

MINUTE ITEM  
This Calendar Item No. C10  
was approved as Minute Item  
No. 10 by the State Lands  
Commission by a vote of 3  
to 0 at its 08/10/88  
meeting.

CALENDAR ITEM

C10

08/10/88  
WP 2043 PRC 2043  
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A 19

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TERMINATION OF EXISTING EASEMENT AGREEMENT  
AND  
ISSUANCE OF A GENERAL PERMIT - PUBLIC AGENCY USE

APPLICANT: City and County of San Francisco  
P.O. Box 360  
San Francisco, California 94101

AREA, TYPE LAND AND LOCATION:  
A 0.602-acre parcel of tide and submerged land,  
San Mateo Canal, San Mateo County.

LAND USE: Sewer transport facilities (San Francisco Clean  
Water Program).

TERMS OF ORIGINAL PERMIT:  
Initial period: 49 years beginning  
December 4, 1957.

PURPOSE: Sewer collection and handling works and related  
facilities, including: 4" diameter sewer line;  
39" diameter concrete sewer and diversion  
structure; roadway, fencing, guardrail,  
shoulder, and protective riprap.

TERMS OF PROPOSED PERMIT:  
Initial period: 49 years beginning July 1,  
1988.

PURPOSE: Addition of a new sewer line structure, and  
retention of existing facilities, to more  
efficiently control and reduce stormwater and  
untreated sewage discharge into San Francisco  
Bay.

CALENDAR ITEM NO. C10 (CONT'D)

CONSIDERATION: The public health and safety; with the State reserving the right at any time to set a monetary rental if the Commission finds such action to be in the State's best interest.

BASIS FOR CONSIDERATION:  
Pursuant to 2 Cal. Adm. Code 2003.

APPLICANT STATUS:  
11/01/88.

PREREQUISITE CONDITIONS, FEES AND EXPENSES:  
Filing fee has been received.

STATUTORY AND OTHER REFERENCES:  
A. P.R.C.: Div. 6, Parts 1 and 2; Div. 13.  
B. Cal. Adm. Code: Title 2, Div. 3; Title 14, Div. 6.

AB 884: 11/01/88.

OTHER PERTINENT INFORMATION:

1. As to the previously installed improvements at the site, and pursuant to the Commission's delegation of authority and the State CEQA Guidelines (14 Cal. Adm. Code 15061), the staff has determined that such improvements are exempt from the requirements of the CEQA as a categorical exempt project, such being exempt under Class 1, Existing Facilities, 2 Cal. Adm. Code 2905 (a)(2).

Authority: P.R.C. 21084, 14 Cal. Adm. Code 15300, and 2 Cal. Adm. Code 2905.

2. As to the proposed facilities, a Negative Declaration was prepared and adopted for this project by the City and County of San Francisco. The State Lands Commission's staff has reviewed such document and believes that it complies with the requirements of the CEQA.

CALENDAR ITEM NO. C 10 (CONT'D)

3. The Applicant and the staff have agreed that it is advantageous to combine the existing facilities and new facilities under a new agreement, and to terminate the existing agreement by mutual consent. The new agreement so provides, and also reflects the Commission's current permit policies.
4. The Applicant has requested a waiver of the processing fee requirement, on the grounds that the project will have a statewide benefit. According to the Applicant, the surface area will be available to the general public, after construction, for open space; the project will additionally control and reduce stormwater and untreated sewage discharge into the San Francisco Bay. The staff agrees with the Applicant's conclusions and commends them to the Commission for consideration and approval.
5. The annual rental value of the site is estimated to be \$486.

APPROVALS OBTAINED:

None.

FURTHER APPROVALS REQUIRED:

State Parks and Recreation; United States Army Corps of Engineers; BCDC; Air Pollution Control District; CalTrans.

EXHIBITS:

- A. Land Description.
- B. Location Map.
- C. Notice of Determination and Negative Declaration.

IT IS RECOMMENDED THAT THE COMMISSION:

1. AS TO THE EXISTING IMPROVEMENTS, FIND THAT SUCH ARE EXEMPT FROM THE REQUIREMENTS OF THE CEQA PURSUANT TO 14 CAL. ADM. CODE 15061 AS A CATEGORICAL EXEMPT PROJECT, CLASS 1, EXISTING FACILITIES, 2 CAL. ADM. CODE 2905(a)(2).

CALENDAR ITEM NO. C 10 (CONT'D)

2. AS TO THE PROPOSED FACILITIES, FIND THAT A NEGATIVE DECLARATION WAS PREPARED AND ADOPTED FOR THIS PROJECT BY THE CITY AND COUNTY OF SAN FRANCISCO AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.
3. DETERMINE THAT THE PROJECT, AS APPROVED, WILL NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT.
4. AUTHORIZE THE TERMINATION OF EXISTING AGREEMENT, PRC 2043.
5. WAIVE THE STANDARD PROCESSING FEE.
6. AUTHORIZE ISSUANCE TO THE CITY AND COUNTY OF SAN FRANCISCO OF A 49-YEAR GENERAL PERMIT - PUBLIC AGENCY USE, BEGINNING JULY 1, 1988; IN CONSIDERATION OF THE PUBLIC HEALTH AND SAFETY, WITH THE STATE RESERVING THE RIGHT AT ANY TIME TO SET A MONETARY RENTAL IF THE COMMISSION FINDS SUCH ACTION TO BE IN THE STATE'S BEST INTEREST; FOR EXISTING SEWAGE CONTROL FACILITIES AND AN ADDITIONAL SEWER LINE STRUCTURE, ALL AS LOCATED ON THE LAND DESCRIBED ON EXHIBIT "A" ATTACHED AND BY REFERENCE MADE A PART HEREOF.

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EXHIBIT "A"

WP 2043

LAND DESCRIPTION

A parcel of tide and submerged land in San Mateo County, California, described as follows:

BEGINNING at a point on the northerly line of the San Mateo Canal, distant thereon 65.76 feet easterly from the westerly terminal line of said Canal, being also the point of intersection of the southeasterly line of Harney Way, as said line of said Way is shown on that certain map entitled, "Map Showing the Widening of Harney Way from Jamestown Avenue to Alana Way," recorded May 9, 1979, in Book "X" of Maps, at pages 4 and 5, in the office of the Recorder of the City and County of San Francisco, and the County line separating the City and County of San Francisco and San Mateo County; thence S 44°41'27" W and along said southeasterly line of Harney Way, a distance of 281.378 feet; thence along a tangent curve concave to the southeast having a radius of 220.00 feet, through a central angle of 54°50'59", a distance of 210.608 feet; thence tangent to said curve S 10°09'32" E, 100.00 feet; thence along a tangent curve concave to the east having a radius of 580.00 feet, through a central angle of 1° 17'43", a distance of 13.113 feet; thence nontangent to said curve N 79°50'37" E, 56.779 feet; thence N 10°09'23" W, 110.00 feet; thence N 55°09'23" W, 23.248 feet; thence along a nontangent curve concave to the southeast having a radius of 180.00 feet, through a central angle of 50°36'15", a distance of 158.978 feet; thence tangent to said curve N 45°18'33" W, 320.727 feet to a point on the line separating the City and County of San Francisco and San Mateo County, thence along said line N 89°50'21" W, 56.110 feet to the point of beginning.

END OF DESCRIPTION

REVISED JUNE 10, 1988, BY BIU 1.

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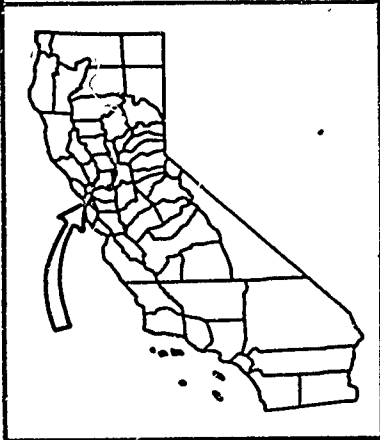
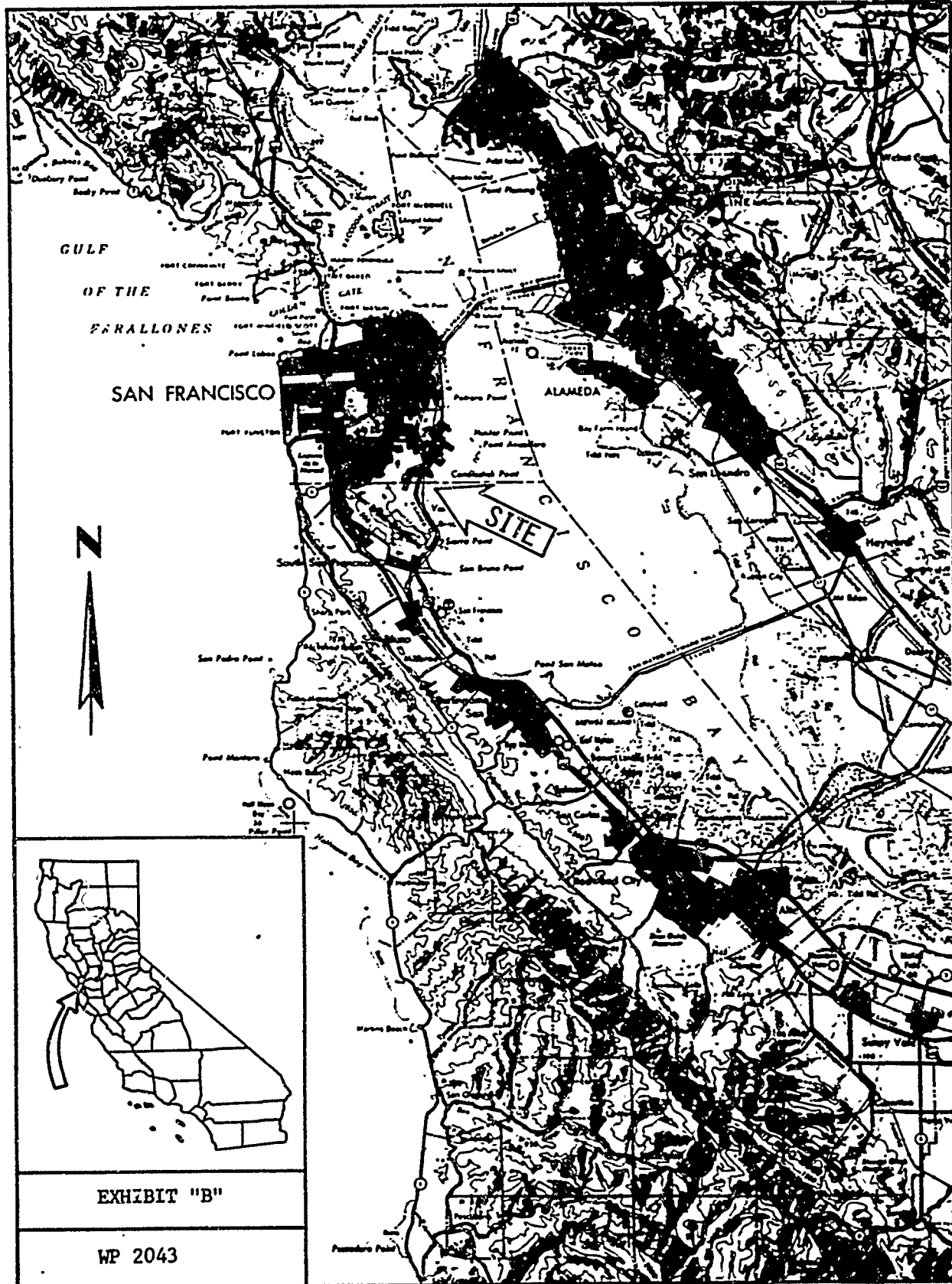


EXHIBIT "B"

WP 2043

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(415) 558-6382

EXHIBIT "C"

5TH FLOOR

NOTICE OF DETERMINATION

State of California  
Office of Planning and Research  
1400 Tenth Street  
Sacramento, CA 94814

State Clearinghouse No.: 87052625

County Clerk  
City and County of San Francisco  
317 City Hall  
San Francisco, CA 94102

ENDORSED  
**FILED**  
San Francisco County Superior Court

DEC 15 1987

DONALD W. DICKINSON, Clerk  
BY: R. HIGGINS  
Deputy Clerk

Pursuant to the California Environmental Quality Act (CEQA), the Guidelines of the Secretary for Resources and San Francisco requirements, this Notice of Determination is transmitted for filing with your office. Following completion of the posting period, please return this Notice to the Department of City Planning with a notation of the period it was posted.

Lead Agency: City and County of San Francisco by Department of City Planning, 450 McAllister Street, 5th Floor, San Francisco, CA 94102

Contact Person: Paul Maltzer

Project Title (including common name, if any): 85.651E: Sunnydale Transport/Storage

Address: Undeveloped land on bayside of Harney Way near Candlestick Park City/County: San Francisco

Project Description: Construct underground storage/transport structure and pump station to capture wet weather combined sewer overflows and transport flows to existing southeast treatment plant.

The City and County of San Francisco decided to carry out or approve the project on December 3, 1987 (date). A copy of the document(s) may be examined at 450 McAllister St., San Francisco, CA 94102

- 1. An environmental document has been prepared pursuant to CEQA, AS FOLLOWS:
  - Certificate of Exemption
  - Negative Declaration
  - Environmental Impact Report (certified pursuant to the provisions of CEQA).

The environmental document is available to the public and may be examined at the Department of City Planning, Office of Environmental Review, 450 McAllister Street, 5th Floor, San Francisco, CA.

- 2. A determination has been made that the project in its approved form  will  will not have a significant effect on the environment.
- 3. Mitigation Measures  were  were not made a condition of approval
- 4. A statement of overriding considerations  was  was not adopted for this project.

Sincerely,  
*Barbara W. Sahm*  
BARBARA W. SAHM  
Environmental Review Officer  
For  
Dean L. Macris  
Director of Planning

cc: Project Sponsor: S. F. Clean Water Program  
Address: 770 Golden Gate Avenue, San Francisco, CA 94101

BWS:PEM:emb

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(2)  
WPEC43

NEGATIVE DECLARATION

Date of Publication of Preliminary Negative Declaration: May 29, 1987

Lead Agency: City and County of San Francisco, Department of City Planning  
450 McAllister Street, 5th Floor, CA 94102

Agency Contact Person: Paul Maltzer Telephone: -(415) 558-6391

Project Title: 85.651E Sunnysdale Transport/Storage Project Sponsor: San Francisco Clean Water Program  
Project Contact Person: Li Boccia

Project Address: Undeveloped land on bayside of Harney Way near Candlestick Park

Assessor's Block(s) and Lot(s): Portions of Blocks 4991, 5059, 5063 and 5076

City and County: San Francisco

Project Description: Construct underground storage/transport structure and pump station to capture wet weather combined sewer overflows and transport flows to existing Southeast treatment plant.

Building Permit Application Number, if Applicable:

THIS PROJECT COULD NOT HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT. This finding is based upon the criteria of the Guidelines of the State Secretary for Resources, Sections 15064 (Determining Significant Effect), 15065 (Mandatory Findings of Significance) and 15070 (Decision to Prepare a Negative Declaration), and the following reasons as documented in the Initial Evaluation (Initial Study) for the project, which is attached:

-- See Text --

-Over-

Mitigation measures, if any, included in this project to avoid potentially significant effects: See Text

Final Negative Declaration adopted and issued on July 23, 1987 as amended.

S. R. MacCall  
for BARBARA H. SAHM  
Environmental Review Officer

cc: Robert Passmore  
Distribution List  
Bulletin Board  
Project Sponsor

PEM:35

679

*Approved by Board of Supervisors  
in December 1987*

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## SUNNYDALE TRANSPORT/STORAGE INITIAL STUDY

### INTRODUCTION

The San Francisco Clean Water Program proposes construction of the Sunnydale Transport/Storage Facilities as an element of their Bayside Facilities Plan. Implementation of the Bayside Facilities Plan is one stage of the Wastewater Master Plan. (A program EIR/EIS for the Master Plan was certified in May 1974 and is available for inspection at the Department of City Planning, 450 McAllister Street, 6th floor, File No. EE 74.62.) The Sunnydale project is one of several Bayside facilities designed to reduce the number of combined sewer overflows\*.

The Sunnydale drainage area extends from the south side of Bayview and Fortola Hills to just south of the city limit, and empties into the bay below Candlestick Point. The drainage area is named for the combined sewer and overflow outfall\* which extends from the base of Sunnydale Avenue to empty into San Francisco Bay south of Candlestick Point.

The existing sewer system in the Sunnydale area transports combined wastewater\* flows north to the Southeast Water Pollution Control Plant (WPCP\*) at Phelps Street and Jerrold Avenue for treatment. Although major sewers are large enough to carry these combined flows during large storms, connecting interceptors\* and pump stations have only enough capacity for peak dry weather\* sanitary sewage flows. When storms occur, capacity of the system is exceeded, and combined wastewater passes untreated through overflow structures into the Bay.

During wet weather the proposed project would permit temporary storage of combined wastewater flows from the Sunnydale drainage area until they could be transported to the Southeast WPCP for treatment. Overflows of untreated combined sewage now discharge into the Bay at the shoreline during rainy weather an average of 43 times per year. The proposed facilities would reduce overflows to an average of one per year. This reduction in overflows is necessary for compliance with Federal water quality regulations and conditions of a discharge permit issued by the California Regional Water Quality Control Board, San Francisco Bay Region.

### PROJECT DESCRIPTION

The elements of the project, shown in Figure 1, would be constructed in the cities of San Francisco and Brisbane. The existing 30-inch x 45-inch sewer extending from the Sunnydale Outfall along Harney Way and then north to the Candlestick Tunnel would be replaced by larger 60-inch diameter and 66-inch diameter lines. The 60-inch diameter line would extend for about 1,000 feet along the bay side of Harney Way, cross under Harney Way just north of the intersection with Alana Way, and continue along the northwest side of Harney Way for about 250 feet to a control structure\*. From the control structure a 66-inch diameter line would be constructed in an easement through San Francisco Executive Park property to connect with a new junction structure\* at the existing Candlestick Tunnel from which existing lines would transport flows to the Southeast WPCP. (Such an easement has not yet been obtained.) These proposed transport lines would carry dry weather flow. During wet weather they would also receive storm water flows from the existing Alana and Harney Way storm sewers and would carry up to 60 million gallons per day (mgd\*) of combined wastewater flows to the Candlestick Tunnel.

The wet weather flow system would consist of a 1,750-foot long 15-foot x 38-foot transport/storage structure with a 5.7 million gallon storage capacity, a 50 mgd pump station, a 48-inch diameter force main\*, and three control structures. The transport/storage structure would be constructed alongside Harney Way from south of the first prominence of Candlestick Point State Recreation Area to the Santa Fe Pacific property south of the existing outfall (see Figure 1). Control structures would be located at the existing Sunnydale outfall, near the intersection of Alana Way and Harney Way, and on the northwest side of Harney Way. The proposed pump station would be constructed at the southern end of the transport/storage structure. The force main would extend from the pump station and would parallel the transport/storage structure. At the northern end of the transport/storage structure the force main would cross Harney Way and connect with the northernmost control structure.

\*Words and phrases which are followed by an \* are defined in the Glossary of Terms, on page 30, below.

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During wet weather, gravity flow capacity of the Candlestick Tunnel is reduced below 60 mgd as existing sewer lines and transport/storage structures at the northern end of the tunnel fill with combined wastewater. As capacity of the tunnel is reduced, excess flows from sewers south of the Candlestick Tunnel would be diverted to the transport/storage structure over baffled weirs in the proposed control structures at Alans Way and at the Sunnydale outfall. Before the transport/storage structure filled to capacity, the pump station would begin to pump out stored flows as soon as the water level in the box reached a preset height. Flows would be pumped through the 48-inch force main to the northernmost control structure near Candlestick Tunnel. Discharge of sufficient flow from the pump station into this structure would automatically close a flap gate and all further flows from the Sunnydale area would accumulate in the transport/storage structure until the system downstream could receive additional flows. Thereafter, the pump station would pump flows from the transport/storage structure until the box is emptied. If the structure was full after a storm, flow would be in the box for a maximum of three hours after the end of rainfall. From the control structure near Candlestick Tunnel wet weather flows would be transported to the Southeast WPCP for treatment via the same route described above for dry weather flows.

On the average of once annually, the transport/storage structure would fill and combined flows would discharge into the bay. The discharge into the bay from the transport/storage box would be over a baffled weir located near the existing outfall. The baffle would be used to contain floatable material in the box structure. Flows which remained in the box would ultimately be pumped to the Candlestick Tunnel and transported to the Southeast WPCP for treatment.

The pump station would be an underground structure containing four electrically-driven pumps, and odor control and ventilation facilities. The odor control system would contain two exhaust fans and four odor control units using activated carbon plus permanganated alumina. The pump station would have water storage and pumping facilities to clean the transport storage structure after it has been emptied of sewage. The pump station would be in operation about 50 to 60 hours per year.

A microcomputer-based control system would also be installed. A remote terminal unit at the pump station would be connected by a fiberoptic cable transmission line to the Bay Side Area Control Center at the Southeast WPCP. The cable would be installed in 2- to 4-inch diameter PVC pipe underneath city streets using the same construction technique employed by cable television companies. An 8-inch trench would be excavated, pipe laid, and the trench recovered in a continuous process. A pull box would be installed approximately every 400 feet, and a splice box every 2,000 to 3,000 feet. The estimated time for placement of 11,800 feet of cable is about one week. The proposed route for the Sunnydale control system extends from the pump station northeast along Harney Way to Jamestown Avenue, northwest along Jamestown to Ingalls Street, and northeast along Ingalls to Fitzgerald Avenue. At Ingalls and Fitzgerald the Sunnydale control system would tie into the existing Griffith system.

All of the facilities described above would be constructed primarily underground. The force main and 60-inch and 66-inch diameter pipes would be completely buried. A landscaped berm would cover about half of the upper surface of the transport/storage structure, with the remaining portion to be used as a foot path (see Figure 2). The upper portion of the transport/storage structure would thus be visible from the bay, and would have the appearance of a sea wall. The top of the pump station would be developed as a viewing area (see Figure 3). Both structures would serve to provide a public access route along the shoreline.

Construction of the Sunnydale facilities would begin in spring or summer of 1989 and would take about two years to complete. Most of the facilities would be constructed using open-cut excavation. To minimize trench width the sides would be retained by temporary bracing. Construction in bay mud may require some special measures such as use of piles to support structures. Dewatering would be required because most of the excavations would be below groundwater level. The total capital cost of the project is estimated to be about \$20 million (January 1985).

The proposed project qualifies to receive funding for 55 percent of eligible costs from a grant authorized under the Federal Water Pollution Control

Act (Public Law 92-500 and Municipal Wastewater Treatment Construction Grant Amendments of 1981). An additional 12.5 percent of funding of eligible costs would come from grants from the State derived from general obligation bonds authorized under the Clean Water Bond Law. The remaining 32.5 percent of grant eligible costs, and all grant ineligible costs, would be borne by the City and County of San Francisco (City). All operation and maintenance costs would be the responsibility of the City. Local funding would come from currently available General Obligation bond funds authorized for sewerage purposes and from Sewer Revenue Bond proceeds.

#### COMPATIBILITY WITH EXISTING ZONING AND PLANS

The Sunnydale project would not require a variance, special authorization, or change to the City Planning Code or Zoning Map. Development of a public structure within P (Public Use) and M-1 (Light Industrial) districts would require a determination by the City Planning Commission as to conformance with the Master Plan. Pursuant to California Government Code Section 53090-53091, San Francisco is exempted from building codes and zoning laws within the City of Brisbane.

The project would generally be consistent with the Environmental Protection Element of the San Francisco Master Plan. In particular, the project would meet the following objectives included in the Plan: 1) Conservation Objective 1, Policy 2, which calls for improvement of the quality of natural resources; and 2) Bay, Ocean, and Shoreline Objective 1, Policy 3 which expresses the need to maintain and improve the quality of the San Francisco Bay, ocean and shoreline areas by improving sewage treatment.

The San Francisco Bay Conservation and Development Commission (BCDC) has jurisdiction over land use within 100 feet from the San Francisco Bay shoreline. BCDC has permit authority over any projects that would require fill, extraction of materials, and substantial alteration of water, land or structural use within its jurisdiction. All of the project area falls within BCDC's jurisdiction.

The BCDC Public Access Plan identifies the Candlestick Point area as an "important shoreline site" and calls for implementation of plans for the Candlestick Point State Recreation Area. The proposed project would conform with all requirements of BCDC as related to shoreline protection, public access, and other issues.

Part of the project area is within the boundaries of the Candlestick Point State Recreation Area which surrounds the shoreline around Candlestick Park's stadium and parking lot. Currently, the California Department of Parks and Recreation, which owns and maintains this State Recreation Area, has plans for trails within the proposed project area. An Environmental Impact Report for a proposed General Plan Amendment to the Candlestick Point State Recreation Area is currently being prepared. This General Plan Amendment deals with relocation of boat launching facilities, ferry landing sites and other recreational facilities.

The proposed project would conform with the plans for the Candlestick Point State Recreation Area by construction of a pathway along the water's edge at project completion.

#### ENVIRONMENTAL EFFECTS

##### Land Use

The Sunnydale project would not disrupt an established community as it would involve construction in an area that is now undeveloped at the edge of the San Francisco Bay. After project construction and development of a pathway along the water's edge, the project would result in an improvement to the existing character of the vicinity. New landscaping and improved access to the shoreline would encourage use of this portion of the San Francisco Bay shoreline.

During construction, secondary land use impacts such as increased noise and disruptions to traffic circulation have the potential to affect users of Candlestick Park, nearby residents, and occupants of office buildings in the

site vicinity. These issues are addressed in greater detail in other sections of this Negative Declaration.

The construction staging area is not known at this time. It would be up to the contractor to arrange for construction staging on a given site. However, at least two potential staging sites have been identified. One site is just east of the Bayshore Freeway and north of Harney Way at the San Francisco/San Mateo County line. This site has recently been used for construction staging in the area. A second site would be on undeveloped Executive Park property north of Harney Way.

If either of these sites were used, no significant impacts are anticipated and no mitigation measures (other than those construction mitigation measures already included) would be required. If another site is considered for construction staging, that site would be presented to the Department of City Planning for a determination as to whether further review or mitigation would be required.

#### Visual Quality

##### Site Description

The project site consists of a strip of undeveloped shoreline between Harney Way and the San Francisco Bay. The average width of the site is about 25-30 feet. The site generally lacks distinctive physical features. Existing vegetation, which occurs along the top of a bank, consists primarily of grasses and small shrubs common to previously disturbed areas. Immature ornamental trees have been planted in a row along the roadway opposite the San Francisco Executive Park, but are still too small to contribute greatly to the site's visual character. The sloping portions of the site are covered with loosely placed rubble to protect the shoreline from erosion. The protective rubble consists of broken pieces of concrete, pavement, curbing and cut-stone of various sizes and contributes to a disturbed, unkempt visual character for the site. This unkempt character is compounded by additional refuse that has been illegally dumped on the site or has washed ashore from the bay.

Several elements in the project vicinity contribute to the overall visual character of the area. Predominant among these is the San Francisco Bay which represents the major scenic element and permits panoramic views to the east and south. Other elements comprising the project's visual environment include Highway 101 (the Bayshore Freeway) to the west; San Francisco Executive Park and Bayview Hill to the north; and Candlestick Park Stadium and Candlestick Point State Recreation Area to the northeast.

##### Views of the Site

The freeway, which is about 100 feet from the site at its closest point, is at a slightly higher elevation than the site, and provides northbound travelers with uninterrupted views of the entire length of the project shoreline. Views of the site from southbound lanes are greatly restricted by the raised center divider in the freeway. Local streets in the immediate project vicinity also provide views of the site. Harney Way, which runs adjacent to the site, provides views of the entire length of the site for travelers in either direction. Figure 4 shows existing views of the site from Harney Way near the south end of the site and from Candlestick Point State Recreation Area. Alana Way and Thomas Mellon Drive provide motorists with limited views of the site as they approach the intersections of each of these two roads with Harney Way (see Figure 1). The views from these streets consist primarily of the top of the bank immediately opposite the intersection of the three streets.

San Francisco Executive Park to the north of the site is a mixed use development in its initial phases of development. At present, three multi-story (one 3-story and two 4-story) office buildings have been completed. Future development plans for the Executive Park include additional commercial and retail buildings, a hotel, a restaurant, and high density housing, all interspersed with landscaped areas. The existing buildings are sited on a plateau above the site and are oriented toward the south and east to take advantage of views out to the Bay. Only glimpses of the site are visible from the ground floors and parking areas of the existing office buildings. The building setbacks from Harney Way and landscaping within the Executive Park combine to obscure most views of the site from these areas. As the young landscaping matures, these existing views will be almost totally obscured. South-facing

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offices on the upper floors of the southern- and eastern-most of the three buildings provide views of the entire site. These views are primarily of the top of the bank along Harney Way and do not include the rubble-lined bank and water's edge, except at the southwest end of the site where the shoreline turns southward. The project site occupies a position in the lower half of the viewshed as seen from these buildings. The site's low-profile position within this viewshed marks a transition between the less visually appealing parking areas and streets in the foreground and the panoramic views of the Bay and mountain ridge beyond.

The Candlestick Point State Recreation Area is adjacent to the east end of the project site. This area consists of a grassy open space area with a few scattered picnic tables. Current plans for the long-range development of the Recreation Area show the area adjacent to the site remaining as minimally-developed open space. A right-angle turn in the shoreline where the site adjoins the Recreation Area provides park-users with uninterrupted views down the length of the site. As shown in Figure 4, views of the site from this area include the entire length of the site's land/water edge and the rubble-lined slopes.

In addition to the land-based viewpoints, the project site is also visible from the Bay. From this vantage, vertical elements such as Bayview Hill and San Francisco Executive Park are much more visually prominent than the site's low profile.

Views from the Site. The project site provides extensive views out to the south, east and west. High quality views of the Bay and distant shorelines are provided to the south and east. To the west, views include the Bayshore Freeway (U.S. 101) in the foreground with the San Bruno Mountains in the distance. Bayview Hill and Candlestick Point enclose the site to the north, limiting the extent of views in that direction. The upper floors of the office buildings in the San Francisco Executive Park are visible from the site, but the landscaping and elevation difference between the site and the Executive Park block views of the large parking areas. Limited views of the Candlestick Park stadium and commercial and residential development of the west side of the freeway are also provided from the site.

Long-Term Visual Impacts. The proposed transport/storage structure would be constructed primarily within the existing shoreline with the finished elevation of the top of the structure ranging from approximately 1.5 feet above the elevation of the adjacent Harney Way roadway (at the pump station) to 0.5 feet below the roadway (at the north end). A low landscaped berm approximately 12 feet wide would extend from the shoulder of Harney Way to approximately midpoint of the 15-foot wide structure. The plan calls for low growing vegetation to be planted on the berm. The height of the proposed berm would be approximately 2.5 feet higher than the top of structure. The portion of the structure not covered by the berm would provide a public walkway along the shoreline. At the shoreline edge of the proposed structure, approximately 5 feet of the transport structure's vertical face would be visible. There has been discussion about treating the face of this wall to visually integrate it with the setting, but to date the plans call for an unadorned concrete-formed wall. Illustrations of the proposed project show two stairways down to the water's edge, but their location and design have not been finalized at this time.

The proposed transport structure and pump station would alter the existing visual character of the site. The project would replace the disturbed somewhat littered character of the existing rubble-lined shoreline with a more ordered, architectural appearance. Existing areas of unsightly erosion or refuse dumping would also be eliminated by the project. As proposed, however, the absence of detailing or variation in the line of the transport structure wall along the shoreline would lack visual interest and would appear somewhat stark in comparison to the existing shoreline. Figure 5 shows photo simulations of the proposed project from Harney Way looking north toward the project and from the shoreline of the Candlestick Point State Recreation Area.

No significant views would be obstructed by the project, and the park-like character of the walkway atop the transport structure would be consistent with the development in the Executive Park and the Candlestick Point State Recreation Area. Views from the Executive Park would remain unobstructed.

The specific plant species selected for the project and the overall landscape design have not yet been determined, but they would affect the final visual character of the project. The use of native plant species and a natural (i.e. informal) design could limit the perceived change in visual character from existing conditions and would be consistent with the landscaping proposed in the Candlestick Point State Recreation Area. The project would create a more developed and park-like character for the area than it now possesses.

The "low-growing" vegetation proposed for this area may not be sufficient to create a positive visual impression. While low-growing vegetation would protect existing Bay views from Harney Way, it would provide very little visual buffer between the public walkway and the vehicular traffic on Harney Way and the freeway. The height of the earth berm would contribute to such buffering, but would only rise approximately 2-3 feet above the walkway. Final design of landscaping would consider the need to provide a visual buffer from nearby roads without obstructing views from those roads.

Aside from the effects the project would have on the appearance of the area, the creation of a public walkway along the shoreline, where none currently exists, would represent a positive scenic amenity by providing a location for the public to safely enjoy views of the San Francisco Bay.

Temporary Visual Impacts Resulting from Construction Activity. Construction of the proposed transport structure and pump station would result in temporary visual disruption along the stretch of Harney Way adjacent to the site. Duration of the disruption would be approximately 2 years for the entire project (about 12-15 months of that period for the transport structure). The disruption would consist of open trenches, equipment and workers along the beside of Harney Way, as well as some equipment and materials storage. It is likely that the visual disruption would be perceived as greatest by occupants of the San Francisco Executive Park and by those picnicking in the Recreation Area due to the more stationary nature of their views of the site. For occupants of vehicles traveling along the freeway and local streets the visual disruption would not be as great due to the transitory nature of the views of the site.

Construction areas would be enclosed in some fashion, but still visible through barriers such as chain-link fences. Most frequently used equipment would be 40-ton cranes with 40-foot booms, large dump trucks for soil banking, concrete transit mix trucks, and flat bed trucks for delivery of supplies such as pipe. It is likely that pile-driving equipment would also be used, but this would not be determined until the final design for the project has been completed. No residential areas would be exposed to visual disturbances as a result of site construction activity.

#### Population

The proposed Sunnyside Facilities Project is designed to substantially decrease the frequency of sewer overflows in the study area by the addition and construction of improved wastewater systems. The proposed project does not include any substantial increase in dry weather sewer pipeline capacity; hence, it would not have a significant growth inducing effect upon the Sunnyside area or upon the City of San Francisco overall.

The proposed project would not displace anyone, because there are no residential, commercial or industrial facilities in the proposed construction corridor. Because the proposed project would generate few new, permanent jobs it would not create a noticeable increase in demand for housing in the project area or in San Francisco or result in a concomitant reduction in the City's housing supply.

No residences are located in the proposed project construction area. As a result, the proposed project would have no impacts on housing.

According to the December, 1986 Bayside Sunnyside Facilities Project Report, the proposed project would generate approximately 101 worker-years of direct construction-related employment, 273 worker-years of project-generated secondary employment, and 1.8 full-time equivalent (FTE) workers. Both the generation of direct and secondary construction-related employment and the addition of nearly two full-time jobs at the proposed facilities, while likely to be beneficial to both the project area and the city economy, would not create any significant new demands for housing or services in the area.

Transportation/Circulation

City streets in the vicinity of the proposed project are Harney Way, Alana Way, Executive Park Boulevard and Thomas Mellon Drive.

Harney Way and Alana Way provide vehicular access from US-101 to the Executive Park office development and to Candlestick Park. Harney Way, northerly of Alana Way, is a five lane street within a 55 to 63 foot pavement width. Two lanes are northbound and three lanes are southbound. Harney Way, southerly of Alana Way, is a three lane street within a 42 foot pavement width. Two lanes are northbound and one lane southward toward US-101 northbound. Alana Way, westerly of Harney Way is a three lane Street within a 40 foot pavement width. One lane is eastbound and two lanes are westward toward US-101 southbound. Executive Park Boulevard, northerly of Alana Way, operates with two travel lanes, one northbound and one southbound, within a 48 foot pavement width. Parking is permitted on the east curb but not on the west curb. Thomas Mellon Drive, northerly of Alana Way and at the juncture with Harney Way, operates with 2 unstriped travel lanes, one northbound and one southbound within a 58 foot pavement width. There is sufficient width to have 4 lanes of traffic.

Traffic Volumes. Existing daily and peak hour traffic volumes were obtained from the City and County of San Francisco Traffic Engineering Division for Harney Way and Alana Way. Ramp volumes on US-101 at Harney Way were obtained from CalTrans. These volumes were supplemented by PM peak hour turning movement counts at the Harney Way/Alana Way and Alana Way/Executive Park Boulevard intersections which were performed by Pang & Associates in February 1987. Copies of all of these materials are on file and available for review at the Department of City Planning, 450 McAllister Street, San Francisco. The existing average daily traffic (ADT\*) and peak hourly volumes (PHV\*) are summarized on Tables 1 and 2.

The volumes are increased substantially on Harney Way and Alana Way when Candlestick Park is used for professional baseball and football games. In a November 1985 Traffic Impact Study for the Candlestick Park Expansion (Dept. of City Planning File No. 85.658E), the City and County of San Francisco's Traffic Engineering Division showed a comparison on pre- and post-game football traffic. For example, on Harney Way, east of Executive Park Boulevard, football traffic volume was 9340 vehicles during the five-hour period before the game and 6520 vehicles during the two hours after the game. These volumes may be compared with an ADT of about 2800 on a normal weekday. Football games are scheduled at Candlestick Park about 10-12 days of the year, primarily on Sunday afternoons in the autumn. There are approximately 80 home games during the baseball season, from April through the first week in October. During the 1987 season there will be 13 weekday day games. Attendance at baseball games is generally lower than at football games, with occasional high attendance games.

Level of Service. The two critical intersections, namely Harney Way/Alana Way and Alana Way/Executive Park Boulevard were analyzed for the PM peak hour to determine an intersection level of service (LOS\*). An explanation of vehicular levels of service is included at the end of this text as Appendix A. Level of service A indicates ample reserve capacity with little or no delay.

A summary of the LOS calculations is as follows:

Harney Way/Alana Way	LOS
Alana Way	
Eastbound Left	A
Eastbound Right	A
Harney Way	
Northbound Left	A
Alana Way/Executive Park Boulevard	
Executive Park Boulevard	
Southbound Left	A
Southbound Right	A
Alana Way	
Eastbound Left	A

Therefore, it appears that the two critical intersections are operating satisfactorily.

TABLE 1  
AVERAGE DAILY TRAFFIC AND PM PEAK HOURLY VOLUMES

Street	Existing ADT	Existing PM-PHV	Construction PM-PHV
Harney Way <sup>a</sup>			
East of Executive Park Blvd.	2,826	291	297
West of Thomas Mellon Dr.	3,756	200	214
West of Executive Park Blvd.	1,622	160	174
Alana Way <sup>a</sup>			
West of Thomas Mellon Drive	4,144	272	280
US-101/Harney Way <sup>b</sup>			
Northbound off to Harney Way	1,600		
Northbound on from Harney Way	3,000		
Southbound on from Harney Way	3,350		
Southbound off to Harney Way	3,550		

ADT = Average Daily Traffic  
PM-PHV = PM Peak Hourly Volume

Source: <sup>a</sup>City and County of San Francisco, Traffic Engineering Division, August 1983 counts.  
<sup>b</sup>Caltrans, 1985 Ramp Volumes on the California State Freeway System, August 1986.

TABLE 2  
PM PEAK HOUR TURNING MOVEMENTS

	Existing			During Construction		
	Left	Thru	Right	Left	Thru	Right
Harney Way/Alana Way						
North Leg	0	10	80	0	12	88
South Leg	74	45	0	74	49	0
West Leg	24	0	25	24	0	25
Alana Way/Executive Park Blvd.						
North Leg	12	0	36	12	0	36
West Leg	10	19	0	10	19	0
East Leg	0	124	102	0	132	102

Source: Pang & Associates, February 1987 count.

Public Transit. San Francisco Municipal Railway (MUNI) provides bus service along Blanken Avenue, Executive Park Boulevard and Alana Way on Line 56 from about 6:30 AM to 11:30 PM. The average headway between buses is 20 minutes. MUNI service prior to a professional football or baseball game is available with Lines 9X, 47X, 28X and 15. Average headways are 5 to 15 minutes. These buses do not travel on Harney Way and Alana Way.

Construction Traffic. The excavations for the project would take 200 working days interspersed over a 15-month period. Construction would take place primarily on weekdays, and activities normally would be completed each



day by 4:00 P.M. This would minimize effects of construction on P.M. peak hour traffic. The construction impacts include the removal of about 72,000 cubic yards (C.Y.) of material. Assuming a 12 C.Y. truck capacity, 6000 truck loads or 12,000 total trips may be expected. Approximately 30 trucks per day or 4 trucks per hour are expected along Harney Way. This translates to 60 daily truck trips and 8 peak hour truck trips. Additional traffic is anticipated by other construction workers such as foremen, surveyors, underground contractors, flaggers, etc. It is estimated that an additional 20 daily vehicle trips and six peak hour trips would be on the street network. Thus, a total of 80 daily trips and 14 peak hour trips may be expected during a typical weekday during the construction period (Table 1). These construction trips would minimize impact the two critical intersections of Harney Way/Alana Way, and Harney Way/Executive Park Boulevard. Both intersections would continue to operate at level of service A (analysis on file and available for review at Department of City Planning, 450 McAllister Street, San Francisco). However, there are potential traffic impacts along Harney Way with the construction of the 60-inch pipe diagonally across Harney Way under the 48-inch force main and the possible construction of a 36-inch pipe from Alana Way to Harney Way to replace an existing sewer (the need for the 15-inch pipe depends upon development decisions by developers of Executive Park). Construction of the force main and 60-inch pipe crossing would be with an "open-cut" method. To mitigate any potential traffic impacts, the Harney Way pipe crossing would be constructed during the weekends when no events are occurring at Candlestick Park. The trench would be dug half way across the road with an appropriate traffic control plan to handle the traffic during construction. The total time for construction of the two crossings is estimated at a maximum of 14 working days.

The construction of the transport/storage facility, 60-inch pipe and 48-inch force main in and along the east side of Harney Way would require the removal of one travel lane for equipment operation and storage during the work day. At least one travel lane in each direction would always be maintained. A traffic handling plan would be provided to route traffic onto the proper travel lanes. The plan would include an interim striping plan, utilization of "K" rails for protection of workers from vehicular traffic, truck routing signs, no construction during major Candlestick Park events such as high-attendance professional baseball and football games, and removal of the equipment to a storage area at the end of each work day.

Alana Way could also be affected since the 36-inch pipe, if constructed along Alana, would probably be constructed in the existing roadway. To mitigate the potential traffic impact, the 36-inch pipe would be constructed on the south side of Alana Way. An alternate location for the 36-inch pipe would be in a future extension of Executive Park Boulevard to the south to a connection at Harney Way. Heavy equipment and truck traffic would have vehicular access to and from the interchange at US-101, Bayshore Freeway. The current truck restriction on Blaken Avenue would be enforced. Additional truck route signing would be installed if required to direct construction traffic exclusively to and from the US-101 freeway.

Short-term construction impacts from the proposed project along the southern periphery of Alana Way and along the southern and western shoulder of Harney Way could impede the flow of services and employees to the San Francisco Executive Park office complex located in the proposed project area. However, these potential impacts would not be expected to be significant. The proposed traffic mitigation measures are designed to allow uninterrupted access, and the construction impacts would be limited in duration (about 24 months). The San Francisco Municipal Railway would be informed as to the anticipated construction schedule to minimize disruption of public transit service.

Development of Executive Park includes construction of additional office space and up to 280 housing units. Construction of those projects would overlap with construction of the proposed project. In such an event, project sponsor would work with the developer of Executive Park to coordinate construction schedules (see mitigation measures, below).

Operational Traffic. Upon completion of the facility, maintenance crews from the Southeast Plant at Army Street would make one or two trips per week to maintain the pump station. These trips are minimal and would not affect the operation at the critical intersections.

## Noise

The San Francisco Clean Water Program has established criteria and specifications for construction noise control for all Clean Water Program contracts. It would be the responsibility of the contractor to assure compliance with these specifications and with noise regulations specified in Article 29 of the Police Code, which regulates noise. According to this Code, the maximum noise level permissible during construction is a steady state level of 80 dBA\* when measured 100 feet from noise-generating powered construction equipment. Higher levels of impact or intermittent noise are permissible, but all impact tools and equipment must have intake and exhaust mufflers recommended by the manufacturer and approved by the Director of Public Works as best accomplishing maximum noise attenuation.

Construction noise would be generated by vehicles, pile drivers, excavation equipment, pumps, and compressors used in the active working area. Of these activities, pile driving would likely generate the highest noise levels. Peak levels of impact noise measured at a distance of 50 feet from pile drivers range from 90 to about 105 dBA (Harris, Cyril M., 1979, Handbook of Noise Control, 2nd Edition, McGraw-Hill Book Company, New York). Pile drivers would probably be used to install sheet pile to retain the sides of the trench excavated for construction of the transport/storage structure. Sheet pile installation would take about four weeks, interspersed through the excavation period. Piles would also be needed to support structures underlain by bay mud. Further geotechnical and design work is needed to determine the number of piles that would be required, so an estimate of time required for installation is not yet possible. The nearest receptors are in the San Francisco Executive Park, whose closest buildings are located about 300 feet from the shoreline area where pile driving could take place. The closest residences are about 900 feet away, on the opposite side of the Bayshore Freeway, which is the predominant source of background noise in the area. Noise levels from pile driving would be attenuated by distance to 75 to 90 dBA outside the Executive Park and 65 to 80 dBA outside the nearest residence. Topography, intervening structures, and walls of buildings would result in further attenuation of noise levels perceived by occupants of buildings.

The pump station would be in operation only about 50 to 60 hours per year. Noise generated by pumps and ventilation equipment would be minimal because the proposed structure is largely underground and would operate very few hours during the year.

## Air Quality/Climate

During construction, short-term air quality impacts could occur due to exhaust fumes from construction equipment, dust from excavations, traffic on unpaved surfaces, and wind erosion of exposed surfaces. Although equipment operation would increase local concentrations of air pollutants, it is not anticipated to cause violations of ambient air quality standards. The potential for generation of dust would be reduced by the fact that a great deal of the excavation would take place in wet materials along the water's edge. Dust mitigation measures, would be part of the contractual obligation of the construction contractor. Standard emission factors (EPA, 1985, Compilation of Air Pollutant Emission Factors, AP-42) and dispersion calculations (Turner, D.B., 1970, Workbook of Atmospheric Dispersion Estimates, U.S. EPA, AP-26) indicate that these measures would prevent local violations of the State 24-hour particulate standard (50 ug/m<sup>3</sup>).

During construction along Harney Way there is a possibility that localized odors could be emitted where there is excavation in bay mud. This would be a short-term impact, and excavated bay muds in haul trucks would be covered to reduce odors when necessary. The existing system would remain intact and in operation during construction. There would thus be no impact on overflows and resultant odors during the construction period.

After completion of the proposed facilities, existing odors near the Sunnydale outfall would be reduced due to reduction in the number of overflow events from 43 times to once per year. No odor impacts are anticipated during operation of project facilities. Flows would remain in the box a maximum of three hours after the end of rainfall, and during this period odor control facilities would be in operation. An activated carbon odor control and ventilation system would be included in the pump station design. Two exhaust fans and four odor control units would increase flexibility and reliability of

the system. The proposed ventilation fans at the pump station would create a slight negative pressure in the transport/storage structure. Because flaps would cover the connection between the transport/storage structure and the control structures and overflow point, negative pressure would extend the entire length of the transport/storage structure. All air removed from the structure by the ventilation fans would be scrubbed by the odor control system located at the pump station. To further ensure odor control, the transport/storage structure would be cleaned by a flushing system to remove solids and grit after it is pumped out. At the time the transport/storage structure is cleaned, the control structure would also be cleaned. Should scheduled cleaning not be sufficient, additional cleaning would be performed when deemed necessary by the Clean Water Program. This would prevent odors during periods when the transport/storage structure is not in use. The Clean Water Program would also provide opportunity for comments on the odor control measures during design of the project.

#### Utilities/Public Services

The proposed facilities would not extend sewer lines with capacity for new development but would reduce the current number of combined sewer overflows to the bay.

Water for flushing of the transport/storage box would be provided by the San Francisco Water Department (SFWD). About 200,000 gallons of water would be required to flush out the box. Frequency of flushing would vary from year to year, depending on the timing and frequency of rainfall events. The SFWD has indicated that it can supply the needed water (Tom Dickerson, San Francisco Water Department, personal communication with Clean Water Program staff, 3 September 1985).

#### Biology

The project area contains both natural habitat and areas that are heavily influenced by human activity. The terrestrial habitat along Harney Way is dominated by introduced landscape plants. The only natural habitat remaining in the area is the shoreline area and intertidal mud flats. The shoreline consists of large concrete rubble leading to a rock and gravel beach, with a mud flat below the beach.

No species designated as rare, threatened or endangered on state or federal lists are known to inhabit the project area (California Department of Fish and Game, Natural Diversity Data Base computer records search, 4 February 1987, on file and available for review at Dept. of City Planning, 450 McAllister Street, San Francisco). The regional office of the Department of Fish and Game confirms there are no species of special concern in the project area (phone conversation, Ted Wooster, Department of Fish and Game, Region 3 Environmental Services Supervisor, 20 February 1987).

Previous surveys of shellfishing areas found harvestable beds of soft shell and Japanese littleneck clams and evidence of clamming activity (James E. Sutton, 1978, Survey of Sport Shellfishing Potential in San Francisco Bay, in Southern San Francisco and Northern San Mateo Counties). More recent surveys by Clean Water Program Staff (Dave Jones 11 July 1985) suggest that these clam beds may have decreased in size since 1978. Reduction of the number of overflows at the Sunnydale Outfall would improve the quality of the clam bed by decreasing the bacterial contamination of the area. Some portions of the clam bed may be disturbed during construction activity, but use of backfill composed of crushed rock and sand would provide a better substrate for clams. Natural reseeding would occur rapidly with provision of a proper substrate. Potential impacts to water quality that could affect aquatic biota are discussed in the section on water.

A few small trees planted for landscaping along the shoreline side of Harney Way would have to be removed during construction. After construction is completed a low landscaped berm is proposed to extend from the shoulder of Harney Way to about the midpoint of the transport storage structure (see Figure 2 and mitigation measure number 2).

The proposed alignment of the transport/storage structure along the edge of the Bay is shown in Figures 6a - 6c, p.p. 17 - 19. These figures demonstrate the amount of water surface lost relative to the line of highest tidal action (i.e., bayfill) resulting from the proposed location of the

structure, as well as the amount of water surface gained due to excavation associated with the project.

The tabulation of the areas of water surface lost and gained is on file and available for review at the Department of City Planning, 450 McAllister Street, San Francisco. That tabulation indicates 10,000 square feet of water surface lost and 9,520 square feet of water surface gained, resulting in a net loss of 480 square feet of water surface from the project, as proposed.

No significant effects are anticipated from this amount of net water surface loss. Nevertheless, this net loss in water surface could be mitigated by placement of the transport/storage structure closer to Harney Way. Placement of the structure one foot closer to Harney Way would add 1,750 square feet of water surface, resulting in a net increase of 1,270 square feet of water surface (1,750-480) from this variation on the proposed project.

#### Geology/Topography

The project area is not underlain by any known active or potentially active fault. The geology of the Candlestick Cove shoreline area consists of a thin layer of artificial fill materials overlying from 0 to 40 feet of younger bay mud. This is in turn underlain by up to 70 feet of bay side sand and gravel deposits which overlie bedrock of the Franciscan Formation. Because of the high density of the bay side sand and gravels, the project location is considered to have a generally low potential for liquefaction. Differential settlement would, however, be a major geotechnical concern for this location. Excavation in bay mud would require special construction techniques because of its physical properties. Recommendations from geotechnical studies would be included in project design to prevent damage from earthquakes, ground movement and differential settlement.

#### Water

The proposed project would achieve the objective of improving water quality in San Francisco Bay by reducing the number of combined sewer overflows. Construction along the shoreline could produce temporary increases in turbidity and siltation in the bay and resultant impacts on aquatic life. Installation of sheet pile or a slurry trench would minimize dispersion of sediment into the bay during construction, thus reducing the potential for adverse impacts on aquatic biota due to siltation.

Water from dewatering of the excavation would be returned to the bay if it is deemed by the San Francisco Department of Public Works to be uncontaminated in accordance with Regional Water Quality Control Board standards.

#### Energy/Natural Resources

The Sunnydale facilities would require about 110,000 kilowatt hours per year for operations. Peak demand would be 910 kilowatts for wet weather operations. This would not coincide with the systemwide peak electrical demand which occurs in the summer. PG&E would be able to accommodate these annual and peak demands (Rocco Colicchia, PG&E, telephone conversation with Clean Water Program Staff, 14 April 1987).

#### Hazards

The presence of open cut construction along Harney Way and Alana Way could constitute a public safety hazard for adults and especially children utilizing the State Recreation Area. Open cut construction areas can represent, for children, an attractive nuisance and could result in injury to children utilizing or playing in the State Recreation Area near to the proposed construction site. Although construction would primarily be confined to daytime weekday periods when children are typically not present, a portion of the 15-month construction period would coincide with the school summer vacation period, thereby increasing the risk to children. Moreover, the dangers of an open construction channel could be even greater on weekends when construction crew are not there to supervise and prevent the encroachment of local residents, both children and adults, into an open trench. This type of potential hazard could affect not only visitors to Candlestick Point State Recreation Area but also residents and children from the Little Hollywood neighborhood

just north of Candlestick Park who might come into the area to explore or play. Safety measures would thus be required to protect residents and visitors. To minimize potential risks associated with open-cut construction along Harney Way construction zone safety devices would be used. A security guard would be posted at the work site during nonworking hours. The Clean Water Program would notify all agencies with emergency vehicles of open-cut construction activities along Alana Way and Harney Way. Safety measures are detailed on page 24.

#### Cultural

Prehistoric shell mound CA-SFR-7 is located in the vicinity of Alana Way and Harney Way. The proposed alignments of the force main and 60-inch and 66-inch pipelines are just outside the identified boundaries of the shell mound (Peter Banks, California Archaeological Consultants, Inc., 1981, Subsurface Archaeological Investigations at CA-SFR-7, the Griffith-Shafter Mound, and the Thomas-Haves Mound, along the Sunnydale-Yosemite Alignment 2A-1, City and County of San Francisco, California, May 115, on file and available for review at Dept. of City Planning, 450 McAllister Street, San Francisco). Subsurface investigations have indicated that the edges of the mound nearest the proposed construction activity have already been disturbed, probably by mound leveling that took place before the area was covered with fill. Construction would not be expected to adversely affect cultural resources in the mound, but construction crews would be advised of the presence of the mound and would be required to report the presence of any cultural materials encountered during excavations. See mitigation measures included in the project, below, at p. 24.

A pair of sunken hulks has also been identified in the area off shore of Candlestick Point (Roger Olsted, Nancy Olsted, David Fredrickson, and Vance Bente, 1982, San Francisco Bayside Historical Cultural Resource Survey). Both are far enough off shore that they are not expected to be affected by construction.

Conformance with plans for Candlestick Point State Recreation Area has been discussed above.

#### Permits and Approvals

The proposed project would require approval from the Environmental Protection Agency (EPA) and the State Water Resources Control Board (SWRCB) indicating project conformance with appropriate State and Federal plans and regulations. In accordance with Public Law 92-500, authorization is required from EPA of Clean Water Grant fund eligibility, and from SWRCB for disbursement of grant funds. Approval by the Regional Water Quality Control Board (RWQCB) is required indicating project conformance with agency plans. RWQCB Order No. 79-67 and National Pollution Discharge Elimination System (NPDES) Permit # CA0038610 specify the level of combined sewer overflow control necessary for protection of receiving water quality.

Approval and permit would be required from the U.S. Army Corps of Engineers for construction of transport/storage facilities along the shoreline, and for storage or disposal of excavated materials in accordance with Section 404 of Public Law 92-500 and appropriate Corps of Engineers regulations.

Concurrence would be required from the State Department of Parks and Recreation, certifying that procedures for the protection of historical and cultural resources have been met, in accordance with Section 106 of the National Historic Preservation Act of 1966, Public Law 89-665. Approval for construction in the Candlestick Point Recreation Area would also be required.

The State Lands Commission has jurisdiction over areas subject to tidal action, and would have to grant approval of construction which would encroach on those areas.

A permit would be required from the San Francisco Bay Conservation and Development Commission (BCDC) for construction of the transport/storage structure along the shoreline in accordance with the McAteer-Petris Act (Section 66600 of the California Government Code). Permits from the Bay Area Air Quality Management District (BAAQMD) would also be needed.

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Permits and approvals to be granted by City agencies would include a determination of conformance with the Comprehensive Plan of the City and County of San Francisco by the City Planning Commission; Board of Supervisors approval of the Negative Declaration and project report and for appropriation of project bonds in accordance with the San Francisco City Charter; San Francisco Art Commission approval for construction of the pump station; and Bureau of Building Inspection review and approval of pump station plans.

Although no permits or approvals are required from the City of Brisbane, that City would be kept informed as to the progress of the project. Plans and specifications would be discussed with the Brisbane City Engineer.

#### MITIGATION MEASURES INCLUDED IN THE PROJECT

1. To improve the character of the vicinity and conform with public access plans for Candlestick Park State Recreation Area, the top of the transport/storage structure would serve as a pathway, providing shoreline access.
2. To improve visual quality:
  - a. Design landscaping along Harney Way to provide an aesthetically pleasing open space area along the pathway. Tall trees (i.e. above 20-30 feet) would not be included in the landscaping because they would obstruct Bay views from the Executive Park and other surrounding areas. Viewsheds would be maintained.
  - b. Landscaping would be designed to coordinate with the character (both existing and planned) of the landscape treatments in surrounding areas, including the San Francisco Executive Park and Candlestick Point State Recreation Area. Landscaping design would be done by architects in the Department of Public Works and reviewed by staff at the Department of City Planning and the California Department of Parks and Recreation.
  - c. To minimize short-term aesthetic impacts during construction the length of open trench would be limited to approximately 500 feet at one time.
3. To improve access, minimize congestion and disruption, and enhance the traffic carrying capability of streets in the proximity of the project:
  - a. A minimum of two lanes (one lane in each direction) would be kept open on Harney Way at all times. Whenever feasible, two lanes in one direction and one lane in the opposite direction would be kept open. Access to Executive Park would be maintained. A detailed traffic handling plan would be provided for Harney Way and Alana Way to include an interim striping plan on Harney Way and Alana Way with revised lane configurations, "K" rail, and truck route signing.
  - b. Construction would be coordinated with Candlestick Park events to ensure minimization of traffic conflicts before, during and after events. No construction would take place during major events (attendance greater than 20,000). The Resident Clean Water Program Construction Manager would contact Giants or 49ers staff to determine possible high-attendance days. This would be done at least one week ahead of time, so that construction can be scheduled. Officials of Executive Park would also be provided with at least one week's notice prior to any construction work at the street entrances to Executive Park or work in or under Executive Park property.
  - c. Excavation of the crossing at Harney Way would be performed on weekends when no events are occurring at Candlestick Park. Traffic flow would be maintained by excavating the trench in sections going half way across the road. The first section would be covered before the second section is excavated. Alternatively, crossing of Harney Way could be performed by jacking or tunneling.

- d. If constructed along Alana Way, the 36-inch pipe would be constructed on the south side of the street to minimize disruption of traffic.
  - e. The current restriction of truck traffic on residential streets such as Blanken Avenue would be strictly enforced. To ensure enforcement of this restriction, a truck haul route would be developed and included in the construction plans and specifications.
  - f. Should additional construction at Executive Park begin prior to completion of the proposed project, the project sponsor would work with the developer of Executive Park to coordinate construction schedules in order to minimize construction traffic overlap.
4. To minimize construction noise impacts on residents, there would be no nighttime construction.
5. To maintain air quality:
- a. The work site would be watered down at least twice daily, or as necessary for dust control when excavating in dry materials.
  - b. Overfilling of haul trucks would be prevented, and protective covers would be placed on trucks if needed to prevent dust and odor problems.
  - c. Haul truck tires would be rinsed of mud before leaving the work site, and any spillage of excavated materials on roadways adjacent to the work site would be cleaned up promptly.
  - d. Odor control measures are included in the proposed design of the pump station.
6. To reduce impacts on biotic resources:
- a. A backfill of crushed rock and sand would be placed after construction of the transport/storage structure to provide habitat for clams.
  - b. The area along Harney Way disturbed during construction would be landscaped with drought resistant native plants.
7. To prevent damage from earthquakes and ground movement:
- a. A detailed geotechnical study would be performed when design details become available, and recommendations from the study would be included in final project design. Long-term ground movement would be minimized by using proper foundation systems. Piles would be used to support structures that are underlain by younger bay mud. Structures would be designed to resist uplift forces from high groundwater levels. The geotechnical study would address the potential settlement and subsidence impacts of dewatering. In particular, the study would examine any potential settlement or subsidence impacts upon Harney Way.
  - b. During construction the trench sides would be retained by a temporary bracing system. Excavations would be dewatered during construction.
  - c. In areas where dewatering would be necessary, the Clean Water Program Resident Construction Manager would determine if sedimentation tanks would be necessary. Specifications would be provided on amount of flow. If water from the site was not contaminated, it would be returned directly to the bay. Contamination would be determined by the City and County of San Francisco Department of Public Works Treatment Plant Laboratory. Any contaminated water would be disposed of appropriately.

8. To reduce sediment dispersion and turbidity in Candlestick Cove due to construction along the shoreline a barrier such as sheet piles would be used to enclose the excavation area.
9. To minimize risks to residents of adjacent neighborhoods and to visitors to Candlestick Point State Recreation Area during the construction period:
  - a. The contractor would be required to cover open trenches within the roadway with steel plates or temporary backfill during nonworking hours.
  - b. Open trenches would be barricaded and posted with warning signs and lights clearly visible both day and night.
  - c. The amount of open trench open at any one time would be limited to approximately 500 feet.
  - d. The contractor would be required to provide a security guard during nonworking hours.
  - e. The contractor would use temporary street lighting at night to ensure clear visibility.
  - f. The California Department of Parks and Recreation and Caspau Corporation would be included in the list of parties to be protected by the contractor's insurance.
10. To ensure protection of cultural resources:
  - a. A Principal Archaeological Investigator (PAI) or his Co-investigator would have the responsibility of informing the resident engineer, construction crew chiefs, and foreman, as to the value of archaeology in general and would describe the types of material remains that would constitute rare or unexpected finds from an archaeological standpoint. In conjunction with the PAI and Co-investigator, the resident engineer would have the responsibility of ensuring that no unauthorized collections of cultural materials be made. The resident engineer would also have the responsibility of noting the locations of any cultural materials that are discovered.
  - b. If any finds of National Register significance should be encountered in the course of excavation, the PAI or Co-investigator would be empowered with the authority to direct immediate cessation of construction activities that might impact the above mentioned cultural resources. In that event, the PAI would, within 72 hours, produce a preliminary report describing the nature of the find and its archaeological significance, and making recommendations for procedures to mitigate the adverse impact on the cultural resources of continuation of construction activities. A copy of that report would be provided to the San Francisco Environmental Review Officer. The City and County of San Francisco would assume the responsibility of taking whatever actions would be required to ensure that adequate mitigation measures are undertaken and completed according to existing federal and state statutes, regulations, and precedents before construction activities can resume.
  - c. If constructed along Alana Way, construction of the 36-inch pipe would take place on the south side of the street to assure avoiding the southern edge of CA-SFR-7.
11. The project sponsor would establish a public liaison person to receive telephone calls and letters from the public in order to ensure adherence to the mitigation measures included in the project.



MITIGATION MEASURES UNDER CONSIDERATION

The following measures are being considered to improve the visual character of the project area after construction:

Include design details to the walkway area that would add visual interest while enhancing the function and safety of the area. Stairways down to the water from the walkway would provide safe access to the water while also varying the straight line created by the edge of the transport/storage structure. The addition of a railing, bollards, or other features along the bay-side of the walkway would also add visual interest and help mitigate the starkness of the proposed structure. Such features would not obstruct views out to the Bay. Inclusion of a retaining wall/bench along the edge of the proposed earth berm would provide sturdy, vandal-resistant seating along the walkway, while also providing a substantial non-erodible edge for the landscape area. An 18-inch retaining wall/bench would also permit the establishment of slightly higher earth berms.

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A. <u>COMPATIBILITY WITH EXISTING ZONING AND PLANS</u>	Not Applicable	Discussed	
1) Discuss any variances, special authorizations, or changes proposed to the City Planning Code or Zoning Map, if applicable.	<u>X</u>	<u>X</u>	
2) Discuss any conflicts with the Master Plan of the City and County of San Francisco, if applicable.	<u>X</u>	<u>X</u>	
*3) Discuss any conflicts with any other adopted environmental plans and goals of the City or Region, if applicable.	<u>X</u>	<u>X</u>	
B. <u>ENVIRONMENTAL EFFECTS - Could the project:</u>			
1) <u>Land Use</u>	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
* (a) Disrupt or divide the physical arrangement of an established community?	---	<u>X</u>	<u>X</u>
(b) Have any substantial impact upon the existing character of the vicinity?	---	<u>X</u>	<u>X</u>
2) <u>Visual Quality</u>			
* (a) Have a substantial, demonstrable negative aesthetic effect?	---	<u>X</u>	<u>X</u>
(b) Substantially degrade or obstruct any scenic view or vista now observed from public areas?	---	<u>X</u>	<u>X</u>
(c) Generate obstructive light or glare substantially impacting other properties?	---	<u>X</u>	---
3) <u>Population</u>			
* (a) Induce substantial growth or concentration of population?	---	<u>X</u>	<u>X</u>
* (b) Displace a large number of people (involving either housing or employment)?	---	<u>X</u>	<u>X</u>
(c) Create a substantial demand for additional housing in San Francisco, or substantially reduce the housing supply?	---	<u>X</u>	<u>X</u>
4) <u>Transportation/Circulation</u>			
* (a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system?	---	<u>X</u>	<u>X</u>
(b) Interfere with existing transportation systems, causing substantial alterations to circulation patterns or major traffic hazards?	---	<u>X</u>	<u>X</u>
(c) Cause a substantial increase in transit demand which cannot be accommodated by existing or proposed transit capacity?	---	<u>X</u>	---

\* Derived from State EIR Guidelines, Appendix G, normally significant effect.

	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
(d) Cause a substantial increase in parking demand which cannot be accommodated by existing parking facilities?	___	<u>X</u>	___
<b>5) <u>Noise</u></b>			
•(a) Increase substantially the ambient noise levels for adjoining areas?	___	<u>X</u>	<u>X</u>
(b) Violate Title 25 Noise Insulation Standards, if applicable?	___	<u>X</u>	___
(c) Be substantially impacted by existing noise levels?	___	<u>X</u>	___
<b>6) <u>Air Quality/Climate</u></b>			
•(a) Violate any ambient air quality standard or contribute substantially to an existing or projected air quality violation?	___	<u>X</u>	<u>X</u>
•(b) Expose sensitive receptors to substantial pollutant concentrations?	___	<u>X</u>	___
(c) Permeate its vicinity with objectionable odors?	___	<u>X</u>	<u>X</u>
(d) Alter wind, moisture or temperature (including sun shading effects) so as to substantially affect public areas, or change the climate either in the community or region?	___	<u>X</u>	___
<b>7) <u>Utilities/Public Services</u></b>			
•(a) Breach published national, state or local standards relating to solid waste or litter control?	___	<u>X</u>	___
•(b) Extend a sewer trunk line with capacity to serve new development?	___	<u>X</u>	<u>X</u>
(c) Substantially increase demand for schools, recreation or other public facilities?	___	<u>X</u>	___
(d) Require major expansion of power, water, or communications facilities?	___	<u>X</u>	<u>X</u>
<b>8) <u>Biology</u></b>			
•(a) Substantially affect a rare or endangered species of animal or plant or the habitat of the species?	___	<u>X</u>	<u>X</u>
•(b) Substantially diminish habitat for fish, wildlife or plants, or interfere substantially with the movement of any residents or migratory fish or wildlife species?	___	<u>X</u>	<u>X</u>
(c) Require removal of substantial numbers of mature, scenic trees?	___	<u>X</u>	___
<b>9) <u>Geology/Topography</u></b>			
•(a) Expose people or structures to major geologic hazards (slides, subsidence, erosion and liquefaction).	___	<u>X</u>	<u>X</u>

	<u>YES</u>	<u>NO</u>	<u>DISCUSSED</u>
(b) Change substantially the topography or any unique geologic or physical features of the site?	—	X	—
<b>10) <u>Water</u></b>			
•(a) Substantially degrade water quality, or contaminate a public water supply?	—	X	X
•(b) Substantially degrade or deplete ground water resources, or interfere substantially with ground water recharge?	—	X	—
•(c) Cause substantial flooding, erosion or siltation?	—	X	X
<b>11) <u>Energy/Natural Resources</u></b>			
•(a) Encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner?	—	X	X
(b) Have a substantial effect on the potential use, extraction, or depletion of a natural resource?	—	X	—
<b>12) <u>Hazards</u></b>			
•(a) Create a potential public health hazard or involve the use, production or disposal of materials which pose a hazard to people or animal or plant populations in the area affected?	—	X	X
•(b) Interfere with emergency response plans or emergency evacuation plans?	—	X	X
(c) Create a potentially substantial fire hazard?	—	X	—
<b>13) <u>Cultural</u></b>			
•(a) Disrupt or adversely affect a prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group; or a paleontological site except as a part of a scientific study?	—	X	X
(b) Conflict with established recreational, educational, religious or scientific uses of the area?	—	X	X
(c) "Conflict with the preservation of buildings subject to the provisions of Article 10 or (proposed) Article 11 of the City Planning Code?"	—	X	—
<b>C. <u>OTHER</u></b>			
Require approval of permits from City Departments other than Department of City Planning or Bureau of Building Inspection, or from Regional, State or Federal Agencies?	X	—	X

YES NO N/A DISCUSSED

D. MITIGATION MEASURES

- 1) If any significant effects have been identified are there ways to mitigate them?   X               X
- 2) Are all mitigation measures identified above included in the project?   X\*\*               X

\*\*Except those measures listed as under consideration.

YES NO DISCUSSED

E. 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, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or pre-history?        X
- \*2) Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?        X
- \*3) Does the project have possible environmental effects which are individually limited, but cumulatively considerable?        X
- \*4) Would the project cause substantial adverse effects on human beings, either directly or indirectly?        X

F. ON THE BASIS OF THIS INITIAL STUDY

     I find the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared by the Department of City Planning.

  X   I find that although the proposed project could have significant effect on the environment, there **WILL NOT** be a significant effect in this case because the mitigation measures, numbers 1-11, in the discussion have been included as part of the proposed project. A **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.

*Barbara W. Sahn*  
BARBARA W. SAHN  
Environmental Review Officer  
for

DEAN L. MACRIS  
Director of Planning

DATE:   5/19/87  

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GLOSSARY OF TERMS

**ACTIVATED CARBON.** Carbon particles possessing a high adsorptive capacity, often used to adsorb odors.

**ADT.** Average daily traffic, expressed as total number of vehicles in period, beginning from 7:00 a.m.

**BAFFLED.** Containing baffles, which are deflector vanes, guides, grids gratings, or similar devices constructed in wastewater systems to check or effect a more uniform distribution of velocities, absorb energy, guide flows, and check eddies.

**BAY MUD.** A water-saturated silty clay underlying the San Francisco Bay. Bay muds are often loosely packed and therefore consolidate or compress easily.

**BIOTA.** The plant and animal life of a region.

**COMBINED SEWER OVERFLOW or COMBINED WASTEWATER or COMBINED FLOW.** The combination of sanitary sewage and rainfall runoff.

**CONTROL STRUCTURE.** A concrete box that controls flows, often by use of a weir.

**dba.** Sound levels expressed in decibels corrected for the variation in frequency response of the typical human ear at commonly encountered noise levels.

**DIFFERENTIAL SETTLEMENT.** The differential response of dissimilar surface materials to compaction and subsidence.

**DRY WEATHER FLOW.** The flow of wastewater in a combined sewer during dry weather.

**FORCE MAIN.** The discharge pipeline from a pump or pump station.

**INTERCEPTOR.** A sewer that receives dry weather flow and storm water from a number of lateral sewers or cutlets and conducts flows to a point for treatment or disposal.

**JUNCTION STRUCTURE.** A converging section of a conduit, usually large enough for a man to enter, used to facilitate the flow from one or more conduits into a main conduit.

**"K" RAIL.** A temporary concrete railing used as a barrier.

**LATERAL SEWER.** A sewer that discharges into another sewer line and has no other common sewer tributary to it.

**LOS.** Level of service, an expression of the amount of reserve capacity on a roadway in the form of a rating from A to F. Level of service A indicates ample reserve capacity with little or no delay. Level of service F indicates traffic volume exceeding capacity resulting in extreme delays.

**MGD.** Million gallons per day.

**OPEN-CUT.** A method of constructing underground structures by excavating an open trench, installing the structure, and refilling the excavation.

**OUTFALL.** The structure where wastewater discharges from a sewer.

**PCPH.** Passenger cars per hour.

**PERMANGANATED ALUMINA.** A material which adsorbs odors and oxidizes impurities in the air such as hydrogen sulfide (which causes "rotten egg" odors).

**PHV.** Peak hourly volume, may be expressed either as AM or PM-PHV.

**FULL BOX.** A small (2 ft x 3 ft x 2 ft) reinforced concrete box placed in the street about every 400 feet to enable cable to be pulled through PVC conduits.

**SPLICE BOX.** A reinforced concrete box large enough for a worker and a coil of wire (3 ft x 6 ft x 3 ft) located in the street where fiberoptic cable must be spliced together.

**SUBSTRATE.** The medium upon which a plant or animal grows.

**WEIR.** A structure, typically a dam or opening in a wall, used for control and/or measurement of flow.

**WPCP.** Water Pollution Control Plant, a sewage treatment facility.

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APPENDIX A

LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS

Reserve Capacity (PCPH)	Level of Service	Expected Delay to Minor Street Traffic
≥ 400	A	Little or no delay
300-399	B	Short traffic delays
200-299	C	Average traffic delays
100-199	D	Long traffic delays
0-99	E	Very long traffic delays
(a)	F	(a)

(a) When demand volume exceeds the capacity of the lane, extreme delays will be encountered with queuing which may cause severe congestion affecting other traffic movements in the intersection. This condition usually warrants improvement to the intersection.

PCPH = Passenger cars per hour

Reference: Highway Capacity Manual, Special Report 209,  
Transportation Research Board, 1985

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