent
Minor components: 6 percent

Description of Diablo

Setting

Landform: Hills
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from mudstone, sandstone and/or shale

Properties and qualities

Slope: 5 to 9 percent
Depth to restrictive feature: 45 to 58 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability (nonirrigated): 3e
Ecological site: CLAYEY (R015XD001CA)

Typical profile

0 to 38 inches: Clay
38 to 58 inches: Clay
58 to 62 inches: Weathered bedrock

Minor Components

Cropley clay

Percent of map unit: 3 percent

Unnamed
Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

129—Diablo clay, 5 to 9 percent slopes

Map Unit Setting

Elevation: 200 to 600 feet
Mean annual precipitation: 14 to 25 inches
Mean annual air temperature: 59 degrees F
Frost-free period: 275 to 350 days

Map Unit Composition

Diablo and similar soils: 85 percent
Minor components: 6 percent

Description of Diablo

Setting

Landform: Hills
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Crest, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from mudstone, sandstone and/or shale

Properties and qualities

Slope: 5 to 9 percent
Depth to restrictive feature: 45 to 58 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability (nonirrigated): 3e
Ecological site: CLAYEY (R015XD001CA)

Typical profile

0 to 38 inches: Clay
38 to 58 inches: Clay
58 to 62 inches: Weathered bedrock

Minor Components

Cropley clay

Percent of map unit: 3 percent

Unnamed
Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

130—Diablo and Cibo clays, 9 to 15 percent slopes

Map Unit Setting

Elevation: 200 to 600 feet
Mean annual precipitation: 14 to 25 inches
Mean annual air temperature: 59 degrees F
Frost-free period: 275 to 350 days

Map Unit Composition

Cibo and similar soils: 45 percent
Diablo and similar soils: 45 percent
Minor components: 3 percent

Description of Diablo

Setting

Landform: Hills
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Side slope, crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from mudstone, sandstone and/or shale

Properties and qualities

Slope: 9 to 15 percent
Depth to restrictive feature: 45 to 58 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability (nonirrigated): 3e
Ecological site: CLAYEY (R015XD001CA)

Typical profile

0 to 38 inches: Clay
38 to 58 inches: Clay
58 to 62 inches: Weathered bedrock

Description of Cibo

Setting

Landform: Hills
Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Crest, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Residuum weathered from metasedimentary rock

Properties and qualities

Slope: 9 to 15 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Moderate (about 6.2 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability (nonirrigated): 3e
Ecological site: CLAYEY (R015XD001CA)

Typical profile

0 to 31 inches: Clay
31 to 39 inches: Clay
39 to 43 inches: Unweathered bedrock

Minor Components

Zaca soils

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

131—Diablo and Cibo clays, 15 to 30 percent slopes

Map Unit Setting

Elevation: 200 to 3,000 feet
Mean annual precipitation: 14 to 28 inches
Mean annual air temperature: 59 degrees F
Frost-free period: 275 to 350 days

Map Unit Composition

Cibo and similar soils: 45 percent
Diablo and similar soils: 45 percent
Minor components: 8 percent

Description of Diablo

Setting

Landform: Hills, mountains
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Mountainflank, side slope, crest
Down-slope shape: Convex, linear
Across-slope shape: Convex
Parent material: Residuum weathered from mudstone, sandstone and/or shale

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 45 to 58 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability (nonirrigated): 4e
Ecological site: CLAYEY (R015XD001CA)

Typical profile

0 to 38 inches: Clay
38 to 58 inches: Clay
58 to 62 inches: Weathered bedrock

Description of Cibo

Setting

Landform: Mountains, hills

Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Mountainflank, side slope, crest
Down-slope shape: Linear, convex
Across-slope shape: Convex
Parent material: Residuum weathered from metasedimentary rock

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Moderate (about 6.2 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability (nonirrigated): 4e
Ecological site: CLAYEY (R015XD001CA)

Typical profile

0 to 31 inches: Clay
31 to 39 inches: Clay
39 to 43 inches: Unweathered bedrock

Minor Components

Lodo clay loam

Percent of map unit: 2 percent

Los osos loam

Percent of map unit: 2 percent

Zaca clay

Percent of map unit: 2 percent

Rock outcrop

Percent of map unit: 2 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

132—Diablo and Cibo clays, 30 to 50 percent slopes

Map Unit Setting

Elevation: 200 to 3,000 feet
Mean annual precipitation: 14 to 28 inches
Mean annual air temperature: 59 degrees F
Frost-free period: 275 to 350 days

Map Unit Composition

Cibo and similar soils: 45 percent
Diablo and similar soils: 45 percent
Minor components: 9 percent

Description of Diablo

Setting

Landform: Hills, mountains
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Mountainflank, crest, side slope
Down-slope shape: Convex, linear
Across-slope shape: Convex
Parent material: Residuum weathered from mudstone, sandstone and/or shale

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 45 to 58 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: High (about 9.8 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability (nonirrigated): 6e
Ecological site: CLAYEY (R015XD001CA)

Typical profile

0 to 38 inches: Clay
38 to 58 inches: Clay
58 to 62 inches: Weathered bedrock

Description of Cibo

Setting

Landform: Hills, mountains

Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Mountainflank, crest, side slope
Down-slope shape: Convex, linear
Across-slope shape: Convex
Parent material: Residuum weathered from metasedimentary rock

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Available water capacity: Moderate (about 6.2 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability (nonirrigated): 6e
Ecological site: CLAYEY (R015XD001CA)

Typical profile

0 to 31 inches: Clay
31 to 39 inches: Clay
39 to 43 inches: Unweathered bedrock

Minor Components

Lodo clay loam

Percent of map unit: 3 percent

Los osos loam

Percent of map unit: 3 percent

Rock outcrop

Percent of map unit: 3 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

134—Dune land

Map Unit Composition

Dune land: 90 percent
Minor components: 9 percent

Description of Dune Land

Setting

Landform: Dunes
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread

Interpretive groups

Land capability classification (irrigated): 8e
Land capability (nonirrigated): 8e

Typical profile

0 to 6 inches: Fine sand
6 to 60 inches: Fine sand

Minor Components

Baywood

Percent of map unit: 3 percent

Capistrano soils

Percent of map unit: 3 percent

Beaches

Percent of map unit: 3 percent
Landform: Beaches

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

158—Los Osos loam, 5 to 9 percent slopes

Map Unit Setting

Elevation: 100 to 2,000 feet
Mean annual precipitation: 15 to 25 inches
Mean annual air temperature: 55 to 59 degrees F
Frost-free period: 275 to 350 days

Map Unit Composition

Los osos and similar soils: 85 percent
Minor components: 14 percent

Description of Los Osos

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Mountaintop, crest, side slope
Down-slope shape: Convex
Across-slope shape: Linear, convex
Parent material: Residuum weathered from sandstone and shale

Properties and qualities

Slope: 5 to 9 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Moderate (about 7.3 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability (nonirrigated): 3e
Ecological site: LOAMY CLAYPAN (R015XD049CA)

Typical profile

0 to 14 inches: Loam
14 to 32 inches: Clay
32 to 39 inches: Sandy loam, loam, clay loam
39 to 43 inches: Weathered bedrock

Minor Components

Cibo clay

Percent of map unit: 2 percent

Diablo clay

Percent of map unit: 2 percent

Gazos clay loam
Percent of map unit: 2 percent

Lodo clay loam
Percent of map unit: 2 percent

Millsap loam
Percent of map unit: 2 percent

Rock outcrop
Percent of map unit: 2 percent

Unnamed
Percent of map unit: 2 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

160—Los Osos loam, 15 to 30 percent slopes

Map Unit Setting

Elevation: 100 to 3,000 feet
Mean annual precipitation: 15 to 35 inches
Mean annual air temperature: 55 to 59 degrees F
Frost-free period: 275 to 350 days

Map Unit Composition

Los osos and similar soils: 85 percent
Minor components: 15 percent

Description of Los Osos

Setting

Landform: Hills, ridges
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Mountaintop, crest, side slope
Down-slope shape: Convex
Across-slope shape: Convex, linear
Parent material: Residuum weathered from sandstone and shale

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability (nonirrigated): 6e
Ecological site: LOAMY CLAYPAN (R015XD049CA)

Typical profile

0 to 14 inches: Loam
14 to 32 inches: Clay
32 to 39 inches: Sandy loam
39 to 43 inches: Weathered bedrock

Minor Components

Cibo clay

Percent of map unit: 2 percent

Diablo clay

Percent of map unit: 2 percent

Gazos clay loam
Percent of map unit: 2 percent

Lodo clay loam
Percent of map unit: 2 percent

Millsap loam
Percent of map unit: 2 percent

Lompico
Percent of map unit: 2 percent

Mcmullin
Percent of map unit: 2 percent

Rock outcrop
Percent of map unit: 1 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

161—Los Osos loam, 30 to 50 percent slopes

Map Unit Setting

Elevation: 100 to 3,000 feet
Mean annual precipitation: 15 to 35 inches
Mean annual air temperature: 55 to 59 degrees F
Frost-free period: 275 to 350 days

Map Unit Composition

Los osos and similar soils: 85 percent
Minor components: 14 percent

Description of Los Osos

Setting

Landform: Hills, ridges
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Mountaintop, crest, side slope
Down-slope shape: Convex
Across-slope shape: Convex, linear
Parent material: Residuum weathered from sandstone and shale

Properties and qualities

Slope: 30 to 50 percent
Depth to restrictive feature: 20 to 40 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability (nonirrigated): 7e
Ecological site: LOAMY CLAYPAN (R015XD049CA)

Typical profile

0 to 14 inches: Loam
14 to 32 inches: Clay
32 to 39 inches: Sandy loam
39 to 43 inches: Weathered bedrock

Minor Components

Cibo clay

Percent of map unit: 2 percent

Diablo clay

Percent of map unit: 2 percent

Gazos clay loam
Percent of map unit: 2 percent

Lodo clay loam
Percent of map unit: 2 percent

Rock outcrop
Percent of map unit: 2 percent

Lompico
Percent of map unit: 2 percent

Mcmullin
Percent of map unit: 2 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

183—Obispo-Rock outcrop complex, 15 to 75 percent slopes

Map Unit Setting

Elevation: 200 to 4,000 feet
Mean annual precipitation: 8 to 35 inches
Mean annual air temperature: 45 to 57 degrees F
Frost-free period: 110 to 350 days

Map Unit Composition

Obispo and similar soils: 50 percent
Rock outcrop: 30 percent
Minor components: 20 percent

Description of Obispo

Setting

Landform: Mountain slopes, ridges
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, mountaintop
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Residuum weathered from serpentinite

Properties and qualities

Slope: 15 to 75 percent
Depth to restrictive feature: 8 to 20 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: Very low (about 1.5 inches)

Interpretive groups

Land capability classification (irrigated): 7e
Land capability (nonirrigated): 7e
Ecological site: SHALLOW CLAYEY SERPENTINE (R015XD146CA)

Typical profile

0 to 11 inches: Clay
11 to 18 inches: Weathered bedrock
18 to 22 inches: Unweathered bedrock

Description of Rock Outcrop

Setting

Landform: Hills
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Side slope, crest
Down-slope shape: Convex

Across-slope shape: Convex

Properties and qualities

Slope: 15 to 75 percent
Depth to restrictive feature: 0 inches to lithic bedrock

Interpretive groups

Land capability classification (irrigated): 8
Land capability (nonirrigated): 8

Typical profile

0 to 60 inches: Unweathered bedrock

Minor Components

Diablo clay

Percent of map unit: 7 percent

Henneke clay loam

Percent of map unit: 7 percent

Unnamed

Percent of map unit: 6 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

San Luis Obispo County, California, Coastal Part

192—Psamments and Fluvents, occasionally flooded

Map Unit Setting

Elevation: 10 to 1,500 feet
Mean annual precipitation: 14 to 25 inches
Mean annual air temperature: 57 degrees F
Frost-free period: 275 to 325 days

Map Unit Composition

Fluvents and similar soils: 45 percent
Psamments and similar soils: 45 percent
Minor components: 10 percent

Description of Psamments

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water capacity: Low (about 4.1 inches)

Interpretive groups

Land capability classification (irrigated): 4w
Land capability (nonirrigated): 6w

Typical profile

0 to 12 inches: Sand
12 to 48 inches: Sand
48 to 60 inches: Stratified gravelly sand to gravelly loamy sand

Description of Fluvents

Setting

Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water capacity: Low (about 4.2 inches)

Interpretive groups

Land capability classification (irrigated): 4w
Land capability (nonirrigated): 6w

Typical profile

0 to 12 inches: Loamy sand
12 to 48 inches: Loamy sand
48 to 60 inches: Stratified gravelly sand to gravelly loamy sand

Minor Components

Riverwash

Percent of map unit: 2 percent
Landform: Drainageways

Unnamed

Percent of map unit: 2 percent
Landform: Depressions

Unnamed

Percent of map unit: 2 percent
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear

Corralitos

Percent of map unit: 2 percent

Tujunga

Percent of map unit: 2 percent

Data Source Information

Soil Survey Area: San Luis Obispo County, California, Coastal Part
Survey Area Data: Version 4, Jan 2, 2008

APPENDIX 3

Tree Care Guidelines

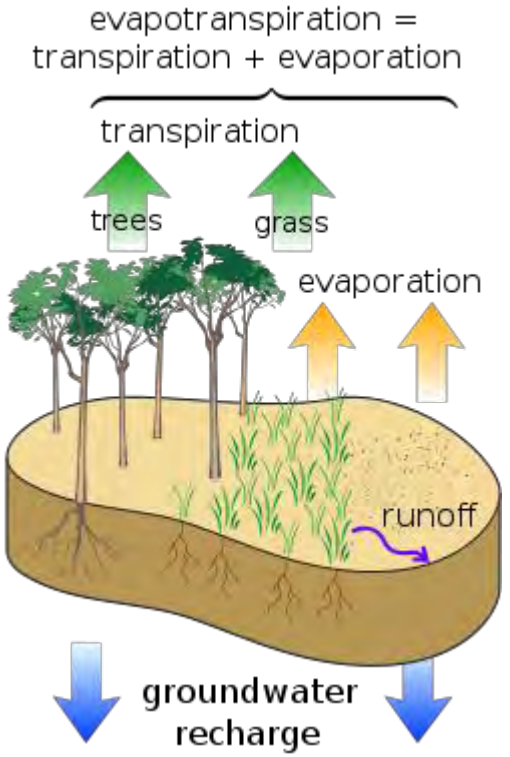
Plant health and vigorous growth are important for young trees to quickly fulfill their landscape purposes. The amount of water that might be saved by being frugal is not worth the possible result of reduced growth or even death. New plantings require more frequent watering (especially at the rootball) until they develop established root systems. Be cautious when transitioning to minimum irrigation because plants must adapt to lower soil moisture conditions.

Shallow watering encourages surface rooting, which makes the tree more vulnerable to drying out during periods of drought. Infrequent, deep soakings encourage the production of a deeper root system and more drought-tolerant trees. If the soil is allowed to dry between irrigations, natural shrinking and swelling improves soil structure. Conversely, frequent, shallow irrigation tends to compact the soil surface and reduce the rate of water infiltration.

Water should be distributed evenly to as much of the root system as possible. Watering the lower trunk (root collar) should be avoided because it can lead to increased fungal decay problems for the tree. Topography affects water distribution. Soil tends to dry faster on hills, while water may accumulate in valleys and low areas. The water application rate should not exceed the soil infiltration rate. If water is applied too quickly, runoff can cause erosion problems and reduced infiltration. Ponding or runoff that results from high application rates wastes water and can be detrimental to root growth and function.

Understanding Soil/Plant/Water Relationships

Plant and soil water loss (evapotranspiration, or ET) are commonly used to schedule irrigations and to indicate how much water to apply. ET rates are dependent on environmental conditions, including light, temperature, wind, and humidity. The California Irrigation Management Information System (CIMIS) supplies this information (http://wwwcimis.water.ca.gov/cimis/welcome.jsp), and your organization may already subscribe to it.



Variations in the weather and length of day, adequacy of previous irrigation or rainfall, depth and spread of roots, and size of the tree top affect the moisture requirements. Besides measuring ET, you can employ some hands-on techniques.

Observe the trees. Most plants wilt noticeably when too little water is available. Leaves that were once shiny become dull, and bright green leaves turn gray-green. You do not want your trees to reach this level of stress.

Feel the soil. With experience, the moisture content can be estimated by the feel of the soil provided it is representative of the site. Collect a sample with a soil probe or shovel. To estimate moisture adequacy, roll or squeeze small sample of soil into a ball. If the soil will not mold into a ball, it is too dry to supply adequate water to plants. If the ball formed will not crumble when rubbed, the soil is too wet. If it can be molded into a ball that will crumble when rubbed, the moisture is probably about right. Sandy soils, however, will crumble even when wet.

Soil moisture sensors, such as tensiometers, can also be used to determine irrigation needs.

By the end of the first year, if the trees are growing vigorously, you may be able to reduce the amount of water applied by 15 to 20 percent, but some trees still may require irrigation on this same schedule.

Container material is the most common type of nursery stock in California, however bare root tree stock in the winter is a good alternative when appropriate.

Selecting Quality Container Nursery Stock

Trees should meet the following minimum standards. Trees that do not meet these requirements should be rejected. Tree planting specifications for selection of quality tree stock should be as follows:

- All trees should be true to type or botanical name as ordered or shown on planting plans or contract orders.
- All trees should have a single, relatively straight trunk with a good taper and branch distribution vertically, laterally and radially with a live crown ratio (distance from bottom of canopy to tree top/tree height) of at least sixty percent (60%). All branches in the canopy should be less than two-third (2/3) the trunk diameter and free of included bark. The trunk and main branches should be free of wounds except for properly made pruning cuts, damaged areas, conks, bleeding and signs of insects or disease.
- All trees should be healthy, have a form typical for the species or cultivar, and be well-rooted and pruned as appropriate for the species.
- All trees should have sufficient trunk diameter and taper so that it can remain vertical without the support of a nursery stake within six months.
- The root ball of all trees should be moist throughout and the crown should show no sign of moisture stress.

Individual tree specifications are as follows:

- The tree should be well rooted in the soil mix. The point where the topmost root in the root ball emerges from the trunk should be visible at the soil surface of the root ball. When the container is removed, the root ball should remain intact. When the tree is lifted, the trunk and root system should move as one.
- All trees should comply with federal and state laws requiring inspection for plant diseases and pest infestations.
- No tree should be accepted that has been severely topped, headed back or lion-tailed.
- No tree should be accepted with co-dominant stems or excessive weak branch attachments that cannot be correctively pruned without jeopardizing the natural form of the species.
- No tree should be accepted that is root bound, shows evidence of girdling or kinking roots, or has roots protruding above the soil (a.k.a. “knees”).
- No tree should be accepted that has roots greater than one-fifth (1/5) the size of the trunk diameter growing out of the bottom of the container.

Planting Specifications

General

The City of Morro Bay shall be the responsible authority for determining the appropriate species or variety of trees planted within the public rights-of-way or easements.

Specific Planting Policies

a. Trees shall be planted in conformance with the approved master plan and in accordance with Public Services Engineering Standard Specifications.

b. A minimum of one street tree shall be planted per lot. Property with frontage of 65 feet or more shall have trees planted at an average maximum spacing of 35 feet (tree to tree) on center. The actual number of trees and spacing for planting will be based on the established canopy width of the designated species as approved by the (department name). To preserve the integrity of the street pattern, where site constraints preclude planting of a street tree within the right-of-way trees may be planted on private property in those instances where an easement for that purpose has been provided.

c. Property owners may plant trees at the owner's expense in accordance with Department standards and subject to prior written approval of the Department.

d. Planting of street trees shall be required at the time the property abutting the right-of-way is developed. The owner of the abutting property shall be responsible for the costs of furnishing, installing and providing a minimum of the first two years of maintenance for all street tree plantings.

e. To maximize the square footage of tree canopy and its benefit to the City, all new and redeveloped properties both residential and commercial shall be required to provide funding for public trees. Fees are established by the City Council. The City through its (contractor or in house staff) will schedule planting of the street trees on or before the time occupancy permits are issued.

f. The Department within 120 days of removal shall replace trees removed by the Department. If possible, no trees will be planted by the City between June 1st and September 30th.

g. Tree removal through a permit by other agencies shall be subject to both a mitigation and replacement fee and shall be replaced by the City's (dept. responsible) within 120 days. If possible no trees will be planted by the city between June 1st and September 30th.

h. Watering of all street trees within the City shall be the responsibility of the abutting property owner, except in reverse frontage and median strips that are maintained by the city. The Department is responsible for all other maintenance after completion of the maintenance period and the written acceptance by the Department.

i. Trees shall not be required to be planted in street right-of-way abutting undeveloped property. If the property owner desires to plant the street right-of-way abutting the owner's undeveloped property, the owner must provide an automatic irrigation system and shall be responsible for the cost of installation and maintenance. The Director may require the posting of a bond of a sufficient amount to guarantee the installation and care of the appropriate improvements.

j. When the sidewalk is located next to the curb, the trees shall be planted a minimum of one foot from the right –of-way line within the public street right-of-way line or easement. Where right-of-way is not available adjacent to the sidewalk, the trees should be planted in easements behind the sidewalk whenever possible. When a tree well in he sidewalk is the only possible solution, a tree will be selected that will not cause or result in long-range curb and or sidewalk damage.

B. In the interest of public safety and maintenance trees shall be planted:

a. A minimum distance from the intersection to provide adequate sight distance. Minimum distance shall be 30 feet from beginning of curve at the curb return, except at secondary and arterial streets; the minimum shall be 50 feet.

b. Five (5) feet minimum from fire hydrants, service walks and driveways.

c. Ten (10) feet minimum from sewer laterals, other utility services laterals and water meters.

d. Fifteen (15) feet minimum from lamp standards.

e. With consideration given to those varieties of trees that will not create a conflict with existing overhead electric utility lines.

f. All trees, other than palm trees, shall be planted a minimum 15-gallon size in residential areas and 24" box size in commercial areas. A 15-gallon or 24" box is defined/determined by the American Association of Nurserymen. Smaller/larger sizes may be permitted/required by the City if warranted.

g. All newly planted trees shall have the nursery stakes removed and replaced with others per Department standards.

h. All staked trees shall be inspected twice a year and the stakes are to be adjusted or removed as necessary.

i. All trees planted in tree wells shall be installed and irrigated in a manner to promote deep rooting per Department standards. All trees in wells shall be installed with an automatic irrigation system.

Percolation and Soil Fertility

Prior to planting the following procedure should be followed:

- Check the soil type and structure. If the soil is compacted, then it should be physically cultivated and have organic material added. Tree should be selected to match the soil type.

Sites for New Street Trees

Typically street trees will be planted where there is an existing vacancy that is unoccupied, as a replacement tree, or if there is a break in the established street tree pattern that should be filled.

Street trees will not be approved for planting under the following conditions:

• The tree would interfere with the growth of other trees in the area.

• The vacant tree well site is overshadowed by other trees nearby creating an unsuitable growing condition for the proposed new tree.

• Utility meters are in the way.

• The tree could block scenic views or views of oncoming traffic.

Street Tree Spacing

The following guidelines shall be followed when planting new street trees. The standard street tree spacing is as follows:

• 30-35 feet on center

• 30 feet from the corner property line

• 20-25 feet on center for smaller statured trees

• 10 feet from driveway approaches

• 10 feet from light poles

• 5 feet from utility meter boxes

• 1 tree per 50feet of property frontage

Planting Procedures

• All planting locations shall be checked for underground conflicts. It is mandatory that Dig Alert is notified to detect all underground utilities prior to any digging.

• Dig planting holes 2-3 times as wide as the container. The depth of the planting pit shall be equal to the size of the rootball. Place the tree in the planting pit so the trunk flare or the top of the rootball is at least one-half inch to 1 inch (1/2” to 1”) above finish grade. In grass covered parkways the top of the rootball shall be higher than the surrounding soil by one-half inch to one inch (1/2” to 1”). In a concrete tree well, the rootball shall be one inch (1”) above the level of the finished surface of the surrounding concrete.

• When obtaining a tree from a nursery, always carry the tree by its container or rootball, never by the trunk.

• After removing the tree from the container, cut circling roots and matted roots off the bottom. Check for any circling roots missed during initial inspection. Any roots less than one-third (1/3) the size of the trunk shall be removed with a sharp pruning tool.

• Before placing the tree in the planting pit, examine the root ball for injured roots and the canopy for broken branches. Damaged roots shall be cleanly cut off at a point

just in front of the break. Broken branches shall be cut out of the canopy making sure that the branch collar is not damaged.

- Backfill with soil removed from the planting hole. Only add fertilizer or compost if soil analysis indicates it is required. Build a temporary four to six inches (4” to 6”) water retention berm around the root ball to allow for establishment watering. Immediately after planting the tree, water it thoroughly by filling the water retention basin twice.
- Eliminate all air pockets while backfilling the planting pit by watering the soil as it is put into the hole. Do not compact the backfill by tamping it down.
- All trees shall be staked with two wooden lodge poles and two ties per pole. The minimum diameter of a lodge pole is two inches (2”), but may be larger for 36” and 48” box trees. Place the tree ties at one-third (1/3) and two-third (2/3) of the trunk height. Drive the stake into the ground approximately twenty-four to thirty inches (24” to 30”) below grade making sure not to penetrate the root ball.
- Mulch with a two to four inch (2” to 4”) layer of mulch where appropriate to conserve soil moisture, provide protection from extreme temperatures and prevent damage from weed eaters. Mulch shall be kept three to four inches (3” to 4”) away from the tree trunk and shall extend at minimum to the boundary of the water retention basin. It may extend further if desired.
- The soil around the new tree shall be kept moist, but not saturated, by watering at least once a week during the cooler winter months and twice a week during the hot summer months.

Tree Planting by Residents

Residents are allowed to plant the approved designated street tree in a parkway or tree well. Residents may plant any size tree they choose however the minimum size acceptable to the City will be in a 15-gallon container. Tree planting may only be done after obtaining a permit issued by the Public Services Department. The City will request that the resident water the tree for the first year to ensure the will survive. The tree will then be incorporated into the City’s tree inventory and become the City’s responsibility to maintain.

Tree Preservation Guidelines

Trees are an essential element of Morro Bay's image and quality of life. Hardscape elements, such as sidewalks, curbs, gutters, and driveways are also indicative of the City of Morro Bay 's commitment to maintain its infrastructure. Over the years, broken and damaged sidewalks, curbs, and gutters and driveways will have to be replaced throughout the City as a result, many trees will be involved. Whenever possible, curbs, gutters, and sidewalks should be meandered away from the tree thereby providing more growing space for roots. Trees will probably also be impacted during new construction and need to be protected. To mange this process and protect existing trees, the following guidelines have been established:

1. **Root Pruning**
   - **a.** Whenever sidewalk, curb gutter or driveway replacements occurs within four feet of a tree, the site will be inspected by an Arborist for tree impact assessment. Root pruning may be performed on any tree that a certified arborist in coordination with the Recreation and Parks Department determines can be safely performed without jeopardizing the life of the tree.

   - **b.** All roots greater than two (2) two inches in diameter must be cleanly cut to encourage good callus tissue. It is recommended that roots be pruned back to the next root node.

2. **Sidewalk Renovation**

   Trees that would be seriously impacted by root pruning during sidewalk replacements will be inspected by a certified arborist in coordination with the Recreation and Parks Department to determine whether:

   - **a.** The repair work can be deferred and a temporary asphalt patch used to eliminate any hazard until other steps can be reviewed and implemented.
   - **b.** The tree can be saved by narrowing the sidewalk near the tree, while still leaving sufficient sidewalk width for disabled access. Standard disability access width is four (4) feet with variances given to 38 inches where absolutely necessary.
   - **c.** Relocating the sidewalk onto private property and negotiating the appropriate easement with the adjacent property owner can save the tree.
   - **d.** The tree can be saved by replacing the sidewalk with minimal disruption of the roots (alternatives: a temporary asphalt sidewalk; rubberized sidewalk; use of root barrier fabric; raising the grade over the roots; and immoral walkway; or other options).

e. To remove the tree and replace it with a minimum 24" boxed replacement tree.

3. Curb and Gutter Replacement

Trees that would be seriously impacted by root pruning during curb/gutter replacement will be inspected by a certified arborist in coordination with the Recreation and Parks Department to determine whether:

a. The repair work can be deferred if it does not create drainage problems or otherwise increase street maintenance unnecessarily and is not a hazard.
b. The tree can be saved by relocating the curb and gutter into the street at lease one foot (ideally two (2) to six (6) feet), thereby narrowing the street width, which in effect may cause the elimination of some street parking.
c. Where six or more trees along one side of a block are severely affected, consideration is to be given to relocating the curb and gutter into the street along the entire block.
d. The tree can be saved by replacing the curb and gutter with minimal disruption of the roots (alternatives: temporary asphalt curb and gutter, use of root barrier fabric: or other similar options).

4. Recovery Period

When significant root pruning on two sides of a tree is required, there will be a 24-month separation between sidewalk and curb/gutter repair to allow time for the tree roots to recover. An exception to this policy may be made if the curb/gutter or sidewalk is relocated away from the tree or other measures are employed that reduce or eliminate root involvement or it is otherwise determined by the (responsible party, department etc.) that the root involvement is minimal.

5. Construction Projects

The following guidelines have been developed to protect trees on City property during construction projects:

a. A root protection zone shall be defined by a minimum 42" high barrier constructed around any potentially impacted tree. This barrier shall be at the drip line or at a distance from the trunk equal to 6 inches for each inch of trunk diameter 4.5 feet above the ground if this method defines a larger area.

b. Should it be necessary to install irrigation lines within this area, the line shall be located by boring, or an alternate location for the trench is to be established.

The minimum clearance between an open trench and a street tree shall be one (1) foot or six inches for each inch of trunk diameter measured at 4.5 feet above existing grade if this method defines a larger distance. The maximum clearance shall be ten (10) feet.

c. At no time shall any equipment, materials, supplies or fill be allowed within the prescribed root protection zone unless otherwise directed by the agency.

It is recognized that failure to abide by these provisions will result in substantial root damage to trees that may not be immediately apparent. The City can therefore assess damages according to the International Society of Arboriculture standards and bill the responsible party.

Tree Pruning Guidelines

Need for Pruning

Trees are pruned principally to preserve their health and appearance and to prevent damage to human life and to property. Broken, dead, or diseased branches are pruned to prevent decay from spreading. Live branches are removed to permit penetration of sunlight and air circulation which helps maintain a strong and healthy tree.

All of Morro Bay's street trees should be completely pruned on aperiodic basis based on species needs. Frequency also depends on funding levels.

Additional tree pruning is done on an "as needed" basis. Specific examples of where "as needed" work is authorized are:

- Pruning tree limbs that interfere with utility lines.
- Pruning tree limbs that interfere with street, parking lot or security light illumination.
- Pruning tree limbs that interfere with buildings or other private or public facilities.
- Pruning hazardous limbs, such as large dead limbs greater than two (2) inches in diameter, hangers, and structurally unsound limbs.
- Pruning tree limbs that interfere with safe vehicular or pedestrian traffic.
- Sucker pruning.

Property Owners Ability to Prune Trees

The public may apply for a permit (a no fee encroachment permit) and hire their own contractor who is licensed and insured to trim the tree(s) according to these standards contained here in.

Tree Pruning Specifications

Any tree work performed on a City tree should be done according to the specifications outlined here in. There are different criteria for pruning depending on the purpose for the pruning.

- Complete Pruning Specifications are used when the entire tree needs to be fully pruned.
- Safety Pruning Specifications require less pruning and are used when specific, possibly hazardous (dead/dying) limbs need removal to eliminate all safety concerns. Safety pruning may be recommended in some circumstances instead of complete pruning. Safety pruning specifications are used for "as needed" pruning and address only safety concerns. Safety pruning includes only the basic requirements to address the problem.

Tree Pruning and Removal near overhead power lines

Where overhead wires pass through trees, safety and reliability of service demand that tree trimming be done in order that the wires may clear branches and foliage by a reasonable distance. The City allows PG&E to maintain their power lines on a yearly basis. PG&E is required by rules and regulations adopted by the California Public Utilities Commission (CPUC) to maintain certain clearances between vegetation and power lines and otherwise maintain its facilities to ensure the safe and reliable provision of electric power to the state. Local jurisdictions do not have the discretion to change or veto these rules and regulations or to second guess the utility's vegetation management program. Thus, they lack the authority to require PG&E to obtain discretionary tree trimming and removal permits because the operation and maintenance (including vegetation management and removal activities) of electric power lines fall within the jurisdiction of the California Public Utilities Commission (CPUC) and is preempted.

Method of Operation

The following trimming specifications are for the use of any pruning of City trees.

a. Lightly trim all trees to lighten and balance the trees, removing no more than 15 to 20% of the tree.
b. Remove dead wood and cross branches.
c. Remove all suckers.
d. Remove all diseased branches.
e. Encourage radial distribution of all branches to provide sufficient number of scaffold branches to fill the circular spaces as concentrically as possible around the trunk.
f. Final trimming cuts shall be made without leaving a stub. Cuts shall be made just outside the shoulder ring area. Extremely flush cuts, which produce large wounds and weaken the tree at the cut, shall not be made.
g. All trimming shall provide adequate clearance for any obstructed (street, directional etc.) sign, streetlight, safety light or other approved standard.
h. Over sidewalks, limbs shall be raised a minimum of seven and a maximum of eight feet from grade to wood. Where sidewalks do not occur or are located on the street side of a parkway, limbs may be retained below the minimum elevation as long as they conform to the natural shape of the species.
i. Over residential streets, limbs shall be raised gradually from ten (10) feet to fourteen (14) feet over traffic lanes from grade to wood giving the appearance of an arch rather than an angle. Near driveways where automated refuse containers are placed, it is imperative to have fifteen (15) feet of clearance. (Insert all, some or none if appropriate)
j. Over arterial streets, limbs should be raised a minimum of twelve (12) and a maximum of fourteen (14) feet from grade to wood. A major arterial street

may require a higher maximum over central traffic lanes for existing, mature canopy-forming limbs. (Use if appropriate)

k. Whether over sidewalk or street, where the lowest limb is attached to a trunk above the desired elevation but extends below that elevation, if possible, rather than removed all together, in order to avoid giving the trunk a skinned appearance.

l. Trimming shall not exceed the amount necessary to achieve the specified elevation at the time of raising. NO attempt to trim to a higher elevation to allow for future growth shall be permitted.

m. No limb over three inches in diameter will be removed without prior (agency name) approval.

n. No lion-tailing. An effect known as "lion-tailing" results from pruning out the inside lateral branches. Lion-tailing, by removing all the inner foliage, displaces the weight to the ends of the branches and may result in sunburned branches, water sprouts, weaken branch structure and limb breakage.

o. Topping, stump cutting, hat raking pollarding, etc. is not acceptable.

Trees with known pathogens

Trees with known pathogens that can be spread with pruning tools shall be pruned using additional caution.

Avoid pruning on windy days in order to reduce the transmission of spores - Sterilize tools in between cuts on diseased trees that can be transmitted on pruning tools. Acceptable sterilization methods include fifty percent (50%) bleach solution for ten (10) minutes or handheld butane torch heating for fifteen (15) seconds per side.

Wood with known wood boring insect infestations shall be chipped into pieces smaller than four inches (4") and spread. - Wood that is infected with disease shall be handled and disposed of in a manner that minimizes the possibility of transmission of disease. This may include:

a. Not working on windy days to reduce transmission of spores.

b. Transporting greenwaste in covered containers.

General Staff Requirements

a. **City Tree Workers** – All persons performing tree work on City trees should be trained according to tree care standards accepted by the International Society of Arboriculture.

b. **Certified Arborists** – Any contracted tree company shall employ a full-time, permanent Certified Arborist, as accredited by the International Society of Arboriculture. This person is responsible for ensuring that the contractor's crews are performing work according these specifications. This individual must be present along with the crew at all times.

c. **Contractor Qualifications** – All contractors are required to have a state contractor's license for tree work (C-61) and that the contractor adheres to the specifications provide in the bid documents.

General Work Site Requirements

a. Proper disposal of all tree green products generated is required mindful of recycling.
b. Assure good traffic control and minimum disruptions to the public.
c. Assure adequate safety of employees and the public.

Wildlife Avoidance/Migratory Bird Treaty Compliance

The Migratory Bird Treaty Act, the Endangered Species Act and local laws protect birds and wildlife located in trees. An arborist that is also a Certified Wildlife Protector can inspect trees. To minimize conflicts with nests, trees should be inspected carefully for nests and cavities using binoculars prior to pruning. The recommended criteria shall apply to tree pruning or removal activities to protect wildlife:

- As feasible, trees should be scheduled for removal during non-breeding/non-nesting season.
- Trees scheduled for pruning or removal during the breeding/nesting seasons shall be visually inspected at ground-level.
- If wildlife is located in the tree, the tree shall not be pruned and the Public Services Department notified.

Safety Tree Pruning Specifications

Safety tree pruning shall consist of the total removal of those dead or living branches as may menace the future health, strength and attractiveness of trees. Specifically, trees shall be pruned according to the Tree Pruning Specifications as outlined previously in this section.

AGENDA NO: B-3

MEETING DATE: November 15, 2013

Memorandum

TO: PLANNING COMMISSIONERS

FROM: KATHLEEN WOLD, PLANNING MANAGER

DATE: NOVEMBER 15, 2013

SUBJECT: SALE OF SURPLUS PROPERTY AT 2783 CORAL (APN 065 386 015)

BACKGROUND

On October 17, 2013 the City Attorney took forward to the City Council Resolution No. 52-13, the adoption of this resolution would approved the real estate agreement for the sale of City owned property at the corner of Coral Avenue and San Jacinto Street (2783 Coral).

The City obtained ownership of the property at the Southeast corner of Coral Avenue and San Jacinto Street in September 1996. At the time of the dedication, the property was a possible site for an additional fire station. In 2005, the City Council determined that alternative sites were better suited for a fire station. Therefore, pursuant to Government Code section 37421 and Resolution No. 30-05, the City notified the citizens of its intention to sell the City-owned property referenced above.

The property has been on the market and an offer is pending for its sale. In accordance with Government Code Section 65402, no property shall be sold until the planning agency reports as to whether this actions conforms with the adopted General Plan.

Staff has diligently worked on pulling together the administrative record that now spans over two decades. City staff is still waiting for a determination from the California Coastal Commission and therefore the Interim City Attorney has advised staff to continue this item until the next Planning Commission meeting of December 4, 2013

RECOMMENDATION

Staff recommends that the Planning Commission open the public hearing and then continue this advertised public hearing to December 4, 2013.

Agenda No: C-1

Meeting Date: November 20, 2013

City of Morro Bay
Public Services/Planning Division
Current Project Tracking Sheet
This tracking sheet shows the status of the work being processed by the Planning Division

New Planning items or items recently updated are highlighted in yellow. Building permit updates are highlighted in green.

Approved projects are deleted on next version of log.

#	Applicant/ Property Owner	Project Address	Date	Permit Numbers	Project Description/Status	Planning Comments and Notations	Building/Fire Comments and Notations	Engineering Comments and Notations	Harbor/Admin Comments and Notations
Hearing or Action Ready									
1	Volk	800 Quintana	10/14/13	UP0-368	**R/R Antennas & TMA Units**	CJ- Project reviewed and ready for Planning Commission meeting 11/20/13. Project to include a height exception to increase height by 3 feet.		RPS: Rcmd Approval with no comments	
2	City of Morro Bay	N/A		n/a	**Urban Forest Management Plan**	Public Works anticipating to present plan at Nov. 20th PC meeting.	No review performed.		
30 -Day Review, Incomplete or Additional Submittal Review									
3	Parker/Steinmann	885 Embarcadero	11/6/13	UP0-372 (Amendment of CUP 28-02)	**Amendment to Use Permit 28-02 to modify location of trash enclosure**	Under initial review.			
4	Turner	356 Yerba Buena	10/30/13	CP0-412	**Single Family Addition & Remodel**	Property located within ESH area. Wetlands delineation study received. Under initial review. CJ			

#	Applicant/ Property Owner	Project Address	Date	Permit Numbers	Project Description/Status	Planning Comments and Notations	Building/Fire Comments and Notations	Engineering Comments and Notations	Harbor/Admin Comments and Notations
5	City of Morro Bay	Morro Creek/Embarcadero	3/14/13 & 10/25/13	UP0-371	**FHWA Approved PE funds - CASB12RP-5391(013) - Phase 1 Morro Creek Trail & Bridge Project**	In process. NEPA review required.RFP released 3-25-13. Planning working on PES form. Working with Althouse to do Botany survey and wetland delineation. Met with consultants on site on May 22, 2013. Consultant selected. PWAB meeting held to discuss bridge design options. Option 1. MND routed to State Clearinghouse. Review period ends 11/26/13. CUP application recvd 10/25/13. Under review.	No review performed.	BCR-Planning and engineering ongoing. Bridge load and configuration selected: H-20 loading will allow our FD vehicles to cross. 30% design complete. Financial limitations may require redesign of trail. Supplemental funds spplied for from SLOCOG.	
6	Buquet	647 Estero	10/16/13	CP0-411	**Admin Coastal Development Permit for new SFR**	KM - Under review.	Review complete, applicant to obtain building permit prior to construction.	DH-Comments provided	
7	Hough	289 Main	10/16/13	CP0-410 & UP0-369	**CDP and CUP to construct a single family home on vacant lot**	CJ- under review		BCR: Conditionally approved: ECP and sewer video required per memo of 10/28/13	
8	Hough	279 Main	10/7/13	CP0-409 &UP0-366	**CDP and CUP to construct a single family home on vacant lot**	Under initial review.	Bldg -- Review complete, applicant to obtain building permit prior to construction. TP/FD Disapprove w/corrections 10/17/13.	BCR: Conditionally approved: ECP and sewer video required per memo of 10/28/13	
9	Adamson	1000 Ridgeway	9/12/13	CP0-408	**Admin Coastal Development Permit for Demo/Reconstruct of single family residence.**	Under initial review. Parking Exception previously granted by Planning Commission for reduced driveway length Oct. 2012. CJ. KM - Correction letter sent 10/11/13.	Bldg -- Review complete, applicant to obtain building permit prior to construction	BCR: Resubmit plans to address comments noted in memo of 10/14/13 - drainage report and street widening required	
10	TNF Ventures - Foster	500 Dawson	8/16/13	CP0-405	**Admin Coastal Development Permit for new SFR on vacant lot**	KM- Under review. KM - Concurrent permitting. Correction letter sent 9-11-13. Corrections received and under review.	Bldg -- Review complete, applicant to obtain building permit prior to construction.FD Approval CPO 405 9/11/13	JW: Conditionally approved with conditions noted in memo of 9/11/13. Revise Building plans based on memo of 9/11/13	

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11	Sonic	1840 Main St.	8/14/13	UP0-364 & CP0-404	**Conditional Use Permit and Coastal Development Permit to develop Sonic restaurant.**	Under initial review. Comment letter sent 9/10/13. CJ. Spoke w/ applicant 10/3 re: traffic study. CJ. Public Works & Fire comments received & forwarded 10/8/13 to applicant. Comments from Cal Trans receivd 10/31 and forwarded to Applicant. Applicant requested meeting w/ City staff & Cal Trans to review project requirements.	Bldg -- Review complete, applicant to obtain building permit prior to construction.FD-Disapprove UPO 364/CPO 404 9/11/13	RPS: Intial conditions provide by memos of 9/10/13 and 10/14. Met with Caltrans on 10/17 and are awaiting their comment letter. Left messages for project Architect 10/18/13 advising him of Caltrans concerns.	
12	Redican	725 Embarcadero Rd.	6/26/13	UP0-359	**Use Permit for seven boat slips and gangway**	Under review. Incomplete letter sent 7-23-13. Resubmittal received on October 1, 2013	Bldg -- Review complete, applicant to obtain building permit prior to construction	N/R	
13	AT&T	788 Main St.	6/10/13	UP0-362 & CP0-403	**Special Use Permit for Recycling Container Enclosure in Parking Lot**	CJ- Application under Review. Deemed Incomplete. Letter sent 7-9-13. Resubmittal received 11-5-13. CJ	Bldg -- Review complete, applicant to obtain building permit prior to construction.TP-FD Disapprove Express Check 3/18/13 & FD Disapprove UPO 362 7/23/13	RS- Rvw complete no frontage improvements required	
14	Goodwin	2920 Juniper	5/21/13	CP0-399	**Coastal Development Permit for new SFR on vacant lot**	CJ- Application deemed incomplete. Requested corrections 6/10/13.	No review performed.	RS&DH-Plan revisions rqd per memo 5/29/13	
15	Diaz	1149 Market			**Business License App for Mexican Market.**	Directed Applicant on 11-27-12 to re-submit parking plan demonstrating compliance with Zoning Ordinance. Parking plan submitted demonstrating seven parking spaces 12-20-2012. Sent letter requesting plan corrections 1-15-13. Waiting for response from applicant.	Review complete, applicant to obtain building permit prior to construction.	N/A	
16	City of Morro Bay	N/A			**MND for Chorro Creek Stream Gauges**	Applicant requesting meeting for week of 9/9/13. SWCA performing the environmental review-tentatively scheduled for 10/14/2013	No review performed.	N/R	

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Continued projects									
18	City of Morro Bay	End of Nutmeg	1/18/12	UP0-344	**Environmental documents for Nutmeg Tanks.** Permit number for tracking purposes only County issuing permit. Demo existing and replace with two larger reservoirs. City handling environmental review	KW--Environmental contracted out to SWCA estimated to be complete on 4/27/2012. SWCA submitted draft I.S. to City on May 1, 2012. MR-Reviewed MND and met with SWCA to make corrections. In contact with County Environmental Division for their review. MND received by SWCA on 10/7/12. MND out for public notice and 30 day review as of 11/19/12. 30 day review ends on 12/25/12. No comments received. Scheduled for 1/16/13 Planning Commission meeting and then to be referred back to SLO County. Planning Commission continued this item to address concerns regarding traffic generated from the removal of soil. In applicant's court, they are addressing issues brought up by neighbors during initial P.C. meeting. Project has been redesigned and will be going forward with concrete tanks. Modifications to the MND are in process.	No review performed.	BCR- New design concept completed. Needs new MND for concrete tank, less truck trips.Neighborhood mtg held 9/27. Neighbors generally support new design that reduces truck trips by 80%. Concrete batch plant set up on site will further reduce impact.	
Ongoing Projects									
19	City of Morro Bay	N/A				CDBG funding to CAPSLO for operation of the Prado Day Center & Homeless Shelter	Staff has ongoing responsibilities for contract management.	No review performed.	N/R	
Projects in Process									
20	Frye	244 Shasta		3/6/13	CP0-396 and AD0-081	**Secondary Unit and Parking Exception.**	Proposed creation of secondary unit from garage. Parking exception. First Noticed 5-16-13. Setbacks noted on plan incorrect, therefore project required to be re-noticed on 6/26/13. Applicant now required to comply with or amend existing permit #CP0-013 before proceeding with proposed project.	No review performed.	N/R	

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21	LaPlante	3093 Beachcomber	11/3/11	CP0-365	**New SFR.** Resubmittal and Phase 1 Arch report 2/6/12.	SD-- Incomplete Letter 12/12/11. Phase 1 Arch Report required and Environmental Document. Environmental in process. Letter sent 4/11/2012 requesting environmental study. Applicant has requested a meeting on August 9, 2012 to review environmental study request. MR-Met with Applicant and discussed potential impacts of project and CEQA information requested to complete MND. Applicant will provide MND fees with submittal of Biological report. 8/9/12 MR met with applicant and owner to discuss environmental issues. Would require a detailed MND. Applicant is still considering preparation of Biological Report. Staff met with applicant and his agent, discussed elements of the project especially the Biological report needs to be prepared. Draft biological report received and under review. Project referred to environmental consultant and Coastal. MND in process.	Review complete, applicant to obtain building permit prior to construction.	DH comments submitted 1/18/2012. Provide EC, drainage report, SW mgmt.	No Comments to date

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Environmental Review									
67		Climate Action Plan				Routed Initial Study - Negative Declaration to State Clearinghouse 10/28/13. Scheduled for Planning Commission 12/4/13 and Council adoption 12/10.			
68	Lucky 7	1860 Main	3/12/13	CP0-394	**Construct Fuel Island Canopy**	CJ- Requested additional info. 3-29-13 Resubmittal received 7-22. Project deemed not exempt from CEQA. Initial Study in process.	Review complete, applicant to obtain building permit prior to construction. FD Approval CPO 394 8/23/13	N/R	
69	Sequoia Court Estates	670 Sequoia	4/3/12	UP0-349 & S00-112	**Parcel Map. 3 parcels and an open space parcel.** A revised subdivision map was submitted for review on August 6, 2012.	Incomplete letter sent to applicant/agent. Project submitted without necessary materials for processing. Applicant submitted a revised plan reducing the number of lots, and is providing additional information as requested addressing City requested information. Additional information submitted; waiting for biological report. Report should be submitted in September 2012. Needs drainage plans. MR: Second incomplete letter sent 11/13/12. MND in preparation. Susan Craig, Coastal Commission staff confirmed property is entirely outside coastal zone. Met with applicant on 1/30/2013 project moving ahead, staff waiting on resubmittal. Applicant directed to obtain wetland determination. Project waiting on applicant. Resubmittal received 9-10-13. Corrections sent to applicant.	Review complete, applicant to obtain building permit prior to construction. TP/FD Disapprove SOO-112 w/corrections 10/18/13.	BCR- comments submitted 4/47/12. Drainage issues need to be addressed.	

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Grants										
70	Community Development Block Grant (CDBG) / HOME Program through Urban County Consortium	Downtown area	City-wide	11/13/12		**CDBG Applications received 10/12/12. Nine applications received. Draft funding recommendations to be adopted at 11/13/12 City Council Meeting. Final Funding Approval heard at 2-13-13 City Council Meeting. Final action taken by County Board of Supervisors 3-5-13.**	Application recommended for funding is Pedestrian Accessibility Improvements for City of Morro Bay. Council approved on 11-13 funding for Senior Nutrition and Pedestrian Accessibility. 2nd Funding Workshop to be held at Community Center on 1/9/13. Subreceipient Agreement and NEPA Environmental Review under review. CEQA NOE filed. NEPA clearance obtained 6/21/13. FY2014 Funding Cycle: Applications released on 9/9/13 and due on 10/15/13. Needs Workshop held on 9/16/13 at City of Atascadero. Draft funding recommendtions to Council on 11/12/13. Council approved staff recommendation on 11/12/13.	No review preformed.	2014 application submitted 10/14/13	
71	Sustainable Communities	City-wide				**$900,000 Grant Opportunity for funding for long-range planning activities including LCP update, General Plan. State has not released grant information for the next application cycle.**	Draft guidelines not yet released for 3rd round of funding.	No review performed.	N/A	
72	Coastal Conservancy, California Coastal Commission, California Ocean Protection Council	City-wide				**$250,000 Grant Opportunity for funding for LCP update to address sea-level rise and climate change impacts.**	Application submitted July 15, 2013. Awaiting results. Agency requested additional information and submitted 10-7-13.	No review performed.	N/A	
73	Coastal Conservancy Climate Ready Grant	City-wide				**$200,000 Grant Opportunity for funding for a wide range of activities that address climate change impacts.**	Application submitted 8-28-13. Awaiting results.	No review performed.	N/A	

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74	Coastal Commission LCP Assistance Grant Program	City-wide				**$1,000,000 Grant funding for Applications of $50,000-$300,000 in funding to assist with update of Local Coastal Plan to address effects of climate change and sea-level rise.**	Application to be submitted. Deadline date 11-22-13 with funding announcements to be announced in early 2014.	No review performed.	N/A	

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Project requiring coordination with another jurisdiction									
75	City of Morro Bay	Outfall			**Original jurisdiction CDP for the outfall and for the associated wells**	Coastal staff is working with staff. Coastal letter received 4/29/2013.	No review performed.	City provided response to CCC on 7/12/13. Per Qtrly Conference Call CCC will take 30days to respond	
76	City of Morro Bay Desal Plant	170 Atascadero			**Project requires a Coastal Development Permit for upgrades at the Plant. Final action taken Sent to CCC but pursuant to their request the City has rescinded the action.**	Waiting for outcome from the CDP application for the outfall	No review performed.	BCR- Phase 1 Maint and Repair project is underway. Desal plant start-up scheduled for 10/15	
Preapplication projects									
77	Galvin	861 Quintana			Applicant/agent requests to fence and rock vacant lot	Commercial structure demolished pursuant to approved CDP. Meeting scheduled to discuss issues regarding expansion of the U-Haul business without benefit of permit. Applicant finalizing plans to submit.	No review performed.	N/A	
78		Little Morro Creek Road			BMX park	Permit process info provided to applicant on 7-23-13. Staff met with applicant on 8/30/13 to provide further application requirement info.	No review performed.	Met w/ applicant 10/15/13 to determine project scope	
79		110 Orcas			Inquires regarding construction of a new house on a vacant lot with wetlands (per U.S. Wildlife mapper)	Staff met with seller and potential buyers to explain code requirements	No review performed.	N/A	
80	Triad Homes	253 Main			Discussions on a parcel map, dividing residential use from commercial uses		No review performed.	N/A	

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Final Map Under Review									
81	Zinngarde	1305 Teresa	5/9/11	Map	**Final Map. Public Works review of the final map, CCR's and conditions of approval. Plans 8/5/11. Applicant resubmitted CCRS. Incomplete submittal as of 1/23/12. Resubmitted 4/4/2012**	KW--Comments given to applicant, held meeting on 9/27/2011 regarding comments. Biological being review by applicant to address drainage issues. Biological Report approved by Planning as well as the CCRs. Tentative map improvements.	Review complete, applicant to obtain building permit prior to construction. Public Improvements under construction.	DH - PIP submitted PIP to be built prior to map recordation. Public Improvements under construction.	
82	Medina	3390 Main	10/7/11	Map	**Final Map. Issues with ESH restoration. Applicant placed processing of final map on hold by proposing an amendment to the approved tentative map and coastal development permit. Applicant proposed administrative amendment. Elevated to PC, approved 1/4/12. Appealed, scheduled for 2/14/12 CC Meeting. Appeal upheld by City Council, and project with denied 2/14/12. map check returning for corrections on 3/9/12**	SD--Meeting with applicant regarding ESH Area and Biological Study. MR- Received letters from biologist regarding revegetation on 9/2/12. Letter sent to biologist. Recent Submittal reviewed and memo sent to PW regarding deficiencies. Initial review shows resubmitted map does not meet the 50 foot ESH boundary.	No review preformed.	DH - resubmitted map and Biological study on Dec 19th 2012. PW has completed their review. Received a letter from Medina's lawyer and preparing response. PW comments sent to RS to be included with his response letter. RS said to process map for CC. Letter being prepared to send to applicant to submit mylars for CC meeting.	

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Projects Continued Indefinitely, No Response to Date on Incomplete Letter or inactive									
83	Maritime Museum Association (Larry Newland)	Embarcadero	11/21/05	UP0-092 & CP0-139	**Embarcadero-Maritime Museum (Larry Newland)**. Submitted 11/21/05. Resubmitted 10/5/06, tentative CC for landowner consent 1/22/07 Landowner consent granted. Resubmitted 5/25/07. Resubmitted additional material on 9/30/09. Applicant working with City Staff regarding lease for subject site. Applicants enter into agreement with City Council on project. Applicant to provide revised site plan. Staff processing a "Summary Vacation (abandonment)" for a portion of Surf Street. Staff waiting on applicant's resubmittal. Meeting held with applicant 2/23/2011. Staff met with applicant 1/27/11 and reviewed new drawings, left meeting with applicant indicating they would be resubmitting new plans based on our discussions.	KW--Incomplete 12/15/05. Incomplete 3/7/07. Incomplete Letter sent 6/27/07. Met to discuss status 10/4/07 Incomplete 2/4/08. Met with applicants on 3/3/09 regarding inc. later. Met with applicants on 2/19/2010. Environmental documents being prepared. Meeting held with city staff and applicants on 2/3/2011.	Please route project to Building upon resubmittal.	An abandonment of Front street necessary. To be scheduled for CC mtg.	
84	James Maul	530, 532, 534 Morro Ave	3/12/10	SP0-323 & UP0-282	**Parcel Map.** CDP & CUP for 3 townhomes. Resubmittal 11/8/10. Resubmittal did not address all issues identified in correction letter.	KW-Incomplete letter sent 4/20/10. Met with applicant 5/25/10. Letter sent to applicant/agent indicating the City's intent to terminate the application based on inactivity. City advised there will be a new applicant and to keep the application viable.MR: Received letter from applicant's rep 11/15/12 requesting project remain open. Called B. Elster for further information. Six month extension granted.	Please route project to Building upon resubmittal.	N/A	

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Projects going forward to Coastal Commission for review										
85	City of Morro Bay		Citywide	2/1/13	Ordinance 556	AMENDING THE MUNICIPAL CODE BY ADDING CHAPTER 17.27 ESTABLISHING REGULATIONS AND PROCEDURES ENTITLED "Antennas and Wireless Telecommunications Facilities" AND MODIFYING CHAPTER 17.12 TO INCORPORATE NEW DEFINITIONS, 17.24 to MODIFY primary district matrices to incorporate the text changes , 17.30 to eliminate section 17.30.030.F "antennas", 17.48 modify to eliminate section 17.48.340 "Satellite dish antennas" and Modify THE TITLE PAGE TO REFLECT THE NEW CHAPTER.	Application for Amendment submitted to Coastal Commission 9-11-13.	No review preformed.	N/A	

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Projects Appealed or Forwarded to City Council									
86	City of Morro Bay	Citywide	6/19/13	A00-015	**Sign Ordinance Update.** Text Amendment Modifying Section 17.68 "Signs"	Text Amendment Modifying Section 17.68 "Signs". Planning Commission placed the ordinance on hold pending additional work on definitions and temporary signs. 5/17/2010. PC made recommendations and forwarded to Council. Scheduled for 5/10/11 CC meeting, item was continued. Item heard at 5/24/11 City Council Meeting. Interim Urgency Ordinance approved to allow projecting signs. A report on the status of this project brought to PC on 2/7/2011. The item to be back to City Council first meeting in Nov. Workshops scheduled 9/29/11 & 10/6/11 .-Workshop results going to City Council 12/13/11. Continued to 1/10/12 CC meeting. Staff Report to PC. Project went to 5/2/2012. Currently an intern is working on the Sign Ordinance. Update due to City Council in June 2013. Draft Sign Ordinance reviewed by PC on 6/19/13. Continued to 7/3/13 PC meeting for further review. PC has reviewed Downtown, Embarcadero, and Quintana Districts as well as the Tourist-Oriented Directional Sign Plan. 8/21/13 PC meeting scheduled to review North Main Street District. Final Draft of Sign Ordinance approved at 9/4/13 PC meeting with recommendation to forward to City Council. Council directed staff to do further research with local businesses. First workshop to be held 11/14 with Quintana area businesses.	No review performed.	N/R	
87	Perry	3202 Beachcomber	9/8/11	AD0-067	**Variance.** Demo/Reconstruct. New home with basement in S2.A overlay. Variance approved for deck only; the issue of stories was resolved due to inconsistencies in Zoning Ordinance.	Variance approved at 8/15/12 PC meeting. Appealed by 3 parties to City Council. Appeal to be heard. City Attorney reviewing.Appeal in abeyance until coastal application complete.	Review complete, applicant to obtain building permit prior to construction.	See above	
Projects in Building Plan Check									
88	Sangren	675 Anchor	11/28/12	B-29813	SFR Addition	Requested corrections 1/9/13. CJ.	BC- Returned for corrections 1/9/13.	N/A	
89	LaPlante	3093 Beachcomber	11/3/11	B-29586	New SFR	SD--Incomplete Letter 12/12/11. Phase 1 Arch Report required and Environmental Document. Incomplete letter sent 2/2012. MR: Met with applicant to go over environmental issues.	BC- Application on hold during planning process	DH- Provide SW mgmt, drainage rpt, EC.	
90	Hodges	2968 Birch	10/14/13	B-30022	Deck	KM - Requested corrections 10/18/13.	BC- Returned for corrections 10/21/13.	N/R	
91	Peter	190 Dana	5/30/13	B-29983	Addendum to accommodate potential future secondary unit	CJ- conditionally approved subject to amending CDP 6-25. Approved 7-10-13	BC-issued.	BCR- Revised Drainage rpt approved 9/5/13	
92	Foster	500 Dawson	8/15/13	B-29983	New SFR	CJ- Needs CDP	BC- Resubmitted 10/28/2013.	JW- correction given 9.10.13, frontage req.	

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93	Bylo	593 Driftwood	3/12/13	B-29870	SFR Addition	Disapproved. Compact in-fill permit conditions not met. 3-27	BC-Returned for corrections 3/28/13.	DH- Provide SW mgmt, drainage rpt, EC.	
94	Imani	571 Embarcadero	4/23/12	B-29695	Commercial alteration, addition	CJ- Incomplete Memo 11/26/2012 sent to applicant's representative. Correction sent 7/22/13 and 9/8/13 and 10/29/13.	BC- RTI pending bond.	BCR- Approved 5/23/12	
95	Vaughn	601 Embarcadero	10/11/13	B-29997	Commerical TI	KM - Under review.	BC- under review. TP/FD	N/R	
96	Fowler	1215 Embarcadero	7/10/13	B-29695	Construct Phase 1-A Water site improvements.	CJ-resubmittal received 8/30/13. Correction requested 9/11/13.	BC- Issued 10/16/13.	RS- CCC approved use of vib-hammer w/o noise monitoring	
97	PG&E	1290 Embarcadero	10/2/13	G-040	Soil Removal	CJ- Needs CDP	BC- on hold pending planning process.	Memo of 11029/13. CDP application should address soil revegetationor stablization of	
98	Harbor	1620 Embarcadero	4/4/13	B-29888	Construct restroom and storage mezzanine within existing "Cal Poly Building."	CJ-requested corrections 4-15 CJ - Resubmittal received and correction sent 8/30/13.	BC-Returned for corrections 9/10/12.	BCR- approved	
99	Cribbs	2360 Greenwood	7/26/13	B-299720	SFR Addition	KM - Disapproved due to setback issues.	BC- under review.	JW- correction given 8.23.13, frontage req.	
100	Helfelt	2940 Greenwood	5/21/13	B-29924	New SFR	KM - Approved 9/11/13.	BC-RTI 10/14/13.	RS - Awaiting Plan revisions	
101	Methodist Church	3000 Hemlock	8/16/12	B-29752	Construct new modular classroom, site work.	Approved by MR 8-30-12	BC- out for pw corrections.	BCR- 11/01/13 Revised Drainage report received and is under review	
102	Ferguson	605 Ironwood	4/24/13	B-29861	New SFR	KM - Approved 10/15/13.	BC- resubmitted 10/2/13. FD Approval CPO 400 8/22/13	BCR-11/01/13- Developer reduced impervious area to reduce requirements.	
103	Vinson	194 Island	9/25/13	B-30015	SFR Addition	CJ- approved	BC- Issued 10/21/13..		
104	Gomzalez	481 Java	10/6/13	B-30029	SFR Addition/ Remodel	KM - Disapproved due to nonconforming issues 10/22/13.	BC- Issued 10/11/13.	Plans returned w/o comment until Plng issue resolved	
105	Douglass	2587 Laurel	10/14/13	B-30030	SFR Addition/ Remodel	KM - Under review.	BC- under review.	JW: Uner review	
106	Naran	2176 Main	5/13/13	B-29918	Partial change of occupancy	CJ - Corrections sent 5-29	BC-returned for corrections 6/11/2013.	N/R	
107	Markowitz	589 Morro Avenue	8/17/11	B-29820	Roof Deck	Under review. Spoke with architect 1/23/13 to clarify requested corrections. Architect to discuss with applicant. KM- Under review.	BC- Corrections	N/A	
108	Rodgers	950 Napa	9/3/13	B-30999	New SFR	KM - Needs CDP.	BC- under review.	JW: Under review	
109	Frantz	499 Nevis	9/23/12	B-29510	New SFR	CJ- approved	BC- RTI 9/16/2013.	N/A	
110	Adamson	1000 Ridgeway	9/11/13	B-30008	New SFR	CJ - needs CDP	BC- under review.	BCR: Revise plans per memo of 10/14/13	
111	Frye	244 Shasta	5/7/13	B-29910	Garage to Second Unit conversion	KM - Needs to comply with or amend existing CDP.	BC- on hold pending planning process.	BCR-approved 5/13/13	
112	Inn at MB	60 State Park	6/27/13	B-29884	Main Building Remodel	CJ- Corrections sent 7-17	BC- Returned for Corrections 9/24/13.	RS - Referred to State Parks for comment on frontage imprvmts	

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Projects & Permits with Final Action									
63	City of Morro Bay	170 Atascadero	1/9/13	CP0-389	**Coastal Development Permit for water treat plant (Desal) modifications.**	Permit approved at 2-6-13 PC Mtg. Letter received from Coastal Commission staff regarding permit and response sent 2-15. Final action pending until resolution with Coastal Commission	No review preformed.	BCR-7/15/13 Repair and maintenance underway. 10/15/13 Phase 1 completed. 11/13/13 Plant curently operational 24/7 during State water shutdown in November	
Final Action Sent to Coastal Commission									
64	Rogers	950 Napa	9/3/13	CP0-406 and UP0-370	**Admin Coastal Development Permit and Minor Use Permit for new SFR on vacant lot**	KM - Correction letter sent 10/3/13. Needs to obtain a MUP. Corrections received 10/21/13. Site noticed 10/25/13. Under review. Permits approved 11/14/13.	Bldg -- Review complete, applicant to obtain building permit prior to construction	JW- correction given 8.23.13, frontage req.	
65	Held	901 Embarcadero	4/26/13	UP0-342	**Amendment to Use Permit and Mitigated Negative Declaration. Adding new water lease area and proposing floating dock for the Harbor Center project.**	Plans submitted and project description. CJ- under initial review. Project deemed incomplete, letter sent to applicant/agent 5/20/13. Resubmittal received 5/31/13. Initial Study/Draft MND routed to State Clearinghouse. Review and comment period in progress until 9/30/13. CJ. Schedule for Council approval 11/12. Council approved and adopted the MND on 11/12/13.	Review complete, applicant to obtain building permit prior to construction.TP-Cond.App.w/FDCode Req.5/7/13	RS- Rcmd Approval subject to conditions in Memo of 5/29/13	
66	Ontiveros	1598 Main	9/27/13	UP0-367	**Minor Amendment to CDP and CDP for tire sales and installation new business, City Tires**	KM - Under review. Awaiting complete building plans to use for review of planning permit application. Letter of substantial conformance issued on 11/8/13.	Review complete, applicant to obtain building permit prior to construction.	N/R	
67	Novak/Shepherd	2981 Juniper		CP0-407 & ADO-084	**Secondary Unit and Parking Exception.**	KM - Correction letter sent 10/2/13. Corrections received 10/7/13. Site noticed 10/17/13. Comment period ends 10/28/13. Permit approved 11/4/13.	Bldg- denied with corrections.	RPS: Revise plans per memo of 9/18/13	