MINUTE ITEM

This Calendar Item No. C11 was approved as Minute Item No. 11 by the California State Lands Commission by a vote of 3 to 0 at its 6-2-03 meeting.

CALENDAR ITEM
C11

A 35

S 18

PRC8459

06/02/03
W 25845
PRC 6620.9
M. Hays
J. Lucchesi

GENERAL LEASE - PUBLIC AGENCY USE AND AMENDMENT TO MAINTENANCE DREDGING LEASE

APPLICANT:

W 25845
Beach Erosion Authority for Clean Oceans and Nourishment (BEACON)
105 East Anapamu Street, Room201
Santa Barbara, CA 93101

LESSEE:

PRC 6620.9
City of Santa Barbara
P.O. Box 1990
Santa Barbara, CA 93102-1990

AREA, LAND TYPE, AND LOCATION:

W 25845
Ungranted sovereign lands in the Pacific Ocean, located at Goleta Beach County Park, Santa Barbara County; and

PRC 6620.9
Legislatively granted sovereign lands, with minerals reserved to the State, in Santa Barbara Harbor, city of Santa Barbara, Santa Barbara County.

AUTHORIZED USE:

W 25845
Proposed placement of approximately 100,000 to 150,000 cubic yards of material on the beach for a demonstration beach nourishment project at Goleta Beach County Park.

PRC 6620.9
Amend Dredging Lease to authorize the disposal of approximately 100,000 to 150,000 cubic yards of material on the beach at Goleta Beach County Park.

LEASE TERM:

W 25845
Two years, beginning September 1, 2003.

PRC 6620.9
Five years, beginning December 1, 2000.

CONSIDERATION:

W 25845
The public use and benefit; with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interest.

PRC 6620.9
No royalty will be charged, as the project will result in a public benefit; however; $0.25 per cubic yard will be charged for any material used for private benefit or commercial sale purposes.

SPECIFIC LEASE PROVISIONS:

W 25845
Insurance:
Liability insurance with coverage of no less than $1,000,000.

PRC 6620.9
Insurance:
Not applicable.

OTHER PERTINENT INFORMATION:

W 25845

1. Applicant has the right to use the uplands adjoining the lease premises.

2. As background, in the Spring of 2002, the Applicant proposed dredging sand from offshore Goleta Beach and pumping the sand onto the beach for a demonstration beach nourishment project. The proposed project was postponed in the Fall of 2002 when it was determined that there could be potential impacts to kelp beds from dredging offshore at Goleta Beach.

Since that time, the beach area at the Goleta Beach County Park (Park) has experienced extensive erosion due to strong winter storm events that have caused damage to the parking lot and picnic areas, and put adjacent public restrooms and underground utilities at risk. Due to the need for sand nourishment at the Park, the Applicant, in conjunction with the County and city of Santa Barbara, revised the project to consist of dredging compatible material from a borrow site in the Pacific Ocean located at the West Beach area on sovereign lands granted to the city of Santa Barbara.

3. The Applicant is proposing to replenish the beach at the Park using approximately 100,000 to 150,000 cubic yards of material dredged from the West Beach area of Santa Barbara Harbor. The project will include pre-construction biological surveys and post construction beach profiles and biological monitoring over a two-year period.

4. The proposed project consists of excavating material using a clambshell dredge and placing the material on a barge that will transport the material from the dredge site, to Goleta Beach. The material will then be pumped from the anchored barge directly onshore through a submerged pipeline that will temporarily lay on the ocean bottom. It is estimated that approximately 9,000 cubic yards of material will be placed on the beach per day. A small percentage, approximately 6,000 to 10,000 cubic yards, may be delivered to the Park from the excavated upper reaches of West Beach using dump trucks. The proposed project is estimated to take approximately 16 days to complete.

5. An EIR (SCH 91011072) was prepared and certified for this project by Beach Erosion Authority for Clean Oceans and Nourishment (BEACON). An EIR Addendum was prepared and certified for this project by BEACON on March 7, 2003. The California State Lands Commission staff has reviewed such documents and the Mitigation Monitoring Program adopted by the lead agency.

   Findings made in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, sections 15091 and 15096) are on file. A Statement of Overriding Considerations made in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, section 15093) are on file.

6. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code sections 6370, et seq. Based upon the staff's consultation with the persons nominating such lands and through the CEQA review process, it is the staff's opinion that the project, as proposed, is consistent with its use classification.

PRC 6620.9

1. The Lessee is the Trustee of the legislatively granted sovereign lands, pursuant to Chapter 78, Statutes of 1925, as amended.

2. Lease PRC 6620 provides for the dredging of 1,000,000 cubic yards of sediment over a five-year period from the following four areas within Santa Barbara Harbor: Leadbetter Beach, West Beach, East Beach and Marina. In order to provide sand nourishment and offset erosion effects, the lease provides for the disposal of dredged material on or immediately offshore beaches on lands granted to the city of Santa Barbara. The lessee has submitted an application for a lease amendment to include an additional disposal site for approximately 100,000 to 150,000 cubic yards of material dredged from the West Beach area of Santa Barbara Harbor to be placed on the beach at the Park. All other terms and conditions of the lease shall remain in full force and effect.

3. An EIR (SCH 91011072) was prepared and certified for this project by Beach Erosion Authority for Clean Oceans and Nourishment. An EIR Addendum was prepared and certified for this project by BEACON on March 7, 2003. The California State Lands Commission staff has reviewed such documents and the Mitigation Monitoring Program adopted by the lead agency.

   Findings made in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, sections 15091 and 15096) are on file. A Statement of Overriding Considerations made in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, section 15093) are on file.

4. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code sections 6370, et seq. Based upon the staff's consultation with the persons nominating such lands and through the CEQA review process, it is the staff's opinion that the project, as proposed, is consistent with its use classification.

APPROVALS OBTAINED:

W 25845
Santa Barbara County Planning and Development

PRC 6620.9
City of Santa Barbara
United States Army Corps of Engineers
California Coast Commission
California Regional Water Quality Control Board

FURTHER APPROVALS REQUIRED:

W 25845
California Coastal Commission
United States Army Corps of Engineers
California Regional Water Quality Control Board

PRC 6620.9
None

EXHIBITS:

A. Site and Location Map – W 25845
B. Site and Location Map - PRC 6620.9
C. Mitigation Monitoring Program

PERMIT STREAMLINING ACT DEADLINE:
June 7, 2003

RECOMMENDED ACTION:
IT IS RECOMMENDED THAT THE COMMISSION:

CEQA FINDING:

W 25845
FIND THAT AN EIR AND AN EIR ADDENDUM WERE WAS PREPARED AND CERTIFIED FOR THIS PROJECT BY BEACH EROSION AUTHORITY FOR CLEAN OCEANS AND NOURISHMENT AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.

ADOPT THE FINDINGS MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTIONS 15091 AND 15096 (h), ON FILE.

ADOPT THE MITIGATION MONITORING PROGRAM, AS CONTAINED IN EXHIBIT C, ATTACHED HERETO.

ADOPT THE STATEMENT OF OVERRIDING CONSIDERATIONS MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15093, ON FILE.

PRC 6620.9

FIND THAT AN EIR WAS PREPARED AND CERTIFIED FOR THIS PROJECT BY BEACH EROSION AUTHORITY FOR CLEAN OCEANS AND NOURISHMENT AND THAT THE COMMISSION HAS REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN.

ADOPT THE FINDINGS MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTIONS 15091 AND 15096 (h), ON FILE.

ADOPT THE MITIGATION MONITORING PROGRAM, AS CONTAINED IN EXHIBIT C, ATTACHED HERETO.

ADOPT THE STATEMENT OF OVERRIDING CONSIDERATIONS MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15093, ON FILE.

SIGNIFICANT LANDS INVENTORY FINDING:

FIND THAT THIS ACTIVITY IS CONSISTENT WITH THE USE CLASSIFICATION DESIGNATED BY THE COMMISSION FOR THE LAND PURSUANT TO PUBLIC RESOURCES CODE SECTIONS 6370, ET SEQ.

AUTHORIZATION:

W 25845

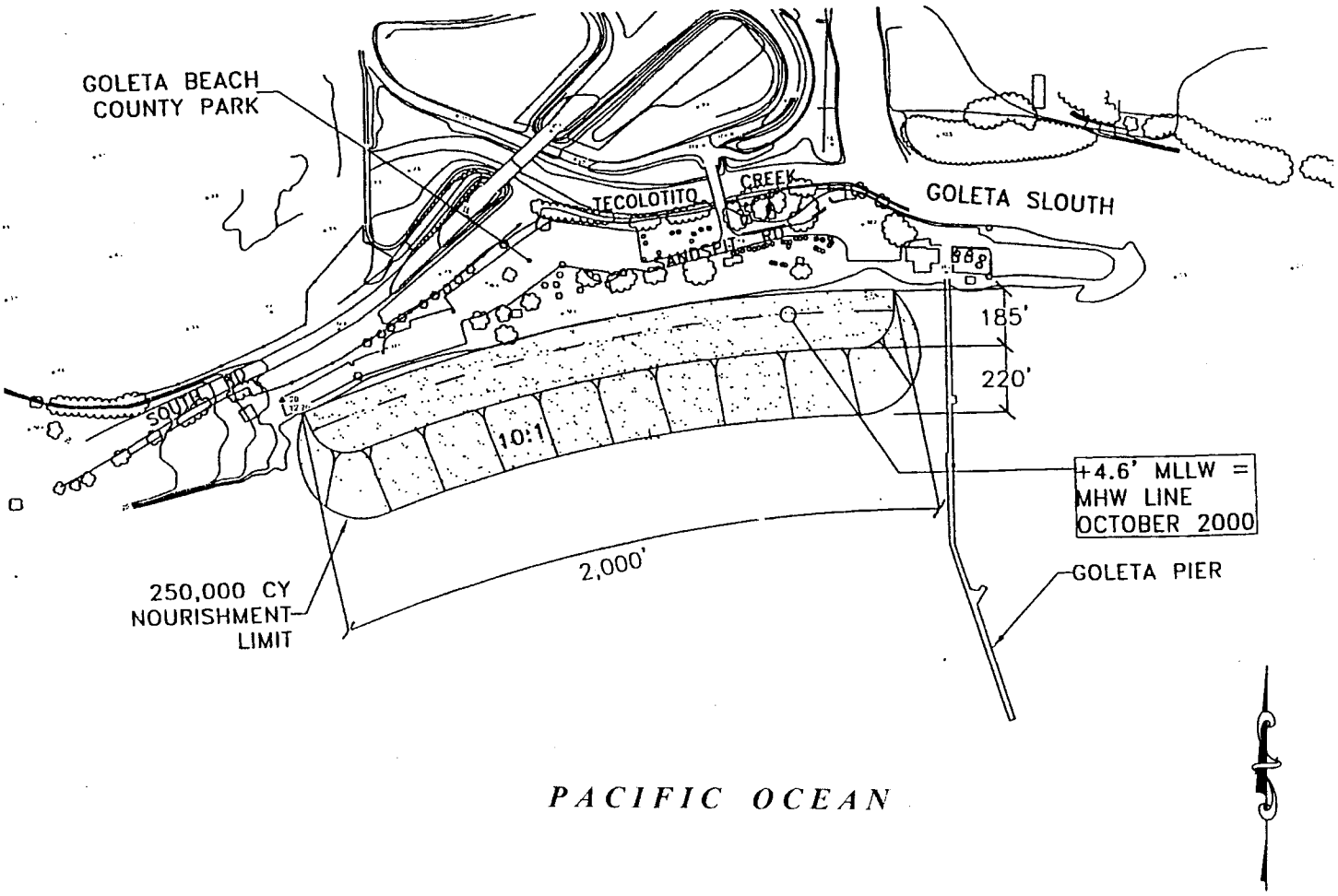
AUTHORIZE ISSUANCE OF A GENERAL LEASE - PUBLIC AGENCY USE, TO BEACH EROSION AUTHORITY FOR CLEAN OCEANS AND NOURISHMENT, BEGINNING SEPTEMBER 1, 2003, FOR A TERM OF TWO YEARS, FOR THE PROPOSED PLACEMENT OF APPROXIMATELY 100,000 TO 150,000 CUBIC YARDS OF MATERIAL ON THE BEACH AT GOLETA BEACH COUNTY PARK FOR A SAND NOURISHMENT DEMONSTRATION PROJECT ON THE LAND SHOWN ON EXHIBIT A ATTACHED AND BY THIS REFERENCE MADE A PART HEREOF; CONSIDERATION BEING THE PUBLIC USE AND BENEFIT, WITH THE STATE RESERVING THE RIGHT AT ANY TIME TO SET A MONETARY RENT IF THE COMMISSION FINDS SUCH ACTION TO BE IN THE STATE'S BEST INTEREST; LIABILITY INSURANCE WITH COVERAGE OF NO LESS THAN $1,000,000.

PRC 6620.9

AUTHORIZE THE AMENDMENT OF DREDGING LEASE NO. PRC 6620.9, AS SHOWN ON EXHIBIT B ATTACHED AND BY THIS REFERENCE MADE A PART HEREOF, EFFECTIVE SEPTEMBER 1, 2003, TO INCLUDE A PROPOSED ADDITIONAL SITE FOR THE DISPOSAL OF APPROXIMATELY 100,000 TO 150,000 CUBIC YARDS OF MATERIAL ON THE BEACH AT GOLETA BEACH COUNTY PARK; ALL OTHER TERMS AND CONDITIONS OF THE LEASE WILL REMAIN IN EFFECT WITHOUT AMENDMENT.

NO SCALE

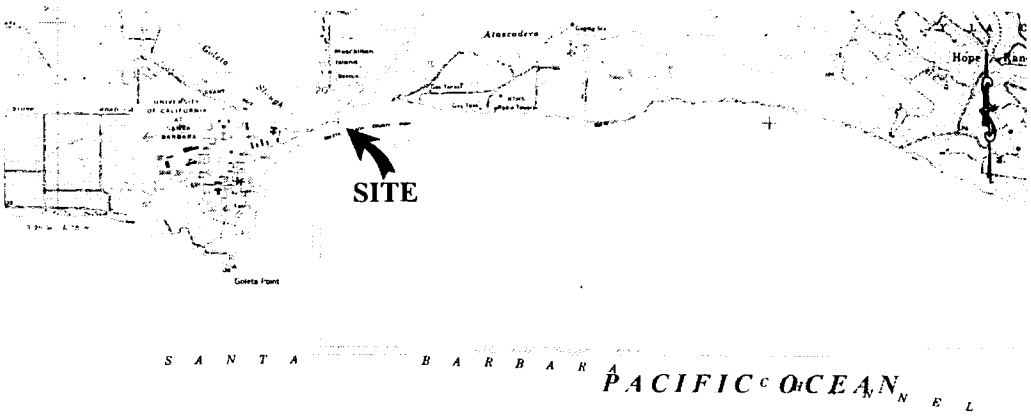
SITE



Goleta Beach County Park Demonstration Beach Nourishment Project

NO SCALE

LOCATION



MAP SOURCE: USGS QUAD

This Exhibit is solely for purposes of generally defining the lease premises, is based on unverified information provided by the Lessee or other parties and is not intended to be, nor shall it be construed as, a waiver or limitation of any State interest in the subject or any other property.

000051 CALENDAR PAGE

000771 MINUTE PAGE

Exhibit A

W25845

APN 071-200-17

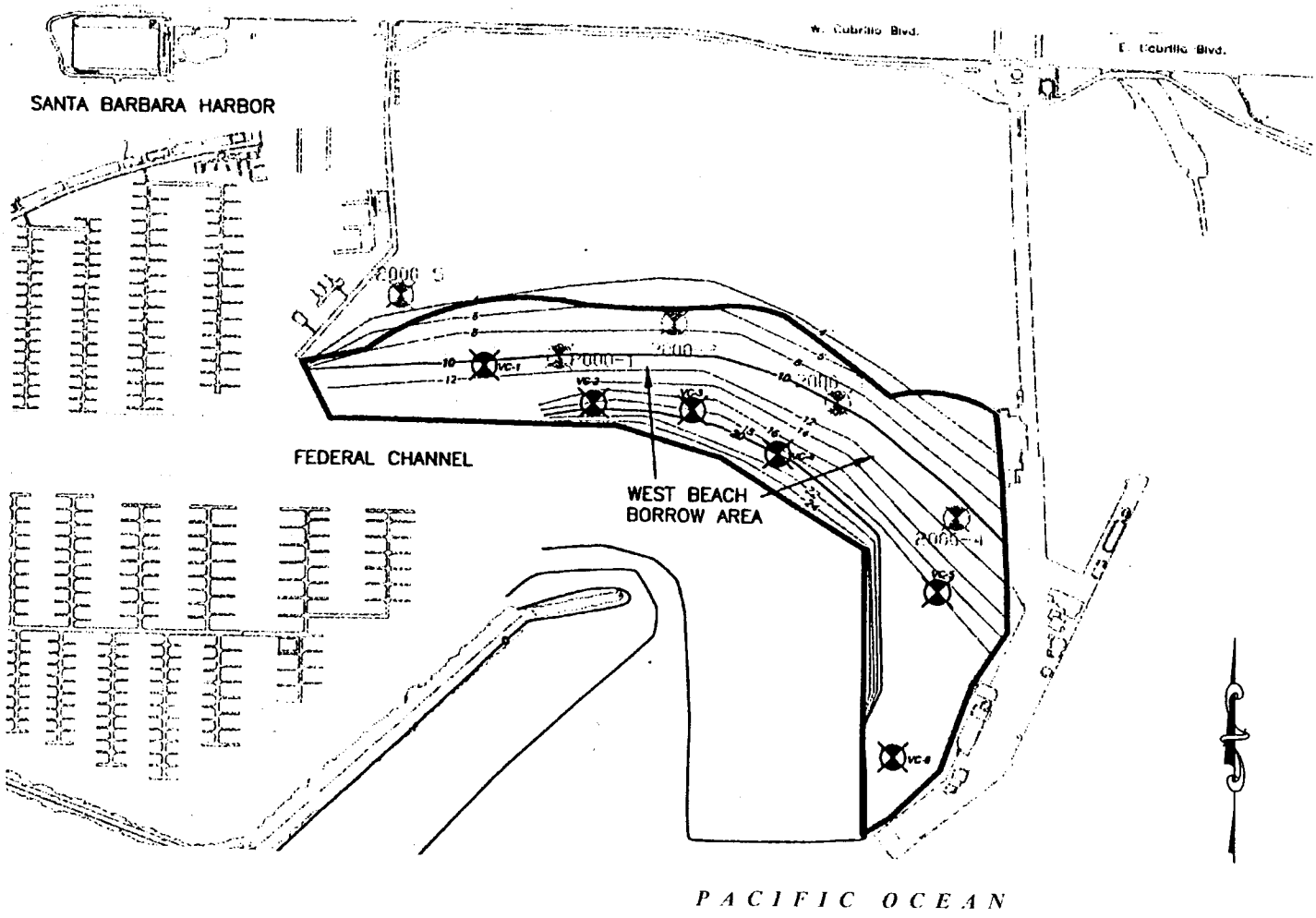
BEACON

Santa Barbara County

MJJ 05/03

NO SCALE

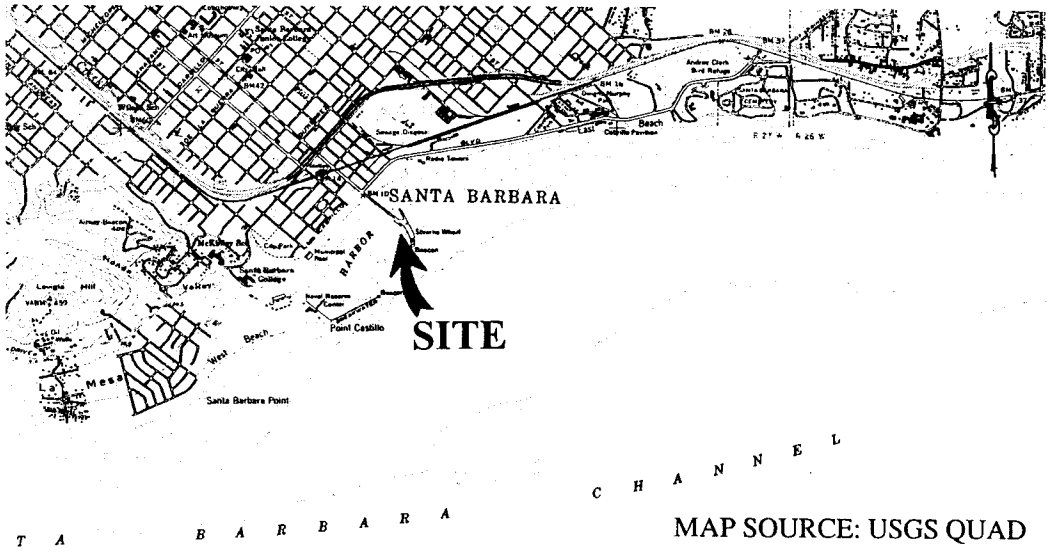
SITE



Santa Barbara Harbor, City of Santa Barbara

NO SCALE

LOCATION



MAP SOURCE: USGS QUAD

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Exhibit B

PRC 6620.9

City of Santa Barbara

Santa Barbara County

MJJ 05/03

EXHIBIT C

MONITORING PLAN OF OFFSHORE, NEARSHORE AND INTERTIDAL RESOURCES FOR THE GOLETA BEACH NOURISHMENT DEMONSTRATION PROJECT

INTRODUCTION

This is a revised draft plan for monitoring of offshore, nearshore and intertidal resources for the Goleta Beach Demonstration Project prepared for BEACON by Moffatt & Nichol Engineers. It is prepared in accordance with the Mitigation Monitoring, Compliance and Reporting Plan (MMCRP) for the project prepared by BEACON and will be used by the Environmental Monitor to track all monitoring requirements. It represents the resource-specific plans referred to in the MMCRP pertaining to Goleta Slough inlet, and sensitive habitats at Goleta Beach.

This plan was prepared with assistance from Dr. Noel Davis of the Chambers Group, Inc. (CGI). CGI developed methods and specifications for the biological monitoring plan in coordination with Dr. Dan Reed of the University of California at Santa Barbara (UCSB). Monitoring will be done for beach profiles and nearshore biology consisting of kelp, eelgrass, surfgrass habitats, the open or closed condition of the slough mouth, and grunion.

A report presenting existing conditions will be appended to this draft plan. It was used as the baseline to set monitoring requirements and determine appropriate methods. Turbidity at Goleta Beach will not be monitored as the project will be constructed over a period of time too short for turbidity to adversely affect resources at the site. The lagoon mouth will be monitored by the Santa Barbara County Flood Control District (SBCFCD) since that agency maintains the mouth under a separate permit.

PROJECT DESCRIPTION

The project consists of dredging of approximately 100,000 to 150,000 cubic yards of sand from the West Beach area of Santa Barbara Harbor using a clamshell dredge. The City of Santa Barbara Waterfront Department currently has a long-term permit to remove sand from the West Beach area on an as-needed basis. This existing permit will be utilized to provide the source of sand for the Goleta Beach nourishment.

Two 3,000 cubic yard capacity dump scows will transport the sand from the harbor dredging site to Goleta Beach. The barges will be towed approximately nine miles using a tender tug. Upon arrival to the nearshore area of Goleta Beach, the loaded barge will be tethered to a temporary monobuoy anchor positioned at a water depth of about 20 feet, relative to mean lower low water (MLLW). The sand in the barge will be pumped directly onshore using onboard equipment. The sand discharge will be conveyed through a 2,000-foot-long submerged pipeline temporarily placed on the bottom. As each section of the beach is restored to the specified grade, additional sections of pipe will be added on the beach parallel to the bluff toe to advance the point of discharge.

It is estimated that approximately 9,000 cubic yards of sand per day will be placed on Goleta Beach over three eight-hour shifts. Allowing for mobilization and demobilization time and barring any inclement weather, the project should be completed within sixteen days. Approximately eleven days of time is required to dredge the specified volume at the borrow site and deliver it to Goleta Beach.

Some material may be delivered to the site using 10-wheel dump trucks. Approximately 6,000 to 10,000 cubic yards may be delivered in this manner. Sand would be excavated from the upper reaches of West Beach, transferred to dump trucks, and hauled to Goleta Beach. Truck-hauled sand would be used to establish the final grade of the dry beach berm. Approximately 3,000 cubic yards per day may be delivered over a twelve-hour daytime shift. Depending upon volume transported, the total time that trucks may be

employed to move sand from West Beach to Goleta Beach is estimated to range from three to five days.

Monitoring will occur for pipeline placement offshore and in the nearshore, and sand placement on Goleta Beach. Monitoring divers will determine the recommended location for the slurry pipeline two to three weeks prior to construction, in coordination with the engineer and contractor. Preliminary data indicate that the area west of Goleta Pier has fewer sensitive resources and may be the appropriate location for the pipeline. Divers will perform a pre-construction dive to identify a corridor west of the Pier that is outside of the kelp canopy and therefore less biologically sensitive. The corridor will extend from the offshore area to the beach, and be marked with buoys for the contractor to mobilize his equipment in the appropriate area.

MONITORING PARAMETERS

Beach Profiles

Objectives: To quantify sand accretion or loss at Goleta Beach and immediately downcoast of Goleta Slough mouth.

Methods: The firm Coastal Frontiers, Inc., a licensed surveyor experienced with the survey methods and the specific project site, will survey the beach profiles. They have established one existing profile that will be used for this study, and they will establish three new profiles. The tasks include:

1. Establish four beach profile transects (one at the upcoast end near the bluff, one toward the middle near the restroom and one at the downcoast end near the pier) and one 500 feet downcoast of Goleta Slough mouth. The attached figure shows the profile locations.

2. Record beach and seabed elevation along the profiles from the back of the beach out to the depth of closure (estimated to be approximately –40 feet relative to MLLW). Survey equipment to be used includes:
   A. Standard survey equipment (level, Global Positioning System or GPS, rod) for work on land; and
   B. A survey boat with fathometer and GPS for work on the water to tie into the land profile.
3. Reduce data for interpretation and reporting.

Biology

Objectives: Monitor and quantify changes to kelp, surfgrass, eelgrass habitats, the slough mouth, and grunion for project effects. BEACON will not monitor bird foraging on the beach as it is not considered a potential adverse impact. UCSB staff presently monitors bird foraging on the beach as a separate project and it is assumed that this monitoring will continue. If available, BEACON staff and consultants will review those data to identify any potential project effects as a value-added measure, but not as a mandatory monitoring requirement.

Methods: Drs. Noel Davis and Dan Reed will scuba dive at two of UCSB's pre-established, permanent biology transects in the two kelp beds closest to, and east of Goleta Pier. One additional permanent transect will be established in the second kelp bed farther east of the Pier, and another one will be established in the intertidal zone near the seal haul-out site east of the Pier. They will estimate conditions of kelp and surfgrass, except the intertidal transect which will be used to only monitor surfgrass. They will also establish three new transects in eelgrass beds both east and west of Goleta Pier to estimate changes. Grunion will be monitored from the beach. The SBCFCD will monitor the slough mouth. Tasks are specified below.

Kelp and Surfgrass

The divers will access the kelp beds using a work boat launched from Santa Barbara Harbor. The locations of each of UCSB's two biology transects are documented by UCSB staff using GPS. The transects exist and are monitored by UCSB and provide long-term data. The permanent transects are in the subtidal zone in the kelp bed closest to, and east (downcoast) of the Pier. They are 40 meters long (130 feet long) and marked at every meter. One new subtidal transect will be established in the kelp bed farther from and east of the Pier. One other new monitoring station will be established in the intertidal zone at the seal haul-out site east of the Pier. It will be accessed from the beach at low tide. The attached figure also shows the locations of the kelp and surfgrass transects, and the additional intertidal monitoring station. Divers will perform the following tasks for both kelp and surfgrass:

1. Measure Kelp
   A. Two divers will observe and quantify conditions along the transect in a one meter swath to each side, at note conditions at each meter along the transect (1 meter square measurement areas are called quadrats);
   B. The divers will document the number and age of species of kelp, the percent sand cover, and the holdfast diameter of giant kelp; and
   C. Divers will observe the general condition, such as if it appears to be healthy or not.

2. Measure Surfgrass (If Present)
   A. Divers will estimate the percent of sand cover with the same quadrats as described above;
   B. Divers will estimate the depth of sand cover;
   C. Divers will estimate the cover of surfgrass; and

D. They will observe the general condition of the surfgrass, such as if it appears healthy or not.

Eelgrass

Eelgrass will be monitored along a series of three new permanent baseline biology transects within the eelgrass beds both east and west of Goleta Pier. The approximate locations of the proposed baseline transects are shown in the attached figure. The existing area of eelgrass east of the pier is oriented toward the southeast at an angle to shore, between depths of 20 to 40 feet, MLLW. A former eelgrass bed documented by CGI in the 1992 EIR existed west of the Pier as a 500-foot-long band oriented parallel to shore between water depths of 20 to 25 feet, MLLW.

Two baseline transects that are each 100 meters long are proposed east of the Pier to run perpendicular to shore to provide representative coverage. One baseline transect is intended to represent eelgrass in shallow water between depths of 20 to 25 feet, MLLW, and the other represents eelgrass in deeper water between depths of 35 to 40 feet, MLLW. A third baseline transect is proposed west (upcoast) of the Pier. It is also to be 100 meters long, but oriented parallel to shore. It will be located at a water depth of approximately 20 feet, MLLW.

The divers will select ten random locations along the baselines to quantify eelgrass along 10 meter by 2 meter transects perpendicular to the baseline. If the eelgrass is patchy they will count plant densities within each of the ten transects. If the eelgrass is very dense (and there are too many plants to count), they will establish a system of measurement subareas that are 0.1 square meter in area (approximately the size of a clip board) within which to estimate eelgrass densities. The divers will randomly establish twenty 0.1 square meter quadrats along each 10 meter by 2 meter transect to count dense eelgrass shoots and estimate percent cover. If eelgrass is both dense and patchy, the divers will

determine the appropriate method on-site and may perform both methods along the same baseline transect.

Monitoring methods will be determined from field evaluation one to two months prior to the start of construction. Permanent baseline transects will be located and marked in the field at that time, while random transects will be located on each individual monitoring event. In summary, divers will perform the following tasks for eelgrass:

A. Select ten randomly-located transects to count eelgrass. If patchy, counts will occur along the entire transect. If dense, ten randomly-located 0.1 square meter quadrats will be establish along either side of the transect to count eelgrass;
B. Observe and quantify conditions;
C. Count the number of plants and the percent cover calculated either along each transect or within each quadrat; and
D. Observe the general condition, whether it appears healthy or not.

Goleta Slough Mouth

Monitoring of Goleta Slough mouth will be to observe if the mouth is closed by sedimentation from the project. The SBCFCD will monitor the condition of the slough mouth during and immediately after construction, and for 36 months after construction. If the mouth closes, the SBCFCD will remove material as necessary until the inlet area has stabilized. The SBCFCD presently maintains the slough mouth under an existing permit. All activities will be performed to meet conditions of the existing permit.

Grunion

Although grunion have been observed at Goleta Beach in recent years, the beach is now significantly depleted and may not provide sufficient sandy area for grunion spawning. Therefore the likelihood of grunion spawning is much lower than in the past. This

project will actually improve grunion spawning by adding sand to the beach. As a precaution, grunion will be monitored before construction, and if present, during construction. No post-construction monitoring is required for grunion.

Grunion spawn from March 1st to August 30th during middle-of-the-night spring high tides at or above approximately mean higher high water (MHHW) on the beach. The eggs incubate then hatch after approximately two weeks, when the juvenile fish return to the sea during the subsequent spring high tide. The presence of grunion at this site should never result in a halt to construction, due to the availability of a larger sandy area for spawning immediately downcoast near the mouth of Goleta Slough. The project shall be allowed to proceed with minor modifications as needed to accommodate limited spawning.

A qualified biologist will be present one time two to three weeks prior to construction during a predicted grunion run (according to the grunion calendar produced by the California Department of Fish and Game), and immediately prior to construction to observe grunion. If grunion are not present during predicted runs, no further monitoring will occur.

If grunion are present during predicted runs, the project will have to be constructed to avoid causing direct impacts to incubating grunion eggs within a relatively small area. If sufficient sand exists for beach area to be present above MHHW, a relatively small protected spawning area will be created west of the Pier (location to be determined collaboratively with BEACON, the biologist, contractor and engineers) that is above MHHW. It will be protected from construction activity using suitable means as determined by the contractor and engineer. No construction activity will be allowed within the diked-off area, but it will be allowed in all other areas. Once incubation during the project is complete, the protected area filled with sand.

MONITORING FREQUENCY

Monitoring will occur during up to eight different events ranging over time from pre- to post-construction as described below.

1. Pre-Project Baseline Monitoring – Surveys of beach profiles and nearshore biology will occur one to four weeks prior to construction to observe and document the baseline condition of biology. A reconnaissance dive of eelgrass areas will be performed to determine the precise locations of permanent transects to be used for monitoring. New permanent transects for eelgrass will be marked with buoys. The divers will also specify and mark the position of the slurry pipeline working with the engineer and contractor, and identify if any measures such as placing the pipe on supports are needed to protect the seabed from impacts caused by direct placement of the pipeline on the bottom. A grunion monitor will also observe any grunion spawning activities during predicted grunion runs, and work with the contractor and engineer to set limited grunion protection and avoidance specifications for construction to not reduce sand delivery rates.

2. Construction Monitoring – The two parameters to be monitored during construction are grunion spawning and resources along the pipeline corridor. If present prior to construction, a grunion monitor also will periodically observe the protection provided for the grunion incubation area during construction to confirm its integrity. The slurry pipeline corridor will be observed by divers two days after the start of construction to confirm that impacts to habitat have not occurred. If impacts have occurred in the judgment of the divers, mitigative action may be required after construction is complete.

3. Post-Construction Monitoring – Monitoring will occur immediately after construction to quantify initial project conditions as described below.

A. Beach profiling will occur at four locations as performed before construction.

B. Kelp, surfgrass and eelgrass will be monitored immediately after construction for immediate impacts using the methods described above.

4. Longer-Term Post-Project Monitoring – Monitoring will continue after construction to quantify project effects. The frequency of longer-term monitoring can vary depending on results of previous dives, and every effort should be made to minimize the number of monitoring events to reduced effort and public costs. The concept outlined below is only an example of a possible scenario, and could be modified during the monitoring period. For example, five monitoring events are specified below for biology. Depending on the results of monitoring data, fewer events might be necessary and should be considered by the agencies.

A. Beach profiles will be recorded over two years after construction. They are typically recorded in fall and spring seasons to determine changes and account for the natural seasonality of the west coast. A total of four long-term monitoring events will occur: 1) one in the first fall season after construction; 2) one in the first spring season after construction; 3) one in the second fall season after construction, and 4) one in the second spring season after construction. The intent will be to quantify sand volume changes along Goleta Beach and determine the duration and extent of project effects.

B. Kelp, surfgrass and eelgrass habitat will be monitored at intervals of three months, six months, one year, one and one-half year, and two years after construction to document impacts from the project using the same methods specified above.

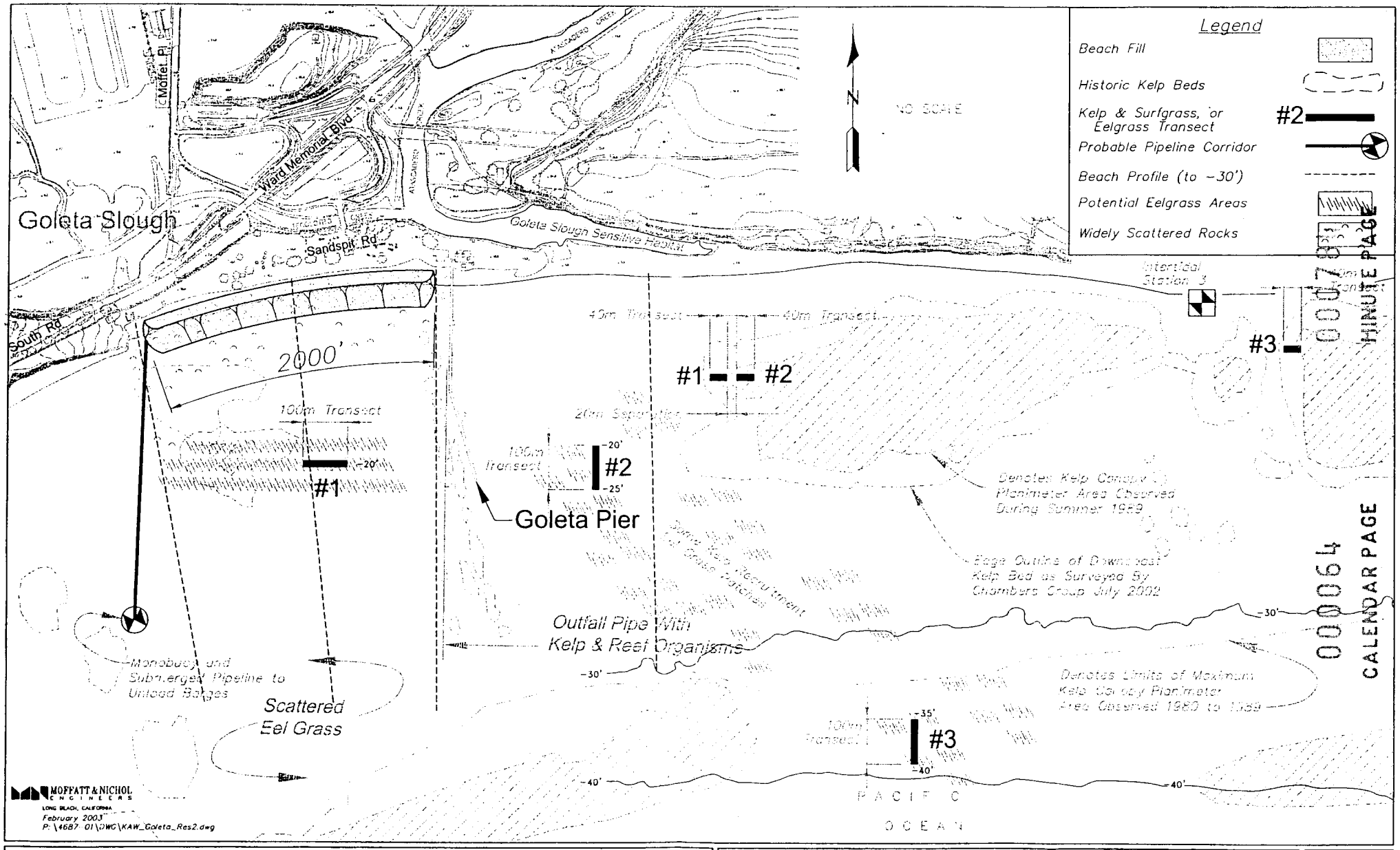
MONITOR REPORTING

Reporting

Monitoring reports will be submitted to BEACON at the end of each monitoring episode. Specifically, reports will be submitted one month after construction, and at one year and two years after construction is complete. The reports submitted at one- and two-years after construction will report cumulative data analyses. Reports and data will also be submitted to BEACON electronically for posting on the web.

Meetings

The monitoring team will present results at four meetings. The meetings may include two BEACON Board meetings and two agency staff meetings. It is anticipated that meetings will be appropriate immediately after construction, and at the one-year and two-year marks after construction.



GOLETA BEACH NOURISHMENT DEMONSTRATION PROJECT	GOLETA BEACH -- MONITORING PLAN	Figure xx