Staff Report to the Planning Commission

Application Number: 07-0212

Applicant: Powers Land Planning (Ron Powers)
Owner: Ernest and Ruth Antolini
APN: 026-031-32,-46

Agenda Date: January 28, 2009
Agenda Item #: 9
Time: after 9:00 a.m.

Project Description: Proposal to demolish an existing commercial building, construct three new commercial buildings of 6,316, 9,216 and 14,497 sq. ft.; excavate approximately 1,294 cu. yds. of earth and fill approximately 495 cu. yds. for a total of 799 cu. yds. of export and to construct associated site improvements to include parking and landscaping. Project includes creation of a Master Occupancy Program and Lot Line Adjustment.

Location: 2776 and 2806 Soquel Avenue

Supervisoral District: First District (District Supervisor: John Leopold)

Permits Required: Amendment to Permits 174-U, 74-614 PUD, 81-534 PUD, 82-974 PUD and 83-0401 PD

Lot Line Adjustment

Technical Reviews: Soils Report Review, Traffic Impact Analysis, Drainage Study & Environmental Site Assessment

Staff Recommendation:

- Certification of the Mitigated Negative Declaration as complying with the requirements of the California Environmental Quality Act
- Approval of Application 07-0212, based on the attached findings and conditions.

Exhibits

A. Project plans
B. Findings
C. Conditions
D. Initial Study

Parcel Information

Parcel Size:	2.64 acres total
Existing Land Use - Parcel:	Service commercial/vacant
Existing Land Use - Surrounding:	Service commercial
Project Access:	Soquel Avenue
Planning Area:	Live Oak
Land Use Designation:	C-S (Service Commercial)
Zone District:	C-4 (Commercial Sevice)
Coastal Zone:	__ Inside _X_ Outside
Appealable to Calif. Coastal Comm.	__ Yes __ No

Environmental Information

Geologic Hazards:	Not mapped/no physical evidence on site
Soils:	N/A
Fire Hazard:	Not a mapped constraint
Slopes:	N/A
Env. Sen. Habitat:	Not mapped/no physical evidence on site
Grading:	See report
Tree Removal:	No trees proposed to be removed
Scenic:	Not a mapped resource
Drainage:	Existing drainage adequate
Archeology:	Not mapped/no physical evidence on site

Services Information

Urban/Rural Services Line:	_X_ Inside __ Outside
Water Supply:	City of Santa Cruz Water Department
Sewage Disposal:	Santa Cruz County Sanitation District
Fire District:	Central Fire Protection District
Drainage District:	Zone 5

History

The current proposal is an amendment to the following permits: 174-U, 74-614 PUD, 81-534 PUD, 82-974 PUD, and 83-0401 PD.

Project Setting

The proposed project, demolition of an existing commercial building and construction of three new commercial buildings, would be located on the south side of Soquel Drive. The parcel was formerly the site of a masonry supply sales business that included a large storage yard and is predominately paved. The masonry supply yard has been removed. Other elements of the proposal include construction of associated parking, access and landscaping.

The parcel where the new commercial buildings are proposed is generally flat and vegetation on the site consists primarily of minimal landscape trees and shrubs associated with the existing commercial development. The nearest watercourse and associated riparian area is Arana Gulch, located approximately 500 feet to the north of the parcels.

Primary access to the proposed project would be from Soquel Drive with secondary access from Bostwick Lane.

Project Description

The applicant proposes to demolish an existing commercial building and construct three new buildings of 6,316; 9,216 and 14,497 square feet on two existing parcels located at 2776 and 2808 Soquel Avenue, where three commercial buildings currently exist. Two of the existing buildings are proposed to be retained as part of the overall development. The occupancy of the existing buildings includes Santa Cruz Electronics in the building nearest Soquel Avenue, Brake Supply and Antolini Masonry Supplies in the rear building, and Bay Plumbing in the western-most building. The Bay Plumbing building is proposed to be removed. The rear portion of the properties was previously used for masonry supply storage, but that use has been relocated.

Zoning & General Plan Consistency

The subject property consists of two lots, located in the C-4 (Commercial Sevice) zone district, a designation that allows industrial uses. The project site is adjacent to conforming service commercial uses to the north, west and east, and Green Acres elementary school is located directly south of the proposed project. Zoning in the surrounding area is Commercial Service (C-4) with the school property zoned Public Facility (PF). There are community commercial uses and zoning (C-2) located approximately 225 feet west of the subject property on Soquel Avenue. The subject parcels have a General Plan designation of Commercial Service (C-S) and other surrounding propertieshave the same designation.

Lot Line Adjustment

The applicant is requesting a Lot Line Adjustment (LLA) with this development application. The LLA is shown on Sheet T1 of Exhibit A. The new lot line would essentially split the entire area down the middle of the driveway. This revised location would provide each half of the property containing buildings and the required parking for each. Staff supports this LLA since the revised parcels will be self-contained for planning requirements, and all of the Findings for the Lot Line Adjustment can be made. Easements for access on each parcel will allow both parcels to use the shared driveway.

Both lots currently are above the minimum area standard for the C-1 zoning and will be above the minimum after the LLA (see table below).

AREA TABLE		
Parcel	**APN: 026-031-46**	**APN: 026-031-32**
parcel before	68,034.66 sq. ft.	43,648.17 sq. ft.
adjustment	- 16,793.05 sq. ft.	+ 16,793.05 sq. ft.
area after	51,241.61 sq. ft.	60,441.21 sq. ft.

Master Occupancy Program

The project is located in the C-4 zone district. All uses allowed in the C-4 zone district as shown in the Uses Chart (County Code Section 13.10.332(b) - Commercial Uses) are permitted. All "Changes of Use" must also be consistent with the C-4 uses chart.

Those uses that do not change the intensity of use can be approved with a Level 1 Change of Use. Any allowed use that is an intensification of use, as defined in County Code 13.10.700-I, will require an amendment to this permit.

In addition, the following use restrictions apply to this permit:

1. Outdoor storage shall not be permitted except for the designated Storage Yard adjacent to Building 4 as shown on Exhibit A.
2. Automobile service stations are not permitted.
3. Temporary uses shall require a Level 3 permit.

Grading and Drainage

The site is relatively flat, and grading is proposed to remove loose fill and to create positive drainage flow. Approximately 1,294 cubic yards of excavation and 495 cubic yards of embankment is proposed, for a net export of 799 cubic yards. Buildings and minimal landscaping currently cover the majority of the site, and the remainder of the site is covered by pavement or compacted soil in the area formerly occupied by the masonry supply storage.

The existing site drains to the center and discharges to the west, to a 24" reinforced concrete pipe (RCP) that connects to the Soquel Avenue storm drain system. This flow will be maintained and enhanced through minimal grading to improve stormwater flow and through the installation of additional catch basins and the use of Best Management Practices (BMP's) to provide filtration and infiltration of site runoff as well as water quality treatment of discharging runoff. Of the 2.6 acre total site area, 2.4 acres of the site will be drained into a gravel filtration/infiltration trench located beneath the porous pavement parking area located in the middle of the site, on the western parcel boundary. This system provides storage of 2,779 cubic feet of runoff, which is greater than the volume required for a 10-year detention system.

Traffic and Parking Analysis

Parking is provided for a total of 110 vehicles, which exceeds the County's requirement of 101 spaces based on the service commercial use and the size of the buildings.

It is estimated that the additional commercial space would generate 313 new daily vehicle trips, of which 35 would occur during the AM peak hour and 32 would occur during the PM peak hour. Traffic analysis prepared by Higgins and Associates found that there would be no significant impacts on the intersections studied, for the existing conditions and for the existing conditions plus the proposed project.

There are currently improvements in signal synchronization underway which are expected to improve existing conditions in the area, including maintaining LOS C at the Seventh Avenue/Soquel Avenue intersection. These improvements were to be completed by the end of 2008.

The applicant will be required to pay Roadway and Roadside Improvement Area fees that will be used to fund the long-term improvements needed to mitigate cumulative traffic impacts.

Design Review

The proposed commercial buildings comply with the requirements of the County Design Review Ordinance, Section 13.11 and have been reviewed by the Urban Designer. The buildings walls are concrete masonry units with infill sections at window and door areas. All of the buildings have flat roofs and the highest building is approximately 26 ft. high.

There are two outstanding issues that have not been addressed with this submittal. The issues are the two large exposed walls that will be visible from Soquel Avenue. The wall of proposed Building 5 facing west along Soquel Avenue is an unbroken plane. The architect has attempted to provide relief and rhythm to the wall by adding split face pilasters at 12 ft. on center with blocks that are a different color and that provide about 2 inches of relief along the wall. While this helps break up the wall a little bit, the photomontage looking at the wall from Soquel Avenue illustrates that the wall will still be prominent and harsh.

There are three possible ways to address this issue. The first is to have the building moved away from the property line 3-5 feet to provide an area for landscaping and the installation of trees that would eventually grow and break up the visual massing of the wall. Another variation of this would be to have alternating 'panels' along the wall step back 3-feet or so to provide some visual relief. The major problem with this approach is that if the neighboring property to the west were to develop, their building could be built at a zero setback along the common property line, effectively creating 'dead' space areas between the two buildings. It also would result in a narrowing of the driveway unless the building size is reduced.

A second alternative is to acquire a landscape easement from the adjacent property along the length of the wall. There happens to be a 5-foot wide landscaped area there now. This would have allowed for the installation and maintenance of a row of trees along the back of the building

until such time as the other property is developed (if ever). Unfortunately, the applicant indicates that all conversations with the adjacent property owner have been fruitless.

The third alternative is to set the building back about a foot from the property line, extend the pilasters 8-12 inches from the wall and plant climbing plants on metal arbors attached to the block walls between the pilasters. The combination of the climbing plants and the extended pilasters could provide relief to the large wall. The applicant will provide an additional exhibit at the hearing showing the likely results of this solution. At this point, staff supports this alternative.

The second issue to be resolved is the large 'white' wall on the east side of existing building 1 (Santa Cruz Electronics). This wall must be painted a color similar to the block walls of the rest of the complex so that it does not stand out as it does now.

Additional landscaping is proposed adjacent to parking areas, at the front of new and existing buildings, and along the Soquel Avenue and Bostwick Lane street frontages. Four Liriodendron (Tulip Trees) are proposed to be removed, as they have not performed well on this site, presumably due to arid conditions and lack of fertile soils. New trees are proposed to be a combination of 15 gallon and 23-inch box size and a total of 36 trees would be installed. In the parking area, 25% of the trees would be 24-inch box size, as would all of the street trees.

Environmental Review

Environmental review has been required for the proposed project per the requirements of the California Environmental Quality Act (CEQA). The project was reviewed by the County's Environmental Coordinator. A preliminary determination to issue a Negative Declaration with Mitigations (Exhibit D) was made on August 12, 2008. The mandatory public comment period expired on September 17, 2008, with no comments received.

The environmental review process focused on the potential impacts of the project in the areas of traffic and noise impacts. The environmental review process generated two mitigation measures that will reduce potential impacts from the proposed development and adequately address these issues (see conditions of approval).

Phasing/Expiration of Permit

The applicant has requested that a phasing plan be incorporated into the permit conditions. The reason for this is that it is probable that financing for the whole project may not be available but portions of the project where there are known tenants might be easier financed. The phasing plan would allow the project to be developed in 2 or 3 phases. The first phase would include proposed building 5 and the roadways and parking areas extending to the south side of building 2. Phases 2 and 3 would include buildings 3 and 4, respectively. In either case, the completion of the roadway to Bostwick Lane would be required with the first of these phases. Staff supports the phasing proposed.

Given the scale of the project and the state of the economy, the owners would like the flexibility

to allow the permit to remain valid for a period of 5-years, as opposed to the standard 2 years. County Code Section 18.10.132(b)(3) allows the Approving Body to establish longer or shorter time periods for the expiration of permits. In this case, staff supports a 5 year term for the expiration of the permit.

Conclusion

As proposed and conditioned, the project is consistent with all applicable codes and policies of the Zoning Ordinance and General Plan/LCP. Please see Exhibit "B" ("Findings") for a complete listing of findings and evidence related to the above discussion.

Staff Recommendation

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.

- **APPROVAL** of Application Number **07-0212,** based on the attached findings and conditions.

Supplementary reports and information referred to in this report are on file and available for viewing at the Santa Cruz County Planning Department, and are hereby made a part of the administrative record for the proposed project.

The County Code and General Plan, as well as hearing agendas and additional information are available online at: www.co.santa-cruz.ca.us

Report Prepared By: _____

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Application #: **07-0212**
APN: **026-031-32,-46**
Owner: **Ernest and Ruth Antolini**

Lot Line Adjustment Findings

1. The lot line adjustment will not result in a greater number of parcels than originally existed.

This finding can be made, in that there were two parcels prior to the adjustment and there will be two parcels subsequent to the adjustment.

2. The lot line adjustment conforms to the county zoning ordinance (including, without limitation, County Code section 13.10.673), and the county building ordinance (including, without limitation, County Code section 12.01.070).

This finding can be made, in that no additional building sites will be created by the transfer as all parcels are currently developed, none of the parcels have a General Plan designation of 'Agriculture' or 'Agricultural Resource', none of the parcels are zoned 'TP' or have a designated Timber Resource as shown on the General Plan maps, technical studies are not necessary as all lots are already developed and the proposal complies with the General Plan designation of the parcels (Service Commercial) per 13.10.673(e).

3. No affected parcel may be reduced or further reduced below the minimum parcel size required by the zoning designation, absent the grant of a variance pursuant to County Code section 13.10.230.

This finding can be made, in that none of the parcels included in the proposal will be reduced below the minimum parcel size required by the zone district as a result of this lot line adjustment.

EXHIBIT B

Application #: **07-0212**
APN: **026-031-32,-46**
Owner: **Ernest and Ruth Antolini**

Development Permit Findings

1. That the proposed location of the project and the conditions under which it would be operated or maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public, and will not result in inefficient or wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity.

This finding can be made, in that the project is located in an area designated for commercial uses and is not encumbered by physical constraints to development. Construction will comply with prevailing building technology, the California Building Code, and the County Building ordinance to insure the optimum in safety and the conservation of energy and resources. The proposed Industrial buildings will not deprive adjacent properties or the neighborhood of light, air, or open space, in that the structure meets all current setbacks that ensure access to light, air, and open space in the neighborhood.

2. That the proposed location of the project and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the zone district in which the site is located.

This finding can be made, in that the proposed location of the commercial buildings and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the C-4 (Commercial Sevice) zone district in that the primary use of the property will be industrial buildings that meets all current site standards for the zone district.

3. That the proposed use is consistent with all elements of the County General Plan and with any specific plan which has been adopted for the area.

This finding can be made, in that the proposed commercial use is consistent with the use and density requirements specified for the Service Commercial (C-S) land use designation in the County General Plan.

The proposed commercial buildings will not adversely impact the light, solar opportunities, air, and/or open space available to other structures or properties, and meets all current site and development standards for the zone district as specified in Policy 8.1.3 (Residential Site and Development Standards Ordinance), in that the commercial buildings will not adversely shade adjacent properties, and will meet current setbacks for the zone district that ensure access to light, air, and open space in the neighborhood.

The proposed industrial buildings will not be improperly proportioned to the parcel size or the character of the neighborhood as specified in General Plan Policy 8.6.1 (Maintaining a Relationship Between Structure and Parcel Sizes), in that the proposed commercial buildings will comply with the site standards for the C-4 zone district (including setbacks, lot coverage, floor area ratio, height, and number of stories) and will result in structures consistent with a design that could be approved on any similarly sized lot in the vicinity.

EXHIBIT B

A specific plan has not been adopted for this portion of the County.

4. That the proposed use will not overload utilities and will not generate more than the acceptable level of traffic on the streets in the vicinity.

This finding can be made, in that the proposed commercial buildings are to be constructed on an existing developed lot. The expected level of traffic generated by the proposed project is anticipated to be only 35 am peak trips and 32 pm peak trips per day such an increase will not adversely impact existing roads and intersections in the surrounding area.

5. That the proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects, land use intensities, and dwelling unit densities of the neighborhood.

This finding can be made, in that the proposed structure is located in a mixed neighborhood containing a variety of architectural styles, and the proposed commercial buildings are consistent with the land use intensity and density of the neighborhood.

6. The proposed development project is consistent with the Design Standards and Guidelines (sections 13.11.070 through 13.11.076), and any other applicable requirements of this chapter.

This finding can be made, in that the proposed commercial buildings will be of an appropriate scale and type of design that will enhance the aesthetic qualities of the surrounding properties and will not reduce or visually impact available open space in the surrounding area.

Application #: **07-0212**
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Conditions of Approval

Exhibit A: Architectural plans, prepared by William Bagnall Architect, Inc., dated 1/19/07.
Preliminary Improvement plans, prepared by Ifland Engineers, dated 11/28/08.
Lot Line Adjustment map, prepared by Ifland Engineers, dated 8/28/07.
Landscape plan, prepared by Greg Lewis Landscape Architect, dated 1/31/08.

I. This permit authorizes a lot line adjustment and the demolition of one commercial building and the construction of three commercial buildings (9,216 sq. ft., 9,216 sq. ft. and 14,321 sq.ft), with one outdoor storage yard, associated parking and landscaping. This approval does not confer legal status on any existing structures or existing uses on the subject property that are not specifically authorized by this permit.

Phasing: The permit may be implemented in phases, per the Phasing Plan approved by the Planning Commission. Issuance of the building permit for the first building and successful completion of that building will exercise this permit.

Lot Line Adjustment Conditions:

A. No parcel map is required. File deed(s) of conveyance (which must result in parcel configurations that match the approved Exhibit "A" for this permit) with the County Recorder to exercise this approval. Parcels or portions of parcels to be combined must be in identical ownership.

B. The deed(s) of conveyance must contain the following statement after the description of the property(ies) or portion(s) of property to be transferred:

> "The purpose of the deed is to adjust the boundary between Assessor's Parcel Number 026-031-46 and Assessor's Parcel Number 026-031-32 as approved by the County of Santa Cruz under Application 07-0212. This conveyance may not create a separate parcel, and is null and void unless the boundary is adjusted as stated."

C. Return a conformed copy of the deed(s) to the Planning Department.

D. If a map is also to be recorded with the County Surveyor's office (which is not required to implement this approval), you must include a copy of these Conditions of Approval to the County Surveyor with the map to be recorded.

Project Conditions:

II. Prior to exercising any rights granted by this permit including, without limitation, any construction or site disturbance, the applicant/owner shall:

A. Sign, date, and return to the Planning Department one copy of the approval to

EXHIBIT C

indicate acceptance and agreement with the conditions thereof.

B. Obtain a Demolition Permit from the Santa Cruz County Building Official.

C. Obtain a Building Permit from the Santa Cruz County Building Official.

1. Any outstanding balance due to the Planning Department must be paid prior to making a Building Permit application. Applications for Building Permits will not be accepted or processed while there is an outstanding balance due.

D. Obtain a Grading Permit from the Santa Cruz County Building Official.

E. Obtain an Encroachment Permit from the Department of Public Works for all off-site work performed in the County road right-of-way.

III. Prior to issuance of a Building Permit the applicant/owner shall:

A. Submit proof that these conditions have been recorded in the official records of the County of Santa Cruz (Office of the County Recorder).

B. Submit final architectural plans for review and approval by the Planning Department. The final plans shall be in substantial compliance with the plans marked Exhibit "A" on file with the Planning Department. Any changes from the approved Exhibit "A" for this development permit on the plans submitted for the Building Permit must be clearly called out and labeled by standard architectural methods to indicate such changes. Any changes that are not properly called out and labeled will not be authorized by any Building Permit that is issued for the proposed development. The final plans shall include the following additional information:

1. One elevation shall indicate materials and colors as they were approved by this Discretionary Application. If specific materials and colors have not been approved with this Discretionary Application, in addition to showing the materials and colors on the elevation, the applicant shall supply a color and material board in 8 ½" x 11" format for Planning Department review and approval.

2. Grading, drainage, and erosion control plans.

3. Maximum height of any structure is 28-feet.

4. Details showing compliance with fire department requirements.

5. Show all rooftop equipment and any screening required to minimize visual

impacts. All rooftop mechanical and electrical equipment screening shall be designed to be an integral part of the building design.

6. Utility equipment such as electrical and gas meters, electrical panels, and junction boxes shall not be located on exterior wall elevations facing streets unless screened from streets and building entries using architectural screens, walls, fences, and/or plant material.

7. a. The western wall of building 5 shall be redesigned to include pilasters, 12-feet on center, that extend 8-12 inches eastward. Metal arbors shall be installed on the block walls between each pilaster covering a minimum of 8 feet of the 12-foot wide area, from 1-foot above the ground to 1-foot below the top edge of the building. Vines and/or other climbing plants shall be planted at the base of the arbors. Plants chosen shall be non-deciduous, capable of climbing to the top of the arbor and planted in sufficient quantity to cover the arbors. A drip irrigation system shall be installed. These climbing plants and arbors shall be permanently maintained (unless a new building is built along the property line of the adjacent property).

   b. The eastern wall of building 1 shall be painted a color that closely matches the color of the block walls for the remainder of the development. This shall be completed prior to final inspection of the first new building.

   ~~A minimum of half the length of the wall of Building 5 facing west along Soquel Avenue shall be set back three feet from the property line and vine planting and drip irrigation shall be installed and maintained.~~

8. Detailed landscape and irrigation plans shall be submitted at the time of the building permit application for review by the City of Santa Cruz Water Department. The landscape and irrigation plans shall satisfy all requirements of the City's landscape water conservation ordinance prior to issuance of the building permit

9. Exterior lighting:
   a. All site, building, security and landscape lighting shall be directed onto the site and away from adjacent properties and the sky.
   b. Area lighting shall be high-pressure sodium vapor, metal halide, fluorescent, or equivalent energy-efficient fixtures.
   c. All lighted parking and circulation areas shall utilize low-rise light standards or light fixtures attached to the building. Light standards to a maximum height of 15 feet are allowed.
   d. Light sources shall not be visible form adjacent properties.

9. Prior to issuing building or grading permits the applicant shall submit a

detailed erosion control plan for review and approval of Environmental Planning Staff. Plans shall indicate that the destination of excess fill is either the municipal landfill or a receiving site with valid permit.

10. Standard dust control BMP's shall be implemented during all grading and demolition work.

11. In order to ensure that the one-hour air quality threshold for the pollutant acrolein is not exceeded during demolition and paving, prior to the issuance of the grading permit, the applicant shall modify the grading plans to include notes incorporating the construction conditions given by the Monterey Bay Unified Air Pollution Control District (MBUAPCD) as follows:

    i. All pre-1994 diesel equipment shall be retrofitted with EPA certified diesel oxidation catalysts *or* all such equipment shall be fueled with B99 diesel fuel;
    ii. Applicant shall retain receipts for purchases of catalysts or b99 diesel fuel until completion of the project;
    iii. Applicant shall allow MBUAPCD to inspect receipts and equipment throughout the project.

    Alternatively, the applicant may submit a health risk assessment to the MBUAPCD for review and approval. Any recommendations and requirements of the MBUAPCD will become conditions of constructing the project.

12. As a part of the building permit review for the first new building, a sign program for the entire property that is consistent with County Code shall be submitted for review and approval by the Urban Designer. All signs shall conform to the sign program prior to final building inspection for the last building.

C. Submit four copies of the approved Discretionary Permit with the Conditions of Approval attached. The Conditions of Approval shall be recorded prior to submittal, if applicable.

D. Meet all requirements of and pay Zone 5 drainage fees to the County Department of Public Works, Drainage. Drainage fees will be assessed on the net increase in impervious area.

E. Meet all requirements and pay any applicable plan check fee of the Central Fire Protection District.

F. Submit 3 copies of a soils report prepared and stamped by a licensed Geotechnical

Engineer.

G. Pay the current fees for Child Care mitigation for the gross area of all new buildings. Currently, this fee is $ 0.23 per sq. ft., but is subject to change. This fee is required for new construction only.

H. The project (new construction) will be subject to Live Oak Transportation Improvement Area (TIA) fees at a rate of $472 ($236 for Roadside Improvement fees and $236 for Transportation Improvement fees) per daily trip-end generated by the proposed use. The proposed commercial development will generate 313 net trip-ends. The fee is calculated as 313 trip-ends multiplied by $472 per trip end. The total fee of $147,736 is to be split evenly between transportation improvement fees and roadside improvement fees.

I. Provide required off-street parking for 101 cars. Parking spaces must be 8.5 feet wide by 18 feet long and must be located entirely outside vehicular rights-of way. Parking must be clearly designated on the plot plan.

J. Submit a written statement signed by an authorized representative of the school district in which the project is located confirming payment in full of all applicable developer fees and other requirements lawfully imposed by the school district.

K. Record easements for access on each parcel in order allow both parcels to use the shared driveway

IV. All construction shall be performed according to the approved plans for the Building Permit. Prior to final building inspection, the applicant/owner must meet the following conditions:

A. All site improvements shown on the final approved Building Permit plans shall be installed.

B. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official.

C. The project must comply with all recommendations of the approved soils reports.

D. Pursuant to Sections 16.40.040 and 16.42.100 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of an historic archaeological resource or a Native American cultural site is discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner if the discovery contains human remains, or the Planning Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.100, shall be observed.

V. Operational Conditions

A. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.

B. The applicant shall designate a disturbance coordinator and a 24-hour contact number shall be conspicuously posted on the job site. The disturbance coordinator shall record the name, phone number, and nature of all complaints received regarding the construction site. The disturbance coordinator shall investigate complaints and take remedial action, if necessary, within 24 hours of receipt of the complaint or inquiry.

C. All uses allowed in the Uses Chart (County Code Section 13.10.332(b) - Commercial uses) are permitted as initial uses. Changes of use that meet (with a Level 1 change of use). All "Changes of Use" must also be consistent with the C-4 uses chart.
1. Office use must be ancillary and incidental to a principal permitted use.
2. Retail and Retail Sales uses must be ancillary and incidental to a principal permitted use.
3. Outdoor storage shall not be permitted outside of the designated Storage Yard adjacent to Building 4 as shown on Exhibit A.
4. Automobile service stations are not permitted.
5. Temporary uses shall require a Level 3 permit.
6. Any change of use which meets the definition of "Intensification of Use" shall require an amendment to this permit

D. In order to mitigate noise impacts to the neighboring schoolyard across Bostwick Lane, conditions of approval for this project shall include measures that prohibit outdoor noise generating uses while school is in session, and during those hours when school is in session, require indoor noise generating uses allowed in the zone district to only occur within buildings with exterior doors closed

VI. As a condition of this development approval, the holder of this development approval ("Development Approval Holder"), is required to defend, indemnify, and hold harmless the COUNTY, its officers, employees, and agents, from and against any claim (including attorneys' fees), against the COUNTY, it officers, employees, and agents to attack, set aside, void, or annul this development approval of the COUNTY or any subsequent amendment of this development approval which is requested by the Development Approval Holder.

A. COUNTY shall promptly notify the Development Approval Holder of any claim,

action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. COUNTY shall cooperate fully in such defense. If COUNTY fails to notify the Development Approval Holder within sixty (60) days of any such claim, action, or proceeding, or fails to cooperate fully in the defense thereof, the Development Approval Holder shall not thereafter be responsible to defend, indemnify, or hold harmless the COUNTY if such failure to notify or cooperate was significantly prejudicial to the Development Approval Holder.

B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:

1. COUNTY bears its own attorney's fees and costs; and

2. COUNTY defends the action in good faith.

C. Settlement. The Development Approval Holder shall not be required to pay or perform any settlement unless such Development Approval Holder has approved the settlement. When representing the County, the Development Approval Holder shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the County.

D. Successors Bound. "Development Approval Holder" shall include the applicant and the successor'(s) in interest, transferee(s), and assign(s) of the applicant.

V. Mitigation Monitoring Program

The mitigation measures listed under this heading have been incorporated in the conditions of approval for this project in order to mitigate or avoid significant effects on the environment. As required by Section 21081.6 of the California Public Resources Code, a monitoring and reporting program for the above mitigation is hereby adopted as a condition of approval for this project. This program is specifically described following each mitigation measure listed below. The purpose of this monitoring is to ensure compliance with the environmental mitigations during project implementation and operation. Failure to comply with the conditions of approval, including the terms of the adopted monitoring program, may result in permit revocation pursuant to section 18.10.462 of the Santa Cruz County Code.

A. In order to mitigate cumulative traffic impacts, Roadway and Roadside Improvement Area fees will be paid as a fair share cumulative impact mitigation to fund the long term improvements needed to mitigate the cumulative future traffic impacts and maintain acceptable levels of service in the vicinity, as identified in the Traffic Impact Analysis Update, prepared by Higgins and Associates (January 18,2008) - (NEGATIVE DECLARATION MITIGATION A).

B. In order to mitigate noise impacts to the neighboring schoolyard across Bostwick

Lane, conditions of approval for this project shall include measures that prohibit outdoor noise generating uses while school is in session, and during those hours when school is in session, require indoor noise generating uses allowed in the zone district to only occur within buildings with exterior doors closed (NEGATIVE DECLARATION MITIGATION B).

Minor variations to this permit, which do not affect the overall concept or density, may be approved by the Planning Director at the request of the applicant or staff in accordance with Chapter 18.10 of the County Code.

Please note: This permit expires FIVE years from the effective date listed below unless a building permit (or permits) is obtained for the primary structure described in the development permit (does not include demolition, temporary power pole or other site preparation permits, or accessory structures unless these are the primary subject of the development permit). Failure to exercise the building permit and to complete all of the construction under the building permit, resulting in the expiration of the building permit, will void the development permit, unless there are special circumstances as determined by the Planning Director.

Approval Date: _____

Effective Date: _____

Expiration Date: _____

Mark Deming	Lawrence Kasparowitz
Assistant Director	Project Planner

Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Planning Commission, may appeal the act or determination to the Board of Supervisors in accordance with chapter 18.10 of the Santa Cruz County Code.

EXHIBIT C

County of Santa Cruz
Planning Department

Planning Commission
Meeting Date: 2/11/09
Agenda Item: # 9
Time: After 9:00 a.m.

Application Number: 07-0212

Staff Report to the Planning Commission

Exhibit D
Initial Study

COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT
701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123
TOM BURNS, PLANNING DIRECTOR

NOTICE OF ENVIRONMENTAL REVIEW PERIOD

SANTA CRUZ COUNTY

APPLICANT: **Ron Powers of Powers Land Planning, for Ernest & Ruth Antolini**

APPLICATION NO.: **07-0212**

APN: **026-031-32, -36**

The Environmental Coordinator has reviewed the Initial Study for your application and made the following preliminary determination:

__XX__ Negative Declaration
(Your project will not have a significant impact on the environment.)

__XX__ Mitigations will be attached to the Negative Declaration.

_____ No mitigations will be attached.

_____ Environmental Impact Report
(Your project may have a significant effect on the environment. An EIR must be prepared to address the potential impacts.)

As part of the environmental review process required by the California Environmental Quality Act (CEQA), this is your opportunity to respond to the preliminary determination before it is finalized. Please contact Matt Johnston, Environmental Coordinator at (831) 454-3201, if you wish to comment on the preliminary determination. Written comments will be received until 5:00 p.m. on the last day of the review period.

Review Period Ends: **September 17, 2008**

Cathy Graves
Staff Planner

Phone: **454-3141**

Date: **August 12, 2008**

NAME: Brickyard Plaza
APPLICATION: 07-0212
A.P.N: 026-031-32, 46

NEGATIVE DECLARATION MITIGATIONS

A. In order to mitigate cumulative traffic impacts, Roadway and Roadside Improvement Area fees will be paid as a fair share cumulative impact mitigation to fund the long term improvements needed to mitigate the cumulative future traffic impacts and maintain acceptable levels of service in the vicinity, as identified in the Traffic Impact Analysis Update, prepared by Higgins and Associates (January 18,2008).
B. In order to mitigate noise impacts to the neighboring schoolyard across Bostwick Lane, conditions of approval for this project shall include measures that prohibited outdoor noise generating uses and that require indoor noise generating uses allowed in the zone district to only occur within buildings with exterior doors closed.

Environmental Review Initial Study

Application Number: 07-0212

Date: August 11, 2008
Staff Planner: Cathy Graves

I. OVERVIEW AND ENVIRONMENTAL DETERMINATION

APPLICANT: Powers Land Planning, Ron Powers **APN**: 026-031-32, 46

OWNER: Ernest & Ruth Antolini, Trustees **SUPERVISORAL DISTRICT**: First

LOCATION: The property is located on the south side of Soquel Drive, approximately 450 feet east from 7th Avenue, at 2776 and 2806 Soquel Avenue.

SUMMARY PROJECT DESCRIPTION: A proposal to demolish an existing commercial building; construct three new commercial buildings of 6316, 6216, and 14,497 square feet; excavate approximately 1294 c.y. of earth and fill approximately 495 c.y., for a total of 799 c.y. of export; and to construct associated site improvements to include parking and landscaping.

ALL OF THE FOLLOWING POTENTIAL ENVIRONMENTAL IMPACTS ARE EVALUATED IN THIS INITIAL STUDY. CATEGORIES THAT ARE MARKED HAVE BEEN ANALYZED IN GREATER DETAIL BASED ON PROJECT SPECIFIC INFORMATION.

✔	Geology/Soils	____	Noise
✔	Hydrology/Water Supply/Water Quality	____	Air Quality
____	Biological Resources	____	Public Services & Utilities
____	Energy & Natural Resources	____	Land Use, Population & Housing
✔	Visual Resources & Aesthetics	____	Cumulative Impacts
____	Cultural Resources	____	Growth Inducement
____	Hazards & Hazardous Materials	____	Mandatory Findings of Significance
✔	Transportation/Traffic		

DISCRETIONARY APPROVAL(S) BEING CONSIDERED

___ General Plan Amendment	✔ Preliminary Grading Approval
___ Land Division	___ Riparian Exception
___ Rezoning	✔ Other: Amendments to prior Development Permits
✔ Development Permit	___
___ Coastal Development Permit	___

NON-LOCAL APPROVALS

Other agencies that must issue permits or authorizations:

Regional Water Quality Control Board

ENVIRONMENTAL REVIEW ACTION

On the basis of this Initial Study and supporting documents:

___ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

__X__ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the attached mitigation measures have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.

___ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

Matt Johnston

Aug 11, 2008
Date

For: Claudia Slater
Environmental Coordinator

II. BACKGROUND INFORMATION

EXISTING SITE CONDITIONS

Parcel Size: 1.04 acres (026-031-32) and 1.6 acres (026-031-46)
Existing Land Use: Service commercial uses and vacant land (former masonry supplies storage)
Vegetation: Minimal commercial landscaping – site is predominately paved
Slope in area affected by project: _✔ __ 0 - 30% ___ 31 – 100%
Nearby Watercourse: Arana Gulch
Distance To: 500 feet

ENVIRONMENTAL RESOURCES AND CONSTRAINTS

Groundwater Supply: n/a
Water Supply Watershed: n/a

Groundwater Recharge: n/a
Timber or Mineral: n/a
Agricultural Resource: n/a

Biologically Sensitive Habitat: n/a
Fire Hazard: n/a
Floodplain: n/a
Erosion: Erodable soils on site
Landslide: n/a

Liquefaction: Minimal potential
Fault Zone: San Andreas fault located 8 miles northeast
Scenic Corridor: n/a
Historic: n/a
Archaeology: Not within mapped area
Noise Constraint: n/a
Electric Power Lines:
Solar Access: Good
Solar Orientation: North/south
Hazardous Materials: n/a

SERVICES

Fire Protection: Central Fire Protection
School District: Santa Cruz High and Elementary
Sewage Disposal: County Sanitation

Drainage District: Zone 5
Project Access: Soquel Drive and Bostwick Lane
Water Supply: City of Santa Cruz

PLANNING POLICIES

Zone District: Commercial Service (C-4)
General Plan: Service Commercial (C-S)

Special Designation: None

Urban Services Line:	✔	Inside	___	Outside
Coastal Zone:	___	Inside	✔	Outside

PROJECT SETTING AND BACKGROUND:

The proposed project, demolition of an existing commercial building and construction of three new commercial buildings, would be located on the south side of Soquel Drive. The parcel was formerly the site of a masonry supply sales business that included a large storage yard and is predominately paved. The masonry supply yard has been removed. Other elements of the proposal include construction of associated parking, access and landscaping.

The project site is adjacent to conforming service commercial uses to the north, west and east, and Green Acres elementary school is located directly south of the proposed project. Zoning in the surrounding area is Commercial Service (C-4) with the school property zoned Public Facility (PF). There are community commercial uses and zoning (C-2) located approximately 225 feet west of the subject property on Soquel Avenue. The subject parcels have a General Plan designation of Commercial Service (C-S) and other surrounding General Plan designations are consistent with the zoning.

The parcel where the new commercial buildings are proposed is generally flat and vegetation on the site consists primarily of minimal landscape trees and shrubs associated with the existing commercial development. Four liriodendron trees are proposed to be removed as they have not performed well on this site, presumably due to arid conditions and lack of fertile soils. The nearest watercourse and associated riparian area is Arana Gulch, located approximately 500 feet to the north of the parcels.

Primary access to the proposed project would be from Soquel Drive with secondary access from Bostwick Lane.

DETAILED PROJECT DESCRIPTION:

The applicant proposes to demolish an existing commercial building and construct three new buildings of 6,316; 9,216 and 14,497 square feet on two existing parcels located at 2776 and 2808 Soquel Avenue, where three commercial buildings currently exist. Two of the existing buildings are proposed to be retained as part of the overall development. The occupancy of the existing buildings includes Santa Cruz Electronics in the building nearest Soquel Avenue, Brake Supply and Antolini Masonry Supplies in the rear building, and Bay Plumbing in the western-most building. The Bay Plumbing building is proposed to be removed. The rear portion of the properties was previously used for masonry supply storage, but that use has been relocated.

The site is relatively flat, and grading is proposed to remove loose fill and to create positive drainage flow. Approximately 1,294 cubic yards of excavation and 495 cubic yards of embankment is proposed, for a net export of 799 cubic yards. The majority of the site is currently covered by buildings and minimal landscaping, and the remainder of the site is covered by pavement or compacted soil in the area formerly occupied by the masonry supply storage. The existing site drains to the center and discharges to the west, to a 24" reinforced concrete pipe (RCP) that connects to the Soquel Avenue storm drain system. This flow will be maintained and enhanced through minimal grading to improve stormwater flow and through the installation of additional catch basins and the use of Best Management Practices (BMP's) to provide filtration and infiltration of site runoff as well as water quality treatment of discharging runoff. Of the 2.6 acre total site area, 2.4 acres of the site will be drained into a gravel filtration/infiltration trench located beneath the porous pavement parking area located in the middle of the site, on the western parcel boundary. This system provides storage of 2,779 cubic feet of runoff, which is greater than the volume required for a 10-year detention system.

Parking is provided for a total of 110 vehicles, which exceeds the County's requirement of 101 spaces based on the service commercial use and the size of the buildings. It is estimated that the additional commercial space would generate 313 new daily vehicle trips, of which 35 would occur during the AM peak hour and 32 would occur during the PM peak hour. Traffic analysis prepared by Higgins and Associates found that there would be no significant impacts on the intersections studied, for the existing conditions and for the existing conditions plus the proposed project. The cumulative Level of Service would decline from D to F at the Soquel Drive/Soquel Avenue intersection and from C to F at the Seventh Avenue/Soquel Avenue intersection. There are, however, currently improvements in signal synchronization underway which are expected to improve existing conditions in the area, including maintaining LOS C at the Seventh Avenue/Soquel Avenue intersection. These improvements are anticipated to be completed by the end of 2008, prior to building permit final for the proposed project. The applicant will be required to pay Roadway and Roadside Improvement Area fees which will be used to fund the long term improvements needed to mitigate cumulative traffic impacts.

Additional landscaping is also proposed adjacent to parking areas, at the front of new and existing buildings, and along the Soquel Avenue and Bostwick Lane street frontages. Four liriodendron trees are proposed to be removed as they have not performed well on this site, presumably due to arid conditions and lack of fertile soils. New trees are proposed to be a combination of 15 gallon and 23-inch box size and a total of 36 trees would be installed. In the parking area, 25% of the trees would be 24-inch box size as would all of the street trees.

III. ENVIRONMENTAL REVIEW CHECKLIST

A. Geology and Soils

Does the project have the potential to:

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
1. Expose people or structures to potential adverse effects, including the risk of material loss, injury, or death involving:				
A. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or as identified by other substantial evidence?			✔	
B. Seismic ground shaking?			✔	
C. Seismic-related ground failure, including liquefaction?			✔	
D. Landslides?			✔	

All of Santa Cruz County is subject to some hazard from earthquakes. However, the project site is not located within or adjacent to a county or State mapped fault zone. The nearest fault zone, the San Andreas is located approximately 8 miles northeast of the project site. A geotechnical investigation for the proposed project was performed by James C. Reynolds and Associates, dated March January 21, 1986 with an update by Dees and Associates, dated July 6, 2006 (Attachment 3). The report concluded that the site is suitable for the proposed development provided the recommendations presented in the reports are implemented during grading and construction. The soils investigation, based on the soils consistency and location of the groundwater table, determined the potential for liquefaction to be minimal. The geotechnical investigation has been reviewed and accepted by County Environmental Planning Staff (Attachment 4). Because the site is gently sloping, landsliding is not expected to post a threat to the proposed development.

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
2. Subject people or improvements to damage from soil instability as a result of on- or off-site landslide, lateral spreading, to subsidence, liquefaction, or structural collapse?			✔	

The geotechnical reports cited above did not identify a significant potential for damage caused by any of these hazards. The soils report indicated that the site is underlain by loose clayey sand over stiff to very still sandy clay. The surface soils are non-expansive and not subject to liquefaction, and the site is essentially flat, so landsliding does not post a threat to development. Foundation design will be required to be consistent with the recommendations in the soils reports.

3. Develop land with a slope exceeding 30%?				✔

There are no slopes that exceed 30% on the property.

4. Result in soil erosion or the substantial loss of topsoil?			✔	

Some potential for erosion exists during the construction phase of the project, however, this potential is minimal because the site is relatively flat and standard erosion controls are a required condition of the project. Prior to approval of a grading or building permit, the project must have an approved Erosion Control Plan, which will specify detailed erosion and sedimentation control measures. The plan will include provisions for disturbed areas to be planted with ground cover and to be maintained to minimize surface erosion.

5. Be located on expansive soil, as defined in section 1802.3.2 of the California Building Code(2007), creating substantial risks to property?				✔

The geotechnical report for the project did not identify any elevated risk associated with expansive soils. Results of laboratory testing conducted by the geotechnical engineer indicate that the soils on site are generally of low expansivity.

6. Place sewage disposal systems in areas dependent upon soils incapable of adequately supporting the use of septic tanks, leach fields, or alternative waste water disposal systems?				✔

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable

No septic systems are proposed. The project will connect to the Santa Cruz County Sanitation District, and the applicant will be required to pay standard sewer connection and service fees that fund sanitation improvements within the district as a Condition of Approval for the project.

7.	Result in coastal cliff erosion?				✔

B. Hydrology, Water Supply and Water Quality

Does the project have the potential to:

1.	Place development within a 100-year flood hazard area?				✔

According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Map, dated March 2, 2006, no portion of the project site lies within a 100-year flood hazard area.

2.	Place development within the floodway resulting in impedance or redirection of flood flows?				✔

According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Map, dated March 2, 2006, no portion of the project site lies within a 100-year flood hazard area.

3.	Be inundated by a seiche or tsunami?				✔
4.	Deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit, or a significant contribution to an existing net deficit in available supply, or a significant lowering of the local groundwater table?			✔	

The project will obtain water from the city of Santa Cruz Municipal Utilities and will not rely on private well water. Although the project will incrementally increase water demand, the City of Santa Cruz has indicated that adequate supplies are available to serve the project (Attachment 5). The project is not located in a mapped groundwater recharge area.

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
5. Degrade a public or private water supply? (Including the contribution of urban contaminants, nutrient enrichments, or other agricultural chemicals or seawater intrusion).			✔	

No commercial or industrial activities are proposed that would generate a significant amount of contaminants to a public or private water supply. The parking and driveways associated with the project will incrementally contribute urban pollutants to the environment; however, the contribution will be minimal given the size of the driveway and parking area. Two silt and grease traps and a filtration/infiltration trench are proposed as part of the project, and a plan for maintenance will be required to reduce this impact to a less than significant level. Potential siltation from the proposed project will be mitigated through implementation of erosion control measures.

6. Degrade septic system functioning?				✔

There is no indication that existing septic systems in the vicinity would be affected by the project.

7. Alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which could result in flooding, erosion, or siltation on or off-site?				✔

The proposed project is not located near any watercourses, and will not alter the existing overall drainage pattern of the site. The nearest watercourse is Arana Gulch, which is located approximately 500 feet north of the project site. Because the site is mostly impervious in it's current condition, the additional runoff generated will be minimal and will continue to discharge to the west, to a 24" reinforced concrete pipe (RCP) that connects to the Soquel Avenue storm drain system. Department of Public Works Drainage Section staff has reviewed and approved the proposed drainage plan.

8. Create or contribute runoff which would exceed the capacity of existing or planned storm water drainage systems, or create additional source(s) of polluted runoff?			✔	

A Drainage Study prepared by Ifland Engineers, dated October, 2007, has been reviewed for potential drainage impacts (Attachment 6) and accepted by the Department of Public Works (DPW) Stormwater Management Section staff (Attachment 7). The proposed system has been sized and designed based on both

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable

the minimal net increase in impervious surfaces and the existing impervious surfaces for the existing commercial buildings draining to the system. The existing site drains to the center and discharges to the west, to a 24" reinforced concrete pipe (RCP) that connects to the Soquel Avenue storm drain system. This flow will be maintained and enhanced through minimal grading to improve stormwater flow and through the installation of additional catch basins and the use of Best Management Practices (BMP's) to provide filtration and infiltration of site runoff as well as water quality treatment of discharging runoff. Of the 2.6 acre total site area, 2.4 acres of the site will be drained into a gravel filtration/infiltration trench located beneath the porous pavement parking area located in the middle of the site, on the western parcel boundary. This system provides storage of 2,779 cubic feet of runoff, which is greater than the volume required for a 10-year detention system. In addition, discharge from the site is restricted to 10-year pre-development release rate in order to further promote filtration and infiltration in the system by storing runoff. Restricting discharge will be achieved by means of a catch basin with a flow restrictor orifice.

Pretreatment for water entering the County drainage system will occur at several locations on site. Prior to entering the gravel trench, runoff will be treated by the use of a silt and grease trap. Runoff from areas that are not routed to the gravel trench will be treated by a silt and grease trap prior to release onto the Bostwick Lane gutter.

9.	Contribute to flood levels or erosion in natural water courses by discharges of newly collected runoff?	____	____	✔	____

The proposed system has been sized and designed based on both the net increase in impervious surfaces and the existing impervious surfaces for the existing commercial buildings draining to the system. The runoff rate from the property will be a 10-year pre-development release rate, minimizing storm water runoff that could contribute to flooding or erosion.

10.	Otherwise substantially degrade water supply or quality?	____	____	✔	____

Two silt and grease traps and a filtration/infiltration trench have been included in the proposal to minimize the effects of urban pollutants. A maintenance plan for all water treatment facilities, including the impervious paving detention system will be required.

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable

C. Biological Resources

Does the project have the potential to:

1. Have an adverse effect on any species identified as a candidate, sensitive, or special status species, in local or regional plans, policies, or regulations, or by the California Department of Fish and Game, or U.S. Fish and Wildlife Service?			✔	

According to the California Natural Diversity Data Base (CNDDB), maintained by the California Department of Fish and Game, there are no known special status plant or animal species in the site vicinity, and there were no special status species observed in the project area.

2. Have an adverse effect on a sensitive biotic community (riparian corridor), wetland, native grassland, special forests, intertidal zone, etc.)?			✔	

There are no mapped or designated sensitive biotic communities on or adjacent to the project site.

3. Interfere with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native or migratory wildlife nursery sites?			✔	

The proposed project does not involve any activities that would interfere with the movements or migrations of fish or wildlife, or impede use of a known wildlife nursery site.

4. Produce nighttime lighting that will illuminate animal habitats?			✔	

The subject property is located in an urbanized area and is surrounded by existing commercial development that currently generates nighttime lighting. There are no sensitive animal habitats within or adjacent to the project site. The nearest riparian corridor is that associated with Arana Gulch, which is approximately 500 feet north of the project site, on the north side of Soquel Avenue adjacent to Highway 1.

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
5. Make a significant contribution to the reduction of the number of species of plants or animals?			✔	

Refer to C-1 and C-2 above.

6. Conflict with any local policies or ordinances protecting biological resources (such as the Significant Tree Protection Ordinance, Sensitive Habitat Ordinance, provisions of the Design Review ordinance protecting trees with trunk sizes of 6 inch diameters or greater)?			✔	

The project will not conflict with any local policies or ordinances.

7. Conflict with the provisions of an adopted Habitat Conservation Plan, Biotic Conservation Easement, or other approved local, regional, or state habitat conservation plan?			✔	

D. Energy and Natural Resources

Does the project have the potential to:

1. Affect or be affected by land designated as "Timber Resources" by the General Plan?				✔

The project is not adjacent to land designated as Timber Resource.

2. Affect or be affected by lands currently utilized for agriculture, or designated in the General Plan for agricultural use?				✔

The project site is not currently being used for agriculture and no agricultural uses are proposed for the site or surrounding vicinity.

3. Encourage activities that result in the use of large amounts of fuel, water, or energy, or use of these in a wasteful manner?				✔

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
4. Have a substantial effect on the potential use, extraction, or depletion of a natural resource (i.e., minerals or energy resources)?				✔

E. Visual Resources and Aesthetics

Does the project have the potential to:

1. Have an adverse effect on a scenic resource, including visual obstruction of that resource?				✔

The project will not directly impact any public scenic resources, as designated in the County's General Plan (1994), or obstruct any public views of these visual resources.

2. Substantially damage scenic resources, within a designated scenic corridor or public view shed area including, but not limited to, trees, rock outcroppings, and historic buildings?				✔

The project site is not located along a County designated scenic road or within a designated scenic resource area.

3. Degrade the existing visual character or quality of the site and its surroundings, including substantial change in topography or ground surface relief features, and/or development on a ridge line?				✔

The existing visual setting includes several commercial service establishments to the north, east and west and a public elementary school to the south. The proposed project will complement the service commercial buildings. The proposed project will actually improve the existing visual character in the area. Little change in topography is proposed and the additional landscaping proposed will be of benefit to the area.

4. Create a new source of light or glare which would adversely affect day or nighttime views in the area?				✔

The project will create an incremental increase in night lighting. However, this increase will be small, and will be similar in character to the lighting associated with the surrounding existing uses.

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
5. Destroy, cover, or modify any unique geologic or physical feature?				✔

There are no unique geological or physical features on or adjacent to the site that would be destroyed, covered, or modified by the project.

F. Cultural Resources

Does the project have the potential to:

1. Cause an adverse change in the significance of a historical resource as defined in CEQA Guidelines 15064.5?				✔

The existing structures on the property are not designated as historic resources on any federal, State or local inventory.

2. Cause an adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines 15064.5?			✔	

No archeological resources have been identified in the project area. Pursuant to County Code Section 16.40.040, if at any time in the preparation for or process of excavating or otherwise disturbing the ground, any human remains of any age, or any artifact or other evidence of a Native American cultural site which reasonably appears to exceed 100 years of age are discovered, the responsible persons shall immediately cease and desist from all further site excavation and comply with the notification procedures given in County Code Chapter 16.40.040.

3. Disturb any human remains, including those interred outside of formal cemeteries?			✔	

Pursuant to Section 16.40.040 of the Santa Cruz County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this project, human remains are discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the sheriff-coroner and the Planning Director. If the coroner determines that the remains are not of recent origin, a full archeological report shall be prepared and representatives of the local Native California Indian group shall be contacted. Disturbance shall not resume until the significance of the archeological resource is determined and appropriate mitigations to preserve the resource on the site are established.

4. Directly or indirectly destroy a unique paleontological resource or site?				✔

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable

There are no unique paleontological resources or features on or adjacent to the site that would be destroyed or modified by the project

G. Hazards and Hazardous Materials

Does the project have the potential to:

1. Create a significant hazard to the public or the environment as a result of the routine transport, storage, use, or disposal of hazardous materials, not including gasoline or other motor fuels?	____	____	✔	____

The applicant has proposed a Master Occupancy Program that would not allow any uses that utilize hazardous materials as a Level 1 change of use. The uses allowed in the zone district, which could potentially be approved with additional review, may include service commercial businesses that use or sell materials that may be considered hazardous as defined by County Environmental Health Services. If such materials require regulation, the operator will be required, as part of any discretionary permit, to obtain a Hazardous Materials Management Permit from County Environmental Health Services, and to prepare and implement a Hazardous Materials Management Plan.

2. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	____	____	✔	____

The project site is included on the July 15, 2008 list of hazardous sites in Santa Cruz County compiled pursuant to the specified code, as a site for which mitigation was completed in 1988.

3. Create a safety hazard for people residing or working in the project area as a result of dangers from aircraft using a public or private airport located within two miles of the project site?	____	____	____	✔
4. Expose people to electro-magnetic fields associated with electrical transmission lines?	____	____	____	✔

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
5. Create a potential fire hazard?				✔

The project design incorporates all applicable fire safety code requirements and will include fire protection devices as required by the local fire agency.

6. Release bio-engineered organisms or chemicals into the air outside of project buildings?				✔

H. Transportation/Traffic

Does the project have the potential to:

1. Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?		✔		

It is estimated that the additional commercial space would generate 313 new daily vehicle trips, of which 35 would occur during the AM peak hour and 32 would occur during the PM peak hour. Traffic analysis prepared by Higgins and Associates, dated January 18, 2008, (Attachment 8) found that there would be no significant impacts on the intersections studied, for the existing conditions and for the existing conditions plus the proposed project. The cumulative future Level of Service would decline from D to F at the Soquel Drive/Soquel Avenue intersection and from C to F at the Seventh Avenue/Soquel Avenue intersection. There are, however, currently improvements in signal synchronization underway which are expected to improve existing conditions in the area, including maintaining LOS C at the Seventh Avenue/Soquel Avenue intersection. These improvements are anticipated to be completed by the end of 2008, prior to building permit final for the proposed project, such that there will be no impact for the existing conditions plus the proposed project. The traffic analysis has been reviewed and accepted by the Department of Public Works, Road Engineering staff (Attachment 7).

The applicant will be required to pay Roadway and Roadside Improvement Area fees which will be used to fund the long term improvements needed to mitigate cumulative future traffic impacts.

2. Cause an increase in parking demand which cannot be accommodated by existing parking facilities?			✔	

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable

The project meets the code requirements for the required number of parking spaces and therefore new parking demand will be accommodated on site. Parking is provided for a total of 110 vehicles, which exceeds the County's requirement of 101 spaces based on the service commercial use and the size of the building.

3.	Increase hazards to motorists, bicyclists, or pedestrians?			✔	

The proposed project will be conditioned to comply with current road requirements to prevent potential hazards to motorists, bicyclists, and/or pedestrians. The traffic analysis prepared by Higgins and Associates (Attachment 8) included a sight distance analysis of the intersection of Bostwick Lane and 7th Avenue that identified a restricted line of sight looking from Bostwick Lane south on 7th Avenue, due to vegetation on the south side of 7th Avenue. The existing sight distance at this location was determined to be 375 feet to the north (right turns) and 190 feet to the south (left turns).

Ideally, based on a design speed of 30 miles per hour, the intersection corner sight distance would be 330 feet in both directions. CalTrans does allow the minimum corner sight distance to be reduced to the stopping sight distance when restrictive conditions, such as high costs associated with right-of-way acquisition, building removal, extensive excavation or environmental impacts exist. Based on the design speed of 30 miles per hour, the minimum corner sight distance of 196 should be provided looking both north and south from Bostwick Lane, using the restrictive condition sight distance criteria. The County Redevelopment Agency is currently developing plans for improvements to 7th Avenue, in the vicinity of the intersection with Bostwick Lane. As part of the improvements, trees and other landscaping that may affect site distance will be trimmed or removed, as applicable, such that adequate site distance will be maintained.

4.	Exceed, either individually (the project alone) or cumulatively (the project combined with other development), a level of service standard established by the county congestion management agency for designated intersections, roads or highways?		✔		

Traffic analysis prepared by Higgins and Associates, dated January 18, 2008, (Attachment 8) found that there would be no significant impacts on the intersections studied, for the existing conditions and for the existing conditions plus the proposed project. The cumulative future Level of Service would decline from D to F at the Soquel Drive/Soquel Avenue intersection and from C to F at the Seventh Avenue/Soquel Avenue intersection. The County of Santa Cruz has established LOS C as the minimum acceptable for overall intersection operations. However, LOS D can

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable

be considered acceptable where costs, right-of-way acquisitions, or environmental impacts of maintaining the standards are excessive and capacity enhancements are infeasible. There are, however, currently improvements in signal synchronization underway which are expected to improve existing conditions in the area, including maintaining LOS C at the Seventh Avenue/Soquel Avenue intersection. These improvements are anticipated to be completed by the end of 2008, prior to building permit final for the proposed project, such that there will be no impact for the existing conditions plus the proposed project.

The applicant will be required to pay Roadway and Roadside Improvement Area fees which will be used to fund the long term improvements needed to mitigate cumulative future traffic impacts and maintain acceptable levels of service in the vicinity.

I. Noise

Does the project have the potential to:

1.	Generate a permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			✔	

The project will create an incremental increase in the existing noise environment. However, this increase will be small, and will be similar in character to noise generated by the surrounding existing uses.

2.	Expose people to noise levels in excess of standards established in the General Plan, or applicable standards of other agencies?		✔		

Per County policy, average hourly noise levels shall not exceed the General Plan threshold of 50 L_{eq} during the day and 45 L_{eq} during the nighttime. Impulsive noise levels shall not exceed 65 db during the day or 60 db at night. Based on the existing uses and the uses allowed in the zone district, it is unlikely that these limits will be exceeded by future tenants. There is, however, an elementary school located directly south of the project site, across Bostwick Lane, which could be considered a sensitive site as it relates to noise impacts. Conditions of approval will be included to prohibit outdoor noise-generating uses and to require that any indoor noise generating uses allowed in the zone district (such as auto repair) only occur within buildings with exterior doors closed.

3.	Generate a temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			✔	

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable

Noise generated during construction will increase the ambient noise levels for adjoining areas. Construction will be temporary, however, and given the limited duration of this impact it is considered to be less than significant.

J. Air Quality

Does the project have the potential to:
(Where available, the significance criteria established by the MBUAPCD may be relied upon to make the following determinations).

1. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			✔	

The North Central Coast Air Basin does not meet State standards for ozone and particulate matter (PM10). Therefore, the regional pollutants of concern that would be emitted by the project are ozone precursors (Volatile Organic Compounds [VOCs] and nitrogen oxides [NOx]), and dust.

Given the modest amount of new traffic that will be generated by the project there is no indication that new emissions of VOCs or NOx will exceed Monterey Bay Unified Air Pollution Control District (MBUAPCD) thresholds for these pollutants and therefore there will not be a significant contribution to an existing air quality violation.
Project construction may result in a short-term, localized decrease in air quality due to generation of dust. However, standard dust control best management practices, such as periodic watering, will be implemented during construction to reduce impacts to a less than significant level.

2. Conflict with or obstruct implementation of an adopted air quality plan?			✔	

The project will not conflict with or obstruct implementation of the regional air quality plan. See J-1 above.

3. Expose sensitive receptors to substantial pollutant concentrations?			✔	
4. Create objectionable odors affecting a substantial number of people?			✔	

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable

K. Public Services and Utilities

Does the project have the potential to:

1.	Result in the need for new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
	a. Fire protection?			✔	
	b. Police protection?			✔	
	c. Schools?			✔	
	d. Parks or other recreational activities?			✔	
	e. Other public facilities; including the maintenance of roads?			✔	

While the project represents an incremental contribution to the need for services, the increase will be minimal. Moreover, the project meets all of the standards and requirements identified by the local fire agency and school and transportation fees to be paid by the applicant will be used to offset the incremental increase in demand for school facilities and public roads.

2.	Result in the need for construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				✔

A Drainage Study prepared by Ifland Engineers, dated October, 2007, has been reviewed for potential drainage impacts and accepted by the Department of Public Works (DPW) Stormwater Management Section staff (Attachment 6). The proposed system has been sized and designed based on both the minimal net increase in impervious surfaces and the existing impervious surfaces for the existing commercial

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable

buildings draining to the system. The existing site drains to the center and discharges to the west, to a 24" reinforced concrete pipe (RCP) that connects to the Soquel Avenue storm drain system. This flow will be maintained and enhanced through minimal grading to improve stormwater flow and through the installation of additional catch basins, and no new off-site drainage facilities are required or proposed.

3.	Result in the need for construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✔	

The project will connect to an existing municipal water supply. The City of Santa Cruz Water Department has determined that adequate supplies are available to serve the project (Attachment 5).

Municipal sewer service is available to serve the project, as reflected in the attached letter from the Santa Cruz County Sanitation District (Attachment 9).

4.	Cause a violation of wastewater treatment standards of the Regional Water Quality Control Board?				✔

The project's wastewater flows will not violate any wastewater treatment standards.

5.	Create a situation in which water supplies are inadequate to serve the project or provide fire protection?				✔

The water mains serving the project site provide adequate flows and pressure for fire suppression. Additionally, the local fire agency or California Department of Forestry, as appropriate, has reviewed and approved the project plans, assuring conformity with fire protection standards that include minimum requirements for water supply for fire protection.

6.	Result in inadequate access for fire protection?				✔

The project's road access meets County standards and has been approved by the local fire agency.

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
7. Make a significant contribution to a cumulative reduction of landfill capacity or ability to properly dispose of refuse?			✔	

The project will make an incremental contribution to the reduced capacity of regional landfills. However, this contribution will be relatively small and will be of similar magnitude to that created by existing land uses around the project.

8. Result in a breach of federal, state, and local statutes and regulations related to solid waste management?				✔

L. Land Use, Population, and Housing

Does the project have the potential to:

1. Conflict with any policy of the County adopted for the purpose of avoiding or mitigating an environmental effect?				✔

The proposed project does not conflict with any policies adopted for the purpose of avoiding or mitigating an environmental effect.

2. Conflict with any County Code regulation adopted for the purpose of avoiding or mitigating an environmental effect?				✔

The proposed project does not conflict with any regulations adopted for the purpose of avoiding or mitigating an environmental effect.

3. Physically divide an established community?				✔

The project will not include any element that will physically divide an established community.

4. Have a potentially significant growth inducing effect, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✔

	Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable

The proposed project is designed at the density and intensity of development allowed by the General Plan and zoning designations for the parcel. Additionally, the project does not involve extensions of utilities (e.g., water, sewer, or new road systems) into areas previously not served. Consequently, it is not expected to have a significant growth-inducing effect.

5.	Displace substantial numbers of people, or amount of existing housing, necessitating the construction of replacement housing elsewhere?	____	____	____	✔

The proposed project will neither remove housing or provide any new housing.

M. Non-Local Approvals

Does the project require approval of federal, state, or regional agencies? Yes ✔ No ____

N. Mandatory Findings of Significance

1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant, animal, or natural community, or eliminate important examples of the major periods of California history or prehistory? Yes ____ No ✔

2. Does the project have the potential to achieve short term, to the disadvantage of long term environmental goals? (A short term impact on the environment is one which occurs in a relatively brief, definitive period of time while long term impacts endure well into the future) Yes ____ No ✔

3. Does the project have impacts that are individually limited, but cumulatively considerable ("cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, and the effects of reasonably foreseeable future projects which have entered the Environmental Review stage)? Yes ____ No ✔

4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? Yes ____ No ✔

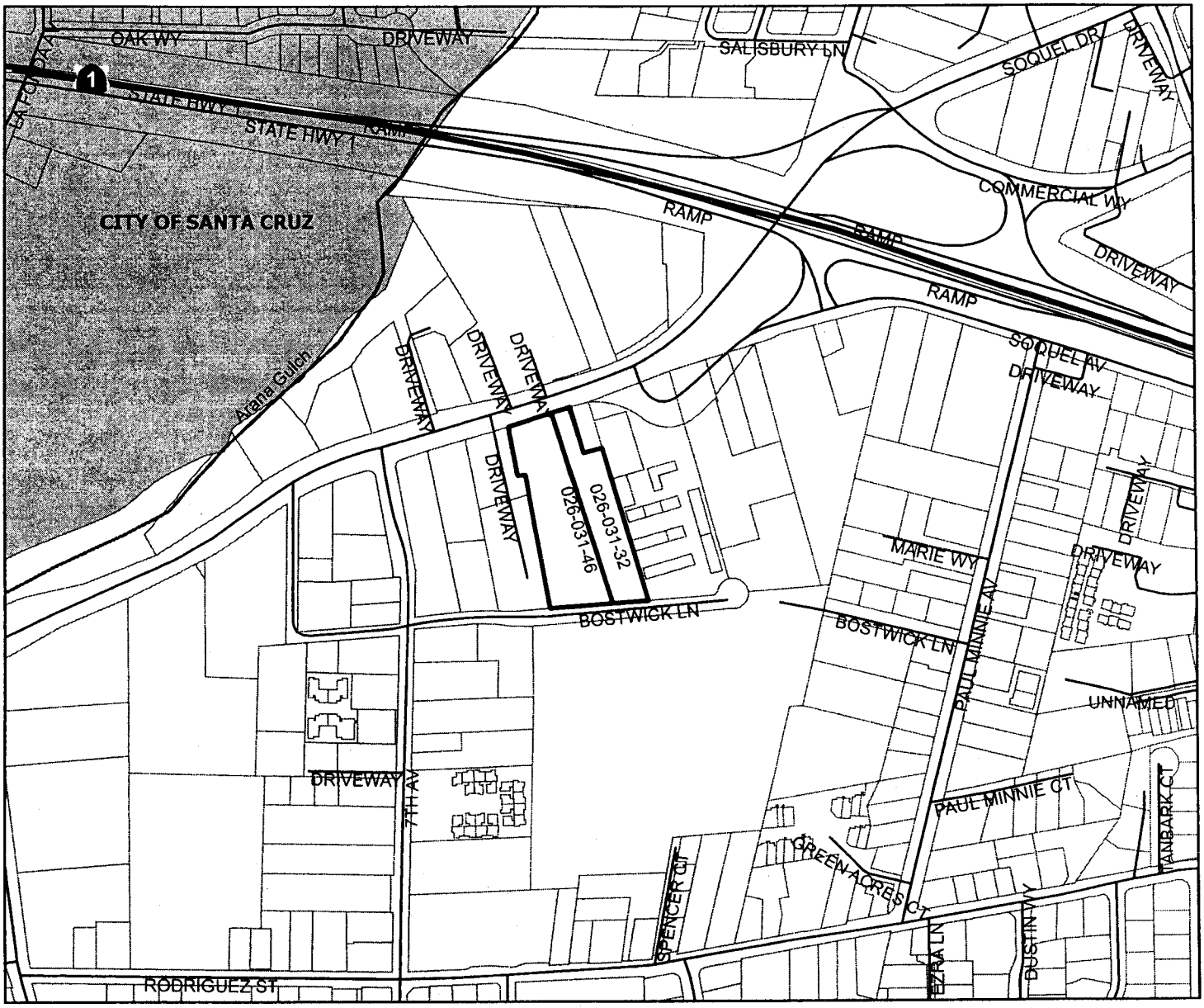
TECHNICAL REVIEW CHECKLIST

	REQUIRED	COMPLETED*	N/A
Agricultural Policy Advisory Commission (APAC) Review			✔
Archaeological Review			✔
Biotic Report/Assessment			✔
Geologic Hazards Assessment (GHA)			✔
Geologic Report			✔
Geotechnical (Soils) Report		July 6, 2006	
Riparian Pre-Site			✔
Septic Lot Check			✔
Other:			
Drainage Study		January, 2008	
Traffic Impact Analysis		January 18, 2008	

Attachments:

1. Vicinity Map, Map of Zoning Districts, Map of General Plan Designations, Assessors Parcel Map
2. Architectural Plans prepared by William Bagnall Architect, Inc, dated 1/9/2007; Preliminary Improvement Plans prepared by Ifland Engineers dated 11/28/2008; Landscape Plan prepared by Greg Lewis Landscape Architect, dated 1/31/08.
3. Geotechnical Investigation (Conclusions and Recommendations) prepared by Dees & Associates, dated 7/6/2006 and letter regarding foundation construction dated 3/6/2007.
4. Geotechnical Review Letter prepared by Carolyn Banti - Civil Engineer, dated 10/31/07.
5. Letter from City of Santa Cruz Water Department, dated 11/9/07.
6. Drainage calculations (Summary) prepared by Ifland Engineers, dated 1/08.
7. Discretionary Application Comments, printed 8/4/08
8. Traffic Impact Analysis prepared by Higgins and Associates, dated 10/8/07 and 1/18/08.
9. Memo from Santa Cruz County Sanitation District, dated 8/13/2008.

Location Map



Environmental Review Inital Study

ATTACHMENT 1, 1 of 4

APPLICATION 07-0212

Legend

- Subject Parcels
- Assessors Parcels
- Streets
- State Highways
- Perennial Strea
- City of Santa Cruz

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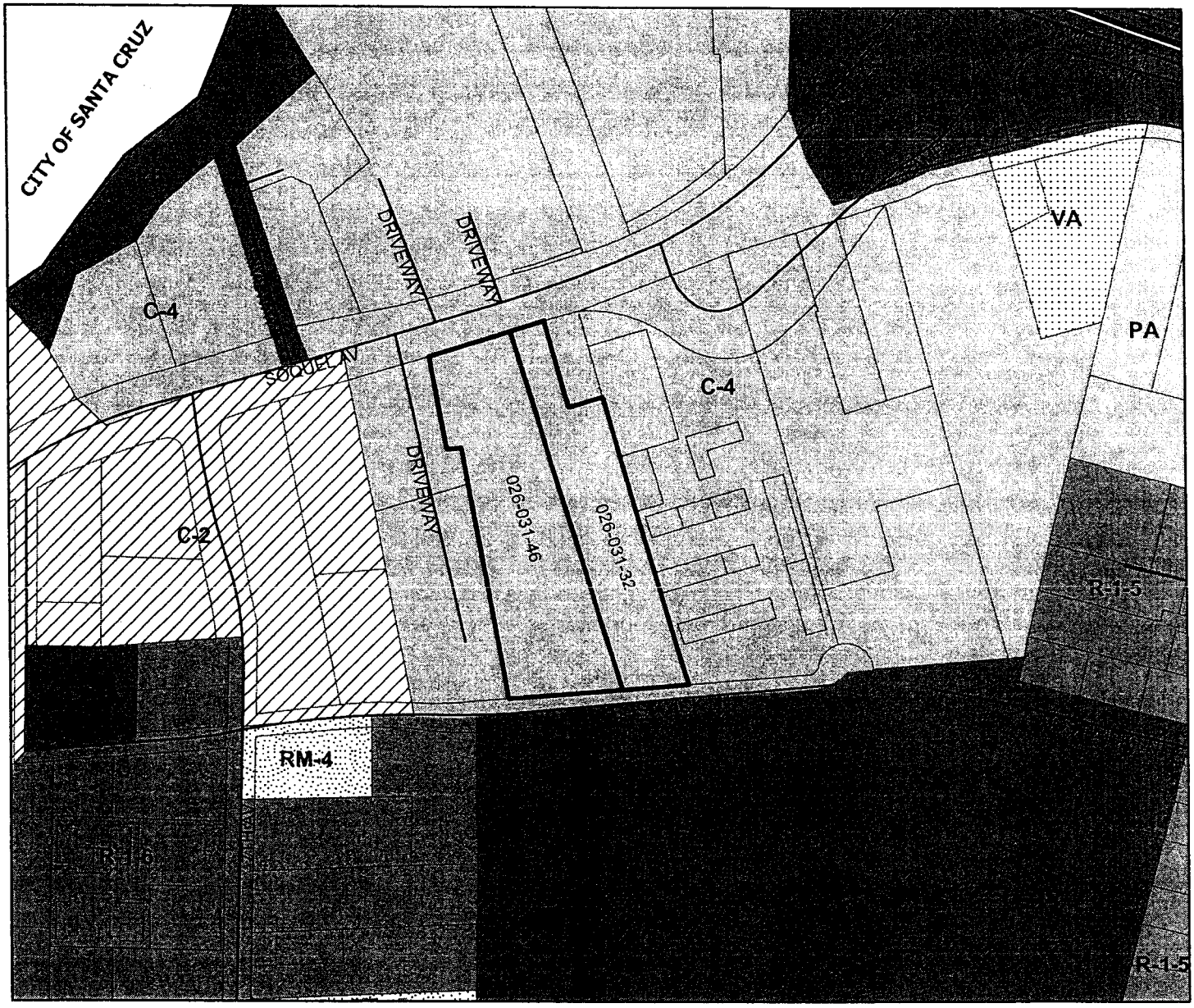
Map Created by
County of Santa Cruz
Planning Department
June 2007

Zoning Map



Legend

- Subject Parcels
- Assessors Parcels
- Streets
- State Highways
- City of Santa Cruz
- COMMERCIAL SERVICE (C-4)
- PUBLIC FACILITY (PF)
- RESIDENTIAL-SINGLE FAMILY (R-1)
- RESIDENTIAL-MULTI FAMILY (RM)
- COMMERCIAL-COMMUNITY (C-2)
- COMMERCIAL-VISITOR ACCOM. (VA)

Environmental Review Inital Study
ATTACHMENT 4 2 of 4
APPLICATION 07-0212

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Map Created by
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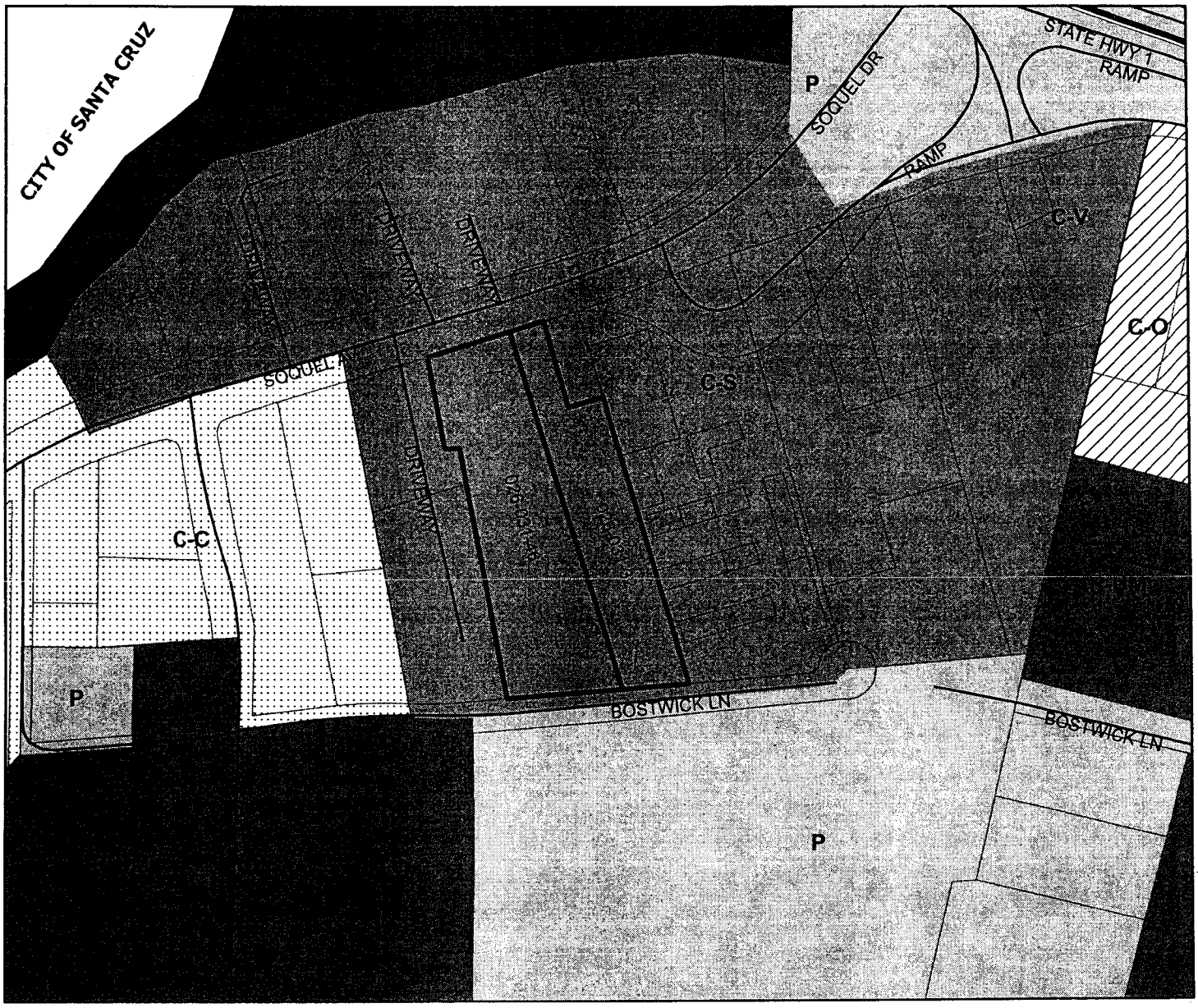
Planning Department
June 2007

General Plan Designation Map



Legend

- Subject Parcels
- Assessors Parcels
- Streets
- State Highways
- City of Santa Cruz
- Commercial-Service (C-S)
- Public Facilites (P)
- Residential - Urban Medium Density (R-UM)
- Urban Open Space (O-U)
- Commercial-Community (C-C)
- Commercial-Office (C-O)

Environmental Review Inital Study
ATTACHMENT 1, 3 of 4
APPLICATION 07-0212

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Map Created by
County of Santa Cruz
Planning Department
June 2007

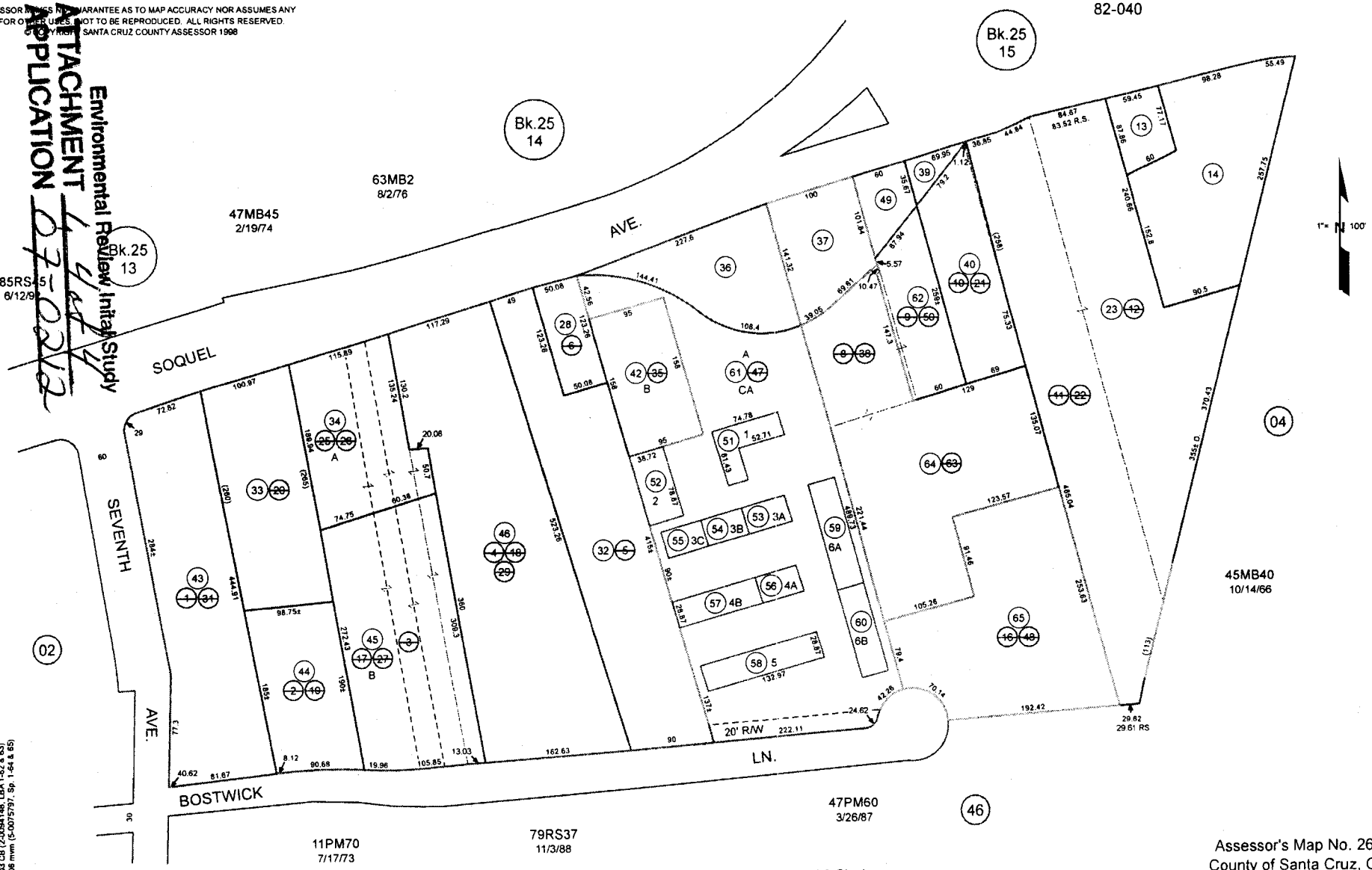
FOR TAX PURPOSES ONLY

ATTACHMENT 4 pg 4
APPLICATION 07-0242
Environmental Review Initial Study

POR. S.E. 1/4 SEC. 8, T.11S., R.1W., M.D.B. & M.

Tax Area Code
82-040

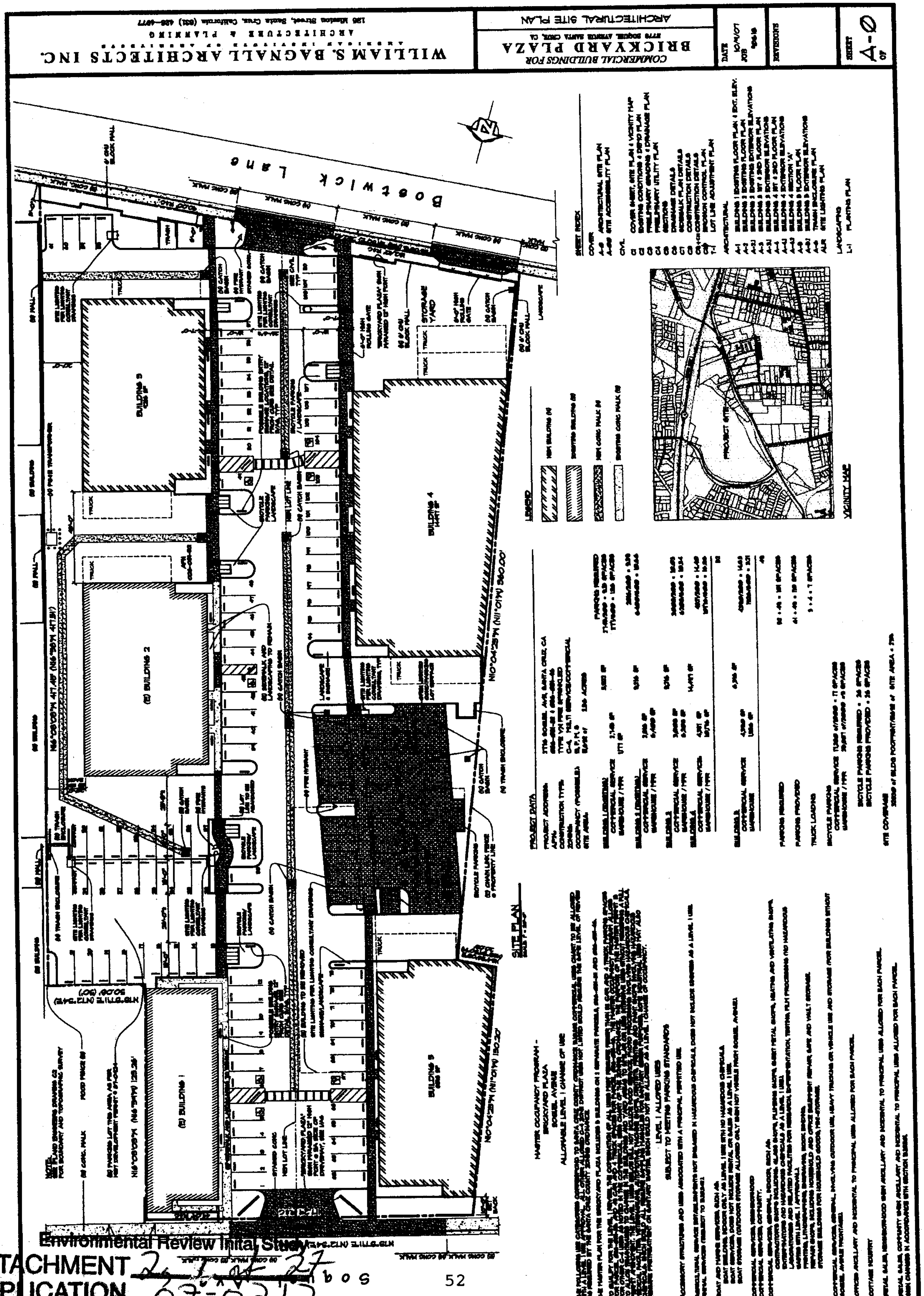
26-03



Note - Assessor's Parcel & Block Numbers Shown in Circles.

Assessor's Map No. 26-03
County of Santa Cruz, Calif.
July, 1998

Electronically Redrawn 7/22/98 rw
Rev. 2/25/03 GB (2-20844B, LBA 1-62 & 63)
Rev. 1/31/08 mvm (3-0075797, Sp. 1-64 & 65)



Environmental Review Inital Study
ATTACHMENT 2, 1 of 27
APPLICATION 07-0212

WILLIAM S. BAGNALL ARCHITECTS INC.
AMERICAN INSTITUTE OF ARCHITECTS
ARCHITECTURE & PLANNING
125 Mission Street, Santa Cruz, California (831) 426-4977

COMMERCIAL BUILDINGS FOR
BRICKYARD PLAZA
2776 SOQUEL AVENUE SANTA CRUZ, CA

SITE ACCESSIBILITY PLAN

DATE 1/28/05
JOB 0516

REVISIONS

SHEET A-00 OF

SITE ACCESSIBILITY PLAN
SCALE: 1:20

Environmental Review Initial Study
ATTACHMENT 2 2 of 27
APPLICATION 07-0212

Project Data

Owner & Subdivider

JEFF ANTOLINI
427 LA FONDA AVE.
SANTA CRUZ, CA 95065

Existing Zoning

C-4

Existing Use

COMMERCIAL SERVICE

Proposed Use

MULTI SERVICE/COMMERCIAL

Water Supply

CITY OF SANTA CRUZ

Sewer Disposal

SANTA CRUZ COUNTY SANITATION DISTRICT

Gas & Electric

PACIFIC GAS & ELECTRIC

Total Area of Site

113,825 S.F. / 2.62 ACRES

Benchmark

COUNTY OF SANTA CRUZ B.M. 917
STANDARD BRASS TAG IN CONCRETE STAMPED "CM-P"
LOCATED ON THE NORTH SIDE OF THE FRONTAGE ROAD
ON THE EXTENSION OF THE CENTERLINE OF 17TH AVENUE.
ELEVATION = 99.81' NGVD 1929

Environmental Review Inital Stud
ATTACHMENT 2, 3 of 27
APPLICATION 07-0212

Notes

1. DESIGNATE A "DISTURBANCE COORDINATOR" TO RESPOND TO CITIZEN COMPLAINTS AND INQUIRIES REGARDING CONSTRUCTION NOISE AND DUST. THE NAME, PURPOSE, AND TELEPHONE NUMBER OF THE DISTURBANCE COORDINATOR SHALL BE POSTED ON A SIGN EASILY VISIBLE FROM OFF-SITE DURING THE ENTIRE TIME PROJECT GRADING AND CONSTRUCTION OCCURS. THE DISTURBANCE COORDINATOR SHALL INVESTIGATE THE CONCERN AND TAKE REMEDIAL ACTION, IF NECESSARY, WITHIN 24 HOURS OF RECEIVING A COMPLAINT OR AN INQUIRY.

2. NO CHANGES IN THE APPROVED IMPROVEMENT PLANS SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE DEPARTMENT OF PUBLIC WORKS.

3. NO LAND CLEARING, GRADING, OR EXCAVATING SHALL TAKE PLACE BETWEEN OCTOBER 15 AND APRIL 15 UNLESS A SEPARATE WINTER EROSION CONTROL PLAN IS APPROVED BY THE PLANNING DIRECTOR.

4. NO LAND DISTURBANCE SHALL TAKE PLACE PRIOR TO THE ISSUANCE OF BUILDING PERMITS, EXCEPT THE MINIMUM REQUIRED TO INSTALL STREET IMPROVEMENTS, PROVIDE ACCESS FOR COUNTY REQUIRED TESTS OR TO CARRY OUT OTHER WORK SPECIFICALLY REQUIRED BY ANOTHER OF THESE CONDITIONS. IN ADDITION, A NPDES PERMIT FROM THE REGIONAL WATER QUALITY CONTROL BOARD IS REQUIRED ALONG WITH A SWPPP.

5. THE CONTRACTOR SHALL APPLY WATER TO ALL EXPOSED EARTH SURFACES AT INTERVALS SUFFICIENT TO PREVENT AIRBORNE DUST FROM LEAVING THE PROJECT SITE. ALL EXPOSED EARTH SHALL BE WATERED DOWN AT THE END OF THE WORK DAY.

6. WHILE IN TRANSIT TO AND FROM THE PROJECT SITE, ALL TRUCKS TRANSPORTING FILL SHALL BE COVERED WITH TARPS.

7. ALL GRADING WORK AND CONSTRUCTION OF IMPROVEMENTS SHALL BE DONE IN ACCORDANCE WITH RECOMMENDATIONS SPECIFIED IN THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT. THE GEOTECHNICAL ENGINEER SHALL PROVIDE TESTING, OBSERVATION AND CONSULTING SERVICES DURING CONSTRUCTION AS NECESSARY TO PROVIDE WRITTEN DOCUMENTATION THAT IMPROVEMENTS HAVE BEEN CONSTRUCTED IN GENERAL CONFORMANCE WITH THE GEOTECHNICAL REPORT.

8. PURSUANT TO SECTIONS 16.40.040 AND 16.42.100 OF THE COUNTY CODE, IF AT ANY TIME DURING SITE PREPARATION, EXCAVATION, OR OTHER GROUND DISTURBANCE ASSOCIATED WITH THIS DEVELOPMENT, ANY ARTIFACT OR OTHER EVIDENCE OF AN HISTORIC ARCHAEOLOGICAL RESOURCE OR A NATIVE AMERICAN CULTURAL SITE IS DISCOVERED, THE RESPONSIBLE PERSONS SHALL IMMEDIATELY CEASE AND DESIST FROM ALL FURTHER SITE EXCAVATION AND NOTIFY THE SHERIFF-CORONER IF THE DISCOVERY CONTAINS HUMAN REMAINS, OR THE PLANNING DIRECTOR IF THE DISCOVERY CONTAINS NO HUMAN REMAINS. THE PROCEDURES ESTABLISHED IN SECTIONS 16.40.040 AND 16.42.100, SHALL BE OBSERVED.

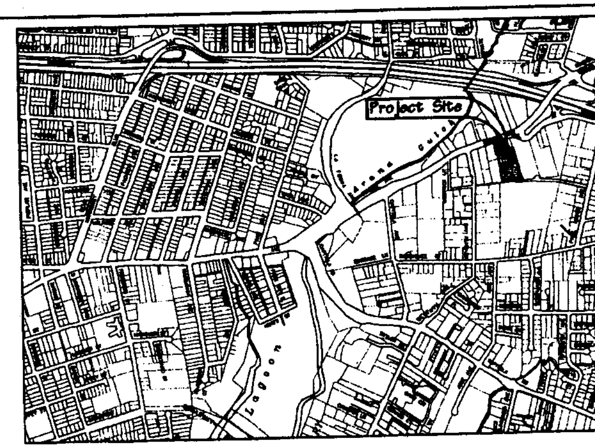
9. THE DIRECTOR OF PUBLIC WORKS, OR HIS AUTHORIZED REPRESENTATIVE, SHALL HAVE THE AUTHORITY TO "STOP WORK" IF THE WORK IS NOT BEING DONE IN ACCORDANCE WITH THE APPROVED IMPROVEMENT PLANS.

10. THE CONTRACTOR SHALL NOTIFY THE COUNTY CONSTRUCTION ENGINEER (408-454-2160) 24 HOURS PRIOR TO START OF CONSTRUCTION.

11. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO, OR USES OF, THESE PLANS. ALL CHANGES MUST BE IN WRITING AND MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.

12. ALL WORK ADJACENT TO OR WITHIN A COUNTY ROAD SHALL BE SUBJECT TO THE PROVISIONS OF CHAPTER 9.70 OF THE COUNTY CODE, INCLUDING OBTAINING AN ENCROACHMENT PERMIT WHERE REQUIRED. WHERE FEASIBLE, ALL IMPROVEMENTS ADJACENT TO OR AFFECTING A COUNTY ROAD SHALL BE COORDINATED WITH ANY PLANNED COUNTY SPONSORED CONSTRUCTION ON THAT ROAD.

NOTE:
IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONSTRUCTION CONTRACTOR AGREES THAT HE WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE APPLIED CONTINUOUSLY AND NOT LIMITED TO NORMAL WORKING HOURS. THE CONSTRUCTION CONTRACTOR ALSO AGREES TO DEFEND, INDEMNIFY AND HOLD THE DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH PERFORMANCE OF THE WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.



Vicinity Map

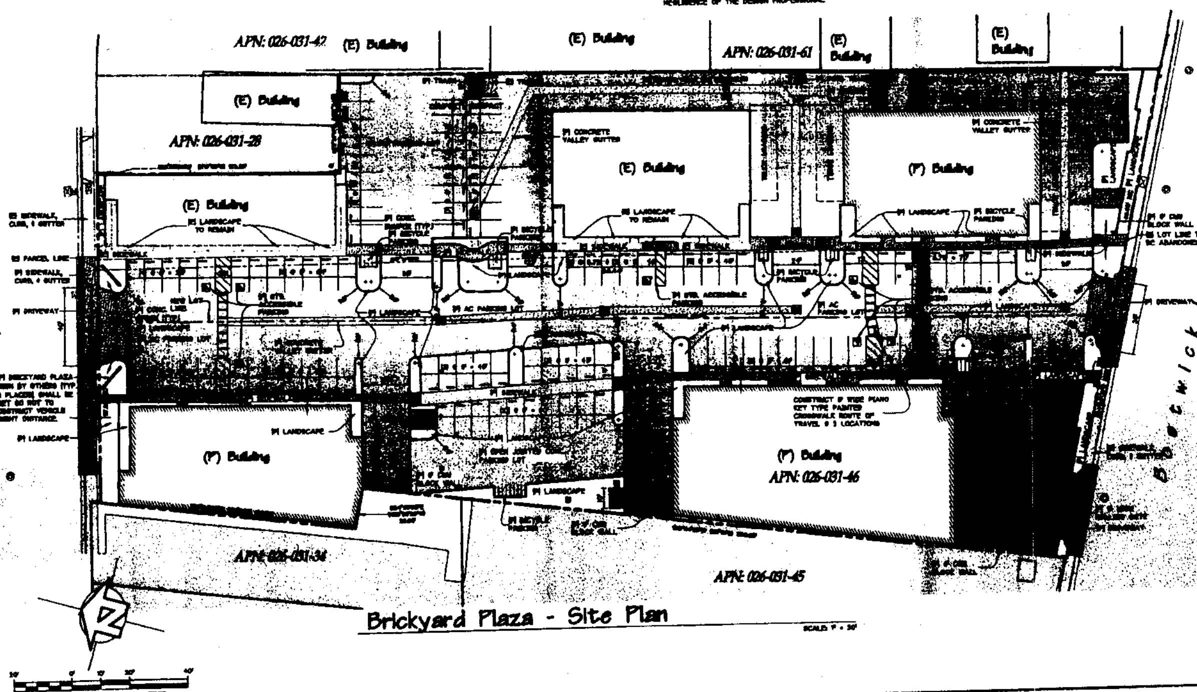
NOT TO SCALE

Sheet Index

SANTA CRUZ COUNTY FLOOD CONTROL & WATER CONSERVATION DISTRICT, ZONE 5
STORM DRAIN PLAN
COUNTY OF SANTA CRUZ STATE OF CALIFORNIA
REVIEWED BY:
APPROVAL RECOMMENDED ______ ASST. DIR. ______ DATE
APPROVED ______ DIRECTOR OF PUBLIC WORKS ______ DATE

DEPARTMENT OF PUBLIC WORKS
COUNTY OF SANTA CRUZ STATE OF CALIFORNIA
REVIEWED BY:
APPROVAL RECOMMENDED ______ ASST. DIR. ______ DATE
APPROVED ______ DIRECTOR OF PUBLIC WORKS ______ DATE

PLANNING DEPARTMENT
COUNTY OF SANTA CRUZ STATE OF CALIFORNIA
REVIEWED BY:
APPROVED ______ PLANNING DIRECTOR ______ DATE



Brickyard Plaza - Site Plan

GRAPHIC SCALE: 1 INCH = 30 FEET

Site Plan, Vicinity Map, & Notes For:
Brickyard Plaza
2776 Soquel Avenue, Santa Cruz, California

Ifland Engineers, Inc.
CIVIL ENGINEERING • LAND PLANNING • STRUCTURAL DESIGN
1100 WATER STREET, SUITE 2
SANTA CRUZ, CA 95062

APN 026-031-32 & 46

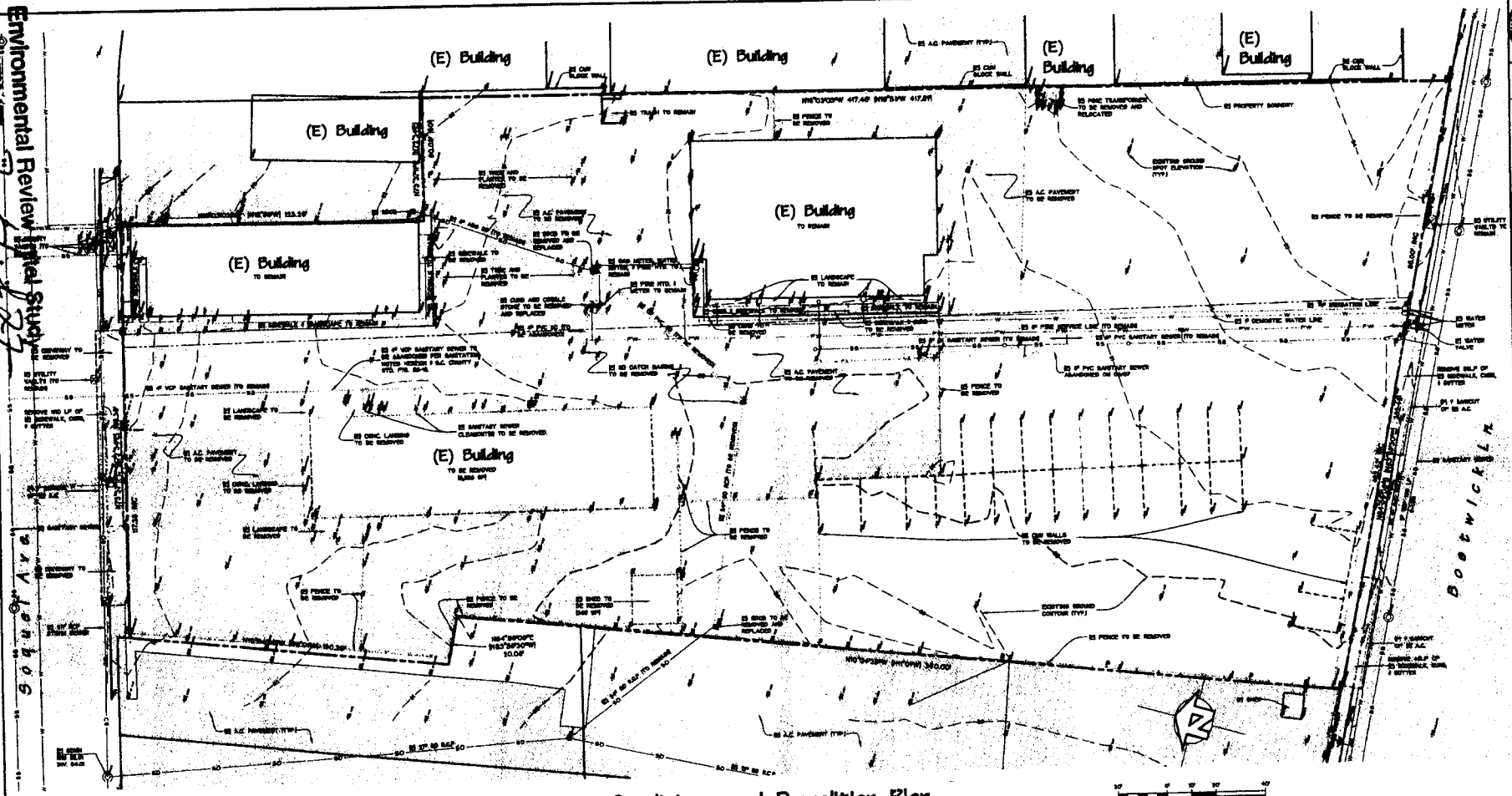
DATE 01/28/08 | DESIGN EP | DRAWN EP

SHEET C1 OF 11 SHEETS

JOB NO. 05069

ATTACHMENT 23
APPLICATION 07-0212

Environmental Review Initial Study



Existing Conditions and Demolition Plan

SCALE: 1" = 30'

GRAPHIC SCALE: 1 INCH = 30 FEET

Site Removal

335	LF OF CURB & GUTTER
1384	SF OF SIDEWALK
3,615	SF OF CMU WALL FACE
765	LF OF CMU WALL FOOTING
48,500	SF OF PAVEMENT
650	LF OF FENCING & POSTS
4	LF OF PVC STORM DRAIN
75	LF OF RCP STORM DRAIN

Sanitation Notes:

1. EXISTING SEWER LATERAL TO BE REMOVED. THE CONNECTION SANITARY SEWER LATERAL SHALL BE CUT, PLUGGED WITH TIGHT-FITTING CAP, AND A REDWOOD STAKE MARKER PLACED (MINIMUM TWO ABOVE GROUND, THREE TO OTHER MOVING OR DEVELOPING THE STRUCTURE.

2. THE END OF THE SANITARY SEWER LATERAL TO BE ABANDONED SHALL BE PLUGGED WITH A GLUE OR SCREW TIGHT CAP, OR CONCRETE.

3. TO OBTAIN NECESSARY INSPECTION OF THE PROPOSED ABANDONMENT AND CAPPING OF THE SEWER LATERAL, PLEASE CALL THE SANITATION DIVISION OF THE PUBLIC WORKS DEPARTMENT, COUNTY OF SANTA CRUZ, AT (831) 454-2160, BETWEEN 10 A.M. AND 3 P.M., OR (831) 454-2160 FROM 8:00 A.M. OR 3:00 P.M.

Benchmark

THE BENCHMARK FOR THIS SURVEY IS SANTA CRUZ COUNTY BENCHMARK (97), WHICH IS A STANDARD CONCRETE MONUMENT WITH BRASS CAP STAMPED "CCA-9" LOCATED ON THE NORTH SIDE OF THE FRONTAGE ROAD OF THE EXTENSION OF THE CENTERLINE OF 17TH AVENUE.

BENCHMARK ELEVATION = (USGS DATUM) 1.0

NOTE

THE SURVEY ABOVE TOPOGRAPHIC DATA SHOWN HEREON WAS PROVIDED TO PLANS ENGINEERING, INC. BY:
GARY RYLAND & ASSOCIATES.
AND IS BASED UPON A FIELD SURVEY DATED:
SEPTEMBER 2006

Existing Conditions and Demolition Plan
Brickyard Plaza
2776 Soquel Avenue, Santa Cruz, California

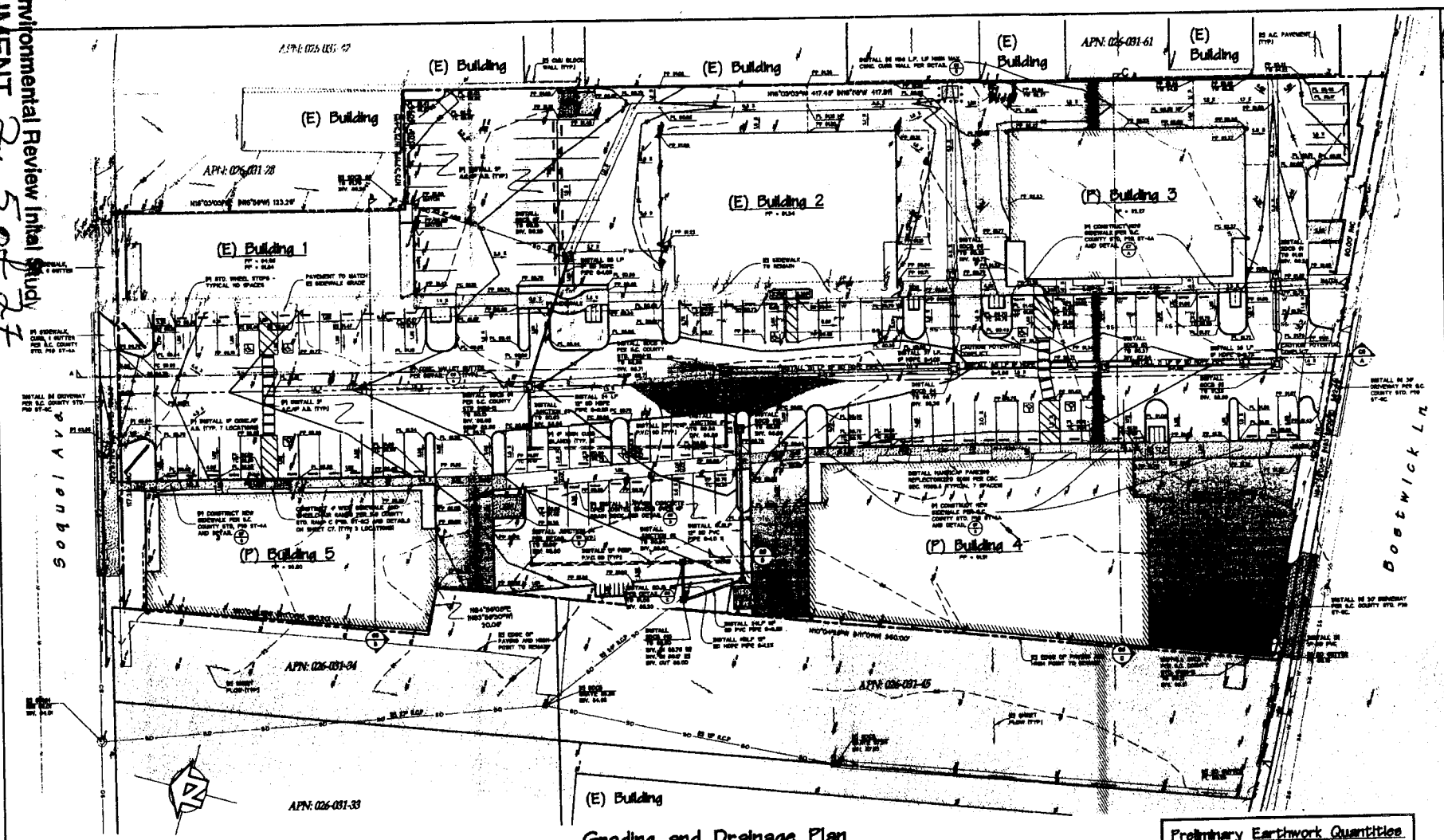
APN: 026-051-32 & 46
DATE: 01/24/08
DESIGN: CP
DRAWN: CP

SHEET C2 OF 11 SHEETS
JOB NO. 05069

PLANS ENGINEERS, INC.
CIVIL ENGINEERING • LAND PLANNING • STRUCTURAL DESIGN
1100 WATER STREET, SUITE 2
SANTA CRUZ, CA 95062
TEL (831) 426-5313
FAX (831) 426-1928

ATTACHMENT 24
APPLICATION 23-0242

Environmental Review Initial Study



Grading and Drainage Plan

SCALE: 1" = 20'

Pavement Legend

PERVIOUS PAVEMENT	EX EXISTING
	FC FACE OF CURB
	FL FLOWLINE
A.C. PAVEMENT	PP PERVIOUS PAVING
	TC TOP OF CURB
	TW TOP OF WALL
CONCRETE WALK	PR PROPOSED

Storm Drainage Calculations

RUNOFF COEFFICIENT - PRE-DEVELOPMENT = 0.71
- POST-DEVELOPMENT = 0.85

RAINFALL INTENSITY - 10 YEAR STORM = 1.20 IN/HR
- 100 YEAR STORM = 3.30 IN/HR

SITE AREA = 2.61 ACRES

TOTAL RUNOFF AREA = 2.75 ACRES

Pre-Development Run-off

Q_{10} = (0.64)(3.782.75)
= 3.71 C.F.S.

Q_{100} = (1.356)(0.64)(3.782.75)
= 8.66 C.F.S.

Post-Development Run-off

Q_{10} = (0.85)(3.782.75)
= 5.86 C.F.S.

Q_{100} = (1.62)(3.782.75)
= 8.70 C.F.S.

Preliminary Earthwork Quantities

1264 CUBIC YARDS EXCAVATION
466 CUBIC YARDS EMBANKMENT
798 CUBIC YARDS EXPORT OFF SITE

NOTES:
1. ESTIMATE DOES NOT INCLUDE STRIPPING, UTILITY TRENCH VOLUMES OR ANY OVEREXCAVATION IF REQUIRED BY SITE CONDITIONS.
2. ESTIMATE ASSUMES A 10% COMPACTION FACTOR ON ALL FILL MATERIAL AND A 10% EXPANSION FACTOR ON ALL CUT MATERIAL.
3. EARTHWORK QUANTITIES ARE PRELIMINARY ESTIMATES ONLY. GRADING FINAL PROJECT DESIGN ESTIMATES MAY BE ADJUSTED TO ACCOUNT FOR UNSUITABLE SOILS, SUBSTRUCTURES AND SITE STRIPPINGS SHOULD SUCH INFORMATION BE AVAILABLE.

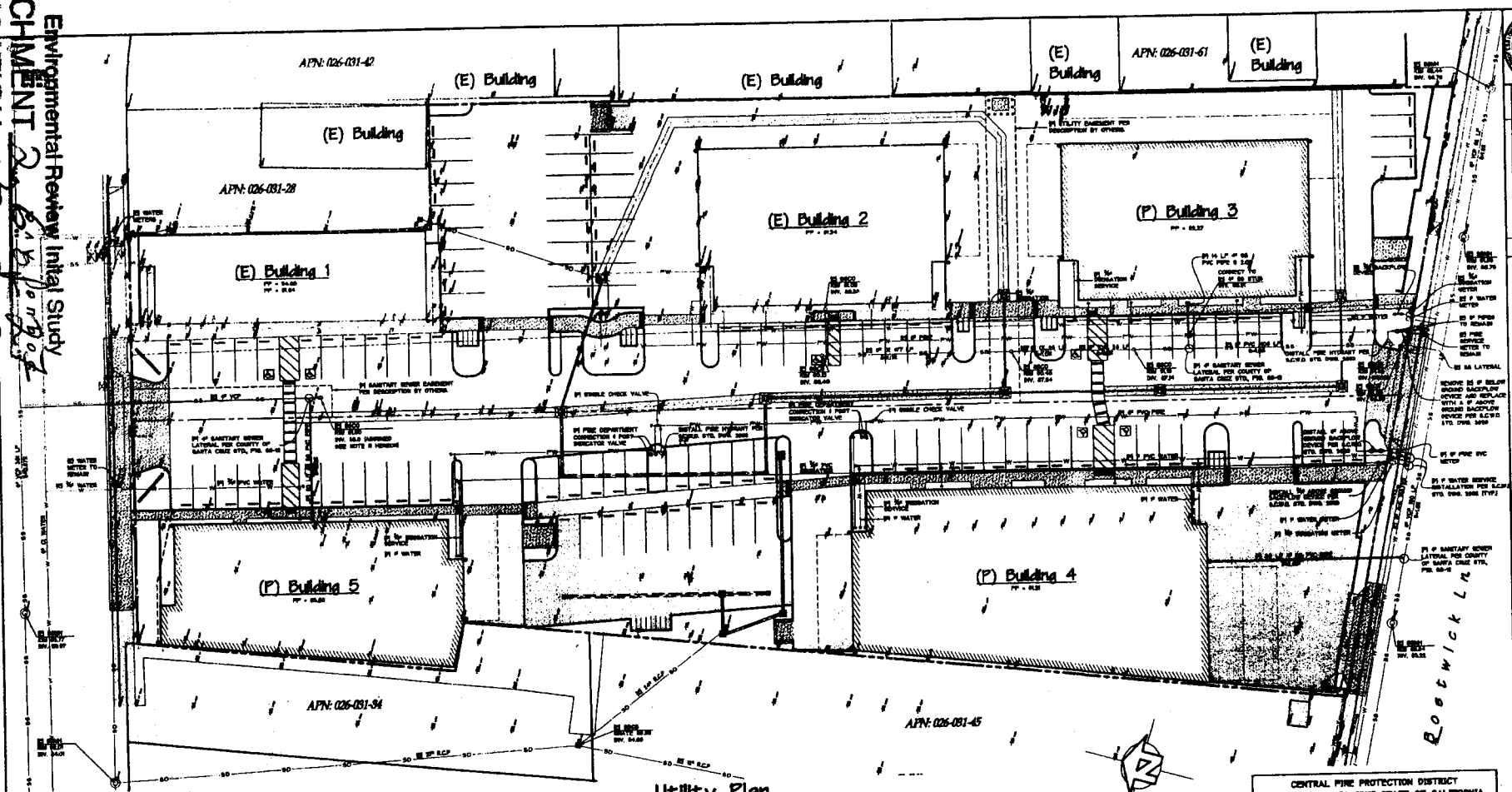
Preliminary Grading and Drainage Plan
Brickyard Plaza
2776 Soquel Avenue, Santa Cruz, California

Mid ENGINEERS, INC.
CIVIL ENGINEERING • LAND PLANNING • STRUCTURAL DESIGN
1100 WATER STREET, SUITE 2
SANTA CRUZ, CA 95062
TEL (831) 426-5313
FAX (831) 426-1928

APN 026-031-32 & 45
DESIGN JW/DP
DRAWN EP
DATE 01/23/06
SHEET C3 OF 11 SHEETS
JOB NO. 05069

ATTACHMENT 2 to Exhibit A
APPLICATION 07-0213

Environmental Review Initial Study



Utility Plan

SCALE: 1" = 10'

GRAPHIC SCALE: 1 INCH = 10 FEET

Santa Cruz County Sanitation District General Notes

1. ALL CONSTRUCTION SHALL COMPLY WITH APPLICABLE REQUIREMENTS IN THE CURRENT EDITION OF THE "COUNTY OF SANTA CRUZ SEWER CRITERIA".

2. ALL FIGURE (FIG) REFERENCES, UNLESS OTHERWISE SPECIFIED, REFER TO STANDARD DRAWINGS IN THE CURRENT EDITION OF THE "COUNTY OF SANTA CRUZ SEWER CRITERIA".

3. NO CHANGES IN THE APPROVED IMPROVEMENT PLANS SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE DEPARTMENT OF PUBLIC WORKS.

4. THE DIRECTOR OF PUBLIC WORKS OR HIS AUTHORIZED REPRESENTATIVE SHALL HAVE THE AUTHORITY TO "STOP WORK" IF THE WORK IS NOT BEING DONE IN ACCORDANCE WITH THE APPROVED IMPROVEMENT PLANS.

5. THE CONTRACTOR SHALL NOTIFY THE COUNTY CONSTRUCTION INSPECTOR 831-454-2160 24 HOURS PRIOR TO START OF CONSTRUCTION.

6. THE CONTRACTOR SHALL NOTIFY THE SANITATION DISTRICT INSPECTOR 831-454-2160 OR LEAVE MESSAGE AT 831-454-2435 BEFORE 9:00 A.M. AT LEAST 24 HOURS PRIOR TO THE CONNECTION OF ANY BUILDING SEWER TO THE SEWER LATERAL OR TO THE ABANDONMENT THEREOF OR IN THE CASE OF ABANDONMENTS, NO DEMOLITION PERMITS WILL BE ISSUED UNTIL SAID SEWER LINE HAS BEEN ABANDONED.

7. EACH NEW SANITARY SEWER LATERAL NOT IMMEDIATELY CONNECTED TO A BUILDING SHALL BE MARKED WITH A 2" X 4" P BEARING STAKE MARKER, TO BE ABOVE FINISH GRADE, AT THE END OF EACH NEW LATERAL STUB-OUT. AN "S" SHALL BE PAINTED ON THE MARKER AND THE END OF EACH LATERAL SHALL BE PROPERLY CAPPED. ALL LATERALS INSTALLED IN NEW DEVELOPMENTS SHALL ALSO BE MARKED BY STAMPING AN "S" IN THE CURB JUST ABOVE THE LATERAL.

8. INSULATED COPPER WIRE (NO. 10) SHALL BE PLACED ALONG TOP OF ALL GRAVITY AND FORCE MAINS. THE WIRE SHALL RUN BETWEEN MANHOLES, CLEANOUTS, OR OTHER APPROPRIATE FACILITIES, BRIGHT TO THE SURFACE AND SPLICED OR OTHERWISE RECEIVED APPROVED TO THE MANHOLE OR CLEANOUT COVER OR OTHER APPROPRIATE METAL STRUCTURE.

9. FOLLOWING THE SUCCESSFUL COMPLETION OF CLEANING AND TESTING, ALL SANITARY SEWER MAINS WHICH ARE TO BE COUNTY-MAINTAINED, OR PRIVATE LINES AT THE DISCRETION OF THE PUBLIC WORKS INSPECTOR, SHALL FIRST BE PLUGGED, THEN VIDEO-RECORDED AT THE DEVELOPER'S EXPENSE ON DVD BY A MICROSOFT WINDOWS MEDIA PLAYER COMPATIBLE FORMAT. SAID VIDEO-RECORDING AND ACCEPTANCE REPORT SHALL BE SUBMITTED TO THE SANITATION DISTRICT FOR REVIEW AND APPROVAL PRIOR TO THE ACCEPTANCE OF THE PROJECT AND ANY ASSOCIATED SUBDIVISION OR BUILDING AGREEMENT. THE CONTRACTOR SHALL REFER TO PART 4, SANITARY SEWER DESIGN OF THE SEWER CRITERIA FOR SPECIFICATIONS ON PIPE LAYING, PIPELINE TESTING AND ALLOWABLE INFILTRATION TOLERANCES.

10. BACKFLOW PREVENTION DEVICES SHALL BE INSTALLED ON ALL LATERALS WHERE THE FINISHED FLOOR ELEVATION IS LESS THAN ONE FOOT ABOVE THE RIM ELEVATION OF THE HIGHEST UPSTREAM MANHOLE OR CLEANOUT. THE VALVES SHALL BE LOCATED IN SUCH A WAY AS TO PREVENT ANY DAMAGE TO ADJACENT PROPERTY AS A RESULT OF SEWAGE RELEASED FROM THE DEVICE (FIGURE 50-14).

11. UNDERGROUND UTILITY LOCATIONS SHOWN ARE COMPILED FROM INFORMATION SUPPLIED BY THE APPROPRIATE UTILITY AGENCY. CONTRACTOR SHALL VERIFY LOCATION OF AFFECTED UTILITY LINES AND POTHOLE THOSE AREAS WHERE POTENTIAL CONFLICTS ARE LIKELY OR DATA IS OTHERWISE INCOMPLETE. SIMILARLY, CONTRACTOR SHALL VERIFY DEPTH OF EXISTING WATER LINES AT PROPOSED STORM DRAIN PIPE CROSSINGS AND NOTIFY ENGINEER OF ANY CONFLICTS.

12. ANY EXISTING UTILITIES THAT ARE REQUIRED TO BE RELOCATED AS A PART OF THIS CONSTRUCTION SHALL BE RELOCATED AT THE DEVELOPER'S EXPENSE.

13. ALL SANITARY SEWERS WITHIN THE ROADWAY OR UNDER CURB, GUTTER OR SIDEWALK SHALL BE IN PLACE, VERIFIED, AND APPROVED FOR ACCEPTANCE PRIOR TO PLACING THE PERMANENT PAVING OR SAID ROADWAY OR PLACING ANY CURB, GUTTER OR SIDEWALK THEREON.

14. IF SIDEWALK IS NOT PLACED MONOLITHICALLY WITH CURB AND GUTTER, PLACE #4 DOWELS UP LONG AT 4' O.C. IN BACK OF CURB 3" BELOW TOP OF CURB, IF INTO CONCRETE.

15. REFER TO FIGURES 50-5A (-10) AND 5A-1 (-2) FOR BACKFILL REQUIREMENTS. REFER TO 50-6 FOR CONCRETE CAP AND ENCASEMENT REQUIREMENTS.

16. WATER SERVICE FOR THE SITE SHALL BE INSTALLED BY THE CONTRACTOR ACCORDING TO CITY OF SANTA CRUZ REQUIREMENTS FOR DETAILS BY ARCHITECT/ENGINEER.

17. BETWEEN OCTOBER 15 AND APRIL 15, EXPOSED SOIL SHALL BE PROTECTED FROM EROSION AT ALL TIMES. DURING CONSTRUCTION, SUCH PROTECTION MAY CONSIST OF MULCHING AND/OR PLANTING OF NATIVE VEGETATION OF ADEQUATE DENSITY. BEFORE COMPLETION OF THE PROJECT, ANY EXPOSED SOIL OR DISTURBED SLOPES SHALL BE PERMANENTLY PROTECTED FROM EROSION.

18. PRIOR TO CONSIDERATION FOR FORMAL COUNTY ACCEPTANCE OF THE IMPROVEMENTS, AS-BUILT PLANS WILL BE PREPARED BY COUNTY STAFF. ANY CHANGES FROM THE APPROVED IMPROVEMENT PLANS NOT PREVIOUSLY APPROVED BY THE DEPARTMENT OF PUBLIC WORKS WILL REQUIRE NOTATION AND ADJUSTMENT TO THE SATISFACTION OF THE COUNTY.

19. SANITARY SEWER MANHOLES, SUBJECT TO SURFACE OR STORM WATER, SHALL HAVE WATER-TIGHT LIDS.

CENTRAL FIRE PROTECTION DISTRICT
COUNTY OF SANTA CRUZ STATE OF CALIFORNIA
REMARKS:
APPROVED _____ DATE _____
FIRE MARSHALL

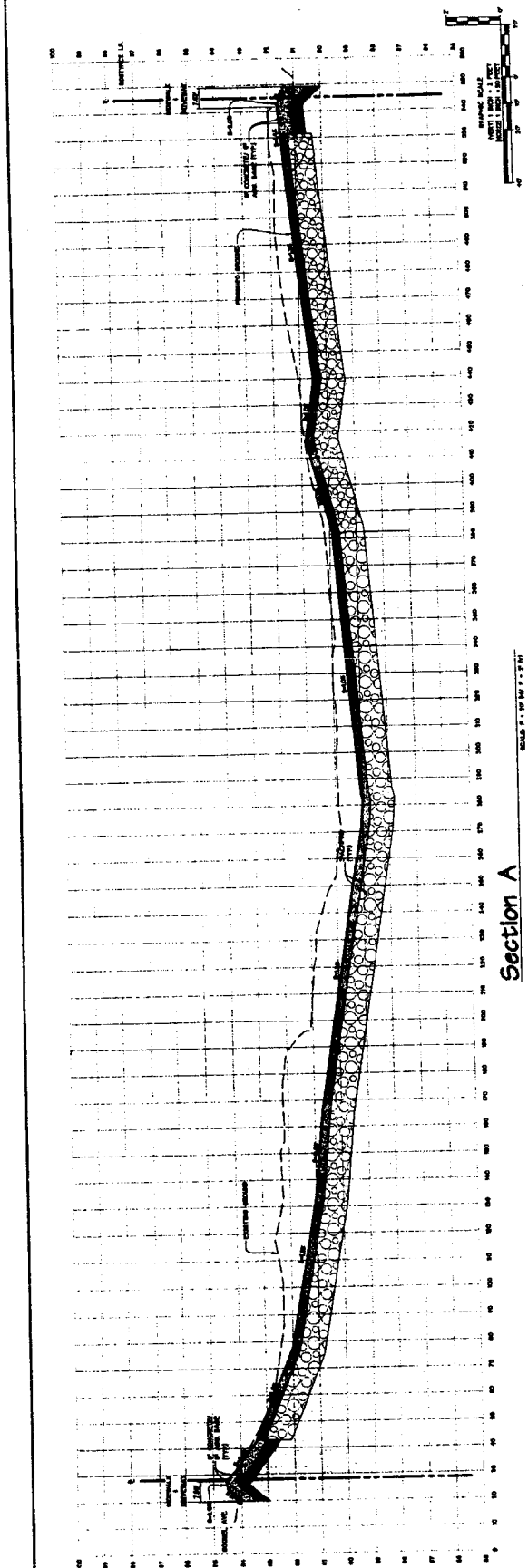
SANTA CRUZ COUNTY
SANITATION DISTRICT
REVIEWED BY:
APPROVAL RECOMMENDED _____ DATE _____
APPROVED _____ DATE _____
DIRECTOR OF PUBLIC WORKS

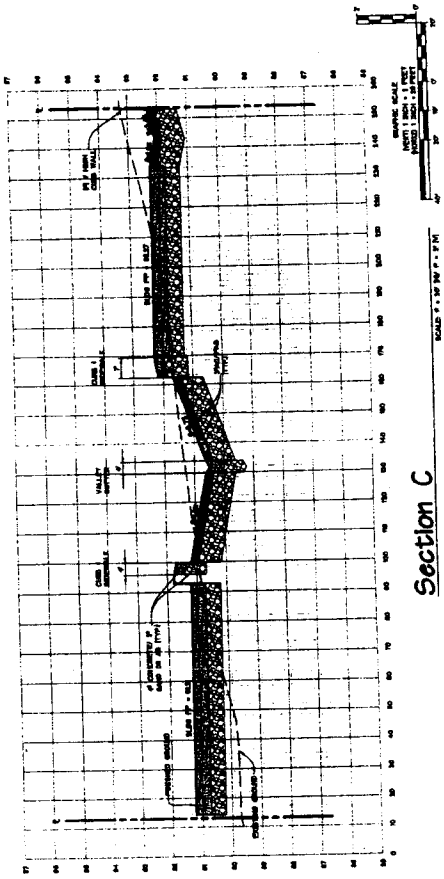
Water System Acceptance
WATER SYSTEM REMAIN ACCEPTED BY CITY OF SANTA CRUZ THIRTEEN ONE YEAR AFTER DATE.
WATER DEPARTMENT DATE

Preliminary Utility Plan
Brickyard Plaza
2776 Soquel Avenue, Santa Cruz, California
APN 026-031-33 & 45
DESIGN: JWP
DRAWN: EP
DATE: 01/28/08
SHEET C4 OF 11 SHEETS
JOB NO. 05068

Miml ENGINEERS, INC.
CIVIL ENGINEERING • LAND PLANNING • STRUCTURAL DESIGN
1100 WATER STREET, SUITE 2
SANTA CRUZ, CA. 95062
TEL (831) 426-3703
FAX (831) 426-1763

57


Section A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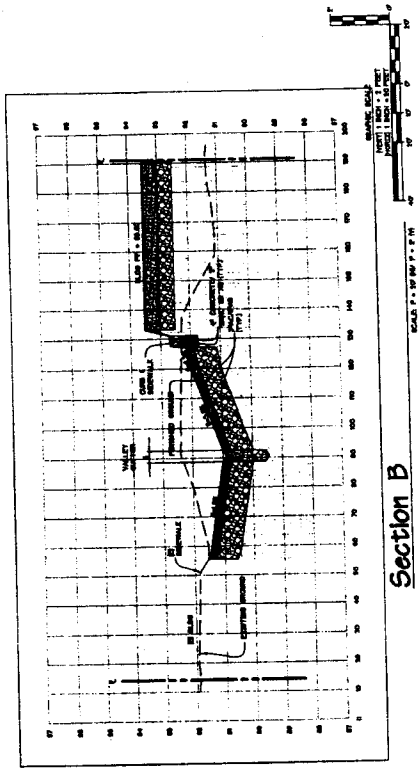
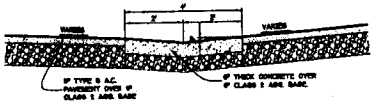
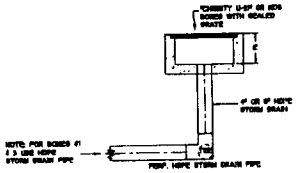

Section B

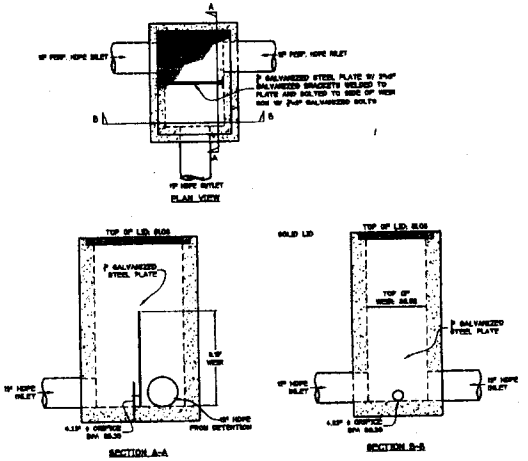
Environmental Review Initial Study
ATTACHMENT 23 of 27
APPLICATION 07-0218



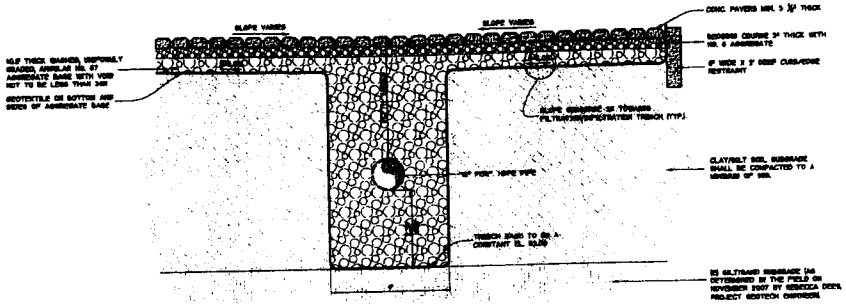
Detail For Concrete Valley Gutter (A)



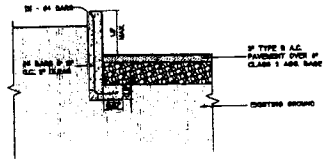
Detail For Storm Drain (B)



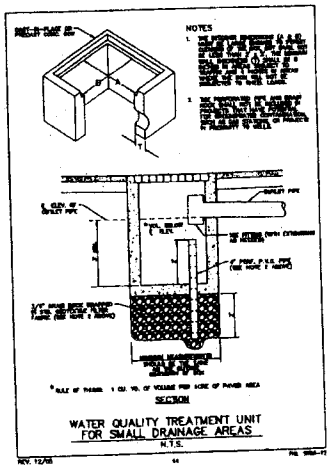
"Christy" U32 w/ Flow Control Weir (C)



Open Jointed Pavement Section Detail (D)



Concrete Curb Wall (E)



WATER QUALITY TREATMENT UNIT
FOR SMALL DRAINAGE AREAS
N.T.S.

Drainage Details

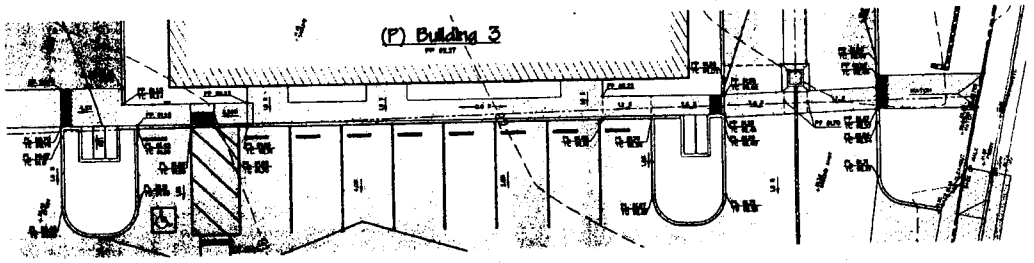
Drainage Details
Brickyard Plaza
2770 Soquel Avenue, Santa Cruz, California
APN 026-031-32 & 46
DESIGN EP/JEW
DRAWN EP
DATE 01/26/08
SHEET C6 OF 11 SHEETS
JOB NO. 05068

59

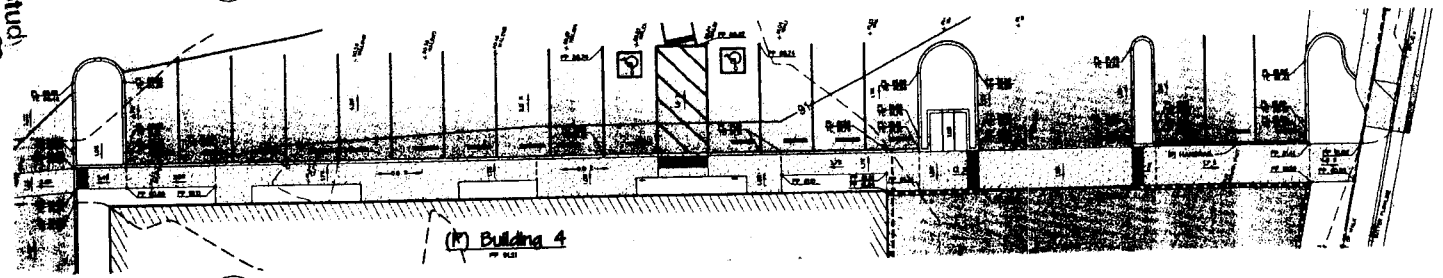
ATTACHMENT 2 to 27
APPLICATION 07-0512

Environmental Review Initial Study

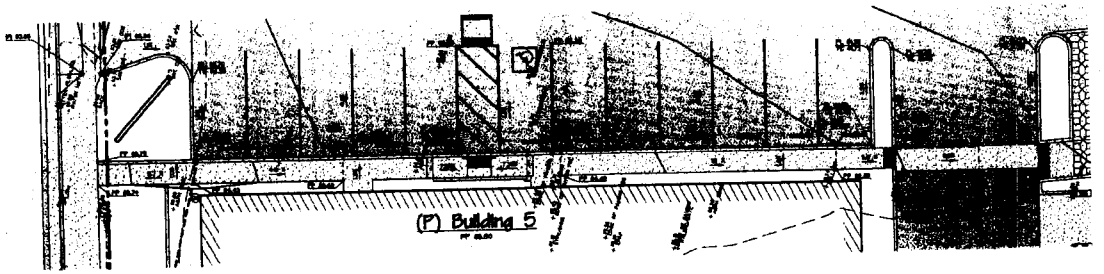
60



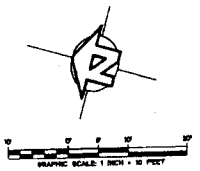
(P) Building 3 — A



(P) Building 4 — B



(P) Building 5 — C



Sidewalk Plan Details

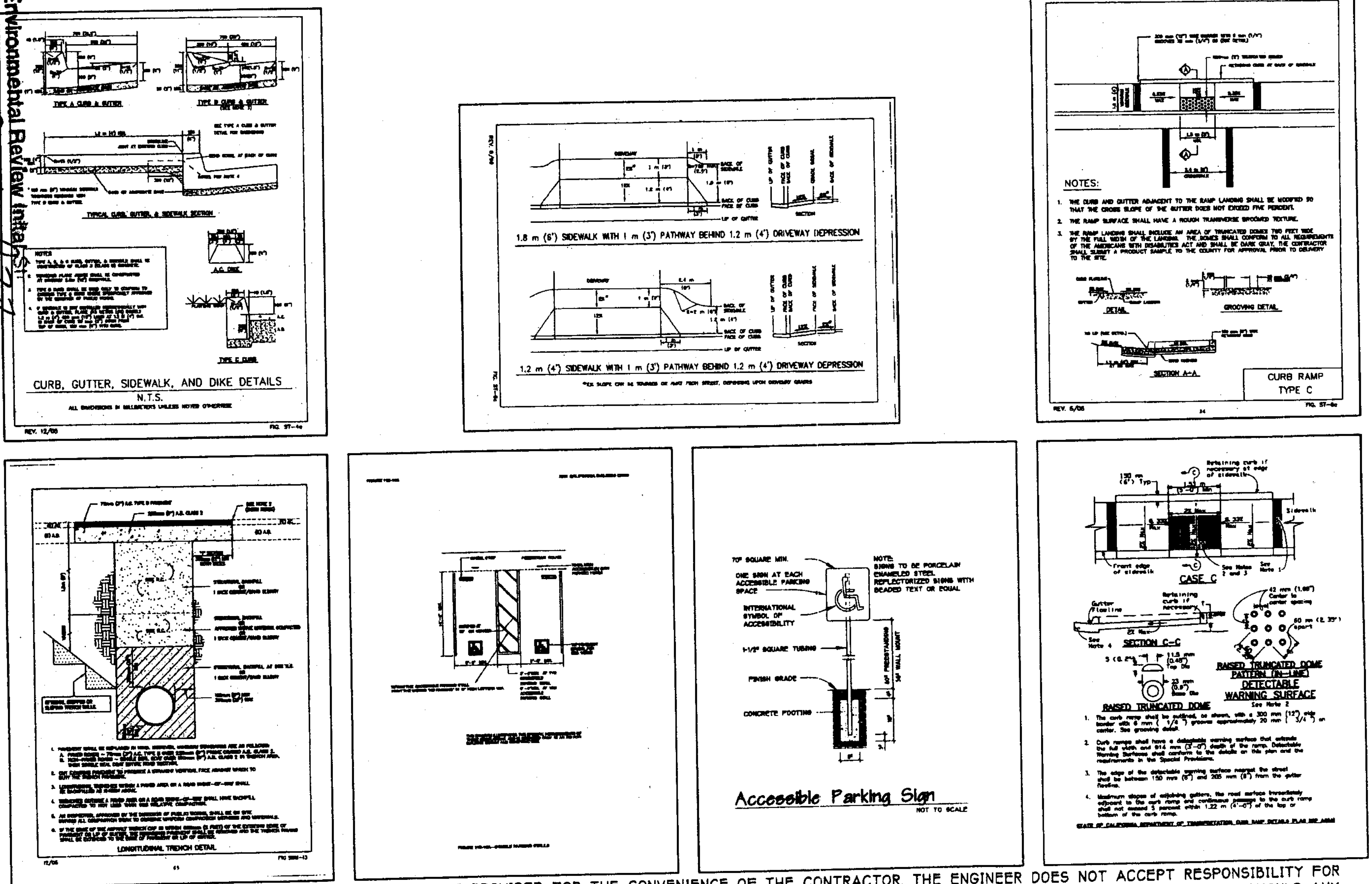
SCALE: 1" = 10'

Sidewalk Plan Details
Brickyard Plaza
2776 Soquel Avenue, Santa Cruz, California

ENGINEERS, INC.
CIVIL ENGINEERING • LAND PLANNING • STRUCTURAL DESIGN

APN 026-031-33 & 46
DATE 01/28/08
DESIGN
DRAWN EP
CHK'D

SHEET C7
OF 11 SHEETS
JOB NO. 05068



NOTE: THE STANDARD DETAILS ON THIS PAGE ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER DOES NOT ACCEPT RESPONSIBILITY FOR THE CURRENCY OF THE DATA CONTAINED ON SAID DETAILS AND ENCOURAGES THE CONTRACTOR TO OBTAIN CURRENT COPIES FOR USE ON THE PROJECT. SHOULD ANY DISCREPANCIES BECOME EVIDENT BETWEEN THESE PLANS AND THE CURRENT DETAIL, THE ENGINEER SHALL BE CONSULTED PRIOR TO CONSTRUCTION.

ifland ENGINEERS, INC.
CIVIL ENGINEERING • LAND PLANNING • STRUCTURAL DESIGN

Construction Details
Brickyard Plaza
2776 Soquel Avenue, Santa Cruz, California
APN 026-031-32 & 46

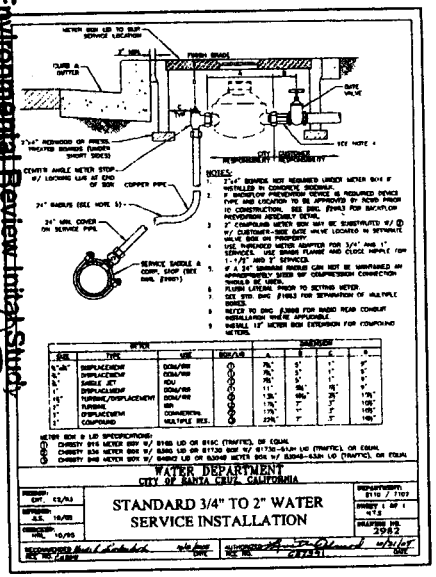
DATE	DESIGN	DRAWN
01/28/08	EP	EP

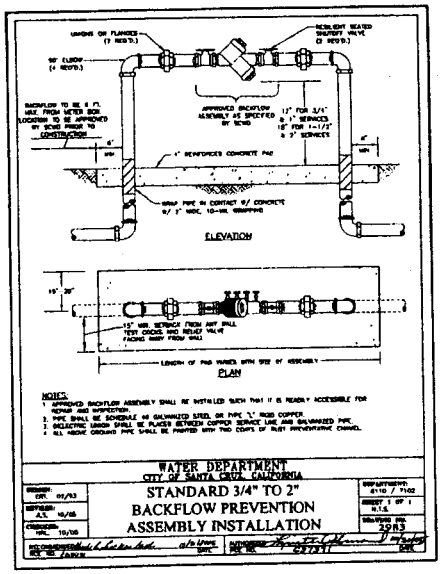
SHEET C8 OF 11 SHEETS
JOB NO. 05069

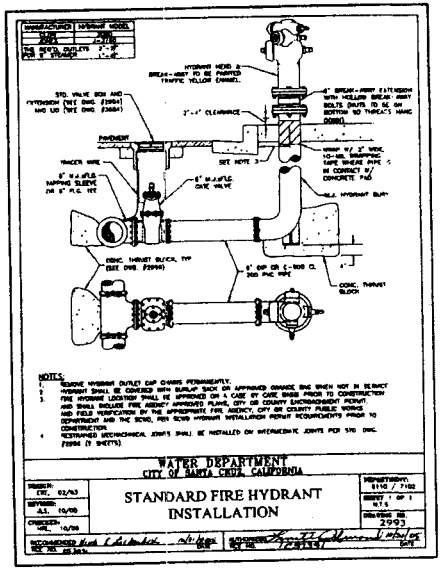
Environmental Review Inital Study
ATTACHMENT 2, 10 of 27
APPLICATION 07-0212

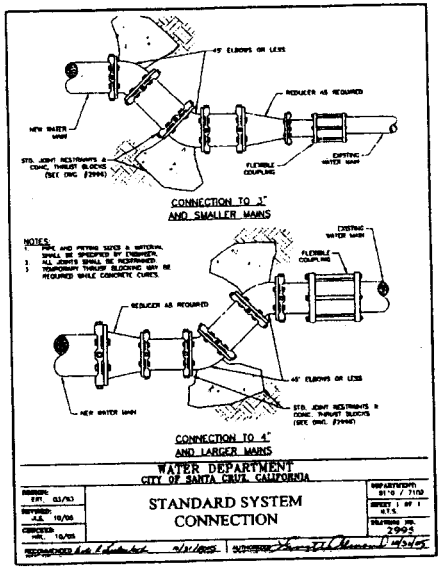
ATTACHMENT 2
APPLICATION 07-0212

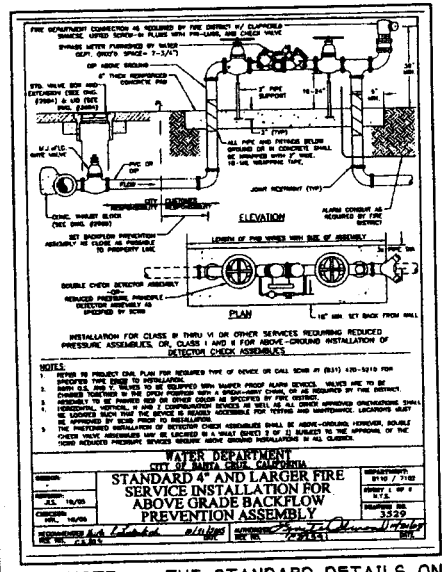
Environmental Review Initial Study











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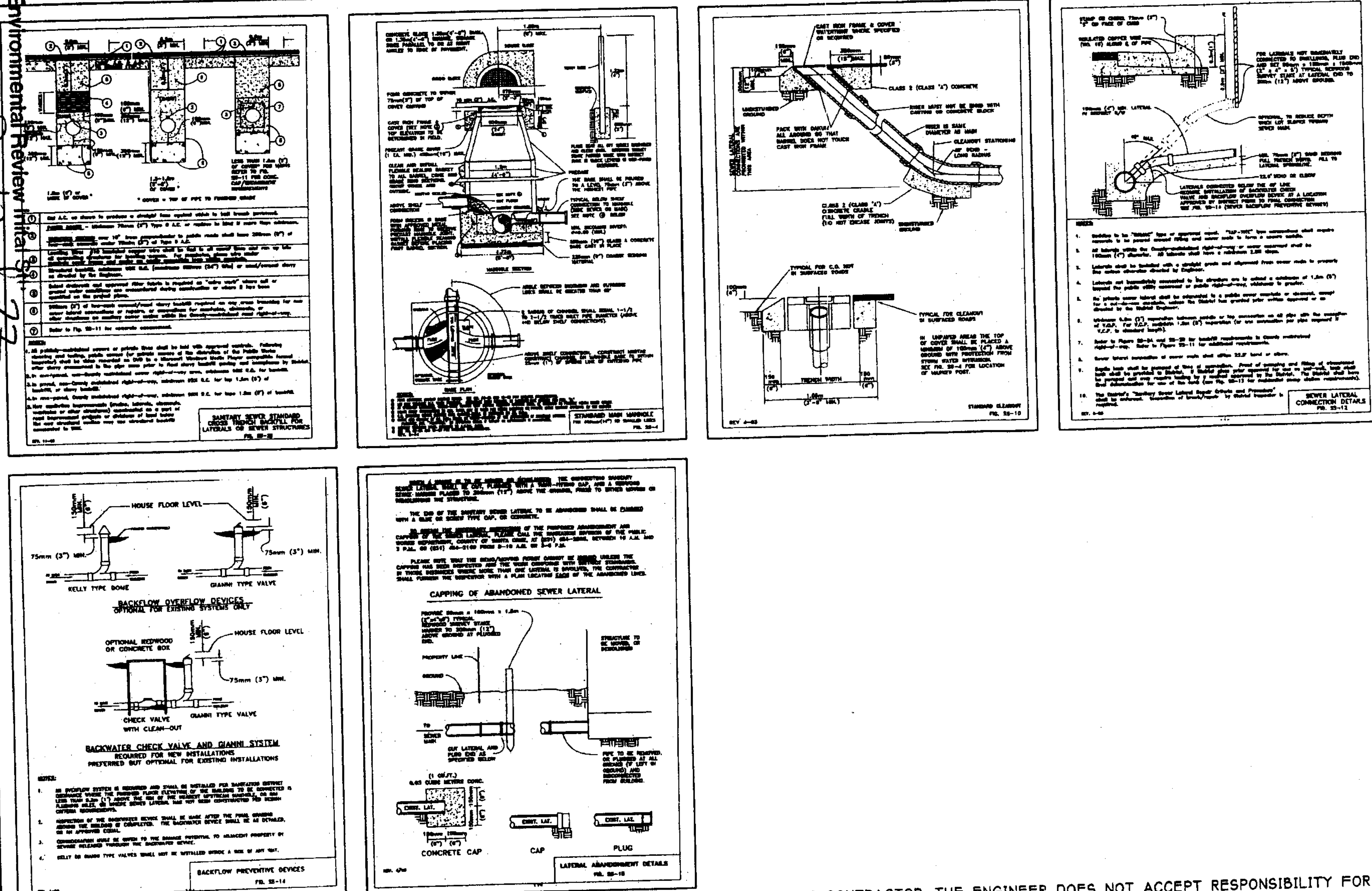
Miand ENGINEERS, INC.
CIVIL ENGINEERING • LAND PLANNING • STRUCTURAL DESIGN
1100 WATER STREET, SUITE 2
SANTA CRUZ, CA 95062
(831) 426-3560
FAX (831) 426-1763

Construction Details
Brickyard Plaza
2776 Soquel Avenue, Santa Cruz, California
APN 026-031-32 & 48
DESIGN
DRAWN
DATE 01/31/08

SHEET C9 OF 11 SHEETS
JOB NO. 05068

62



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iei Ifland ENGINEERS, INC.
CIVIL ENGINEERING • LAND PLANNING • STRUCTURAL DESIGN
1100 WATER STREET, SUITE 2
SANTA CRUZ, CA 95062

Construction Details
Brickyard Plaza
2776 Soquel Avenue, Santa Cruz, California

APN 026-031-32 & 46

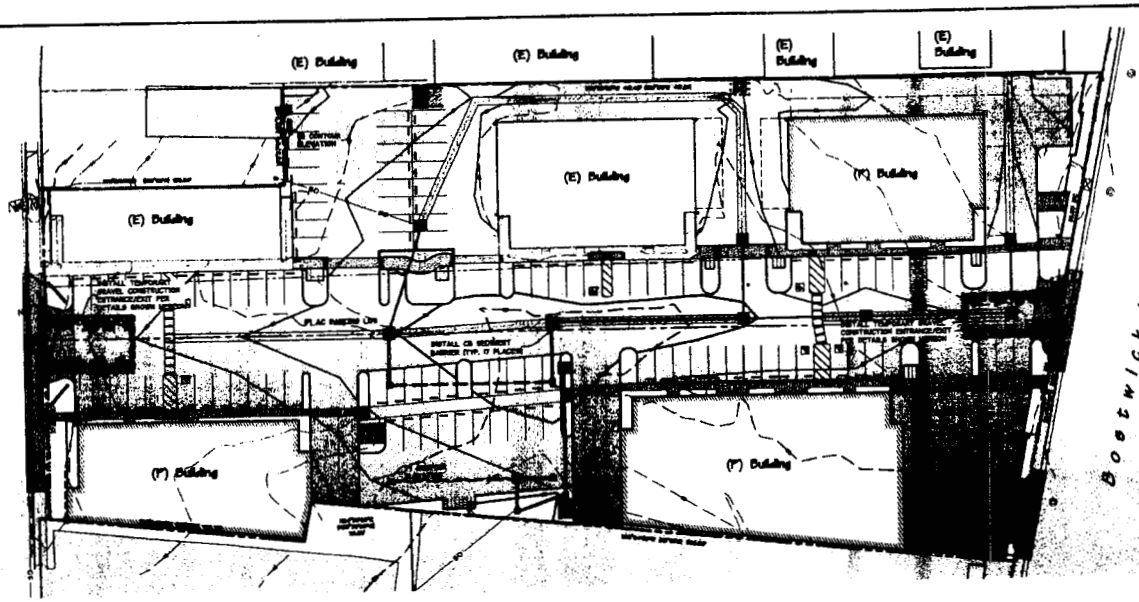
DATE 01/24/08

SHEET C10 OF 11 SHEETS

JOB NO. 05069

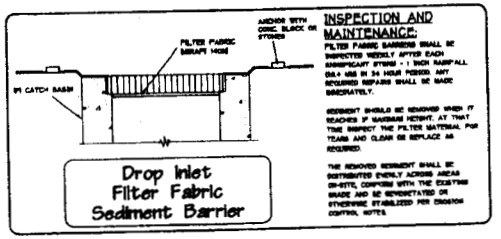
Environmental Review Inital Study
ATTACHMENT 2, 12 of 27
APPLICATION 07-0212

Environmental Review Initial Study
ATTACHMENT 2
APPLICATION 07-0212



Erosion Control Plan

SCALE: 1" = 30'



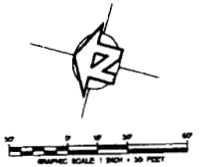
Drop Inlet Filter Fabric Sediment Barrier

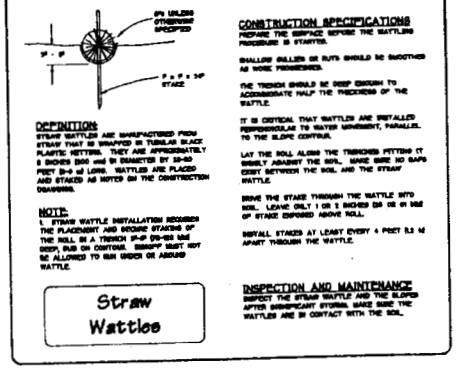
INSPECTION AND MAINTENANCE:

FILTER FABRIC BARRIERS SHALL BE INSPECTED WEEKLY AFTER EACH SIGNIFICANT STORM - 1 INCH RAINFALL OR MORE IN 24 HOUR PERIOD. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

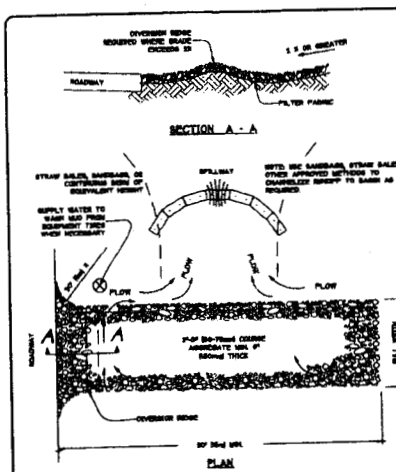
SEDIMENT SHOULD BE REMOVED WHEN IT REACHES 1/2 BARRIER HEIGHT. AT THAT TIME INSPECT THE FILTER MATERIAL FOR TEARS AND CLEAR OR REPLACE AS REQUIRED.

THE REMOVED SEDIMENT SHALL BE DISTRIBUTED EVENLY ACROSS AREAS ON-SITE, CONFORM WITH THE EXISTING GRADE AND BE REVEGETATED OR OTHERWISE STABILIZED PER EROSION CONTROL NOTES.





Straw Wattles



Temporary Gravel Construction Access

CONSTRUCTION SPECIFICATIONS:

THE AGGREGATE SIZE FOR CONSTRUCTION OF THE PAD SHALL BE 1-5 INCH (25-76 MM) STONE. PLACE THE GRAVEL TO THE SPECIFIC GRADE AND DIMENSIONS SHOWN ON THE PLANS, AND SMOOTH IT.

THE THICKNESS OF THE PAD SHALL NOT BE LESS THAN 6 INCHES (150 MM). USE GEOTEXTILE FABRICS, IF NECESSARY, TO IMPROVE STABILITY OF THE FOUNDATION IN LOCATIONS SUBJECT TO SEEPAGE OR HIGH WATER TABLE.

THE WIDTH OF THE PAD SHALL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS AND IN ANY CASE SHALL NOT BE LESS THAN 10 FEET (3.0 M) WIDE.

THE LENGTH OF THE PAD SHALL BE AS REQUIRED, BUT NOT LESS THAN 50 FEET (15.0 M).

LOCATE CONSTRUCTION ENTRANCES AND EXITS TO LIMIT SEDIMENT LEAVING THE SITE AND TO PROVIDE FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES. AVOID ENTRANCES WHICH HAVE STEEP GRADES AND ENTRANCES AT CURVES IN PUBLIC ROADS.

THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY.

PROVIDE DRAINAGE TO CARRY WATER TO A SEDIMENT TRAP OR OTHER SUITABLE OUTLET.

WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. SEE SEDIMENT BASIN MAP.

ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, STRAW BALES, OR OTHER APPROVED METHODS.

INSPECTION AND MAINTENANCE:

MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE.

REPLACE GRAVEL MATERIAL WHEN SURFACE VOIDS ARE VISIBLE.

AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY.

IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS. REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS WITHIN 24 HOURS.

Mid Coast Engineers
CIVIL ENGINEERING • LAND PLANNING • STRUCTURAL DESIGN
1100 WATER STREET, SUITE 2
SANTA CRUZ, CA 95062
TEL (831) 426-3560
FAX (831) 426-7763

BY	APPROVED	DATE
BY	DESIGN	DATE
	JOB NO. 1617	

Erosion Control Plan

Brickyard Plaza

2776 Soquel Avenue, Santa Cruz, California

APN 026-031-22 & 46

DATE	DESIGN	DRAWN
01/28/08	EP	EP

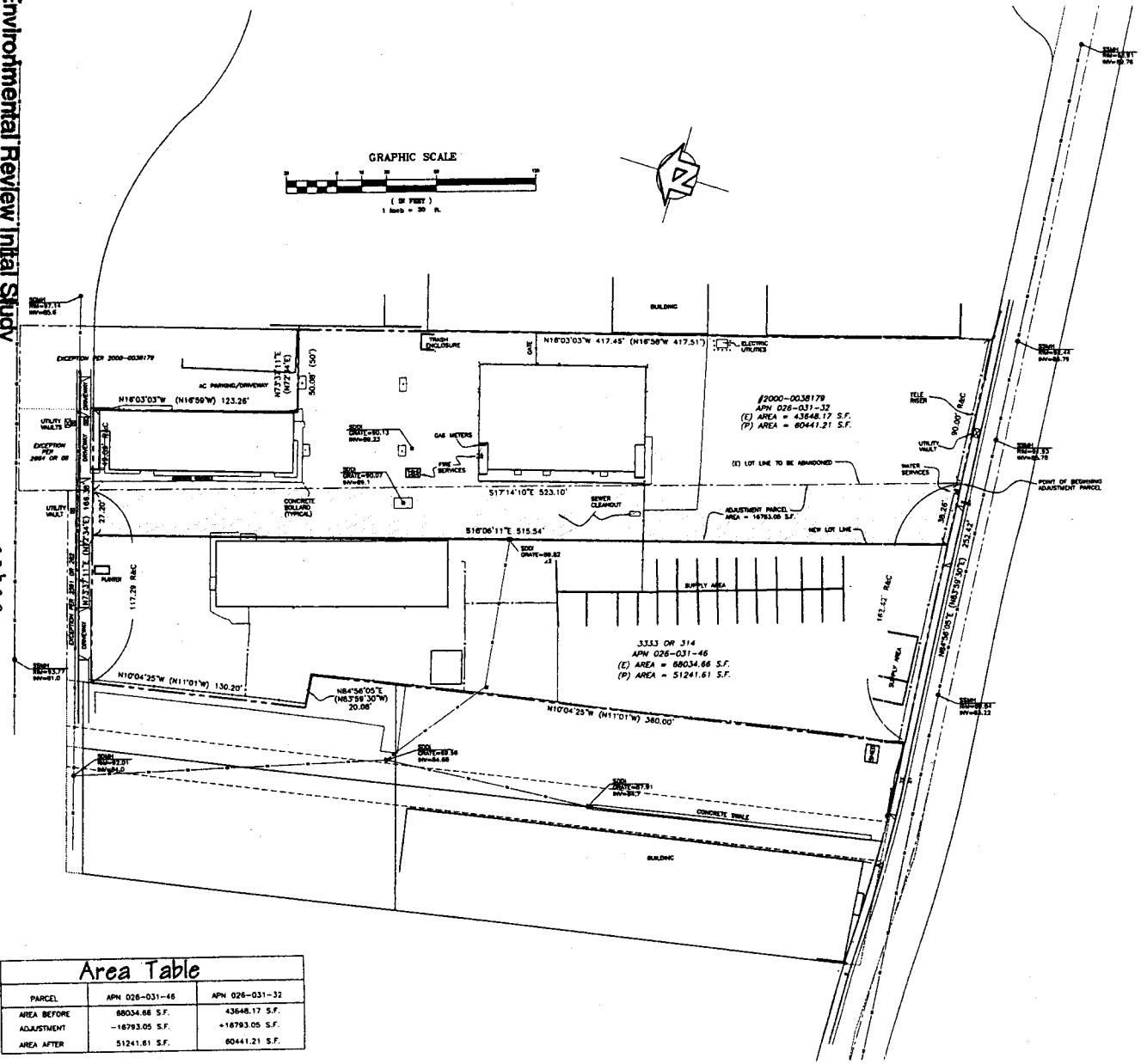
SHEET C11 OF 11 SHEETS

JOB NO. 05069

ATTACHMENT 2
APPLICATION 07-0212

Environmental Review Initial Study

page 65



Area Table

PARCEL	APN 026-031-46	APN 026-031-32
AREA BEFORE	68034.66 S.F.	43648.17 S.F.
ADJUSTMENT	-16793.05 S.F.	+16793.05 S.F.
AREA AFTER	51241.61 S.F.	60441.21 S.F.

Deed: APN 026-031-

BEING THE SAME LANDS AS CONVEYED TO DANIEL B. BIAS, ET AL., BY DEED RECORDED IN VOLUME 1754, PAGE 382, OFFICIAL RECORDS OF SANTA CRUZ COUNTY, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHEASTERLY CORNER OF PARCEL 1 OF THE LANDS CONVEYED TO LOUIS A. SZABO, ET UX., BY DEED RECORDED IN VOLUME 1538, PAGE 214, OFFICIAL RECORDS OF SANTA CRUZ COUNTY, ON THE SOUTHERLY LINE OF SOQUEL AVENUE; THENCE FROM SAID POINT OF BEGINNING ALONG THE EASTERLY LINE OF SAID PARCEL 1, SOUTH 11°28' EAST, 145 FEET, MORE OR LESS, TO THE NORTHWESTERLY CORNER OF PARCEL 2 OF SAID LANDS OF SZABO, FROM WHICH A ½ INCH IRON PIPE BEARS SOUTH 11°28' EAST, 4 FEET DISTANT; THENCE ALONG THE NORTHERLY LINE OF LAST MENTIONED PARCEL NORTH 83°33' EAST, 20.08 FEET TO THE NORTHEASTERLY CORNER THEREOF, FROM WHICH A ½ IRON PIPE BEARS SOUTH 11°28' EAST, 4 FEET DISTANT; THENCE ALONG THE EASTERLY LINE OF SAID PARCEL 2, SOUTH 11°28' EAST, 380 FEET TO THE SOUTHEASTERLY CORNER THEREOF; THENCE LEAVING SAID PARCEL 2, NORTH 83°33' EAST, 162.42 FEET TO THE SOUTHWESTERLY CORNER OF HTE LANDS CONVEYED TO LESTER D. KNIGHT, ET UX., BY DEED RECORDED IN VOLUME 1232, PAGE 235, OFFICIAL RECORDS OF SANTA CRUZ COUNTY; THENCE ALONG THE WESTERLY LINE OF SAID LANDS OF KNIGHT, NORTH 18°30' WEST, 538 FEET, MORE OR LESS, TO A POINT ON THE SOUTHERLY LINE OF SOQUEL AVENUE; THENCE ALONG SAID SOUTHERLY LINE OF SOQUEL AVENUE, SOUTH 72°30' WEST, 115 FEET TO THE POINT OF BEGINNING.

Deed: APN 026-031-32

E CENTERLINE OF SAID COUNTY ROAD, NORTH 72-½° EAST, 100 FEET; THENCE SOUTHERLY TO A POINT ON THE NORTHERLY LINE OF LANDS CONVEYED TO J.M. HUDSON AS RECORDED IN VOLUME 315, PAGE 250, OF DEEDS, RECORDS OF SANTA CRUZ COUNTY, WHICH POINT IS NORTH 84° EAST, 90.00 FEET FROM THE SOUTHEAST CORNER OF LANDS CONVEYED TO S. WHITESTLINE AS RECORDED IN VOLUME 299, PAGE 117, OF DEEDS, RECORDS OF SANTA CRUZ COUNTY; THENCE SOUTH 84° WEST, 90.00 FEET TO THE SOUTHEAST CORNER OF SAID LANDS OF WHITESTLINE; THENCE NORTHERLY ALONG THE WESTERLY LINE OF SAID LANDS OF RUSSELL, NORTH 18-½° WEST, 568.28 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM THE FOLLOWING DESCRIBED LANDS:

BEGINNING AT A STATION IN THE CENTER OF THE SANTA CRUZ-WATSONVILLE HIGHWAY AT THE NORTHEAST CORNER OF LANDS CONVEYED BY DEED DATED DECEMBER 12, 1942, RECOREDED DECEMBER 22, 1942, PAGE 497, OF OFFICIAL RECORDS OF SANTA CRUZ COUNTY; RUNNING THENCE SOUTHERLY ALONG THE EASTERN LINE OF LANDS SO CONVEYED TO RICHARDSON 168.26 FEET TO A STATION; THENCE WESTERLY PARALLEL TO THE CENTERLINE OF HTE SANTA CRUZ-WATSONVILLE HIGHWAY 50.00 FEET TO A STATION; THENCE NORTHERLY PARALLEL WITH THE SAID EASTERN LINE OF LANDS CONVEYED TO RICHARDSON 162.26 FEET TO A STATION IN THE CENTER OF THE SANTA CRUZ-WATSONVILLE HIGHWAY; THENCE EASTERLY ALONG THE CENTERLINE OF SAID HIGHWAY, 50.00 FEET TO THE POINT OF BEGINNING.

ALSO EXCEPTING THEREFROM THAT PORTION CONVEYED TO THE COUNTY OF SANTA CRUZ BY DEED RECORDED SEPTEMBER 17, 1976, IN VOLUME 2984, OFFICIAL RECORDS, PAGE 8.

Adjustment Parcel

BEING A PORTION OF THE LANDS CONVEYED TO ERNEST ANTOLINI AND RUTH I. ANTOLINI REVOCABLE TRUST BY DEED F

LIAL RECORDS SANTA CRUZ COUNTY; THENCE ALONG THE WESTERLY LINE OF SAID LAST MENTIONED LANDS, NORTH 17°14'10" WEST, A DISTANCE OF 523.10 FEET MORE OR LESS, TO THE SOUTHERLY SIDE OF SOQUEL AVENUE; THENCE ALONG THE SOUTHERLY SIDE OF SOQUEL AVENUE SOUTH 73°37'11" WEST, A DISTANCE OF 27.20 FEET TO A STATION; THENCE LEAVING THE SOUTHERLY SIDE OF SOQUEL AVENUE SOUTH 16°06'11" EAST, A DISTANCE OF 515.54 FEET MORE OR LESS TO THE SOUTHERLY LINE OF THE LANDS CONVEYED TO THE ANTOLINI REVOCABLE TRUST BY DEED RECORDED IN VOLUME 3333, AT PAGE 314, OFFICIAL RECORDS OF SANTA CRUZ COUNTY; THENCE NORTH 84°56'05" EAST, A DISTANCE OF 38.26 FEET TO THE POINT OF BEGINNING.

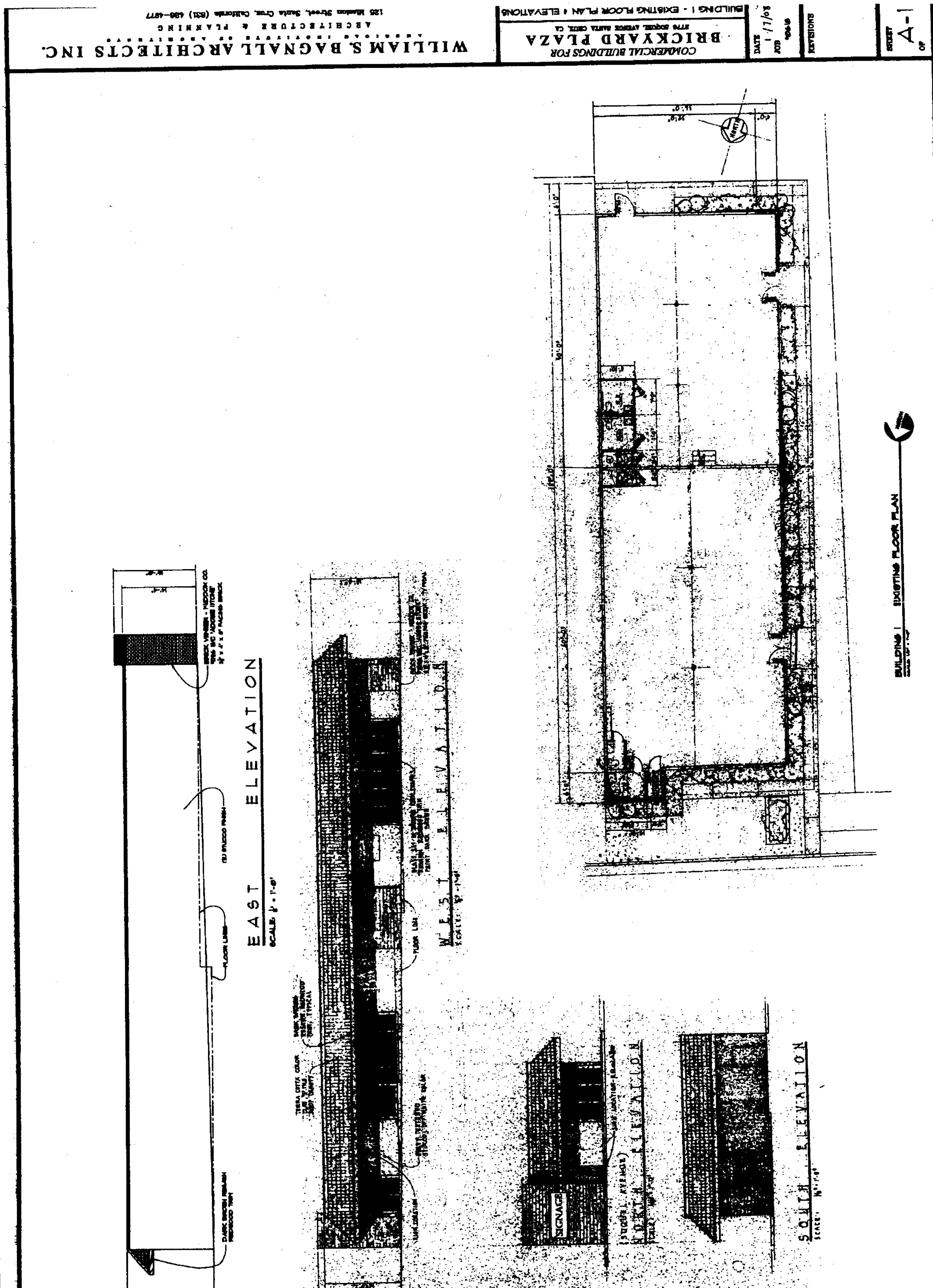
REVISIONS | APPROVED

Lot Line Adjustment Application Map for
Jeff Antolini
Soquel Avenue, Santa Cruz, CA

APN 026-031-32 & -46 | DATE 08/29/07 | DRAWN GFI | SCALE 1" = 30'

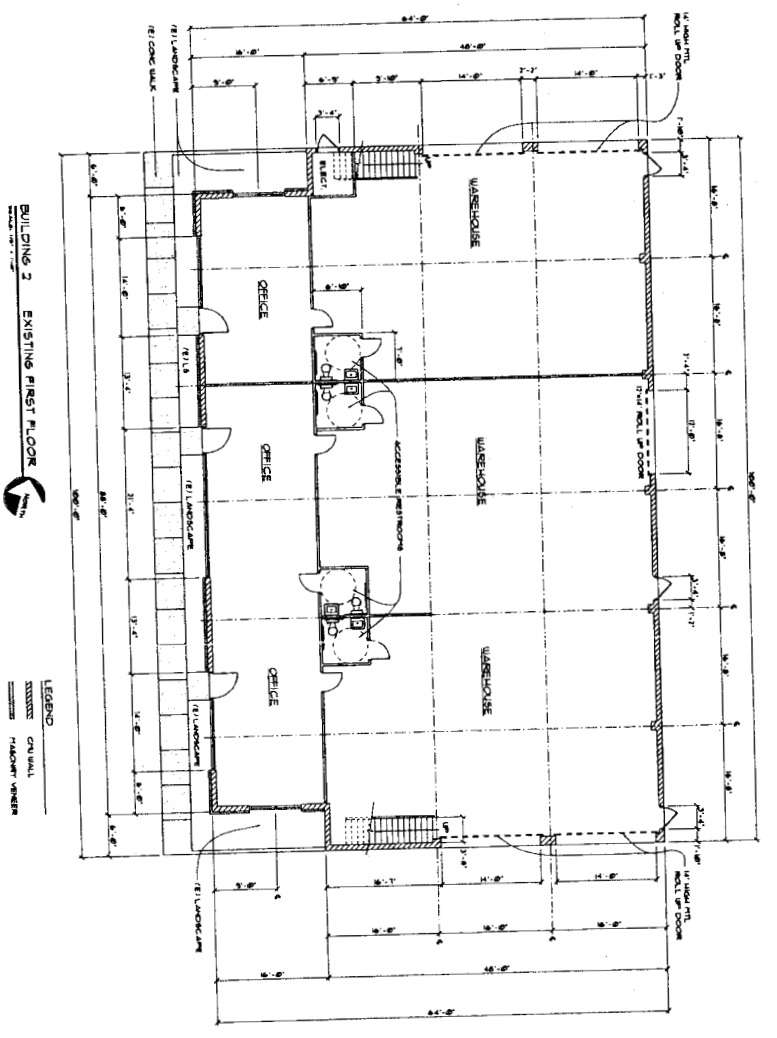
SHEET T-1 OF 1 SHEETS

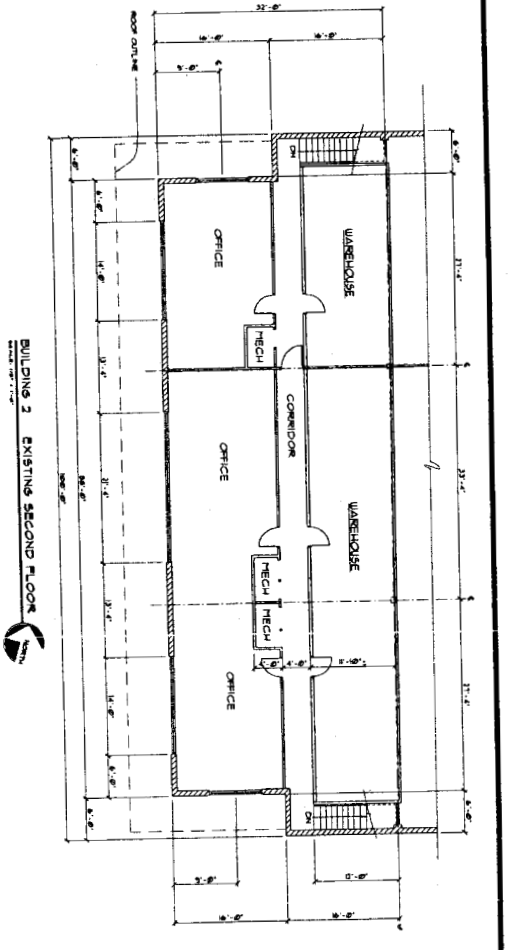
JOB NO. G06078



Environmental Review Inital Study
ATTACHMENT 2, 15 of 27
APPLICATION 07-0212

ATTACHMENT 2, Page 22 of 23
APPLICATION 07-0618
Environmental Review Initial Study





SHEET A-2 OF	REVISIONS	DATE 10/31/07 JOB 0618	COMMERCIAL BUILDINGS FOR BRICKYARD PLAZA 2778 SOQUEL AVENUE SANTA CRUZ, CA BUILDING 2 - EXISTING FLOOR PLAN	WILLIAM S. BAGNALL ARCHITECTS INC. AMERICAN INSTITUTE OF ARCHITECTS ARCHITECTURE & PLANNING 125 Mission Street, Santa Cruz, California (831) 426-4977

WILLIAM S. BAGNALL ARCHITECTS INC.
AMERICAN INSTITUTE OF ARCHITECTS
ARCHITECTURE & PLANNING
125 Mission Street, Santa Cruz, California (831) 426-4977

BUILDING 2 - EXISTING EXTERIOR ELEVATIONS

COMMERCIAL BUILDINGS FOR
BRICKYARD PLAZA
2776 SOQUEL AVENUE SANTA CRUZ, CA

DATE 10/9/07
JOB 9618

REVISIONS

SHEET A-2.1 OF

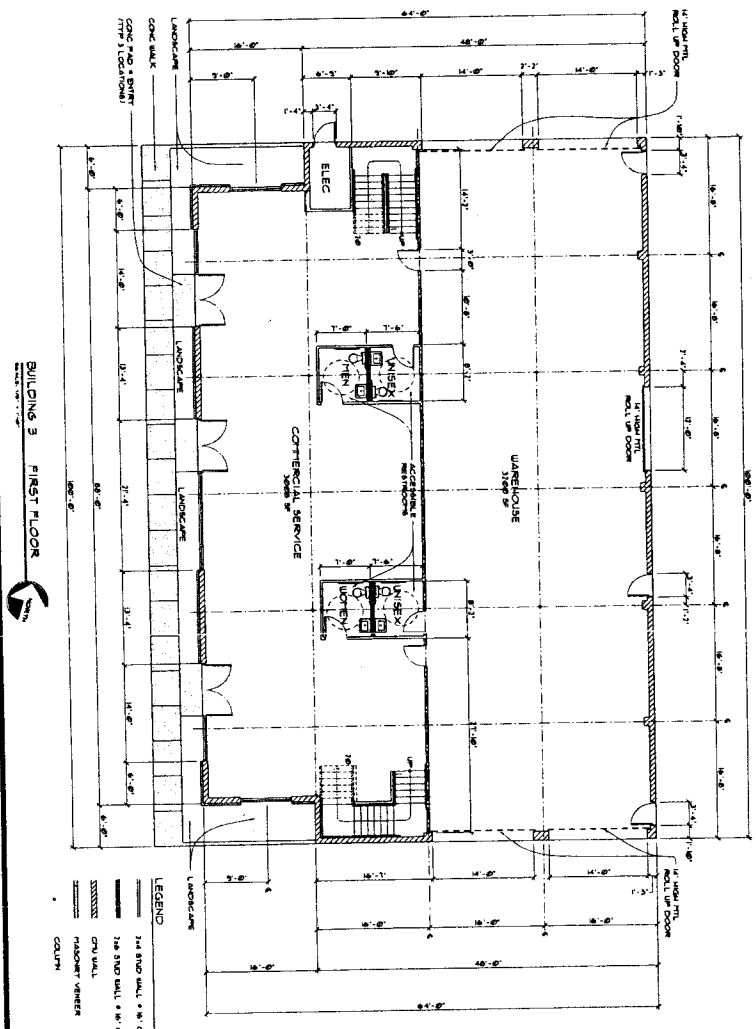
BUILDING 2 - EXISTING NORTH ELEVATION

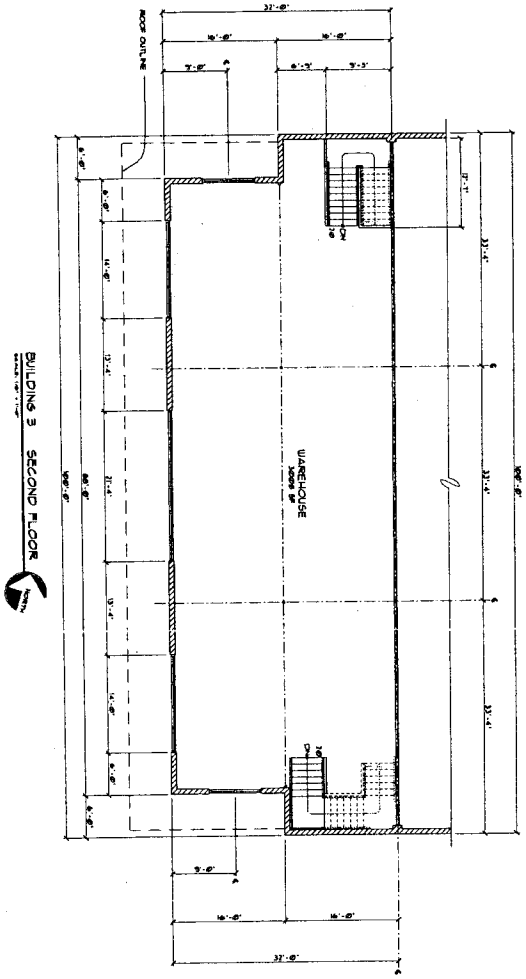
BUILDING 2 - EXISTING SOUTH ELEVATION

BUILDING 2 - EXISTING WEST ELEVATION

BUILDING 2 - EXISTING EAST ELEVATION

ATTACHMENT 2, 19 of 27
APPLICATION 07-0618
Environmental Review Initial Study





SHEET A-3 OF	REVISIONS	DATE 10/10/07 JOB 0618	COMMERCIAL BUILDINGS FOR BRICKYARD PLAZA 2778 SOQUEL AVENUE SANTA CRUZ, CA BUILDING 3 - FIRST & SECOND FLOOR PLAN	WILLIAM S. BAGNALL ARCHITECTS INC. AMERICAN INSTITUTE OF ARCHITECTS ARCHITECTURE & PLANNING 125 Mission Street, Santa Cruz, California (831) 426-4977

WILLIAM S. BAGNALL ARCHITECTS INC.
AMERICAN INSTITUTE OF ARCHITECTS
ARCHITECTURE & PLANNING
125 Mission Street, Santa Cruz, California (831) 426-4977

BUILDING 3 - EXTERIOR ELEVATIONS

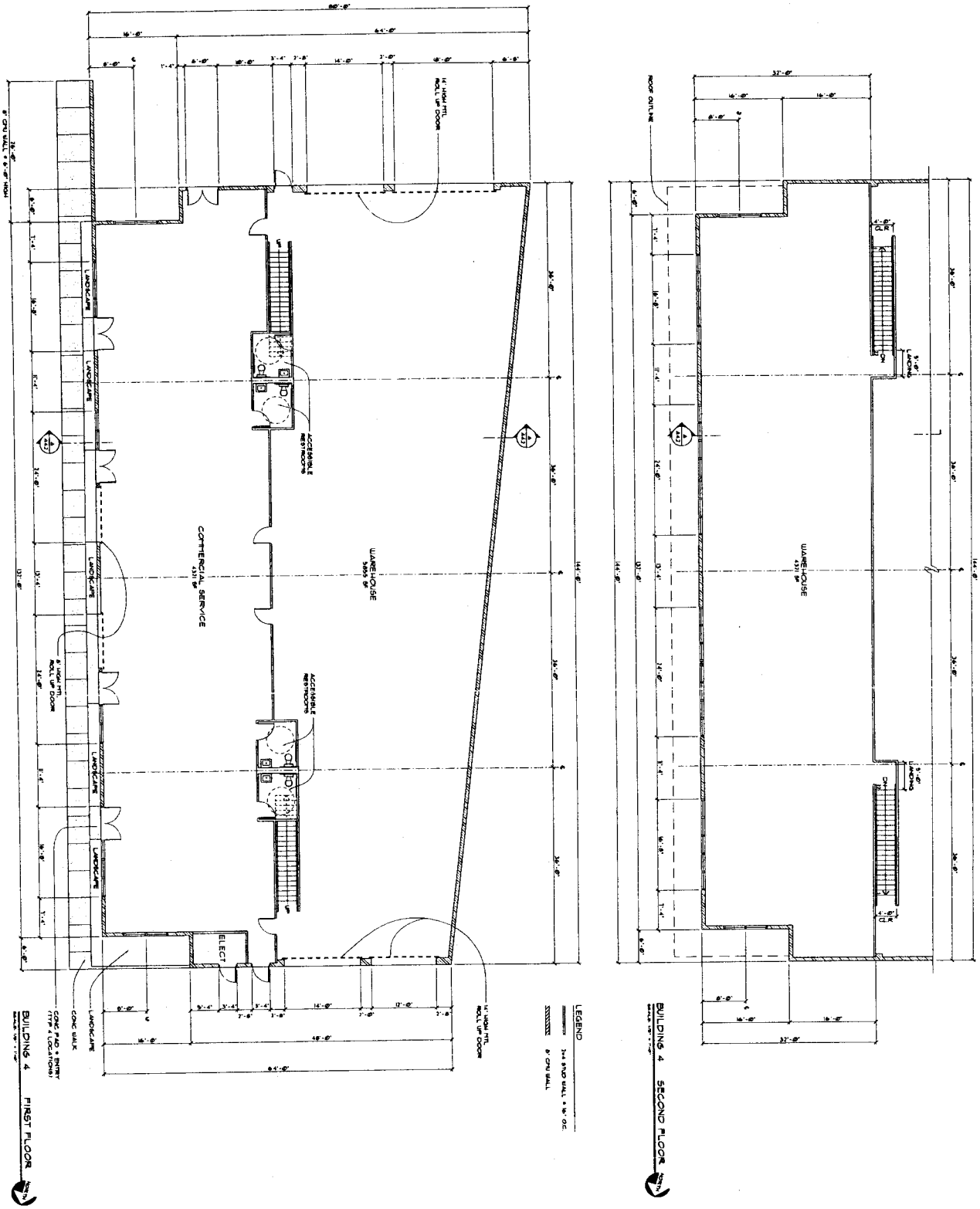
COMMERCIAL BUILDINGS FOR
BRICKYARD PLAZA
2776 SOQUEL AVENUE SANTA CRUZ, CA

DATE 10/M/07
JOB 0618

REVISIONS

SHEET A-3.1
OF

ATTACHMENT 2 page 27
APPLICATION 07-0618
Environmental Review Initial Study



SHEET A-4 OF

REVISIONS

DATE 10/31/07
JOB 0618

COMMERCIAL BUILDINGS FOR
BRICKYARD PLAZA
2778 SOQUEL AVENUE SANTA CRUZ, CA
BUILDING 4 - FIRST & SECOND FLOOR PLAN

WILLIAM S. BAGNALL ARCHITECTS INC.
AMERICAN INSTITUTE OF ARCHITECTS
ARCHITECTURE & PLANNING
125 Mission Street, Santa Cruz, California (831) 426-4977

WILLIAM S. BAGNALL ARCHITECTS INC.
AMERICAN INSTITUTE OF ARCHITECTS
ARCHITECTURE & PLANNING
125 Mission Street, Santa Cruz, California (831) 426-4977

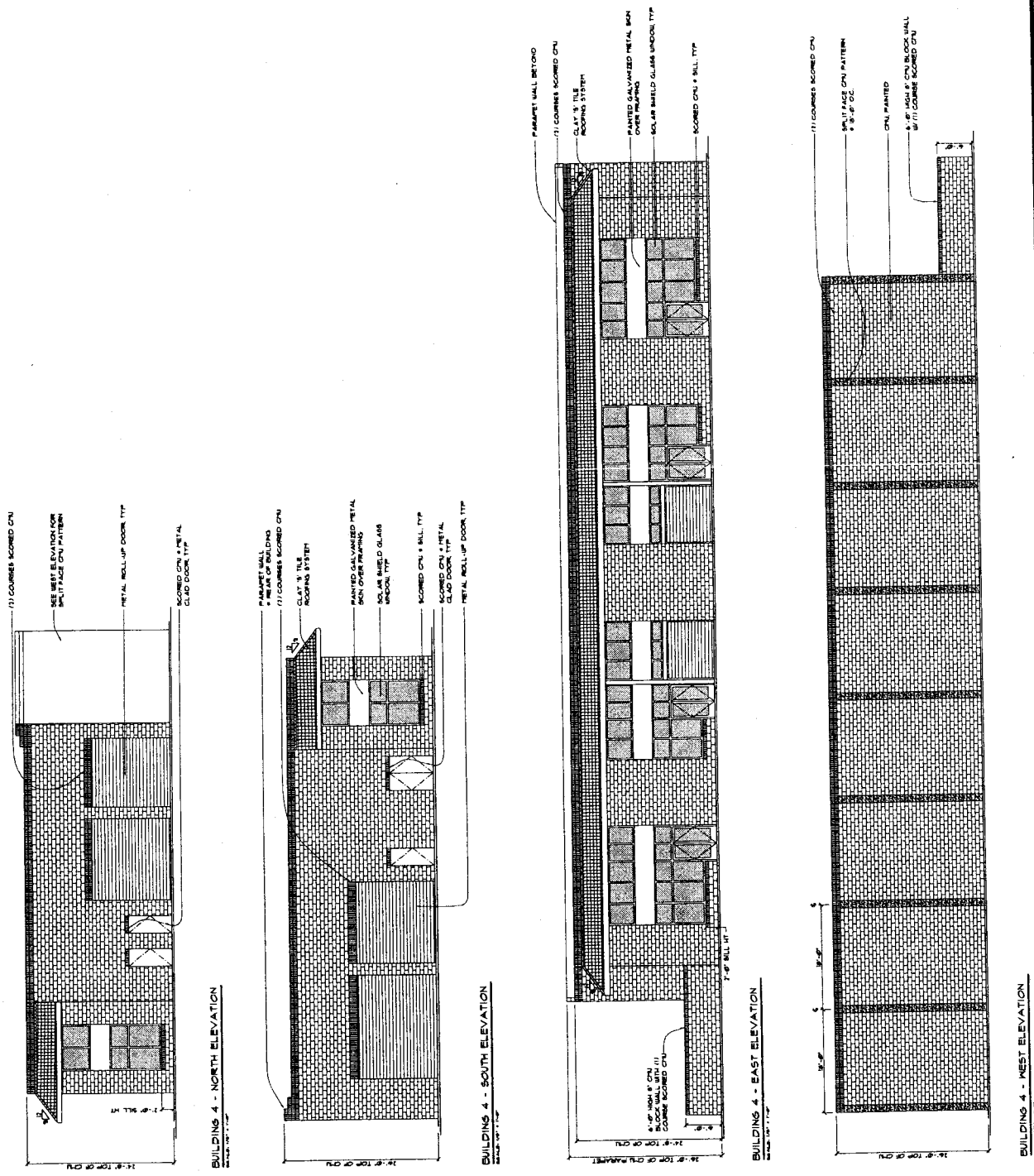
COMMERCIAL BUILDINGS FOR
BRICKYARD PLAZA
2776 SOQUEL AVENUE SANTA CRUZ, CA

BUILDING 4 - EXTERIOR ELEVATIONS

DATE 10/5/07
JOB 0618

REVISIONS

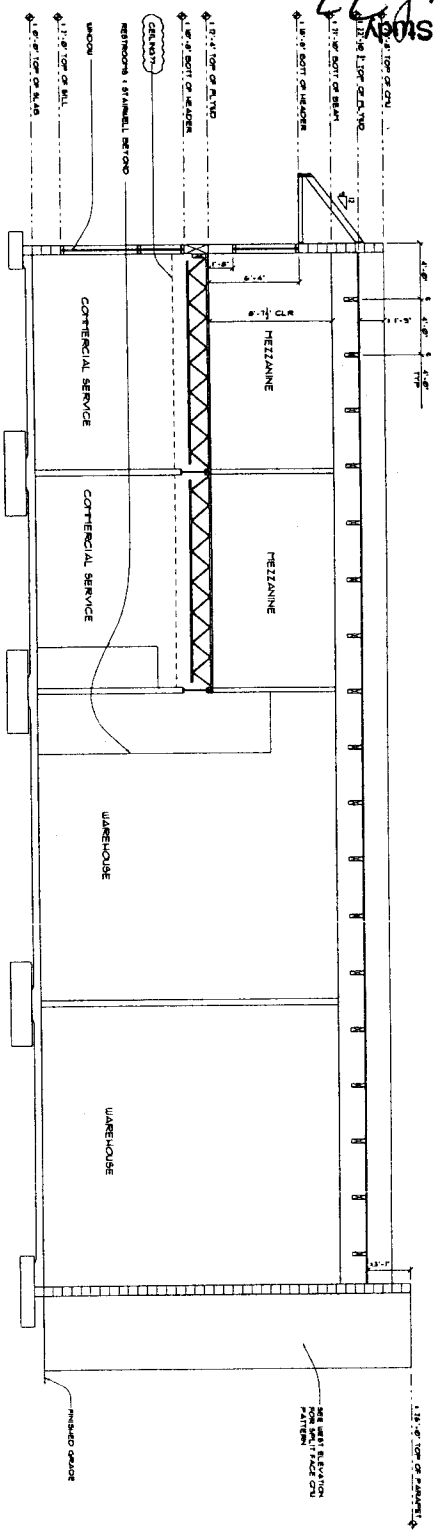
SHEET A - 4.1
OF



Environmental Review Inital Study
ATTACHMENT 2 2 of 27
APPLICATION 07-0212

H:\Schultz, William Bagnall Architects\ 1/30/2008 3:26 PM 0618A41-42.dwg

BUILDING 4 - SECTION 'A'



SHEET OF	REVISIONS	DATE / JOB	COMMERCIAL BUILDINGS FOR BRICKYARD PLAZA 2776 SOQUEL AVENUE SANTA CRUZ, CA	WILLIAM S. BAGNALL ARCHITECTS INC. AMERICAN INSTITUTE OF ARCHITECTS ARCHITECTURE & PLANNING 125 Mission Street, Santa Cruz, California (831) 426-4977
A-4.2		10/5/07 0618	SECTION @ BUILDING 4	

WILLIAM S. BAGNALL ARCHITECTS INC.
AMERICAN INSTITUTE OF ARCHITECTS
ARCHITECTURE & PLANNING
125 Mission Street, Santa Cruz, California (831) 426-4977

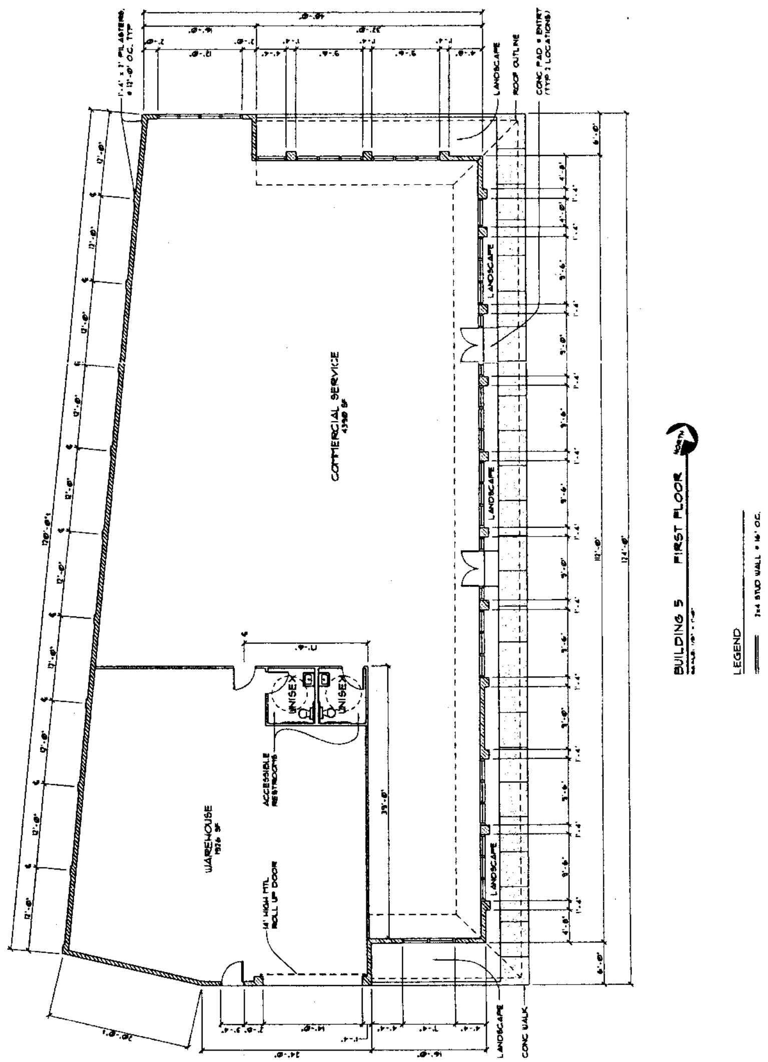
COMMERCIAL BUILDINGS FOR
BRICKYARD PLAZA
2776 SOQUEL AVENUE SANTA CRUZ, CA

BUILDING 5 - FLOOR PLAN

DATE 10/9/07
JOB 0618

REVISIONS

SHEET A-5 OF



Environmental Review Inital Study
ATTACHMENT 2, 23 of 27
APPLICATION 07-0212

H. Schullen, William Bagnall Architects 1/30/2008 3:35 PM 0618A-5.dwg

WILLIAM S. BAGNALL ARCHITECTS INC.
ARCHITECTURE & PLANNING
126 Klisdon Street, Santa Cruz, California (831) 426-4877

COMMERCIAL BUILDINGS FOR
BRICKYARD PLAZA
2770 SOQUEL AVENUE SANTA CRUZ, CA

BUILDING 5 - EXTERIOR ELEVATIONS

DATE 8/07
REVISIONS
SHEET A-5.1 OF

Environmental Review Inital Study
ATTACHMENT 2, 24 of 27
APPLICATION 07-0212

WILLIAM S. BAGNALL ARCHITECTS INC.
COMMERCIAL • INDUSTRIAL • PLANNING
ARCHITECTURE & PLANNING
125 Mission Street, Santa Cruz, California (831) 426-4877

SITE SIGNAGE & TRASH ENCLOSURE PLAN

COMMERCIAL BUILDINGS FOR
BRICKYARD PLAZA
2776 SOQUEL AVENUE SANTA CRUZ, CA

DATE
JOB 0618

REVISIONS

SHEET A-6 OF

1 DRIVEWAY ENTRY SIGNAGE
SCALE: 1/4" = 1'-0"

2 ENTRY SIGNAGE ELEVATION
SCALE: 1/2" = 1'-0"

3 BUILDING ENTRY SIGNAGE ELEVATION
SCALE: 1/2" = 1'-0"

ROOF FRAMING PLAN

NOTE:
ALL EXPOSED STEEL TO BE GALVANIZED

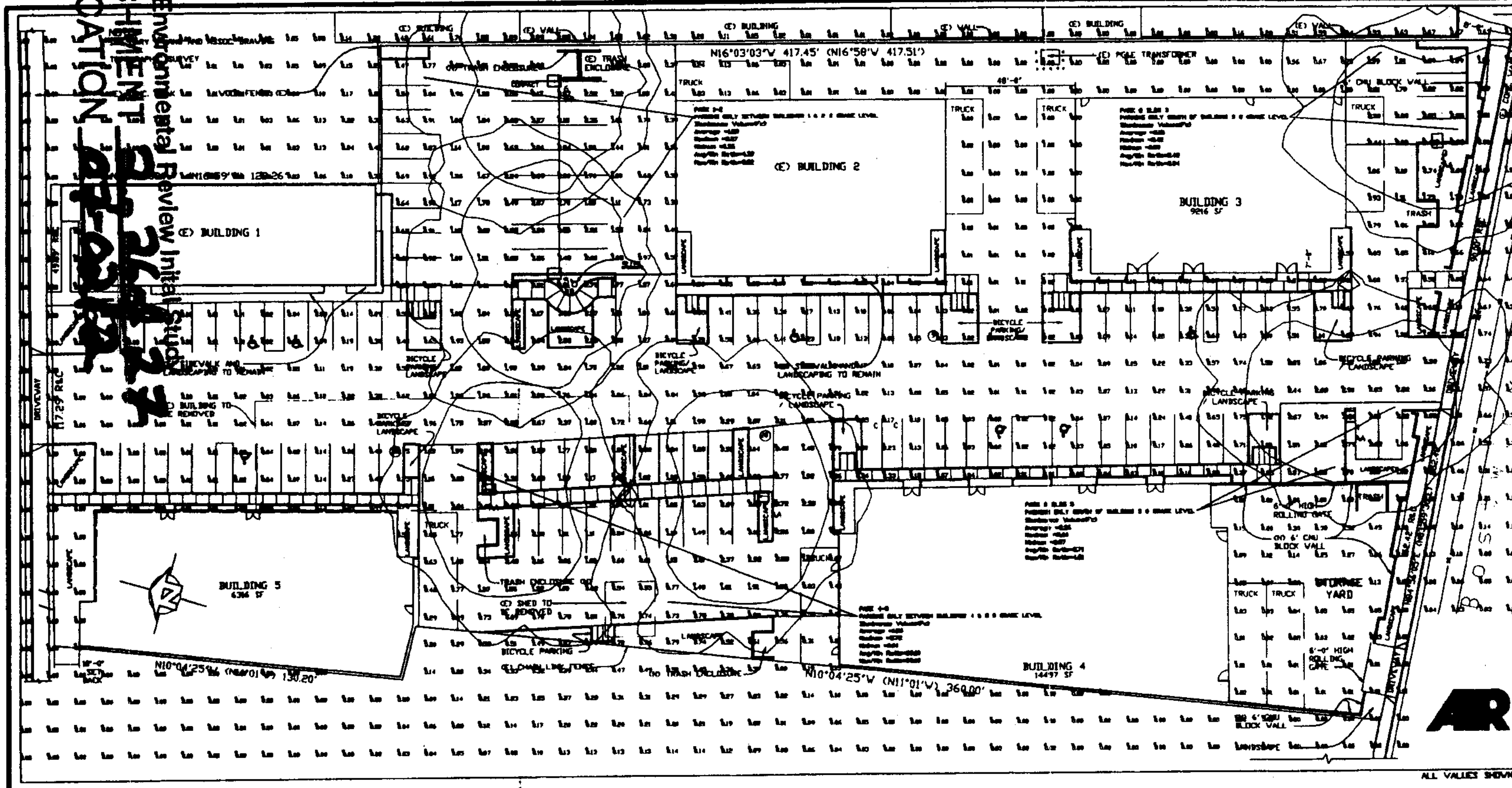
4 COVERED RECYCLE PLAN
SCALE: 1/4" = 1'-0"

ENCLOSURE PLAN

5 COVERED REFUSE ELEVATIONS
SCALE: 1/4" = 1'-0"

Environmental Review Inital Study
ATTACHMENT 2a 25 of 27
APPLICATION 07-0212

H. Schuller, William Bagnall Architects 1/30/2008 4:18 PM 0618A6.dwg



ISOLUX TEMPLATE KEY:
1.0 FC
0.5 FC

ASSOCIATED LIGHTING REPRESENTATIVES, INC
8400 ENTERPRISE WAY
P.O. BOX 8265
OAKLAND, CA 94621
PHONE (510) 638-0858 - FAX (510) 638-2900

ALL VALUES SHOWN ARE MAINTAINED HORIZONTAL FOOTCANDLES AT GRADE LEVEL

PHOTOMETRIC DATA USED AS INPUT FOR THESE CALCULATIONS IS BASED ON ESTABLISHED IES PROCEDURES AND PUBLISHED LAMP, RATINGS, FIELD PERFORMANCE WILL DEPEND ON ACTUAL LAMP, BALLAST, ELECTRICAL, AND SITE CHARACTERISTICS.

Calculations have been performed according to IES standards and good practice. Some differences between measured values and calculated results may occur due to tolerances in calculation methods, testing procedures, component performance, measurement techniques and field conditions such as voltage and temperature variations. Input data used to generate the attached calculations such as room dimensions, reflectances, furniture and architectural elements significantly affect the lighting calculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculated values.

REPORT FOR CLIENT OFFICE- WILLIAM BAGNALL ARCH.- HOWARD SCHULTEN
BY: APPLICATIONS ENGINEERING — LARRY AYERS LC
SALES REPRESENTATIVE: ALR— STEVE HOLDAWAY

DATE: 14 FEBRUARY 2007

AGI32 VERSION 1.94
AGI (C) 2002 LIGHTING ANALYSTS, INC.
1834 WEST CHATFIELD AVENUE, SUITE 108, LITTLETON, CO 80127

NOTE: 24.76' OPTICAL HEIGHT CORRESPONDS TO A 25' POLE AND PIER COMBINATION

Luminaire Schedule
Project: BRICKYARD PLAZA PARKING AREAS

Symbol	Qty	Label	Arrangement	Lumens	LLD	LDD	BF	LLF	Watts	Description	Filename
→	4	AA	SINGLE	30000	0.7	0.9	1	0.630	365	GARDCO G18-3XL-400MH PRORATE 320MH	GV3X4Mies
→	2	BB	SINGLE	30000	0.7	0.9	1	0.630	365	GARDCO G18-4XL-400MH PRORATE 320MH	GV4X4Mies

Luminaire Location Summary
Project: BRICKYARD PLAZA PARKING AREAS

SeqNo	Label	X	Y	Z	Orient	Tilt
1	AA	2684.25	25.664	24.76	0	0
2	AA	2788.868	22.401	24.76	180	0
3	AA	3037.327	148.509	24.76	90	0
4	AA	3005.102	48.466	24.76	90	0
5	BB	2712.616	103.848	24.76	180	0
6	BB	2712.656	174.306	24.76	180	0

Numeric Summary
Project: BRICKYARD PLAZA PARKING AREAS

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	# Pts	Description
ALL POINTS	Illuminance	Fc	0.56	3.81	0.00	N.A.	N.A.	1294	ALL POINTS SHOWN @ GRADE LEVEL
PARK 4-5	Illuminance	Fc	1.56	3.72	0.04	39.00	93.00	112	PARKING ONLY BETWEEN BUILDINGS 4 & 5 @ GRADE LEVEL
PARK 1-2	Illuminance	Fc	1.58	3.57	0.36	4.39	9.92	91	PARKING ONLY BETWEEN BUILDINGS 1 & 2 @ GRADE LEVEL
PARK @ BLDG 5	Illuminance	Fc	2.36	3.66	0.87	2.71	4.21	13	PARKING ONLY SOUTH OF BUILDING 5 @ GRADE LEVEL
PARK @ BLDG 3	Illuminance	Fc	2.21	3.42	0.89	2.48	3.84	16	PARKING ONLY SOUTH OF BUILDING 3 @ GRADE LEVEL

Associated Lighting Representatives

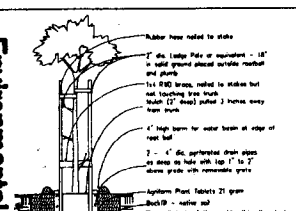
BRICKYARD PLAZA SITE LIGHTING
SANTA CRUZ, CALIFORNIA
6847HOL.DWG / 6847HOL.A32

Scale	Sheet	Date	Rev
1" = 20'	1 OF 1	02/14/2007	0

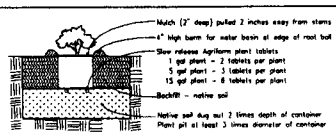
Environmental Review Inital Study
ATTACHMENT 2, 26 of 27
APPLICATION 07-0262

ATTACHMENT 2
APPLICATION 07-0212

Environmental Review Initial Study 07-0212



Tree Planting
No Scale



1) 8 - 12 hours before installation, water all plants while still in containers sufficiently to thoroughly wet root balls
2) Dig the plant hole at least 3 times the dia. and 2 times the depth of the plant container.
3) Replace this mixture in bottom half of hole and walk on it. The level of it should be such that when the plant is installed and settled it will be slightly above grade of existing soil. Fill hole with water.
4) Remove rootball carefully from container by tapping out, not pulling out by the stem. Scarify rootball walls in 3 vertical cuts and bottom to 1/2" deep, or by cutting roots of 1/2" or larger with shears. Do not pull roots apart.
5) Install fertilizer packets under rootball of plant. Set rootball on prepared surface and fill hole to 1/2 the depth, tamping soil around rootball. Fill hole with water.
6) Fill the remainder of the hole with backfill and pack it but do not tamp rootball.
7) Make the water basin.
8) Water shrub thoroughly within 1 hour of planting by filling the basin and allowing the water to percolate in, doing this 3 times or more until root ball and backfill is wet
9) Install mulch

Shrub Planting
No Scale

Existing Plant Legend

rc	Rhaphiolepis
ju	Junipers
ca	Camellia
ph	Phox
pm	Mountain Grass
st	Bird of Paradise
di	Disema
LR	Liriodendron Tree

Landscape Notes

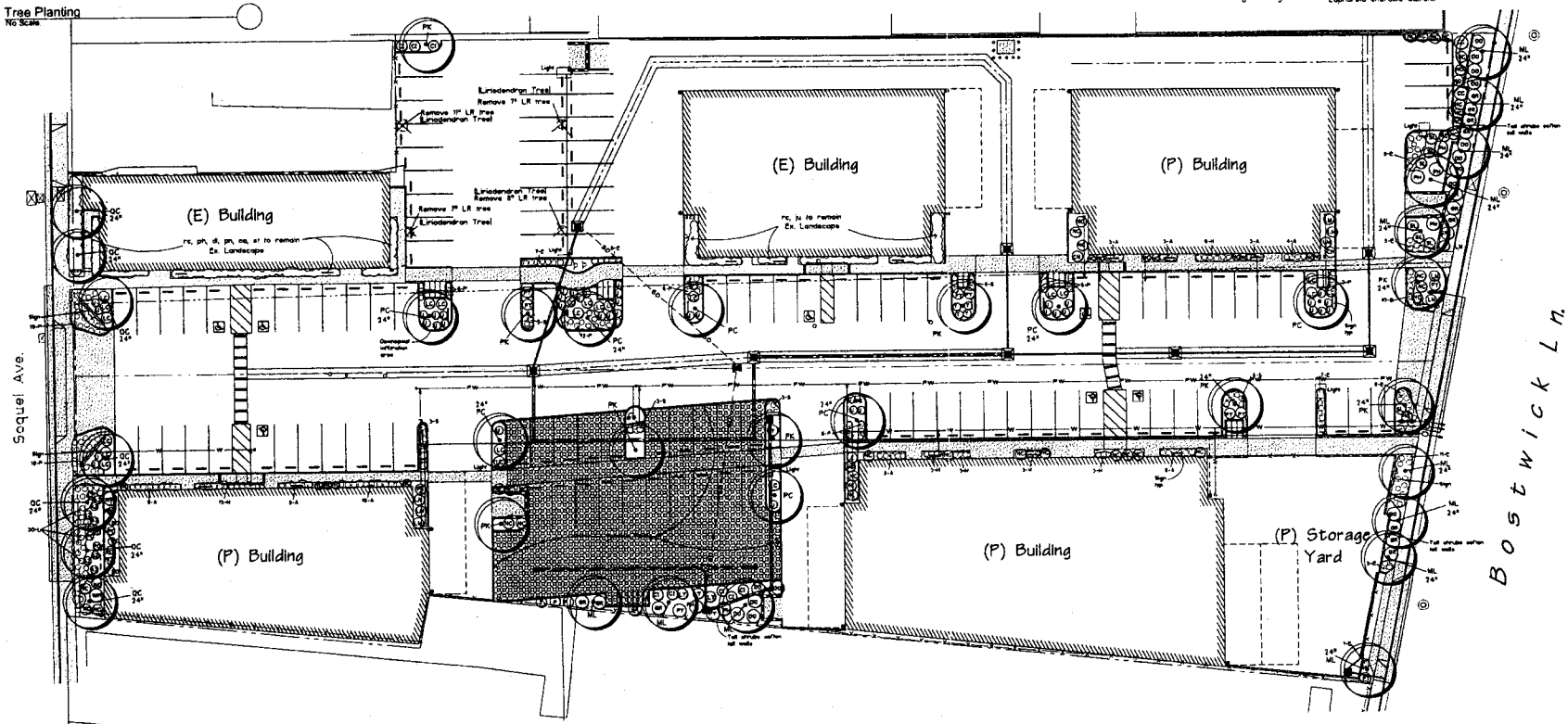
1) Final construction drawings to include an irrigation plan, irrigation details and specs. The irrigation and planting will meet the requirements of the Santa Cruz Water Dept. and Santa Cruz County.
The irrigation system will be drip. Most of the plants are rated low water use.
2) Exact location of plants on site to be adjusted as as to best coordinate with sprinkler head locations, lights, drainage features, and swales
3) Don't put plants in bottom of swales
4) Don't mulch flow lines of swales such that mulch blocks flow of water
5) Use 3 inch deep mulch in all planting areas. Provide owner with different mulch samples and prices including Premium redwood chips from Vision Recycling at the Santa Cruz County Landfill in Watsonville and medium for bark
6) Install plants for all plant circles shown on the plan even if they aren't labeled. Call for clarification. For bidding purposes, if no one is available to answer questions, assume that any plant circle sealed less than 8' wide is 5 gal. size and any circle sealed larger is 24" box size
7) The plan is schematic. Don't install plants too close to edges of paving or buildings. Be sure plants are not blocking sprinkler spray excessively. Keep valves and quick couplers away from trees.
8) The plants will do much better if efforts are made to dig out any compacted, clay textured soils with slow percolation and replace them with at least 12" deep of sandy loam top soil. You should also provide for removal of any excess water (drain inlets and pipes) that puddles in the planters and does not percolate in a reasonable period of time.
At the latest dig down with a power rotospade at least 12" deep mixing in the mineralized redwood sawdust soil amendment.
9) See specs. concerning soil amendments and fertilizer. For bidding purposes (until the soil fertility test is done, bid 6 cubic yards of mineralized redwood sawdust and 16 pounds of 12-12-12 fertilizer tilled into the top 6" to 8" of soil after ripping soil to 12" deep.
10) Remove and grind out major roots and stumps of trees to be removed but do not hurt any utilities.
11) Protect any trees to be saved with protective fencing. Do not stock building materials under the existing trees to be saved.

POSSIBLE PLANTS FOR DOWNSPOUT INFILTRATION AREAS
if they are ok damp for normal plants during the winter

J	1	Juncus patens	Rush
C	1	Canna	
CA	1	Carex species	Sedge
CL	1	Zantedeschia aethiopica	Calla Lily

Plant Legend

KEY	SIZE	BOTANICAL NAME	COMMON NAME
OC	24" box	Quercus chrysolepis	Goldcup Oak
	Street tree selected by the County Planning Dept		
ML	15 and 24" box	Melaleuca linarifolia or quinquenervia	
LI	15 and 24" box	Lagerstroemia i. Tuscarora	Crape Myrtle
PC	15 and 24" box	Pistacia chinensis	Chinese Pistache
PK	15 and 24" box	Prunus Krauter Vesuvious	Flowering Plum
25% of trees in parking lot to be 24" box as per County req.			
TALL SHRUBS			
DO	5	Dodonaea purpurea	Hopseed Bush
GR	5	Grevillea Robyn Gordon	Large Grevillea
PH	5	Phormium tenax - big green or burgundy	Flax
CC	5	Cortnus coggygria purpurea	Smoke Tree
MEDIUM SHRUBS			
PO	5	Polystichum munitum Western Sword Fern	
PY	5	Phormium Jack Spratt or Pueraca	
WF	5	Woodwardia fimbriata	Chain Fern
LC	5	Leropetalum chinense Sizzling Pink	Chinese Fringe Flower
NC	5	Nandina Gulf Stream	Heavenly Bamboo
CN	5	Chondropetalum tectarum	Cape Rush
AZ	5	Azaleas Kurume type such as Hellper/Pebble Crimson	
CI	5	Cistus hyenicus or purpureus	Rockrose
GR	5	Grevillea rosmarinifolia	
GROUND COVERS			
F	1	Festuca californica or glauca	Small Ornamental Grass
PH	1	Pennisetum Cupinum	Bronze Fountain Grass
P	1	Phormium Tiny Tim	Small Phormium
E	1	Erigeron karvinskianus	Santa Barbara Daisy
LM	1	Lantana montevidensis	Purple Lantana
LY	1	Lantana Dwarf Yellow	Yellow Lantana
SL	1	Salvia leucantha	Mexican Sage
S	1	Succulents - Senecio, Aeonium, Echeveria, Agave Provide good drainage by planting on mound and using backfill with good drainage	
Y	1	Achillea	Yarrow
L	1	Lamiastrum galeobdolon	Yellow Archangel
W	1	Heuchera Plum Pudding or Purple Palace	
A	1	Aggapanthus Tinker Bell (variegated)	
U	5	Euphorbia characia wulfenii	



Planting Plan

1"=20'-0"
0' 20' 40'

NORTH

Revision
9/4/07
9/20/07
10/08/07
11/31/08

GREGORY LEWIS LANDSCAPE ARCHITECT #2178
736 Park Way Santa Cruz, CA 95065 (831) 423-4747 FAX 423-1107

Brick Yard Plaza
2776 Soquel Ave., Santa Cruz, CA APN 026-031-32 & 46

Date 4/23/07
Scale As Noted
Drawn Greg
Job
Sheet
L1

78

Dees & Associates, Inc.
Geotechnical Engineers
501 Mission Street, Suite 8A, Santa Cruz, CA 95060

Phone: 831 427-1770
Fax: 831 427-1794
Email: dna@dslextreme.com

March 6, 2007
Revised March 7, 2008

Project No.SCR-0174

MR. JEFF ANTOLINI
427 La Fonda
Santa Cruz, California 95060

Subject: Compaction Below Foundations

Reference: Proposed Buildings 4 and 5
2776 Soquel Avenue
APN 011-032-39
Santa Cruz County, California

Dear Mr. Antolini:

Our report recommended compacting the top 2.5 feet of soil within 2 feet of Building 5 located in the northwest corner of the site. Building 5 will be constructed along the property line. Where foundations lie adjacent to property lines the recommend 2 feet overbuild recommended for re-densification of the foundation soils may be eliminated. This will reduce the bearing capacity of the soil, therefore, foundations located along the property line should be designed using a reduced bearing capacity of 1,500 psf.

The foundation for Building 4 can either penetrate the upper 3 feet of loose soil or the top 3 feet of soil can be compacted in the same manner as Building 5 to allow for conventional foundations. If foundations penetrate the loose soil, the top 8 inches of the subgrade should be compacted to 90 percent to provide a firm base for slab support.

If you have any questions, please call our office.

Very truly yours,

DEES & ASSOCIATES, INC.

REGISTERED PROFESSIONAL ENGINEER
REBECCA LYNN DEES
No. 2623
Exp. 12/09
GEOTECHNICAL
CALIFORNIA

Rebecca L. Dees
Geotechnical Engineer
G.E. 2623

Copies: 1 to Addressee
1 to Powers Land Planning, Inc.

Environmental Review Initial Study
ATTACHMENT 3, Lot 16
APPLICATION 07-0212

Dees & Associates, Inc.
Geotechnical Engineers
501 Mission Street, Suite 8A, Santa Cruz, CA 95060

Phone: 831 427-1770
Fax: 831 427-1794
Email: dna@dslextreme.com

March 6, 2007

Project No.SCR-0174

MR. JEFF ANTOLINI
427 La Fonda
Santa Cruz, California 95060

Subject: Compaction Below Foundations

Reference: Proposed Buildings 4 and 5
2776 Soquel Avenue
APN 011-032-39
Santa Cruz County, California

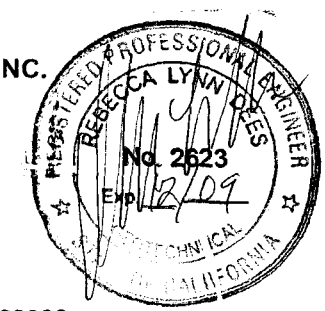
Dear Mr. Antolini:

Buildings 4 and 5 will be constructed along the property line at the site. Where foundations lie adjacent to property lines the recommend 2 feet overbuild recommended for re-densification of the foundation soils may be eliminated. This will reduce the bearing capacity of the soil, therefore, foundations located along the property lines should be designed using a reduced bearing capacity of 1,500 psf.

If you have any questions, please call our office.

Very truly yours,

DEES & ASSOCIATES, INC.



Rebecca L. Dees
Geotechnical Engineer
G.E. 2623

Copies: 1 to Addressee
1 to Powers Land Planning, Inc.

Environmental Review Inital Study
ATTACHMENT 3, 2 of 16
APPLICATION 07-0212

Dees & Associates
Geotechnical Engineers
501 Mission Street, Suite 8A Santa Cruz, CA 95060 Phone (831) 427-1770 Fax (831) 427-1794

July 6, 2006 Project No. SCR-0174

MR. JEFF ANTOLINI
427 La Fonda
Santa Cruz, California 95060

Subject: Geotechnical Investigation Review and Update

Reference: Proposed Commercial Buildings
2776 Soquel Avenue, Santa Cruz
Santa Cruz County, California

Dear Mr. Antolini:

As requested, this letter provides updated geotechnical recommendations for the commercial warehouse/office buildings proposed at the referenced site. A Soil Investigation was prepared for the site in January 1986 by James C. Reynolds & Associates, Project No. 85112-S60-F6. Their report included seven exploratory borings and recommendations for site development. The Reynolds report is over ten years old and the County of Santa Cruz requires an updated geotechnical investigation for reports over three years old.

The purpose of our investigation was to review the previous soil report prepared for the site, perform engineering analysis and determine if the recommendations of the Reynolds report are still valid for the proposed site improvements. Our specific scope of our work was as follows: 1) a site reconnaissance to observe the existing site conditions and discuss the project with Jeff Antolini, 2) review data in our files regarding the site and vicinity, 3) review the Geotechnical Investigation prepared by James C. Reynolds & Associates, Project No. 85112-S60-F6, dated January 21, 1886, 4) review the preliminary site plan indicating the location of existing and proposed improvements, 5) engineering analysis and 6) preparation of this report.

Site and Project Description

The site is located on the southeast side of Soquel Avenue about 250 feet east of 7th Avenue. The fairly level site is developed with three mixed-use commercial buildings. The buildings are currently used for warehouse, retail and office space. We understand three new mixed-use buildings are proposed for the site. The buildings will be constructed in two phases. The first phase will be to construct a new two-story warehouse/office building in the southwest corner of the site. Phase two will include construction of two more warehouse/office buildings in the southeast and northwest corners. One of the existing structures will be removed to accommodate the Phase 2 improvements.

Environmental Review Inital Study
ATTACHMENT 3, 3 of 16
APPLICATION 07-0212
SCR-0174 | 7/6/06

Subsurface Soil Conditions

Seven borings were drilled at the site by Reynolds & Associates. The test boring logs indicate the site is underlain by up to 2.5 feet of loose clayey sand over 1.5 to 4 feet of stiff to very stiff sandy clay. The sandy clay is underlain by clayey sand and sand to the depth of the borings. The report indicates the surface soils are non-expansive. Baserock and asphalt cover the native soils over most if the site and four feet of compacted fill was encountered in the northwest corner of the site near Soquel Avenue.

DISCUSSIONS & CONCLUSIONS

Based on the results of our investigation, the recommendations presented in the Reynolds Associates may be used for the proposed improvements with the exception of the building proposed in the northwest corner of the site.

Foundations

The loose soil varies from 1.5 to 2.5 feet deep across the site with the exception of the northwest corner where compacted fill was found. The Reynolds report recommended embedding foundation at least 18 inches below grade and provided a very low bearing capacity (1,250 psf) for proposed structures. Mr. Reynolds also recommended keeping the bearing loads uniform around the structure. We assume this recommendation was provided to keep the settlement uniform across the structure. The Reynolds report did not estimate total and differential settlements for the proposed structures. Our firm calculated the maximum allowable bearing capacity of the soil using the laboratory data included on the test boring logs. Our calculations indicate an allowable bearing pressure of 1,386 to 1,768 psf with a total settlement of 1 inch. We inspected the exposed portion of the foundation and slab for an existing structure constructed using the recommendations of the Reynolds report. (The two-story structure is centrally located along the east edge of the site.) The foundation was mostly buried below grade and the interior was stacked with storage items, however, the portions we were able to see were in very good condition. There were very small shrinkage cracks in the interior slab, most likely due to inadequate control joint spacing and no remarkable cracks were observed in the footings or masonry walls. Our calculations and site observations indicate the bearing capacity provided in the Reynolds report is appropriate and proposed structures may be supported on spread footings embedded 18 inches into firm native soil per the recommendations of the Reynolds report.

The building proposed in the northwest corner has very dense compacted fill below the north end of the structure. The nearest boring to the south end of the building had loose soils to a depth of 2.5 feet. There is a potential for differential settlement due to the large variation in soil density across the building pad. We recommend compacting the loose soil below the building foundation proposed in the northwest corner of the site to provide a firm, uniform subgrade for foundation support. The loose soils within 2 feet of footings should be compacted to at least 90 percent relative compaction. Footings embedded into compacted

engineered fill may be designed using an allowable bearing capacity of 2,350 psf.

Slabs-on-Grade

Dees & Associates are not experts in the field of moisture proofing or vapor barriers. An expert, experienced in the field of vapor mitigation should be consulted to address areas where floor wetness would be undesirable or where sensitive flooring or equipment is planned on top of floor slabs. We also recommend you discuss this issue with your flooring and equipment manufacturers. At a minimum, a blanket of 4 inches of free-draining gravel should be placed beneath the floor slab to act as a capillary break. In order to minimize vapor transmission, an impermeable membrane should be placed over the gravel. The membrane should be covered with 2 inches of sand or rounded gravel to protect it during construction. The sand or gravel should be lightly moistened just prior to placing the concrete to aid in curing the concrete.

Seismic Design Parameters

Structures designed in accordance with the most current seismic design codes should react well to seismic shaking. The project site is located about 13 km (8 miles) southwest of the San Andreas Fault zone. The San Andreas Fault is considered to be a Seismic Fault Source Type A, according to the 1997 UBC. A "Soil Type S_D" may be used in seismic analysis using the 1997 UBC seismic design provisions.

Plan Review, Construction Observation and Testing

Dees and Associates should be provided the opportunity for a general review of the final project plans prior to construction to evaluate if our geotechnical recommendations have been properly interpreted and implemented. If our firm is not accorded the opportunity of making the recommended review, we can assume no responsibility for misinterpretation of our recommendations. We recommend that our office review the project plans prior to submittal to public agencies, to expedite project review. Dees and Associates request the opportunity to observe and test grading operations and foundation excavations at the site. Observation of grading and foundation excavations allows anticipated soil conditions to be correlated to those actually encountered in the field during construction.

It has been a pleasure working with you on this project. If you have any questions, please call our office.

Very truly yours,

DEES & ASSOCIATES, INC.

Rebecca L. Dees
Geotechnical Engineer
G.E. 2623

Copies: 3 to Addressee

LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. The recommendations of this report are based upon the assumption that the soil conditions do not deviate from those disclosed in the borings. If any variations or undesirable conditions are encountered during construction, or if the proposed construction will differ from that planned at the time, our firm should be notified so that supplemental recommendations can be given.

2. This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information and recommendations contained herein are called to the attention of the Architects and Engineers for the project and incorporated into the plans, and that the necessary steps are taken to ensure that the Contractors and Subcontractors carry out such recommendations in the field. The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. No other warranty expressed or implied is made.

3. The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether due to natural processes or to the works of man, on this or adjacent properties. In addition, changes in applicable or appropriate standards occur whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or partially, by changes outside our control. Therefore, this report should not be relied upon after a period of three years without being reviewed by a geotechnical engineer.

SOIL INVESTIGATION
for
APN 26-031-05,18
Santa Cruz, California

FOR
MR. ERNEST ANTOLINI
Santa Cruz, California

BY
JAMES C. REYNOLDS & ASSOCIATES
GEOTECHNICAL ENGINEERS
85122-S60-F6
January 1986

JAMES C. REYNOLDS & ASSOCIATES, INC.
Geotechnical Engineers

85122-S60-F6
21 January 1986

Mr. Ernest Antolini
2776 Soquel Avenue
Santa Cruz, CA 95062

Subject: Antolini Property, APN 26-031-5,18
2776 Soquel Avenue, Santa Cruz

Dear Mr. Antolini:

In accordance with your authorization, we have conducted an investigation of the subsurface soil conditions at the site of the presently proposed high story building and subsequent future commercial buildings, in Santa Cruz, California.

Our findings indicate that the site, from a geotechnical engineering standpoint, is suitable for the proposed construction provided the recommendations of this report are followed in the design and construction phases of the project.

The accompanying report outlines our findings related to the field exploration and laboratory testing and includes our recommendations and conclusiona based on these findings.

It has been a pleasure performing this service for you. If you have any questions, please contact our office.

Very truly yours,
JAMES C. REYNOLDS & ASSOCIATES, INC.

James C. Reynolds
CE 15285

JCR:sr

Copies: 4 to Mr. Ernest Antolini
1 to Ifland Engineers, Inc.

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

General

1. Based on this investigation, it is our opinion that the site can be developed for the proposed commercial type development provided these recommendations are included in the design and construction in the field.

2. Out site observations and laboratory testing indicated that the surface soils possess non-expansive properties.

3. Based on the site topography and our discussions, only a slight amount of grading will be required to develop the site. The use of imported material will probably not be necessary.

4. As the grading plans and foundation details have not been finalized, some of the recommendations must be general in nature. These items should be reviewed by the Geotechnical Engineer prior to the contract bidding to insure that the provisions of this report have been included in the design. At that time, additional recommendations will be provided, if necessary.

5. The Geotechncial Engineer should be notified at least four (4) working days prior to any site clearing or grading operations on the property in order to coordinate his work with the grading contractor. This time period will allow for any necessary laboratory testing (compaction curves) that should be completed prior to the grading operations.

6. Earthwork construction should be performed in accordance with the "Recommended Grading Specifications," Appendix B. The specifications set

forth minimum standards necessary to satisfy the other requirements of this report and without compliance with these standards, the design criteria presented in this report will not be valid.

Site Preparation

7. The initial site preparation shall consist of removal of all vegetation, stockpiled building materials, and demolition debris. The organic surface strippings from the site may be stockpiled for future landscaping. The depth of stripping will be minimal or non-existent , however some areas may require as much as four inches (4") in depth.

Cut and Fill Slopes

8. All cut and fill slopes shall be graded no steeper than two horizontal to one vertical (2:1).

9. After completion of the slope construction, proper erosion protection must be provided. This must include track-rolling and planting of the exposed surface of the slopes. Cut and fill slopes shall be constructed so that accumulated surface water will not be allowed to drain over the top of the slope face.

Grading

10. Fill soil including redensification of the loose surface soils under buildings should be compacted to a relative compactive effort of 90%: however, compactive effort under paved areas shall be a minimum of 95%. All soils should be moistured conditioned so that the moisture content at the time of compaction is at or near its optimum moisture content. The percent

relative compaction must be based on the maximum dry density obtained from a laboratory compaction curve run in accordance with the procedure set forth in ASTM Test procedure #D1557-78. This test will also establish the optimum moisture content of the soil.

11. Should the use of imported fill be necessary for other than base or subbase on this project, this fill should be:

a. free of organics, debris and other deleterious materials
b. granular in nature and contain sufficient binder to allow utility trenches to stand open
c. free of rocks in excess of 4 inches in size
d. have a sand equivalent of 20 or more and
e. have a Resistance "R"-Value in excess of 30.

Samples of any proposed imported fill planned for use on this project should be submitted to the Geotechnical Engineer for appropriate testing and approval no less than four (4) working days before anticipated job site delivery.

Redensification Zone

12. Due to the loose condition of the surface soils we recommend that the top six inches (6") of subgrade soil under the proposed pavements and buildings be scarified, moisture conditioned, and recompacted to the minimum compactive effort as delineated in paragraph 10 above. Subsequent fill required to bring the street subgrade and building pad to proper elevation will be placed, moisture condtioned and compacted in a like manner.

Foundations

13. Based on the soil characteristics, it is our opinion that the most appropriate foundation system for support of the building will consist of

conventional footings bedded into firm existing soil. This system should consist of continuous exterior footings, in conjunction with interior isolated spread footings or additional interior continuous footings.

14. For conventional footings, the continuous and isolated footing sizes should be based on the allowable bearing value but not less than 15" inches in width. All footings should be excavated a minimum of eighteen inches (18") into the firm existing soil. Should local building codes require deeper embeddment of the footings, the local codes must apply. Footing excavations must be checked by the Geotechnical Engineer before steel is placed and concrete is poured to insure bedding into proper material. Footings constructed to the given cirteria may be designed for an allowable bearing capacity of 1,250 p.s.f. for dead plus live load, and may be increased by one-third to include short term wind and seismic type loadings. Foundation bearing values should be kept as close to the specified value as possible.

15. The footings should contain steel reinforcement as directed by the Project Design Engineer in accordance with applicable UBC or ACI Standards. However, we recommend that the reinforcing steel in the continuous footings be increased to include a minimum of four No. 4 bars (two near the top and two near the bottom). Isolated footings should be reinforced in a similar manner.

Concrete Slab-on-Grade Construction

16. Concrete slab-on-grade floors may be used for ground level construction on firm native soil. All concrete slabs-on-grade should be underlain by a

minimum of six inch (6") thick capillary break of crushed rock. This should be checked and approved by the Geotechnical Engineer prior to pouring concrete.

17. Where floor coverings are anticipated or vapor transmission will be a problem, a water proof membrane should be placed between the granular layer and the floor slab in order to reduce the moisture condensation under the floor coverings. A two inch layer of moist sand on top of the membrane will help protect the membrane from rupturing and will assist in equalizing the curing rate to reduce excessive shrinkage stresses. The crushed rock thickness may be reduced by a thickness equal to the sand cushion layer.

18. Slab thickness and reinforcing shall be designed by the Design Engineer based on the structural parameters; however minimum reinforcement shall consist of 6"x6"/10x10 wire mesh. The reinforcing must be firmly held in place during placement and finishing of the concrete in order to attain its greatest efficiency in minimizing the cracking of the slabs.

Drainage

19. We recommend that full gutters be used at all roof down eves to collect storm runoff water and channel it through closed rigid conduits to a suitable discharge.

20. Water must not be allowed to pond adjacent to the structural foundations or on the paved areas. Finished grade should provide a positive gradient away from all foundations.

21. The building and surface drainage facilities should not be altered,

nor any filling or excavation work performed after initial construction work has been completed without consulting the Geotechnical Engineer.

22. Irrigation activities at the site should be done in a controlled and reasonable manner.

Utility Trenches

23. Utility trenches that are located parallel to the sides of building foundations should be placed so that they do not extend below a line sloping down and away at a 2:1 (horizontal to vertical) slope from the bottom edge of all footings.

24. Trenches should be backfilled with an approved granular material (not sand) and compacted uniformily to the minimum relative compactive effort as required by the "City Specifications" but not less than those specified in Item 10 above.

Lateral Pressures

25. Retaining walls that are fully drained, should be designed to the following criteria:

a. Where walls are "flexible," i.e. free to yield in an amount sufficient to develop an active earth pressure condition (about ½% of height) design for an active pressure 35 p.s.f./ft. depth with a horizontal backslope, and 55 p.s.f./ft. of depth with a 2:1 backslope.
b. Where walls are considered "fixed" design for a uniform active pressure of 24H p.s.f. (H is depth of wall in feet) with horizontal backslope, and 30H p.s.f. with a 2:1 backslope gradient.
c. For resisting passive earth pressure:
    1. For existing in-place soil, use 250 p.s.f./ft., of depth neglect the upper 12" if the soils are loose.
    2. For engineered fill, use 300 p.s.f./ft., of depth.

d. Coefficient of "friction" between base of foundation and subsoil of 0.30.
e. Any live or dead surcharge which will transmit a force to the wall.

26. The above criteria are based on fully drained conditions. Therefore, we recommend that permeable material meeting the State of California Standard Specification Section 68-1.025 Class 2, be placed behind the wall, with a minimum width of twelve inches (12") and extending for the full height of the wall to within one foot of the ground surface. The rock should then be covered with a waterproof membrane and twelve inches (12") of compacted fill. A 4-inch diameter perforated and rigid drain pipe should be installed within four inches of the bottom of the granular backfill and be discharged to a suitable approved location.

Erosion

27. These soils are susceptable to erosion. The exposed soils should be landscaped as soon as possible, after grading, to reduce erosion.

Pavements

28. The native clayey sand soils typically exhibit "R" Values from 20 to 30 with very low expansion characteristics. The following design results are based upon a minimum basement "R" Value of 20 and Traffic Indices of four for automobile traffic in driveway and parking areas and six for the truck maneuvering and delivery driveway areas. Therefore, we recommend that the on-site paving should be 2 inches of asphaltic concrete, over 7 inches of Class 2 Aggregate Baserock (R=78 min.), over 6 inches of compacted (95%) subgrade soil. For truck maneuvering and delivery driveway areas we recommend

3 inches asphaltic concrete, over 6 inches of Class 2 Aggregate Baserock (R=78), over 5 inches of Class 2 Aggregate Subbase (R=50 min.), over 6 inches of compacted (95%) subgrade soil.

29. To have the selected sections perform to their greatest efficiency, it is very important that the following items be considered:

a. Properly moisture condition the subgrade and compact to a minimum relative compaction of 95%, at a moisture content near the optimum moisture content.
b. Provide sufficient gradient to prevent ponding of water.
c. Use only quality materials of the type and thickness (minimum) specified. All baserock must meet CALTRANS Stantard Specifications for Class 2 Aggregate Base, and be angular in shape. Subbase must also meet CALTRANS Standard Specifications for Class 2 Aggregate Subbase, and be angular in shape.
d. Compact the subbase and base aggregate uniformily to a minimum relative compactive effort of 95%.
e. Place the asphaltic concrete only during periods of fair weather when the free air temperature is within the prescribed limits.
f. Provide a routine maintenance program.

Plan Reiview

30. We respectfully request an opportunity to review the plans before bidding to insure that the recommendations of this report have been included and to provide additional recommendations, if needed.

COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT
701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123
TOM BURNS, PLANNING DIRECTOR

November 15, 2007

Powers Land Planning, Ron Powers
1607 Ocean St., Ste. 8
Santa Cruz, CA, 95063

Subject: Review of Geotechnical Investigation by Dees & Associates
Dated July 6, 2006; Project #: SCR-0174
APN 026-031-32,46, Application #: 07-0212

Dear Applicant:

The purpose of this letter is to inform you that the Planning Department has accepted the subject report and the following items shall be required:

1. All construction shall comply with the recommendations of the report.

2. Final plans shall reference the report and include a statement that the project shall conform to the report's recommendations. Plans shall also provide a thorough and realistic representation of all grading necessary to complete this project

3. Prior to the discretionary application being deemed complete, a *plan review letter* shall be submitted to Environmental Planning. The author of the report shall write the *plan review letter*. The letter shall state that the project plans conform to the report's recommendations.

After building permit issuance the soils engineer *must remain involved with the project* during construction. Please review the *Notice to Permits Holders* (attached).

Our acceptance of the report is limited to its technical content. Other project issues such as zoning, fire safety, septic or sewer approval, etc. may require resolution by other agencies.

Please submit two copies of the report at the time of building permit application.

Please call the undersigned at (831) 454-5121 if we can be of any further assistance.

Sincerely,

Carolyn Banti
Associate Civil Engineer

Cc: Cathy Graves, Project Planner
Ernest and Ruth Antolini, Owners
Dees & Associates

Environmental Review Inital Study
ATTACHMENT 4
APPLICATION 07-0212

(over)

CITY OF SANTA CRUZ

WATER DEPARTMENT

809 Center Street, Room 102 Santa Cruz CA 95060 Phone (831) 420-5200 Fax (831) 420-5201

November 9, 2006

Jeff Antolini
427 La Fonda Avenue
Santa Cruz CA 95062

Re: APN 026-031-32 & 46, 2776 & 2806 Soquel Avenue; proposed demolition of one existing and construction of two new commercial buildings for a total of five buildings on two parcels.

Dear Mr. Antolini:

This letter is to advise you that the proposed development is located within the service area of the Santa Cruz Water Department and potable water is currently available for normal domestic use and fire protection. Service will be provided to each and every lot of the development upon payment of the fees and charges in effect at the time of service application and upon completion of the installation, at developer expense, of any water mains, service connections, fire hydrants and other facilities required for the development under the rules and regulations of the Santa Cruz Water Department. The development will also be subject to the City's Landscape Water Conservation requirements.

At the present time:

- the required water system improvements have not been determined; and
- financial arrangements have not been made to the satisfaction of the City to guarantee payment of all unpaid claims.

This letter will remain in effect for a period of two years from the above date. It should be noted, however, that the City Council may elect to declare a moratorium on new service connections due to drought conditions or other water emergency. Such a declaration would supersede this statement of water availability.

If you have any questions regarding service requirements, please call the Engineering Division at (831) 420-5210. If you have questions regarding landscape water conservation requirements, please contact the Water Conservation Office at (831) 420-5230.

Sincerely,

Bill Kocher
Director

Environmental Review Inital Study
ATTACHMENT 5
APPLICATION 07-0212

Cc: Ron Powers

BK/mf
P:\WTEN\EngTech\Letter Boilerplates\Water Availability.doc
Cc: SCWD Engineering

DRAINAGE STUDY

FOR

Brickyard Plaza

2776 Soquel Avenue

Santa Cruz, California

January, 2008

Job 05069

IFLAND ENGINEERS, INC.
1100 Water Street, Suite 2
Santa Cruz, CA 95062
(831) 426-5313 FAX (831) 426-1763
www.iflandengineers.com

Environmental Review Inital Study
ATTACHMENT 6, 1 of 22
APPLICATION 07-0212

Introduction:

The subject property is 2.62 acres, consisting of two existing commercial lots located approximately 300 feet east of 7th Avenue on Soquel Avenue and Bostwick Lane. Redevelopment of the site is being proposed to remove an existing building in order to accommodate three additional buildings. Site development will necessitate compliance with drainage regulations as mandated by the County of Santa Cruz Design Criteria and the letters issued by the County of Santa Cruz Department of Public Works dated February 5, 1987 and July 27, 2007 (See Attachment A).

Presently there are three buildings, diminutive amount of trees and landscaping on the east lot, and the remainder is either pavement or compacted soil (used for storage). The existing site drains to the center and discharges to the east leading into the Soquel Avenue drainage system. The onsite structures of interest include three inlets located near and around the center of the site. The offsite structures of interest include the 24" RCP leaving the site near the eastern boundary and the north gutter on Bostwick Ln, which leads to an inlet at the west end of the street.

For the proposed development, improvements will include the use of BMPs to provide filtration and infiltration of site runoff as well as water quality treatment of discharging runoff.

Resources used for the study include the Soil Report conducted by Reynolds & Associates (dated January 1986), the updated Soil Report conducted by Dees & Associates (dated July 2006), National Resources Conservation Service Web Soil Survey 2.0, and Saturated Hydraulic Conductivity (permeability) data (See Attachment B). These exhibits demonstrate that the soil type and soil permeability in the upper 3' to 7' range is poor. However, the design includes a filtration/infiltration system (Concrete Open Jointed Pavers) to promote recharge.

Existing Conditions:

The following calculations provide analysis of the existing conditions.

The runoff coefficient (C_{10}) and the rainfall intensity (I_{10}) are assumed values taken from figures SWM-1 and SWM-3, respectively, of the County of Santa Cruz Design Criteria dated June 2006.

*Total Area	= 2.75 Acres
C_{10}	= 0.64
I_{10} @ T_c = 10 min,	= 2.11 in/hr.
$Q_{10} = (0.64)(2.11)(2.75)$	= 3.71 c.f.s.
$Q_{100} = (1.25)(1.5)(Q_{10})$	= 6.96 c.f.s.

*Area Includes Neighboring Northeast lot (APN 026-031-28, A=0.13 Ac impervious), which drains into property (See C3).

Post Development Conditions:

The following calculations provide a general analysis of the post development conditions at the site.

- *Total Area = 2.75 Acres
- Impervious Area = 2.41 Acres
- Pervious Area = 0.17 Acres
- Semi-Impervious Area = 0.17 Acres

$C_{10} = \frac{(0.9)(2.58) + (0.25)(0.17)}{2.75}$ = 0.86

I_{10} @ T_c = 10 min = 2.11 in/hr.

$Q_{10} = (0.86)(2.11)(2.75)$ = 4.99 c.f.s.

For Q_{100}, (Ca)(C) = (1.25)(0.83) > 1, so (Ca)(C) = 1

$Q_{100} = (1)(1.5)(2.11)(2.75)$ = 8.70 c.f.s.

2.54 acres of the site will be drained into a gravel filtration/infiltration trench located beneath the porous pavement structure. On-site filtration/infiltration is provided as required by the July 27, 2007 Santa Cruz DPW letter.

- *Total Area = 2.54 Acres
- Impervious Area = 2.21 Acres
- Pervious Area = 0.16 Acres
- Semi-Impervious Area = 0.17 Acres

$C_{10} = \frac{(0.9)(2.38) + (0.25)(0.16)}{2.54}$ = 0.86

I_{10} @ T_c = 10 min = 2.11 in/hr.

$Q_{10} = (0.86)(2.11)(2.54)$ = 4.61 c.f.s.

$Q_{100} = (1)(1.5)(2.11)(2.54)$ = 8.04 c.f.s.

The filtration/infiltration system provides a total storage volume of 2,779 cubic feet, which is greater than the volume required for a 10-year detention system design. Exhibit A shows the calculations used to determine the minimum and total storage volume.

In addition, discharge from the site is restricted to 10-year pre-development release rate in order further promote filtration and infiltration in the system by storing runoff longer. Restricting discharge to pre development levels will be achieved by means of a catch basin with a built in flow restrictor orifice.

Release Rate

The site's release rate is based on a 10-yr pre-development storm, which is 3.71 c.f.s (see calculation on Page 1).

There are areas of new impervious surface that will not be treated by the filtration/infiltration system. The following calculations provide runoff analysis of the impervious areas not treated by the system.

• Other impervious areas requiring mitigation	= 0.20 AC
• Other pervious areas requiring mitigation	= 0.01 Ac
C_{10}	= 0.87
I_{10} @ T_c = 10 min	= 2.11 in/hr.
Q_{10} = (0.87)(2.11)(0.21)	= 0.39 c.f.s.

The run-off generated from these untreated/undetained impervious areas is subtracted from the 10-yr pre-development run-off rate, which determines the release rate. This release rate of 3.32 c.f.s. is used in sizing the orifice. The following calculations provide the orifice size.

$Q = CA(2gH)^{0.5}$ rearrange to solve for Area, $A= Q/[C*(2gH)^{0.5}]$ (where C=0.61 for circular sharp edged orifices)

$A= 3.32/[0.61*(2*32.2*2.99')^{0.5}] = 0.39$ s.f.

Convert area to circular diameter: $A= \pi r^2 = 0.39$ s.f. and r = 0.35 ft. = 4.23 in.

Infiltration Calculations

The amount of water that will percolate from the system is shown in the following calculation:

Filtration/Infiltration Trench

Saturated Hydraulic Conductivity or Permeability (from NRCS Web Soil Survey 2.0)	= 0.9 µm/s = 0.13 in/hr
System Footprint	= 1,056 sf
48 hr drawdown = (0.13in/hr)(.083ft/in)(1,056 sf)(48hr)	= 547 ft^3

Since only 547 cf will percolate in 48 hours, a 12" sub-drain was included in the design of the system to assure that the facility would completely drain after all storms have ended.

The plans show the configuration of the collection, filtration/infiltration, and discharge system.

Environmental Review Inital Study
ATTACHMENT 6, 4 of 22
APPLICATION 07-0212

Design Conclusions:

- Pervious Pavement and an open bottom gravel trench filtration/infiltration system will provide added water quality treatment benefits to the site development through reduced runoff, particulate deposition, and groundwater recharge.

- Pretreatment for runoff entering the gravel trench will be addressed by the use of the Santa Cruz County Standard Water Quality Treatment Unit (Fig. SWM-12). In addition, roof runoff entering the storm drain system will be pretreated by selected landscape areas where water will discharge and pond to a depth of 1" prior to release by curb notches onto the proposed AC pavement. Similarly, runoff from the area(s) not entering the filtration/infiltration trench will be treated by the use of Santa Cruz County Standard Water Quality Treatment Unit (Fig. SWM-12) prior to release onto Bostwick Ln gutter.

- All existing runoff to the neighboring west lot will be nearly eliminated.

Environmental Review Inital Study
ATTACHMENT 6, 5 of 22
APPLICATION 07-0212

Attachment A:

Environmental Review Inital Study
ATTACHMENT 6a 6 of 12
APPLICATION 07-0212

County of Santa Cruz

DEPARTMENT OF PUBLIC WORKS

701 OCEAN STREET, ROOM 410, SANTA CRUZ, CA 95060-4070
(831) 454-2160 FAX (831) 454-2385 TDD (831) 454-2123

THOMAS L. BOLICH
DIRECTOR OF PUBLIC WORKS

July 27, 2007

RON POWERS, AICP
Powers Land Planning, Inc.
1607 Ocean Street, Suite 8
Santa Cruz, CA 95060

SUBJECT: ANTOLINI USE PERMIT, PLANNING APPLICATION NUMBER 07-0212
ASSESSOR PARCEL NUMBERS 026-031-32 AND 026-031-46

Dear Mr. Powers:

This letter is in response to your June 19, 2007, letter regarding the subject development application and proposed requirements regarding drainage aspects of the project. The February 5, 1987, letter from Public Works that you attached indicates that for future development on the parcel no additional downstream drainage improvements would be required. In addition, the letter stated that on-site detention would not be required but that payment of appropriate drainage fees would be required. In closing, the letter made it clear that future development would be subject to any changes that are made to the County Design Criteria. Since that time the Design Criteria has in fact changed, and projects today must include some level of Best Management Practices (BMPs) where feasible to minimize impacts of the development. BMPs are meant to reduce sediment and pollutants that make their way into our local streams and water bodies.

Public Works will revise our project completeness comments after taking into consideration some of the facts that you point out in your letter. We will not require downstream drainage system analysis, including assessment of the outfall. We will not require on site detention, but we will require a reasonable attempt to include BMPs to the maximum extent feasible for your project. The current submittal makes no attempt to minimize the impacts of the development such as using alternative pervious or semi impervious pavements or optimizing the use of the landscaping areas to provide filtration and minor infiltration. As presented, the landscaped areas are quite small, fragmented, and separated from the rest of the site by curbing. In addition to the BMPs, we will require water quality treatment devices for the project site.

Environmental Review Inital Study
ATTACHMENT 6, 7 of 22
APPLICATION 07-0212

DEPARTMENT OF
PUBLIC WORKS

GOVERNMENTAL CENTER

COUNTY OF SANTA CRUZ

701 OCEAN STREET SANTA CRUZ, CALIFORNIA 95060-4070

D.A. PORATH
DIRECTOR OF PUBLIC WORKS

PHIL W. SANFILIPPO (408) 425-2133
(ATSS#) 525-2133
ASST. DIRECTOR ENGINEERING

JOHN A. FANTHAM (408) 425-2481
(ATSS#) 525-2481
ASST. DIRECTOR OPERATIONS

February 5, 1987

GLEN IFLAND
IFLAND ENGINEERS
1100 Water Street
Santa Cruz, Ca 95062

SUBJECT: ZONE 5 DRAINAGE REQUIREMENTS FOR DEVELOPMENT OF APN 26-031-29, 32, 35, AND 38

Dear Glen:

This letter is to confirm the extent of drainage improvements which will be required of development on the subject parcels.

Zone 5 has recently approved plans ~~prepared by Ifland~~ Engineers for developments by Ernest Antolini (26-031-29 and 32) and Dapont Construction (26-031-35). The drainage improvements on these plans were designed for a 25-year storm for ultimate buildout of the entire drainage shed.

For any future development on these parcels, Zone 5 will have no additional requirements, other than payment of any appropriate drainage fees. On site detention will not be required.

For future development of Wayne Barnes' property (26-031-38) no downstream improvements will be required, and onsite detention will not be required. Payment of any appropriate drainage fees and extension of the subject storm drain to serve this parcel will be required. This storm drain will in turn be extended by development upstream.

Environmental Review Inital Study
ATTACHMENT 6, 8 of 22
APPLICATION 07-0212

These requirements are based upon the current County Design Criteria. While we do not anticipate any increase in the level of storm protection required by the design criteria, it is possible that such a change would affect these requirements.

If you have any questions regarding these requirements, please contact Carl Rom at 425-2133.

Yours truly,

D. A. PORATH
Director of Public Works

By: Compton I. Vester

Compton I. Vester
Senior Civil Engineer

CDR:bb

Environmental Review Inital Study
ATTACHMENT 6a 9of22
APPLICATION 07-0212

Merge: ZONE 5

Attachment B:

Environmental Review Inital Study
ATTACHMENT 6 of 10 of 22
APPLICATION 07-0212

Saturated Hydraulic Conductivity (Ksat)–Santa Cruz County, California
(Brickyard Plaza)

Environmental Review Inital Study
ATTACHMENT 6, 11 of 22
APPLICATION 07-0212

Environmental Review Initial Study
ATTACHMENT 6
APPLICATION 07-0212

MAP LEGEND

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

Soils
- Soil Map Units

Soil Ratings
- <= 0.91
- Not rated or not available

Political Features

Municipalities
- Cities
- Urban Areas

Water Features
- Oceans
- Streams and Canals

Transportation
- Rails

Roads
- Interstate Highways
- US Routes
- State Highways
- Local Roads
- Other Roads

MAP INFORMATION

Original soil survey map sheets were prepared at publication scale. Viewing scale and printing scale, however, may vary from the original. Please rely on the bar scale on each map sheet for proper map measurements.

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

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

Soil Survey Area: Santa Cruz County, California
Survey Area Data: Version 5, Dec 12, 2007

Date(s) aerial images were photographed: 6/14/1993

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.

Saturated Hydraulic Conductivity (Ksat)

Saturated Hydraulic Conductivity (Ksat)— Summary by Map Unit — Santa Cruz County, California				
Map unit symbol	Map unit name	Rating (micrometers per second)	Acres in AOI	Percent of AOI
161	Pinto loam, 0 to 2 percent slopes	0.9100	0.6	23.5%
176	Watsonville loam, 0 to 2 percent slopes	0.9100	1.7	69.2%
177	Watsonville loam, 2 to 15 percent slopes	0.9100	0.2	7.3%
Totals for Area of Interest (AOI)			2.5	100.0%

Description

Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water. The estimates are expressed in terms of micrometers per second. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Saturated hydraulic conductivity is considered in the design of soil drainage systems and septic tank absorption fields.

For each soil layer, this attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

The numeric Ksat values have been grouped according to standard Ksat class limits.

Rating Options

Units of Measure: micrometers per second

Aggregation Method: Dominant Component

Component Percent Cutoff: *None Specified*

Tie-break Rule: Fastest

Interpret Nulls as Zero: No

Layer Options: Depth Range

Top Depth: 42

Bottom Depth: 84

Units of Measure: Inches

Exhibit A:

Environmental Review Inital Study
ATTACHMENT 6a 14 of 22
APPLICATION 07-0212

Calculations For Trench System Volume:

Index for SWM-17, Runoff Detention by the Modified Rational Method:

Cpre = Runoff Coefficient from Calculations on Page 1

Cpost = Impervious Runoff Coefficient

Impervious Area = Total impervious area captured by the Trench system.
*Includes porous pavement, existing impervious, and new impervious.

Results from SWM-17:

Excavation Volume Needed = **3437 cf**
Proposed Void Space = **40%**
Storage Volume Calculated = **1375 cf**

** Everything else on SWM-17 not needed for Trench System Design

Trench System Proposed Volume:

Length of trench = 264 ft.
Width of Trench = 4 ft.
Total Footprint Area = **1,056 sq.ft.**

Minimum Depth = 5.55 ft. (Refer to Junction #1 on sheet C3 of Civil Plans)

Total Volume based on Minimum Depth
Minimum Depth x Total Footprint Area = 5,861 cf

Storage Volume Calculated based on Minimum Depth
Void Space x Volume = (5861 cf)(0.40) = **2,344 cf**

Minimum Storage for 10-yr @ 15 min. < Trench System Minimum Storage Volume

Trench Additional Available Storage = 1,087 cf

Total Trench Volume = 1,087 cf + 5,861 cf = 6,948 cf

Total Available Storage Volume
Void Space x Volume = (6,948 cf)(0.40) = **2,779 cf**

Environmental Review Inital Study
ATTACHMENT 6, 150f22
APPLICATION 07-0212

ATTACHMENT 2
APPLICATION 07-0212

Environmental Review Initial Study
EXHIBIT B
07-0212

PROJECT: Brickyard Plaza - APN: 026-031-32 & 46 Application:07-0212 **Calc by:** EP **Date:** 1/28/2008

RUNOFF DETENTION BY THE MODIFIED RATIONAL METHOD

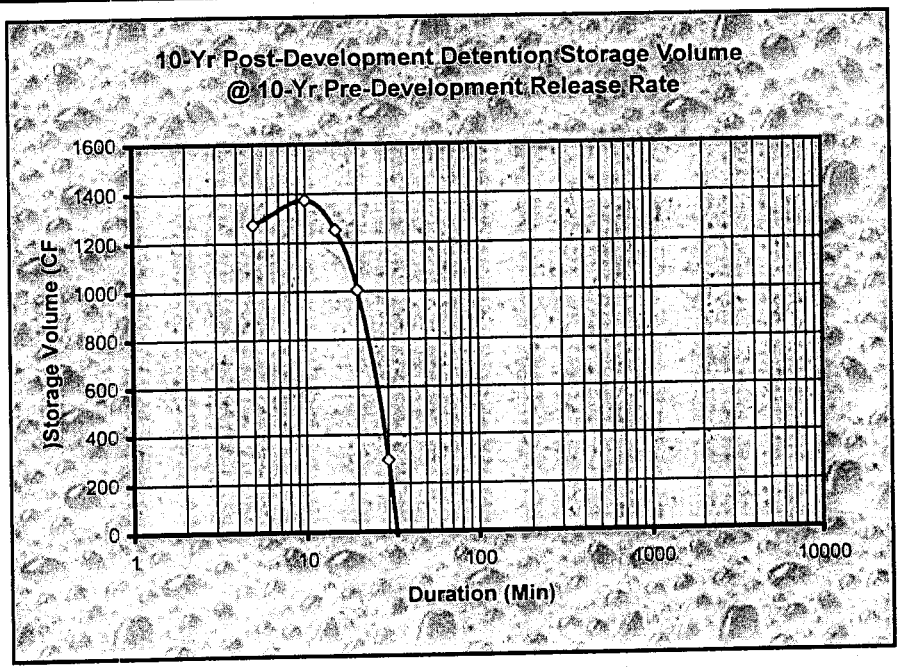
Data Entry: PRESS TAB & ENTER DESIGN VALUES SS Ver: 1.0

Site Location P60 Isopleth:	1.50		Fig. SWM-2 in County Design Criteria
Rational Coefficients Cpre:	0.64		See note # 2
Cpost:	0.90		See note # 2
Impervious Area:	103814	ft^2	See note # 2 and # 4

STRUCTURE DIMENSIONS FOR DETENTION

1375	ft^3 storage volume calculated			
40	% void space assumed			
3437	ft^3 excavated volume needed			
Structure	Length	Width*	Depth*	*For pipe, use the square
Ratios	2.60	0.04	0.04	root of the sectional area
Dimen. (ft)	**243.97**	**3.75**	**3.75**	

10 - YEAR DESIGN STORM				DETENTION @ 15 MIN.	
Storm Duration (min)	10 - Year Intensity (in/hr)	10 - Yr. Release Qpre (cfs)	10 - Year Qpost (cfs)	Detention Rate To Storage (cfs)	Specified Storage Volume (cf)
1440	0.26	0.395	0.556	-2.180	-235473
1200	0.28	0.427	0.600	-2.136	-192208
960	0.31	0.469	0.660	-2.076	-149478
720	0.34	0.530	0.746	-1.990	-107486
480	0.41	0.630	0.885	-1.851	-66624
360	0.46	0.711	1.000	-1.736	-46867
240	0.55	0.845	1.188	-1.548	-27868
180	0.62	0.954	1.342	-1.394	-18822
120	0.74	1.133	1.594	-1.143	-10283
90	0.83	1.280	1.800	-0.936	-6317
60	0.99	1.520	2.138	-0.598	-2692
45	1.12	1.717	2.415	-0.321	-1083
30	1.33	2.039	2.868	0.132	297
20	1.57	2.422	3.406	0.670	1005
15	1.78	**2.736**	3.848	1.112	1250
10	2.11	3.249	4.569	1.833	**1375**
5	2.83	4.359	**6.130**	3.394	1273

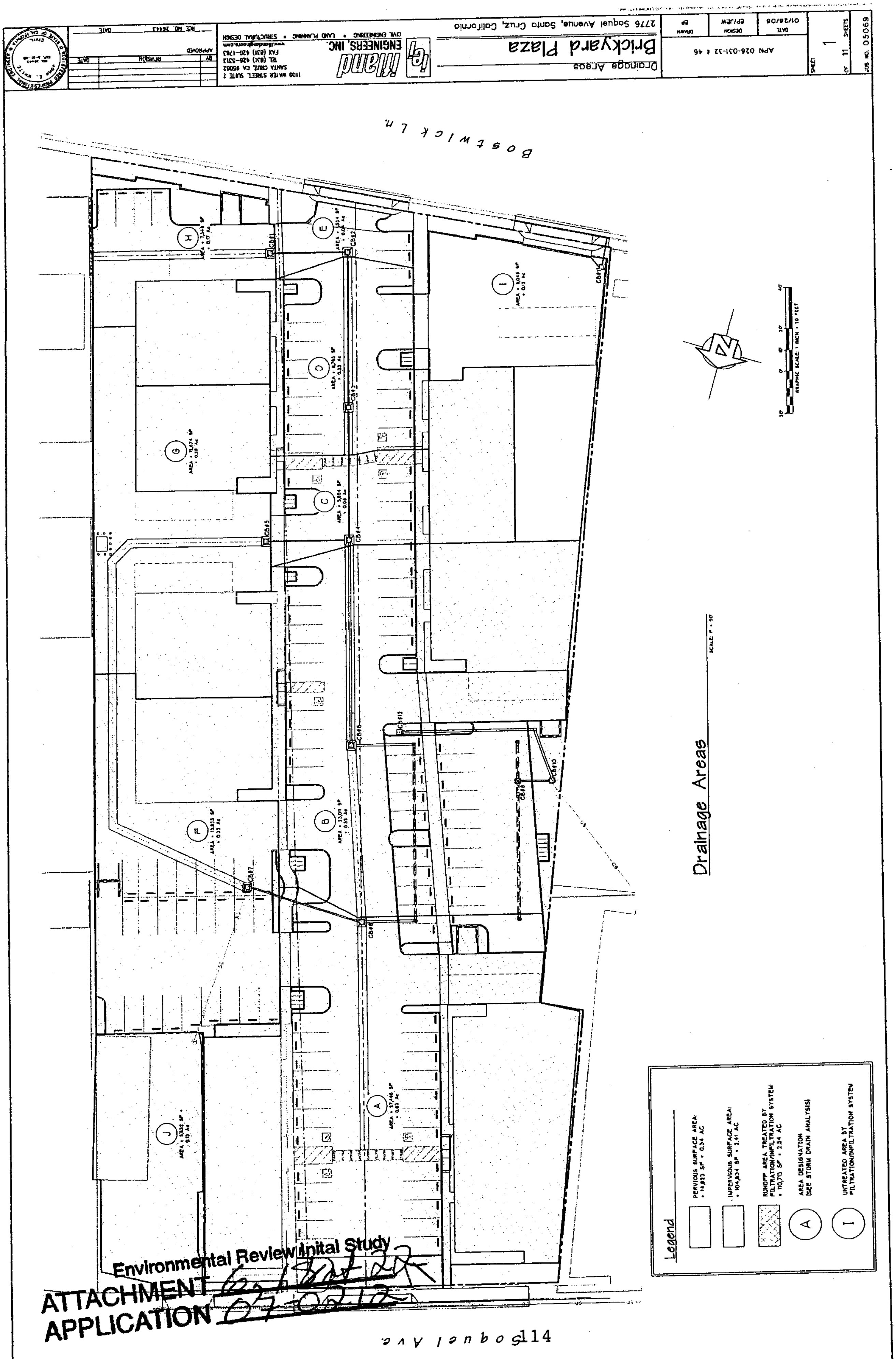


Notes & Limitations on Use:

1) The modified rational method, and therefore the standard calculations are applicable in watersheds up to 20 acres in size.
2) Required detention volume determinations shall be based on all net new impervious area both on and off-site, resulting from the proposed project. Pervious areas shall not be included in detention volume sizing; an exception may be made for incidental pervious areas less than 10% of the total area.
3) Gravel packed detention chambers shall specify on the plans, aggregate that is washed, angular, and uniformly graded (of single size), assuring void space not less than 35%.
4) A map showing boundaries of both regulated impervious areas and actual drainage areas routed to the hydraulic control structure of the detention facility is to be provided, clearly distinguishing between the two areas, and noting the square footage.
5) The EPA defines a class V injection well as any bored, drilled, or driven shaft, or dug hole that is deeper than its widest surface dimension, or an improved sinkhole, or a subsurface fluid distribution system. Such storm water drainage wells are "authorized by rule". For more information on these rules, contact the EPA. A web site link is provided from the County DPW Stormwater Management web page.
6) Refer to the County of Santa Cruz Design Criteria, for complete method criteria.

Exhibit B:

Environmental Review Inital Study
ATTACHMENT 6, 17 of 22
APPLICATION 07-0212


Drainage Areas
Brickyard Plaza
2776 Soquel Avenue, Santa Cruz, California
APN 026-051-32 & 46
ifland ENGINEERS, INC.
CIVIL ENGINEERING • LAND PLANNING • STRUCTURAL DESIGN
1100 WATER STREET, SUITE 2
SANTA CRUZ, CA 95062
TEL (831) 426-5313
FAX (831) 426-1763
JOB NO. 05069
Bostwick Ln.
Soquel Ave.
Legend
PERVIOUS SURFACE AREA: • 14,823 SF • 0.34 AC
IMPERVIOUS SURFACE AREA: • 104,834 SF • 2.41 AC
RUNOFF AREA TREATED BY FILTRATION/INFILTRATION SYSTEM • 110,713 SF • 2.54 AC
AREA DESIGNATION (SEE STORM DRAIN ANALYSIS)
UNTREATED AREA BY FILTRATION/INFILTRATION SYSTEM

Environmental Review Inital Study
ATTACHMENT
APPLICATION 07-0212

ATTACHMENT 4
APPLICATION

Environmental Review Initial Study

DRAINAGE SYSTEM CALCULATION

PROJECT: Brickyard Plaza (05069) APN: 026-031-32&46 Application 07-0212

SS Ver: 1.0

Calc by: EP Date: 01/28/08

Check by: Date:

P60 50 Design Storm 10 Years Return Period Factor 1.00 Antecedent Moisture Factor (Ca) 1.00

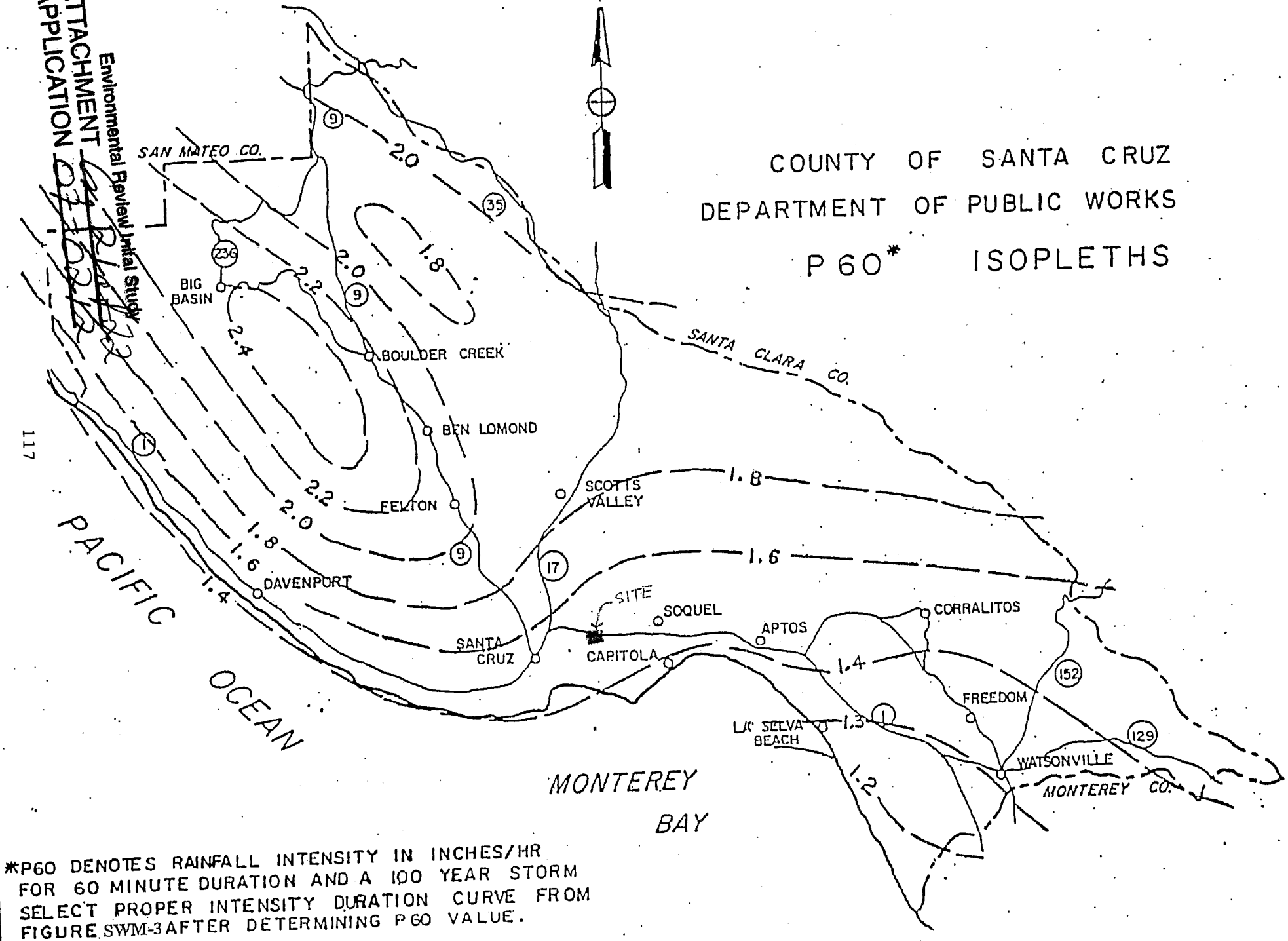
AREA DESIGNATION (1)	Area (ac) (2)	C (3)	A*C (4)	Tc (min) / I (in/hr) (5)	Q (cfs) CaCIA (6)	JUNCTION DESIGNATION (7)	Σ A*C (8)	Σ Tc / Tc (min) (9)	I (in/hr) (10)	Q (cfs) (11)	PIPE LINE DESIGNATION (12)	L (ft) (13)	D (in) / Type (14)	Pipe Area (sq ft) / n (15)	V (fps) / V (fpm) (16)	Sn (17)	LOSSES: FRIC. L*Sn (ft) (18)	LOSSES: Hi (ft) (19)	LOSSES: Σ H (ft) (20)	Outlet Control W.S. Elev. (21)	T.G. Elev. (22)	Inlet Control W.S. Elev. (23)	PIPE F.L. (24)	INLET FREEBOARD
H	0.17	0.90	0.15	10.0 / 2.11	0.32	1	0.15	10.00 / 0.35	2.11	0.32										90.03	91.61	89.80	89.25	1.58
											1,2	35	6.0 HDPE	0.20 / 0.012	1.65 / 98.7	0.00282	0.099	0.046	0.145	89.88	91.25	89.46	88.89	1.37
E	0.04	0.90	0.04	10.0 / 2.11	0.08	2	0.19	10.35 / 0.59	2.08	0.39	2,3	71	6.0 HDPE	0.20 / 0.012	2.00 / 120.2	0.00417	0.296	0.069	0.365	89.52	90.37	88.61	87.84	0.85
D	0.22	0.90	0.20	10.0 / 2.11	0.42	3	0.39	10.95 / 0.25	2.03	0.79	3,4	60	6.0 HDPE	0.20 / 0.012	4.01 / 240.4	0.01670	1.002	0.274	1.276	88.24	89.77	87.42	86.36	1.53
C	0.08	0.90	0.07	10.0 / 2.11	0.15	4J	0.46	11.19	2.01	0.92										88.68	90.28	87.36	86.73	1.60
G	0.29	0.90	0.26	10.0 / 2.11	0.55	5	0.26	10.00 / 0.22	2.11	0.55	5,4	37	6.0 HDPE	0.20 / 0.012	2.81 / 168.4	0.00820	0.303	0.135	0.438	88.24	89.77	87.42	86.36	1.53
115				#####	#####	4J	0.72	11.19 / 1.18	2.01	1.45	4,6	131	12.0 HDPE	0.79 / 0.012	1.85 / 110.7	0.00141	0.184	0.058	0.243	88.00	88.98	86.86	85.71	0.98
B	0.53	0.89	0.47	10.0 / 2.11	1.00	6	1.19	12.38 / 0.09	1.93	2.30	6, Out	15	12.0 HDPE	0.79 / 0.012	2.93 / 175.6	0.00354	0.053	0.146	0.199					
							1.19	12.46 / #VALUE!	1.92	2.29														
J	0.13	0.90	0.12	10.0 / 2.11	0.25	9	0.12	10.00 / 1.79	2.11	0.25										89.21	91.70	89.96	89.28	1.74
											7,9	76	8.0 ABS	0.35 / 0.010	0.71 / 42.5	0.00025	0.019	0.009	0.027	89.18	90.13	87.25	86.23	0.95
F	0.32	0.90	0.29	10.0 / 2.11	0.61	7	0.41	10.00 / 0.87	2.11	0.86	7,8	57	12.0 HDPE	0.79 / 0.012	1.09 / 65.3	0.00049	0.028	0.020	0.048	89.13	90.13	86.79	85.68	1.00
A	0.63	0.89	0.56	10.0 / 2.11	1.18	8	0.97	10.87 / 0.11	2.04	1.97	8, Out	17	12.0 HDPE	0.79 / 0.012	2.51 / 150.4	0.00260	0.044	0.107	0.151					
							2.16	10.99 / #VALUE!	2.03	4.38														

Appendix:

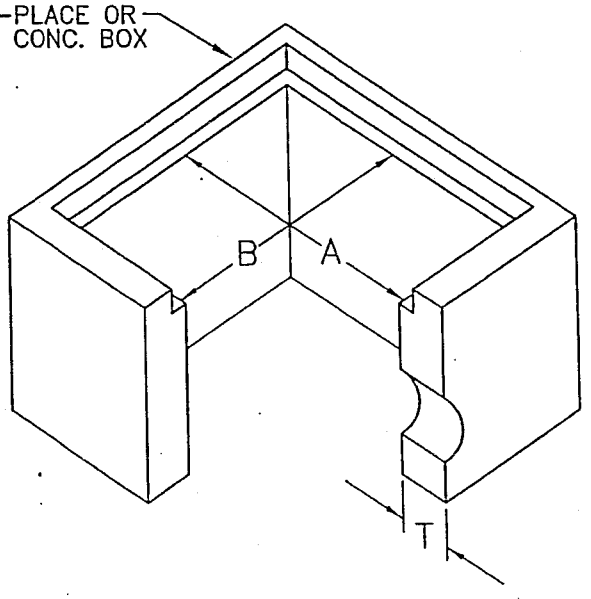
Environmental Review Inital Study
ATTACHMENT 6, 20 of 22
APPLICATION 07-0212

ATTACHMENT 1
APPLICATION 02-0282

Environmental Review Initial Study



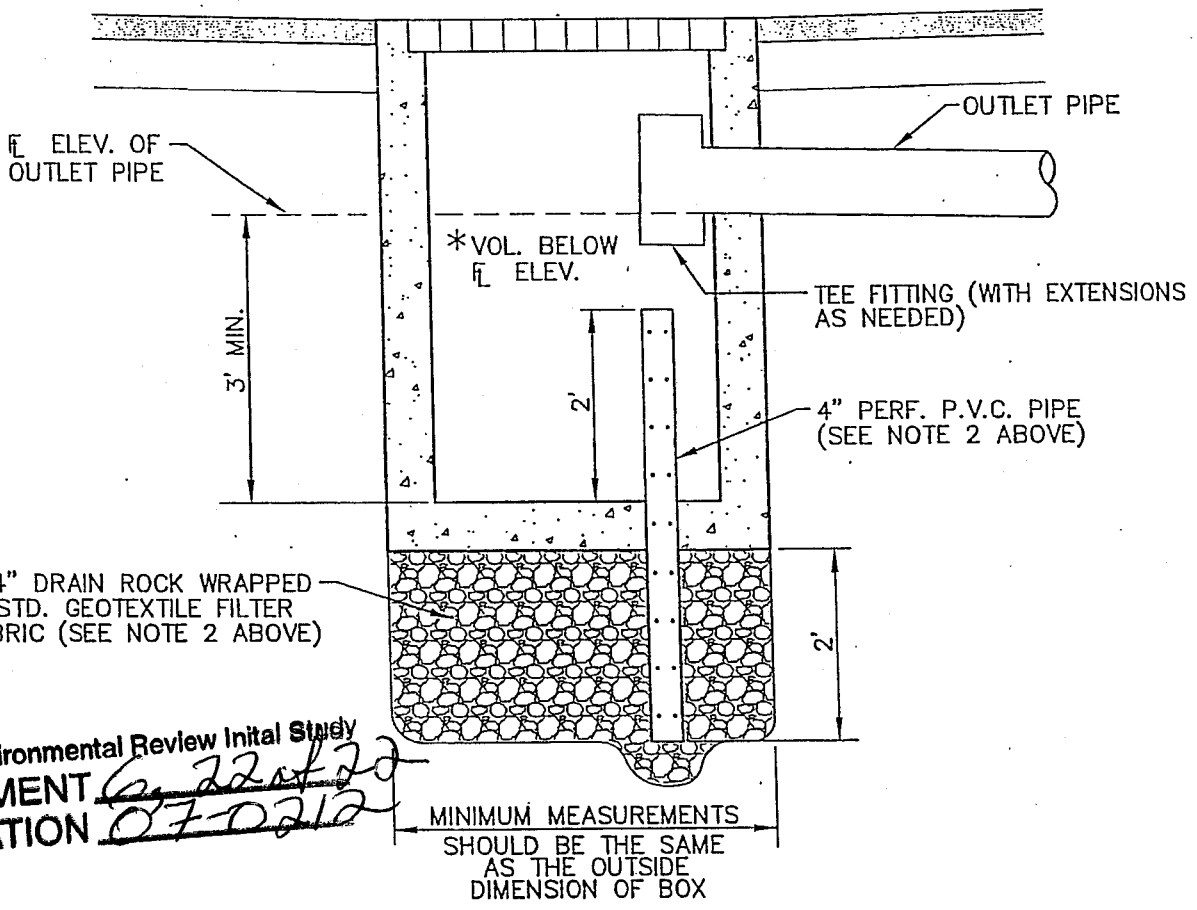
*P60 DENOTES RAINFALL INTENSITY IN INCHES/HR FOR 60 MINUTE DURATION AND A 100 YEAR STORM SELECT PROPER INTENSITY DURATION CURVE FROM FIGURE SWM-3 AFTER DETERMINING P60 VALUE.



NOTES

1. THE INTERIOR DIMENSIONS (A & B) MUST BE LARGE ENOUGH TO PERMIT CLEANING OF THE BOX, BUT SHALL NOT BE LESS THAN 2' x 2'. THE MINIMUM WALL THICKNESS (T) SHALL BE 6 INCHES IN AREAS SUBJECT TO TRAFFIC AND 4 INCHES IN AREAS WHERE THE BOX WILL NOT BE SUBJECTED TO WHEEL LOADS.

2. THE PERFORATED PIPE AND DRAIN ROCK SHALL NOT BE INCLUDED IN PROJECTS THAT HAVE POTENTIAL FOR GROUNDWATER CONTAMINATION, SUCH AS GAS STATIONS, OR PROJECTS IN PROXIMITY TO WELLS.



*RULE OF THUMB: 1 CU. YD. OF VOLUME PER ACRE OF PAVED AREA

SECTION

WATER QUALITY TREATMENT UNIT FOR SMALL DRAINAGE AREAS

N.T.S.

REV. 12/05

FIG. SWM-12

COUNTY OF SANTA CRUZ
DISCRETIONARY APPLICATION COMMENTS

Project Planner: Cathy Graves
Application No.: 07-0212
APN: 026-031-32

Date: August 4, 2008
Time: 10:25:24
Page: 1

Environmental Planning Completeness Comments

========= REVIEW ON MAY 22, 2007 BY ANTONELLA GENTILE =========
Please submit 3 copies of a soils report for this project.

Once we have received the soils report, the grading and drainage plan will be reviewed.

Once the plans have been accepted by all reviewing agencies, submit a plan review letter from the soils engineer stating that the plans are in conformance with the recommendations made in the report. ========= UPDATED ON NOVEMBER 6, 2007 BY ANTONELLA GENTILE =========
The soils report and update is currently under review by the County Civil Engineer. After the report and update have been accepted, comments on the grading and drainage plan will be forwarded to the applicant. ========= UPDATED ON NOVEMBER 15, 2007 BY CAROLYN I BANTI =========
The soils report has been accepted. Please see letter dated 11/15/07.

Prior to the discretionary application being deemed complete, a geotechnical plan review letter shall be submitted to Environmental Planning. The author of the soils report shall write the plan review letter. The letter shall state that the project plans conform to the recommendations of the report. The plan review letter should also include the depth of the required overexcavation and recompaction beneath the building at the northwest corner of the property. ========= UPDATED ON NOVEMBER 15, 2007 BY CAROLYN I BANTI =========
========= UPDATED ON FEBRUARY 28, 2008 BY CAROLYN I BANTI =========
Completeness Items (Third Review): The submitted plan review letter does not address overexcavation and recompaction beneath the proposed Northwest Building. Please submit a revised plan review letter that states the depth and lateral extent of overexcavation and recompaction in this area. Note: this building is located on the property line. If the lateral extents of the required overexcavation cross the property line, an owner-agent agreement will be required along with a letter from the owners of parcel 023-031-34 stating what work may take place on their parcel.If a foundation alternative exists that would eliminate the need for overexcavation and recompaction, please include any additional recommendations. ========= UPDATED ON APRIL 15, 2008 BY CAROLYN I BANTI =========
Recieved Addendum recommendations for compaction below foundations (Dees, 3/6/07, SCR-0174). Comment addressed.

Environmental Planning Miscellaneous Comments

========= REVIEW ON MAY 22, 2007 BY ANTONELLA GENTILE =========
No misc comments at this time. ========= UPDATED ON NOVEMBER 15, 2007 BY CAROLYN I BANTI =========
The following are miscellaneous comments/conditions of approval in regards to soils and grading issues:

Grading plans to be submitted with the building permit application shall show the extents of overexcavation and recompaction beneath the building proposed at the northwest corner of the parcel.Grading quantities shall inclu de the quantities for

overexcavation and recompaction.

Erosion control plans submitted with the building permit application shall include measures along the property boundary to prevent sediment from leaving the property.
========= UPDATED ON FEBRUARY 28, 2008 BY CAROLYN I BANTI =========
Miscellaneous Comments (Third Review):

A separate grading permit will be required for all site grading (grading will not be included in the building permit for the structures).

Winter grading approval has not been granted for this site. This determination may be reevaluated at the building permit stage.

Dpw Drainage Completeness Comments

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

========= REVIEW ON MAY 24, 2007 BY DAVID W SIMS =========
1st Review Summary Statement:

The present development proposal does not control stormwater impacts. The proposal is out of compliance with County drainage policies and the County Design Criteria (CDC) Part 3, Stormwater Management, June 2006 edition, and also lacks sufficient information for complete evaluation. The Stormwater Management section cannot recommend approval of the project as proposed.

Reference for County Design Criteria: http://www.dpw.co.santa-cruz.ca.us/DESIGNCRITERIA.PDF

Policy Compliance Items:

Item 1) The County acknowledges the 1987 letter referring to drainage requirements for these parcels. The requirements of current County policies and the County Design Criteria have changed several times since the issuance of this letter and current requirements will be applied, as they have been revised and are now stricter.

Item 2) Please provide mitigation measures holding runoff levels to pre-development rates for a broad range of storms. These measures must include effective and substantial use of BMPs, which provide the bulk of stormwater controls in preference to orifice controlled detention. Such detention use shall be only supplemental in achieving full control of the largest design storm event. Due to capacity issues downstream, the minimum detention control shall be required to release the pre-development 10-year event flow rate and provide storage volume for a 25-year event.

Item 3) The development is required to minimize impervious surfacing. Given the proposal for full development of the parcel and the large extents of parking desired, the use of properly designed porous pavements will meet this requirement and could be incorporated if sub-drained. This measure would also qualify as an acceptable BMP to meet item 2. Site soils are not mapped as being of good permeability.

Item 4) Please assess and photo document the current stability and erosion condition of the slope distance between the outfall for the offsite drainage system into which this development drains, and the normal water surface of Arana Gulch. Propose any needed corrective work, and show it on the plans.

Item 5) Water quality treatment mitigations are required for the entire site, including existing development.

Information Items:

Item 6) Incomplete. Provide topography a minimum of 50 feet beyond the project work limits.

Item 7) Incomplete. Submit documentation that establishes the legally developed extents of existing impervious surfacing, so that required mitigation levels may be evaluated. See miscellaneous comments.

Item 8) Incomplete. Indicate on the plans the manner in which building downspouts will be discharged. Proposing downspouts as discharged directly into the storm drain system or hardscape is generally inconsistent with efforts to hold runoff to pre-development rates.

Please see miscellaneous comments. ========= UPDATED ON MAY 29, 2007 BY DAVID W SIMS =========
========= UPDATED ON NOVEMBER 8, 2007 BY DAVID W SIMS =========
2nd Review Summary Statement:

The present development proposal is accepted for discretionary stage stormwater review. This acceptance does not settle a question about fee credits being asked by the applicant. The applicant will be responded to separately on this issue.

Policy Compliance Items:

Prior Item 1) The County Public Works formally responded to the applicant by letter dated July 27, 2007 stating the terms for drainage requirements based on consideration of the prior referenced 1987 letter. This response letter modified some of the comments and stated requirements from the first routing and is accounted for below.

Prior Item 2) Project now proposes feasible BMP measures that provide storm runoff control and water quality improvements. The general approach, feasibility and level of control for the proposal has been accepted, with miscellaneous clarifications and changes deferred to the building application.

Prior Item 3) The proposed development includes application of porous pavers incorporated as a component of the primary mitigation facility, thereby minimizing impervious surfacing to a modest extent.

Prior Item 4) This item was waived in its entirety.

Prior Item 5) Water quality treatment is proposed by installation of three the County's standard silt and grease trap inlets effective for the entire paved site.

Additionally the porous pavers and underlying gravel beds will achieve a higher level of filtration.

Information Items:

Item 6) Deferred. Additional topography, spot elevations, flow arrows and notations were provided along the west property boundary and clarifies the conditions. The same level of information was not provide along the east property boundary and is required to be provided prior to public hearing.

Item 7) Deferred. Revisions to mitigation requirements have reduced the importance of this item to be resolved now for purposes of the mitigation design. For purposes of fee credits the issue can be deferred until later.

Item 8) Deferred. The drainage study states that roof downspouts will discharge into the various landscape islands for pretreatment prior to routing as surface flow to the primary mitigation facility. This intent was not found on the plans and will need to be added on the building application.

See miscellaneous comments ========= UPDATED ON FEBRUARY 27, 2008 BY DAVID W SIMS =========

3rd Review Summary Statement:

The present development proposal is accepted for discretionary stage stormwater review.

Policy Compliance Items:

Prior Items 1 through 5) No additional comment.

Information Items:

Item 6) Complete. Additional information was provided along the east property boundary.

Item 7) Complete. Issue of fee credits and how they will be charged was communicated to applicant by letter dated 12/21/2007. Per this letter, the building plans will need to show the correct recognized extents of existing impervious surfacing to support fee charge documentation.

Item 8) Complete. The drainage study still states that roof downspouts will discharge into the various landscape islands for pretreatment prior to routing as surface flow to the primary mitigation facility. The civil engineer has stated verbally that this BMP will not be applied, and this was accepted by the reviewer since other sufficient mitigations are provided.

See miscellaneous comments.

Dpw Drainage Miscellaneous Comments

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

========= REVIEW ON MAY 24, 2007 BY DAVID W SIMS =========
A) Maintenance procedures for the drainage facilities and mitigation measures must be provided on the plans.

B) A recorded maintenance agreement may be required for certain stormwater facilities.

C) Please note on the plans provision for permanent bold markings at each inlet that read: "NO DUMPING - DRAINS TO BAY".

Construction activity resulting in a land disturbance of one acre or more, or less than one acre but part of a larger common plan of development or sale must obtain the Construction Activities Storm Water General NPDES Permit from the State Water Resources Control Board. Construction activity includes clearing, grading, excavation, stockpiling, and reconstruction of existing facilities involving removal and replacement. For more information see:
http://www.swrcb.ca.gov/stormwtr/constfaq.html

A drainage impact fee will be assessed on the net increase in impervious area. The fees are currently $0.95 per square foot, and are assessed upon permit issuance. Reduced fees are assessed for semi-pervious surfacing to offset costs and encourage more extensive use of these materials.

You may be eligible for fee credits for pre-existing impervious areas to be demolished. To be entitled for credits for pre-existing impervious areas, please submit documentation of permitted structures to establish eligibility. Documentations such as assessor's records, survey records, or other official records that will help establish and determine the dates they were built, the structure footprint, or to confirm if a building permit was previously issued is accepted. Not all existing pavements may be recognized as exempt from mitigation, or credited against impact fees.

Because this application is incomplete in addressing County requirements, resulting revisions and additions will necessitate further review comment and possibly different or additional requirements.

All resubmittals shall be made through the Planning Department. Materials left with Public Works will not be processed or returned.

Please call the Dept. of Public Works, Stormwater Management Section, from 8:00 am to 12:00 noon if you have questions. ========= UPDATED ON NOVEMBER 8, 2007 BY DAVID W SIMS =========
Limited review time has not allowed the posting of detailed miscellaneous comments. These items have been marked on the plans and calculations and returned to the engineer for pick-up. A meeting is required with the engineer/applicant to more thoroughly discuss these items prior to the first submittal of the building plans. It is not anticipated that any of these issues will affect the general feasibility of the proposal although modifications may be required. ========= UPDATED ON FEBRUARY 27, 2008 BY DAVID W SIMS =========
Remaining miscellaneous corrections will be handled with the building application.

Maintenance agreement will be required.

Dpw Driveway/Encroachment Completeness Comments

========= REVIEW ON MAY 22, 2007 BY DEBBIE F LOCATELLI =========
Proposed signage shall not obstruct motorist or pedestrian sight distance. =========
UPDATED ON OCTOBER 29, 2007 BY DEBBIE F LOCATELLI =========
It is the responsibility of owner/representative to verify that proposed fence and sign do not obstruct pedestrian or motorists site distance. No further comments.
========= UPDATED ON FEBRUARY 11, 2008 BY DEBBIE F LOCATELLI =========
Please condition discretionary permit to include the following: Encroachment permit required for all work proposed within county maintained right-of-ways (Soquel Avenue and Bostwick Lane).

Encroachment permit shall address the newly paved section of Soquel Avenue, any work within this area shall be required to be repaved in-kind or better.

Dpw Driveway/Encroachment Miscellaneous Comments

========= REVIEW ON MAY 22, 2007 BY DEBBIE F LOCATELLI =========
Encroachment permit required for all off-site work in the County road right-of-way (required at the time of building permit submittal)
Proposed fencing shall not block sight distance for motorists at adjacent intersections and driveways.

Dpw Road Engineering Completeness Comments

I) Applicant submitted a Trip Generation Analysis prepared by Higgins Associates, dated October 8, 2007. The subject traffic analysis determined that 35 (AM) and 32 (PM) net new trip-ends will be generated at AM/PM peak hours, and 313 daily trips as a result of the project. The increase of net vehicular trip-ends at each peak hour exceeds the 20 trip-ends threshold for which a Traffic Impact Study is warranted. Therefore, Applicant is required to provide a Traffic Impact Study.

---------- II) The Traffic Impact Study will need to provide AM peak and PM peak Level of Service Analysis for the following intersections: a) Bostwick Lane / 7th Avenue, b) Soquel Drive / 7th Avenue, and c) Soquel Drive / Soquel Avenue. Additionally, the study should include a sight distance analysis for Bostwick Lane at the intersection with 7th Avenue. Please contact Road Planning engineering staff if you have any question regarding the scope of work for the Traffic Impact Study.

---------- III) The project will be subject to Live Oak Transportation Improvement Area (TIA) fees at a rate of $472($236 for roadside improvement fees + $236 for transportation improvement fees) per daily trip-end generated by the proposed use. The proposed Commercial Development will generate 313 net trip-ends. The fee is calculated as 313 trip-ends multiplied by $472 per trip-end which equals $147,736. The total TIA fee of $147,736 is to be split evenly between transportation improvement fees and roadside improvement fees. ----------
---------- IV) Parking analysis

will be reviewed by the Planning Department.

---------- V) The proposed valley gutter shown along the main driveway needs to be located on the center line of the parking aisle in order to discourage motorists from switching lanes.

---------- VI) Please provide an explanation indicating the reason why the driveway in the south west corner is needed. ----------
---------- VII) Market crosswalk between Building #3 and Building #4 needs to be centered between parking landing zones. ----------
---------- ========= REVIEW ON MAY 22, 2007 BY GREG J MARTIN =========
Incomplete ----------
---------- The plans are incomplete with respect to curb heights so it is unclear how pedestrian access shall function. Show all ramps, not just those for handicapped parking facilities.

---------- Traffic study which includes trip generation, trip distribution, parking requirements, and truck circulation is required. Please show truck turns using truck turn templates or AutoTurns (or equivalent).

---------- Compliance

Transportation Improvement Area fees are required.

Recommended

---------- A pedestrian connection to Bostwick Lane is recommended.

---------- Parking spaces 85 and 39 are not protected on the side by a island. Please correct.

---------- Trash enclosure doors may not swing out into parking aisle or driveway. The trash enclosure may be recessed to allow additional room for trash doors to swing.

---------- The existing PG&E transformer appears to be located in the driveway and shall need to be relocated or the design revised.

---------- Publicly accessible areas are not recommended to have parking aisles directly adjacent to buildings. A buffer consisting of sidewalk or landscaping is recommended.
---------- Contact Greg Martin at 831-454-2811 with questions. ========= UPDATED ON NOVEMBER 5, 2007 BY RODOLFO N

RIVAS =========
========= UPDATED ON FEBRUARY 22, 2008 BY GREG J MARTIN =========
1) Road Engineering no longer reviews internal circulation or parking for commercial projects. 2) The curb cuts for the new driveways will require 2 feet of new pavement from the lip of gutter to sawcut line. This can be addressed at the building permit stage. 3) TIA fees (previously calculated) shall be required.

Dpw Road Engineering Miscellaneous Comments

========= REVIEW ON MAY 22, 2007 BY GREG J MARTIN =========
========= UPDATED ON NOVEMBER 5, 2007 BY RODOLFO N RIVAS =========
NO COMMENT
========= UPDATED ON FEBRUARY 22, 2008 BY GREG J MARTIN =========

Dpw Sanitation Completeness Comments

No. 1 Review Summary Statement for Appl. 07-0212, Sanitation Engineering comments:

The Proposal is out of compliance with District or County sanitation policies and the County Design Criteria (CDC) Part 4, Sanitary Sewer Design, June 2006 edition, and also lacks sufficient information for complete evaluation. The District/County Sanitation Engineering and Environmental Compliance sections cannot recommend approval of the project as proposed.

Reference for County Design Criteria: http://www.dpw.co.santa-cruz.ca.us/DESIGNCRITERIA.PDF

Policy Compliance Items:

Item 1) This review notice is effective for one year from the issuance date allow the applicant the time to receive tentative map, development or other Environmental Compliance Unit Review Comments Application No: 07-0212 APN: 026-031-32, 46

Review Summary Statement:

The Environmental Compliance Unit must be allowed to review plans and inspect all industrial operations at the facility. If commercial uses such as the ones listed in the -Level 1 Allowed Uses- section are anticipated for the Master Occupancy Permit, then you must submit plans that illustrate e plumbing plan and all work areas.

Policy Completeness Items:

Item 1) Any industrial use of the proposed building may require pretreatment of sanitary wastes prior to discharge. Industrial uses of the building will also require the installation of a sampling manhole on the property. The following activities may require pretreatment: machine work, surfboard shaping, vehicle/boat service facility, paint contractors, laboratories, lithographic print shops, photo processing labs, and any other industrial sector that could potentially have an impact on the sewer system

All resubmittals shall be made through the Planning Department. Materials left with Public Works will not be processed or returned.

Please call the Dept. of Public Works, Environmental Compliance Unit at 477-3907 if you have questions. discretionary permit approval. If after this time frame this project has not received approval from the Planning Department, a new availability letter must be obtained by the applicant. Once a tentative map is approved this letter shall apply until the tentative map approval expires.

Information Items:

Item 1) A complete engineered sewer plan, addressing all issues required by District staff and meeting County -Design Criteria- standards (unless a variance is allowed), is required. District approval of the proposed discretionary permit is withheld until the plan meets all requirements. The following items need to be shown on the plans:

Show rim elevation of public sewer manhole upstream of sewer lateral connection serving existing Building 1 for backflow prevention device requirements. Show sewer lateral for existing Building 1.

On demolition plan, show the existing sewer lateral -To be properly abandoned (including inspection by District) prior to issuance of demolition permit or relocation or disconnection of structure- at the property line.

Figs. SS-4 and SS-12 (from Design Criteria) have been revised. Use most current detail drawings available at above internet address.

Include Sanitation General Notes.

Any questions regarding the above criteria should be directed to Diane Romeo of the Sanitation Engineering division at (831) 454-2160.

Please see miscellaneous comments.

========== == No. 1
Review Summary Statement for Appl. 07-0212, Environmental Compliance Division Requirements: Commercial Building, Use Unknown Industrial Operations:

- A sampling manhole is required for certain types of industries: food service, photoprocessing, medical facilities, veterinarians, automotive, machine shops, dentists, etc. - Pretreatment may also be required for industrial facilities. - Any trash enclosures with drains connecting to the sanitary sewer must have overhead coverage to prevent storm water from entering the collection system. - If there are plans to wash fleet vehicles, forklifts, or large equipment then the wastewater generated from these activities must be routed to and treated prior to entering the sanitary sewer. A 3-stage 1500 gallon clarifier will be required if the above mentioned activities are conducted. - Hazardous waste, including biohazardous waste is prohibited from discharge to the sanitary sewer. - All hazardous materials and chemicals must be stored within secondary containment. Materials that are reactive

should be separated and stored appropriately. - Floor drains are not permitted in any work areas. - Commercial kitchens will require a properly sized District approved grease interceptor.

Any industrial use of the proposed building may require other pretreatment of sanitary wastes prior to discharge. It is difficult to specify any requirements during the planning phase if it is unclear what the intended use of the property is. For instance, a sampling manhole may be required if any industrial facilities are planned at the site. The following activities may require pretreatment: photoprocessing, machine work, surfboard shaping, vehicle service, dentistry, medical facility, paint contractors, printers, and dry cleaners, and any other industrial sector that could potentially have an impact on the sewer system.

Industrial uses of the building will require the installation of a sampling manhole on the property. Any questions regarding these requirements should directed to the Santa Cruz County Sanitation District Environmental Compliance Unit at (831) 477-3907. No. 2 Review Summary Statement for Appl. 07-0212, Sanitation Engineering comments:

The Proposal is out of compliance with District or County sanitation policies and the County Design Criteria (CDC) Part 4, Sanitary Sewer Design, June 2006 edition, and also lacks sufficient information for complete evaluation. The District/County Sanitation Engineering and Environmental Compliance sections cannot recommend approval of the project as proposed.

Reference for County Design Criteria: http://www.dpw.co.santa-cruz.ca.us/DESIGNCRITERIA.PDF

Policy Compliance Items:

Item 1) This review notice is effective for one year from the issuance date allow the applicant the time to receive tentative map, development or other discretionary permit approval. If after this time frame this project has not received approval from the Planning Department, a new availability letter must be obtained by the applicant. Once a tentative map is approved this letter shall apply until the tentative map approval expires.

Information Items:

Item 1) A complete engineered sewer plan, addressing all issues required by District staff and meeting County -Design Criteria- standards (unless a variance is allowed), is required. District approval of the proposed discretionary permit is withheld until the plan meets all requirements. The following items need to be shown on the plans:

Add note that the installation of sewer backflow/overflow prevention devices for all buildings is required.

Show sewer lateral for existing Building 1.

Proof of a recorded easement for maintenance, repair and replacement of existing lateral to serve proposed building 5 and located on the adjacent property shall be submitted to District prior to approval for this permit application.

Revise lateral for Building 4 to connect to public sewer main instead of existing manhole.

On demolition plan, show the existing sewer lateral -To be properly abandoned (including inspection by District) prior to issuance of demolition permit or relocation or disconnection of structure- at the property line.

Include Sanitation General Notes.

Any questions regarding the above criteria should be directed to Diane Romeo of the Sanitation Engineering division at (831) 454-2160.

========= UPDATED ON FEBRUARY 21, 2008 BY DIANE ROMEO =========
No. 3 Review Summary Statement for Appl. 07-0212, Sanitation Engineering comments:

Reference for County Design Criteria: http://www.dpw.co.santa-cruz.ca.us/DESIGNCRITERIA.PDF

Completeness Items:

The sewer improvement plan submitted for the 3rd routing for the subject project is approved by the District with the addition of a note on the plans that all building are required to have sewer backflow preventative devices on their laterals.

Future changes to these plans shall be routed to the District for review to determine if additional conditions are necessitated by changes. All changes shall be highlighted as plan revisions and changes may cause additional requirements to meet District standards.

Any questions regarding the above criteria should be directed to Diane Romeo of the Sanitation Engineering division at (831) 454-2160.

There are no miscellaneous comments.

Dpw Sanitation Miscellaneous Comments

Miscellaneous:

Item 1) In accordance with Sanitation District Code section 7.04.375 Private Sanitary Sewer System Repair, of Title 7, prior to building permit submittal the applicant/owner is required to televise all on-site sewer laterals and make repairs

to any damaged or leaking pipes that might be shown. This includes root intrusion, open joints, cracks or breaks, sags, damaged or defective cleanout, inflow and infiltration of extraneous water, older pipe materials that are known to be inadequate, inadequate lift or pump stations, inadequate alarm systems for overflows, and inadequate maintenance of lift stations. Color video results (tape or dvd), of a sufficient quality to observe interior pipe condition, joints, sags among other items, shall be made available to the District for review, along with District certification form completed by plumber, and the District shall review results within 10 working days of submittal to the District. Repairs, as required by the District, shall be made within 90 working days of receipt of video result review. Applicant/owner shall obtain a sewer repair permit (no charge) from the District and shall have repairs inspected by the District inspector prior to backfilling of pipe or structure.

Attach an approved (signed by the District) copy of the sewer system plan to the building permit submittal.

Any questions regarding the above Miscellaneous comments should be directed Diane Romeo of the Sanitation Engineering division at (831) 454-2160. ========= UPDATED ON MAY 23, 2007 BY DIANE ROMEO =========
========= UPDATED ON MAY 24, 2007 BY DIANE ROMEO =========
========= UPDATED ON FEBRUARY 21, 2008 BY DIANE ROMEO ========= There are no miscellaneous comments.

Environmental Review Inital Study
ATTACHMENT 7, 12 of 12
APPLICATION 07-0212

HIGGINS ASSOCIATES
CIVIL & TRAFFIC ENGINEERS

October 8, 2007

Mr. Jeff Antolini
427 La Fonda Avenue
Santa Cruz, CA 95065

Re: Brickyard Plaza, Santa Cruz County, California

Dear Jeff,

Higgins Associates has performed an initial traffic review for the proposed business park redevelopment project, to be constructed on Soquel Avenue between 7th Avenue and Soquel Drive in Santa Cruz County, California. A project vicinity map is included as ***Exhibit 1***. Mr. Greg Martin, Santa Cruz County Public Works Department, has requested that the estimated trip generation and distribution for the project be submitted to the County. This letter report contains the trip generation estimate for the project and our anticipated project trip distribution within the greater Santa Cruz area. In addition, Higgins Associates has reviewed internal and access circulation for trucks, as well as verified if the number of provided parking spaces meets current Santa Cruz County parking standards.

1 Trip Generation

The study project is composed of both redevelopment of an existing building on the project site, as well as the construction of new buildings. The project site plan is shown on ***Exhibit 2***. Currently, the project site is composed of three existing buildings ("Building 1," "Building 2," and "Building 3"), totaling 18,658 square feet. As part of the study project, the third existing building ("Building 3," 5,520 square feet) would be torn down, and in its place, three new buildings ("Building 3," "Building 4," and "Building 5") would be constructed. The three new buildings would total 30,029 square feet in size.

Exhibit 3 contains the trip generation estimate for the study project. This trip generation estimate is based upon trip generation rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation*, 7th Edition, 2003. The study project would generate a net new 313 daily trips, with 35 trips (29 in, 6 out) during the AM peak hour, and 32 trips (7 in, 25 out) during the PM peak hour. When added to the estimated existing trip activity at the two remaining existing buildings, the total trip activity at the project site after construction of the study project would total 551 daily trips, with 62 trips (52 in, 10 out) during the AM peak hour, and 56 trips (13 in, 43 out) during the PM peak hour.

2 Trip Distribution

The anticipated project trip distribution is shown graphically on ***Exhibit 3***, and repeated

below:

Direction	Percent	AM Peak Hour	PM Peak Hour
To/From the North:	0%	0	0
To/From the South:	20%	12	11
via 7th Avenue – 10%		6	5
via 17th Avenue – 5%		3	3
via 41st Avenue – 5%		3	3
To/From the East:	35%	22	20
via Highway 1 – 25%		16	14
via Soquel Drive – 10%		6	6
To/From the West:	45%	28	25
via Highway 1 – 35%		22	19
via Soquel Avenue – 10%		6	6
TOTAL:	100%	62	56

The above trip distribution is based upon the trip distribution utilized in the traffic report *Live Oak Business Park Traffic Analysis Report*, by Higgins Associates, and dated February 1999. Said report reviewed the traffic impacts associated with a similar land use within one mile of the study project site.

3 Truck Circulation

As shown on the project site plan, Buildings 2, 3, 4, and 5 will have truck loading areas. Per our discussion with Eduardo Pech, Ifland Engineers, on July 23, 2007, it is our understanding that the largest truck traveling to and from the project site will be a WB-40 truck. Therefore, truck turning templates for the WB-40 truck, as shown in ***Attachment 1***, have been created for some of the more difficult maneuvers on site. As shown on the truck turning templates, the Soquel Avenue and Bostwick Lane driveways will be able to accommodate WB-40 trucks. Trucks will also be able to maneuver into and out of the project site from Bostwick Lane without encroaching into the eastbound parking lane. All right-turn movements into and out of the loading spaces for all buildings would require trucks to travel on to the opposing side of traffic in the parking lot when making their turns or exiting on to Bostwick Lane. Due to the low traffic volumes that would travel through the project site, this situation is not considered to be a problem.

Fire truck turning templates have also been created to determine the feasibility of emergency

vehicle access. Since the project site is located close to the County of Santa Cruz (County) and the City of Santa Cruz (City) border line, we compared the County fire truck to the City fire truck and used the larger of the two to run the fire truck turning template. Based on information received from the Central Fire Department, the largest fire truck for the County is approximately 38 feet long. The City's largest fire truck is approximately 46 feet long. To be conservative, the City's fire truck was used for the turning template.

Attachment 1 also includes the fire truck turning templates. The City fire truck was found to have no problems entering or circulating through the project site. As the City fire truck is larger, the County fire truck would also have no problems entering or circulating through the site.

4 Parking

Higgins Associates has reviewed the parking plan for the project site, and compared it with Santa Cruz County parking standards. The project would provide 110 parking spaces, of which 7 would be accessible (disabled) spaces. There is no County parking standard for a business park; based upon the proposed uses of the site, the land use of Manufacturing is the closest County land use. Based upon that land use, the project site would need to provide at least 72 spaces and 3 accessible spaces. Therefore, the project would meet County parking standards.

5 Conclusion

In summary, the study project is estimated to generate a net 313 daily trips, over and above the existing site trip generation. The project trip distribution also has been derived. Truck turning templates found that trucks entering to and from the project site via Soquel Ave. and Bostwick Ln. driveways are adequate. Fire trucks would also be able to adequately circulate through the project site. Finally, the study project would meet County parking standards.

Thank you for the opportunity to assist you with this analysis. If you have any questions, please contact me at (408) 848-3122.

Respectfully submitted,

Keith B. Higgins, CE, TE

Kbh;sk:jmw:cl

Attachments

I:\2007\Jobs\051-100\7-096\7-096 Letter3.doc

Environmental Review Inital Study
ATTACHMENT 8, 3 of 18
APPLICATION 07-0212

HIGGINS ASSOCIATES

CIVIL & TRAFFIC ENGINEERS

BRICKYARD PLAZA

SANTA CRUZ, CALIFORNIA

TRAFFIC IMPACT ANALYSIS

Final Report

Prepared For

Jeff Antolini
Santa Cruz, California

Environmental Review Initial Study
ATTACHMENT 6, 4 of 18
APPLICATION 07-0212

January 18, 2008

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LIST OF EXHIBITS

LIST OF APPENDICES

1 INTRODUCTION

This Traffic Impact Analysis (TIA) presents an analysis of the traffic impacts for the proposed Brickyard Plaza in Santa Cruz County, California. **Exhibit 1** shows the project location.

1.1 Project Description

The study project is composed of both the redevelopment of an existing building on the project site, as well as the construction of new buildings. The project site plan is shown on **Exhibit 2**. Currently, the project site is composed of three existing buildings ("Building 1," "Building 2," and "Building 3"), totaling 18,658 square feet. As part of the study project, the third existing building ("Building 3," 5,520 square feet) would be demolished, and in its place, three new buildings ("Building 3," "Building 4," and "Building 5") would be constructed. The three new buildings would total 30,029 square feet.

1.2 Scope of Work

This traffic study analyzed the anticipated project traffic impacts on the local roadways in the project area. The study analyzes traffic conditions under these development scenarios:

- Existing Conditions
- Background Conditions
- Background Plus Project Conditions
- Cumulative Conditions
- Cumulative Plus Project Conditions

The following three intersections were analyzed. Recommendations for improvements and mitigation measures to offset the traffic impacts from the proposed project are provided. The site plan was analyzed for traffic circulation.

Project intersections:

1. Seventh Avenue/Soquel Avenue
2. Seventh Avenue/Bostwick Lane
3. Soquel Drive/Soquel Avenue

1.3 Traffic Operation Evaluation Methodologies and Level of Service Standards

Quantitative Levels of Service (LOS) analyses were performed for the study intersections and highway segments, based on the *2000 Highway Capacity Manual* methodologies. Intersection operations were evaluated using the Synchro analysis software.

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Intersection traffic flow operations were evaluated using a level of service (LOS) concept. Intersections are rated based on a grading scale of "LOS A" through "LOS F", with "LOS A" representing free flowing conditions and "LOS F" representing forced flow conditions. The County of Santa Cruz has established LOS C as the minimum acceptable LOS for overall intersection operations. However, the Santa Cruz County does consider a LOS D where costs, right of way acquisitions, or environmental impacts of maintaining operational standards under LOS policy are excessive and the capacity enhancements infeasible. Generally, LOS F operations on the minor street approach of two-way or one-way stop controlled intersections are considered the threshold warranting improvements.

For signalized intersections, average control delay per vehicle is utilized to define intersection level of service. Delay is dependent upon a number of factors including the signal cycle length, the roadway capacity (number of travel lanes) provided on each intersection approach and the traffic demand. **Appendix A1** shows the relationship between vehicle delay and the signalized intersection level of service categories. The Synchro software program was utilized to calculate signalized intersection levels of service.

At one and two-way stop controlled intersections, the operating efficiency of vehicle movements that must yield to through movements were analyzed. The level of service for vehicle movements on the controlled approaches is based on the distribution of gaps in the major street traffic stream and driver judgment in selecting gaps. **Appendix A2** shows the relationship between the vehicle delay and level of service for two-way stop controlled intersections. The 2000 HCM calculates the level of service of the minor street approaches. Using this data, an overall intersection level of service was calculated. Both are reported in this study because traffic on the minor street approaches has the lowest priority of right-of-way at the intersection and is the most critical in terms of delay. The Synchro software program was utilized to calculate intersection levels of service for intersections that are one and two-way stop controlled.

2 EXISTING CONDITIONS

This chapter presents a description of the existing street network, existing traffic volume, intersection levels of service and sight distance.

2.1 Existing Street Network

Soquel Avenue is a major arterial that traverses through Santa Cruz County, and connects to Highway 1 just east of Seventh Avenue. Seventh Avenue also serves as a major arterial connecting southern Santa Cruz County to Soquel Avenue. Another local road in the project vicinity includes Bostwick Lane.

Soquel Avenue is a four-lane arterial west of Highway 1 that provides as a corridor for travel between Santa Cruz and Live Oak. To the east of Highway 1, Soquel Avenue is a two-lane road providing access to Highway 1 for truck traffic generated by local commercial and industrial development.

Seventh Avenue is a two-lane arterial street, extending from east Cliff Drive to Soquel Avenue. The speed limit on Seventh Avenue is 25 mph near the project site.

Bostwick Lane is a two-lane local road connecting Paul Minnie Avenue and terminating at Soquel Avenue. The speed limit on Bostwick Lane is 25 mph.

2.2 Existing Intersection Volumes and Operating Conditions

The following intersections have been studied for the project:

1. Seventh Avenue/Soquel Avenue
2. Seventh Avenue/Bostwick Lane
3. Soquel Drive/Soquel Avenue

Manual traffic counts were conducted at the intersection of Seventh Avenue/Bostwick Lane on November 29, 2007. Existing traffic volumes at the remaining two intersections were obtained from the *Santa Cruz Medical Foundation Office Building Traffic Impact Analysis Report*, October 5, 2007, and from the *S.C.C.O Animal Services Center Traffic Impact Analysis Report*, August 18, 2006. Each intersection was analyzed at its individual peak hour. The existing weekday AM and PM peak hour volumes are illustrated on **Exhibit 3**.

Weekday AM and PM peak hour levels of service for the study intersections are summarized on **Exhibit 4A**. The recommended intersection improvements are shown on **Exhibit 4B**.

All intersections currently operate at LOS C or better during the AM and PM peak hours, with the exception of Soquel Drive/Soquel Avenue, which operates at a LOS D during the AM and PM peak periods. This intersection is currently controlled by an actuated-isolated traffic signal. Based on the traffic analysis performed in Synchro, it is nevertheless recommended to provide an actuated coordinated signal system between the Soquel Drive/Soquel Avenue and Seventh Avenue/Soquel Avenue intersections. By implementing the above-mentioned improvement, along with optimizing the cycle lengths (80 seconds in the AM peak period and 85 seconds in the PM peak period) and green bands, the intersection could operate at LOS C during the AM and PM peak periods. **Exhibit 4B** summarizes the recommended intersection improvements for each analysis condition. The LOS calculation sheets are included in **Appendix B** for Existing Conditions. As the signalized intersections along Soquel Avenue-Soquel Drive are closely spaced, it is recommended to interconnect all the signals between Seventh Avenue and Thurber Lane.

2.3 Sight Distance Analysis

A sight distance analysis was performed to evaluate the corner sight distance currently available from the Bostwick Lane approach to Seventh Avenue. Sight distance looking from the Bostwick Lane approach to Seventh Avenue was measured in both directions. The minimum corner sight distance was evaluated using corner sight distance standards documented by Caltrans and the American Association of State Highway and Transportation Officials (AASHTO).

The existing sight distance looking to the north (right) and south (left) is 375 feet and 190 feet, respectively. These measurements were obtained from a point approximately 15 feet from the existing edge of travel way on Seventh Avenue. This is the approximate location that a driver stopped on Bostwick Lane would observe traffic on Seventh Avenue. It should be noted that the sight distance looking to the left from the eastbound Bostwick Lane approach to Seventh Avenue is blocked by vegetation on the south side of Seventh Avenue.

The posted speed limit on Seventh Avenue at its intersection with Bostwick Lane is 25 miles per hour (mph). A design speed of 30 mph was used to evaluate the minimum intersection and stopping sight distances required at Bostwick Lane. According to AASHTO and Caltrans, the preferred intersection corner sight distance, based on a 30 mph design speed, is 330 feet, as tabulated on **Exhibit 9**. This distance provides 7½ seconds for vehicles turning from the Bostwick Lane approach to Seventh Avenue to complete their maneuvers without significantly impacting the travel speed of vehicles on Seventh Avenue.

Caltrans allows the minimum corner sight distance to be reduced to the stopping sight distance when restrictive conditions exist. These conditions include high costs associated with right of way acquisition, building removal, extensive excavation, or environmental costs. **Exhibit 9** also shows the minimum stopping sight distances for the 30 mph design speed using the AASHTO stopping sight distance equation, which can be used for corner sight distance under restrictive conditions. Based on a 30 mph design speed, a minimum corner sight distance of 196 feet should be provided looking to the north and south from Bostwick Lane, based upon the restrictive condition sight distance criteria. For this situation, it is recommended that the restrictive condition criteria using the minimum stopping sight distance be used. The corner sight distance looking to the south does not meet the minimum recommended corner sight distance, while the corner sight distance looking to the north does meet the minimum recommended corner sight distance.

To achieve the minimum recommended corner sight distance of 196 feet looking from the Bostwick Lane approach to the south, it is recommended the vegetation be trimmed. Although trimming the vegetation would improve the sight distance coming from Bostwick Lane onto Seventh Avenue, final determination of the sight distance will not be known until the recommendation is implemented. Pictures of the sight distance observations that were taken during the field visit are included in **Appendix G.**

3 BACKGROUND CONDITIONS

This section describes Background Conditions, which include projects that have been approved by the County but not yet constructed. The Background traffic was added to the existing traffic and analyzed. The list of Background projects was obtained from the County; the locations of these projects are depicted on **Exhibit 5A**, and the trip generations for the projects are itemized on **Exhibit 5B**.

3.1 Background Conditions Intersection Volumes and Operating Conditions

The Background peak hour traffic volumes are illustrated on **Exhibit 6. Exhibit 4A** contains the levels of service for the study intersections under Background Conditions. The recommended intersection improvements are shown on **Exhibit 4B**.

Levels of service at the study intersections under Background Conditions would remain unchanged from Existing Conditions. All intersections will operate at a LOS C or better during the AM and PM peak hours, with the exception of Soquel Drive/Soquel Avenue, which operates at an LOS D during the AM and PM peak periods. This intersection could operate at acceptable levels of service by implementing the improvements identified under Existing Conditions. The LOS calculation sheets are included in **Appendix C**.

4 BACKGROUND PLUS PROJECT CONDITIONS

This chapter describes Background Plus Project Conditions including traffic volumes and intersection levels of service. The project trip generation, distribution, and assignment are estimated. The project traffic is then added and analyzed to determine possible project impacts.

4.1 Project Definition

The project proposes to demolish the existing "Building 3" and construct three new buildings ("Building 3," "Building 4," and "Building 5") totaling 30,029 square feet of commercial and industrial use that will expand their existing project site from 18,658 square feet to approximately 49,000 square feet at the intersection of Seventh Avenue and Bostwick Lane. Expansion is not expected for "Building 1" and "Building 2".

4.2 Project Trip Generation

The anticipated project trip distribution is shown graphically on **Exhibit 7B**, and repeated below:

Direction	Percent	AM Peak Hour	PM Peak Hour
To/From the North:	0%	0	0
To/From the South:	20%	12	11
via 7th Avenue – 10%		6	5
via 17th Avenue – 5%		3	3
via 41st Avenue – 5%		3	3
To/From the East:	35%	22	20
via Highway 1 – 25%		16	14
via Soquel Drive – 10%		6	6
To/From the West:	45%	28	25
via Highway 1 – 35%		22	19
via Soquel Avenue – 10%		6	6
TOTAL:	100%	62	56

The above trip distribution is based on existing traffic patterns in the project vicinity. It is similar to the distribution utilized in the traffic report *Live Oak Business Park Traffic Analysis Report*, by Higgins Associates, dated February 1999. The report reviewed the traffic impacts associated with a similar land use within one mile of the study project site.

4.3 Project Trip Distribution and Assignment

Trip distribution defines the origins and destinations of all trips to and from a project site. The project traffic was distributed onto the study street network based upon existing travel patterns and land use in the vicinity of the project site. Project traffic was distributed onto the study street network as shown below:

Vicinity of Trip Distribution	Project Trip Distribution
Highway 1 West	35%
Highway 1 East	25%
North of Highway 1	10%
West of Soquel Avenue	10%
7th Avenue	10%
17th Avenue	5%
41st Avenue	5%
TOTAL:	100%

Exhibits 7A and 7B illustrate the project trip distribution and assignment at the study intersections. The Project peak hour traffic volumes are illustrated on **Exhibit 6**

4.4 Background Plus Project Intersection Volumes and Operating Conditions

The Background Plus Project peak hour traffic volumes are illustrated on **Exhibit 10. Exhibit 4A** contains the levels of service for the study intersections under Background Plus Project Conditions. The recommended intersection improvements are shown on **Exhibit 4B**.

Levels of service at the study intersections under Background Plus Project Conditions would remain unchanged from Background Conditions. All intersections will operate at LOS C or better during the AM and PM peak hours, with the exception of Soquel Drive/Soquel Avenue, which will continue to operate at an LOS D during the AM and PM peak periods.

Based on the traffic analysis results, it was determined that an optimized cycle length of 85 seconds instead of 80 second during the AM peak period will be necessary for better traffic operations at the intersection. This intersection will operate at LOS C by implementing the improvement described above. Aside from the above-mentioned improvement, no additional intersection improvements are recommended under Background Plus Project Conditions. The LOS calculation sheets are included in **Appendix D**.

5 CUMULATIVE CONDITIONS

Traffic volumes on the study road network will increase as a result of other new development in the region. This section describes Cumulative Conditions, which includes estimated traffic conditions in roughly 14 years. To assess the impact of the traffic generated by other new developments to traffic operations at the study intersections, the existing intersection volumes were increased at an average annual rate of 2.0% for 14 years per the County of Santa Cruz staff directive. These volumes were then analyzed to determine impacts for Cumulative Conditions.

5.1 Cumulative Conditions Intersection Volumes and Operating Conditions

The Cumulative peak hour traffic volumes are illustrated on **Exhibit 11. Exhibit 4** contains the levels of service for the study intersections under Cumulative Conditions.

All intersections will operate at LOS C or better during the AM and PM peak hours, with the exception of the Soquel Drive/Soquel Avenue and Seventh Avenue/Soquel Drive intersections.

The Seventh Avenue/Soquel Avenue intersection operates at a LOS F during the PM peak period. Based on the Synchro analysis, more capacity at this intersection can be

achieved by adjusting the cycle lengths and green bands. The intersection would operate at LOS C by implementing the above-mentioned improvements.

The Soquel Drive/Soquel Avenue intersection operates at LOS F during the AM and PM peak periods. Previous studies, including the Santa Cruz County General Plan, have determined that ultimately it will be necessary to rebuild the interchange and convert the existing button-hook configuration into a partial cloverleaf interchange. Implementation of improvements to improve Soquel Drive/Soquel Avenue intersection operations should confirm the planned ultimate design of the interchange.

In lieu of this improvement, the traffic operational issues/concerns at this intersection can be solved by providing one of the following improvements:

- Extend the existing eastbound Soquel Avenue right turn lane to 150 feet from the intersection stop line to provide an exclusive free eastbound right turn movement. This improvement will require right of way acquisition from existing businesses along Soquel Avenue.

- Re-stripe the existing lane configurations on the west leg to accommodate a free eastbound right turn lane. This could be achieved by providing 11-foot through lanes and 4-foot bike lanes.

The intersection will operate at LOS D during the AM peak hour and LOS C during the PM peak period. The Santa Cruz County does consider a LOS D where costs, right of way acquisitions, or environmental impacts of maintaining operational standards under LOS policy are excessive and the capacity enhancements infeasible. As the signalized intersections along Soquel Avenue-Soquel Drive are closely spaced, it is recommended to interconnect all the signals between Seventh Avenue and Thurber Lane. The LOS calculation sheets are included in **Appendix E**.

6 CUMULATIVE PLUS PROJECT CONDITIONS

In order to evaluate the potential traffic impacts that may be attributed to the proposed project, the Cumulative Plus Project volumes were derived by adding project trips to Cumulative traffic volumes. The Cumulative Plus Project peak hour traffic volumes are illustrated on **Exhibit 12. Exhibit 4A** contains the levels of service for the study intersections under Cumulative Plus Project conditions. The recommended intersection improvements are shown on **Exhibit 4B**.

Levels of service at the study intersections under Cumulative Plus Project Conditions would remain unchanged from Cumulative Conditions. Improvements identified under Cumulative Conditions for the Seventh Avenue/Soquel Avenue and Soquel Drive/Soquel Avenue intersections will be sufficient to mitigate the traffic operations at these intersections. Per County LOS policy, any proposed development that adds traffic resulting in a 1% increase in the volume by capacity ratio in an already over-saturated

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intersection (LOS E or F) will be required to mitigate its impact. The proposed project adds less than a 1% increase in the volumes, and hence will only be required to pay their fair share contribution to mitigate the Cumulative impacts at the intersections. Please refer to the *County's Roadway Capacity/Level of Service* document attached in the **Appendix G**. Level of Services calculations for Cumulative Plus Project Conditions may be found in **Appendix F**.

7 PROJECT ACCESS, CIRCULATION AND PARKING ASSESSMENT

This section describes Project Access, circulation and parking assessment for the proposed project site.

7.1 Project Access

Access to the project site will be provided via three driveways, two located along Bostwick Lane and the other located along Soquel Avenue. The west driveway along Bostwick Lane will primarily serve the proposed "Building 4." Some of the major streets in the proximity of the project site include Soquel Avenue, Seventh Avenue, and Highway 1. The majority of project trips will be utilizing Highway 1, Soquel Avenue, Seventh Avenue and 17th Avenue for access to the project site. The proposed development has convenient access to all of these major transportation roadway networks.

7.2 Truck Circulation

As shown on the project site plan, Buildings 2, 3, 4, and 5 will have truck loading areas. Per our discussion with Eduardo Pech, Ifland Engineers, on July 23, 2007, it is our understanding that the largest truck traveling to and from the project site will be a WB-40 truck. Therefore, truck turning templates for the WB-40 truck, as shown in **Exhibit 13A, 13B** and **13C** has been created for some of the more difficult maneuvers on the site. As shown on the truck turning templates, the Soquel Avenue and Bostwick Lane driveways will be able to accommodate WB-40 trucks. Trucks will also be able to maneuver into and out of the project site from Bostwick Lane without encroaching into the eastbound parking lane. All right-turn movements into and out of the loading spaces for all buildings would require trucks to travel on to the opposing side of traffic in the parking lot when making their turns or exiting on to Bostwick Lane. Due to the low traffic volumes that would travel through the project site, this situation is not considered to be a problem.

Fire truck turning templates, found on **Exhibit 13D**, have also been created to determine the feasibility of emergency vehicle access. Since the project site is located close to the County of Santa Cruz (County) and the City of Santa Cruz (City) border line, we compared the County fire truck to the City fire truck and used the larger of the two to run the fire truck turning template. Based on information received from the Central Fire

Department, the largest fire truck for the County is approximately 38 feet long. The City's largest fire truck is approximately 46 feet long. To be conservative, the City's fire truck was used for the turning template.

The City fire truck was found to have no problems entering or circulating through the project site. As the City fire truck is larger, the County fire truck would also have no problems entering or circulating through the site.

7.3 Parking

The project parking plan has been compared with Santa Cruz County parking standards. The project would provide 110 parking spaces, of which 7 would be accessible (disabled) spaces. There is no County parking standard for a business park; based upon the proposed uses of the site, the land use of Manufacturing is the closest County land use. Assuming that land use, the project site needs to provide at least 72 spaces and 3 accessible spaces. The 85th percentile parking demand at the project site was also checked using *ITE Parking Generation Manual 3rd Edition.* Assuming an industrial park land use, the project site needs to provide at least 80 spaces and 4 accessible spaces. Therefore, the project meets County parking standards.

8 SUMMARY OF RECOMMENDATIONS

8.1 Existing Conditions

The following improvements are recommended under Existing Conditions regardless of the project impacts:

1. Provide an actuated coordinated signal system between the Soquel Drive/Soquel Avenue and Seventh Avenue/Soquel Avenue intersections.
2. Optimize the cycle lengths (80 seconds in AM and 85 seconds in PM peak period) and green bands at the Soquel Drive/Soquel Avenue intersection.
3. As the signalized intersections along Soquel Avenue-Soquel Drive are closely spaced, it is recommended to interconnect all the signals between Seventh Avenue and Thurber Lane for better traffic flow conditions.
4. Vegetation along Seventh Avenue, looking south from Bostwick Lane, needs to be trimmed to improve the sight distance. Although trimming the vegetation would improve the sight distance coming from Bostwick Lane onto Seventh Avenue, final determination of sight distance would be possible only after the recommendation is implemented.

8.2 Background Conditions

No additional improvements are recommended under Background Conditions other than the improvements recommended for Existing Conditions.

8.3 Background Plus Project Conditions

No additional improvements are recommended under Background Conditions other than the improvements recommended for consideration under Existing Conditions except for the following minor changes.

Soquel Drive/Soquel Avenue intersection

1. Adjust the cycle lengths at the Soquel Drive/Soquel Avenue intersection to accommodate Background volumes. It is assumed that a coordinated system as recommended for the existing conditions has been installed.

8.4 Cumulative Conditions

Cumulative traffic impacts can be mitigated by providing the following improvement. This assumes the improvements described under Existing Conditions are implemented.

Soquel Drive/Soquel Avenue intersection

1a. Provide a free eastbound Soquel Avenue right turn lane with 150 foot storage length. This improvement will require right of way acquisition from existing businesses along Soquel Avenue **OR,**

1b. Re-stripe the existing lane configurations on the west leg to accommodate a free eastbound right turn lane. This could be achieved by providing 11-foot through lanes and 4-foot bike lanes.

Seventh Avenue/Soquel Avenue intersection

1. Adjust the cycle lengths and green bands at the Soquel Drive/Soquel Avenue intersection to accommodate Cumulative volumes. It is assumed that a coordinated system as recommended for the existing conditions has been installed.

8.5 Cumulative Plus Project Conditions

No additional improvements are recommended under Cumulative Plus Project Conditions other than the improvements recommended for consideration under Cumulative Conditions. The project does not add more than 1% increase in the volume to capacity ratio and hence will only be responsible for paying its fair share contribution to the anticipated developments under the Cumulative impacts.

Santa Cruz County Sanitation District

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THOMAS L. BOLICH, DISTRICT ENGINEER

August 13, 2008

MR. RON POWERS
1607 OCEAN STREET #8
SANTA CRUZ CA 95060

SUBJECT: SEWER AVAILABILITY AND DISTRICT'S CONDITIONS OF SERVICE FOR THE FOLLOWING PROPOSED DEVELOPMENT:

APN: 26-031-32 & -46 APPLICATION NO.: 07-0212
PARCEL ADDRESS: 26776 AND 2806 SOQUEL DRIVE, SANTA CRUZ
PROJECT DESCRIPTION: CONSTRUCT 3 BUILDINGS AT BRICKYARD PLAZA (COMMERCIAL, MANUFACTURING, AND RETAIL USES; NO FOOD SERVICE OR PROCESSING)

The District has been requested to allow for a time extension of the subject permit application. The last submittal to the plans (3rd submittal) was conditionally approved contingent upon a minor addition to the plans. The District will permit a minimum one year time extension as recommended by the Planning Department.

Any future changes to the plans shall be routed to the District for review to determine if additional conditions are necessitated by changes. All changes shall be highlighted as plan revisions and changes may cause additional requirements to meet District standards.

Please contact Diane Romeo at (831) 454-2160 if you have additional questions.

Yours truly,

THOMAS L. BOLICH
District Engineer

By: Rachél Lather

Rachél Lather
Senior Civil Engineer

Environmental Review Inital Study
ATTACHMENT 9
APPLICATION 07-0212

DR:dls/168

c: Cathy Graves, Planning Department ✓

Property Owner: Ernest & Ruth Antolini
P.O. Box 2665
Santa Cruz, CA 95063

RECEIVED
AUG 2008
Planning Dept. Admin.
County of Santa Cruz