CALIFORNIA WATER COMMISSION
RESOLUTION OF NECESSITY
STAFF REPORT
September 21, 2011

RON No.: 2011-05

Project: Geotechnical Activities in support of the Bay Delta Conservation Plan (BDCP)
APN: 0177-040-040
DWR #: DCAS-506
Owner: Islands, Inc.

PROJECT

1. Description of the Project and Explanation of Why the Project is Necessary

The Department of Water Resources is planning to conduct overwater and land geotechnical borings, perform cone penetration tests (CPT) and dig approximately 30 small test pits in order to test soils in the Sacramento-San Joaquin Delta. DWR will investigate the engineering properties of the soils within a narrow corridor transecting the Delta. The purpose of the investigation is to gather necessary geotechnical information to support the preparation of a draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the proposed BDCP and/or preliminary engineering design for the Delta Habitat Conservation and Conveyance Program. This testing is necessary because of the lack of geotechnical data available in the Project location. (Excerpted from the Notice of Determination for the Final Supplemental Initial Study/Mitigated Negative Declaration, dated September 23, 2010 (SCH No. 2010062041))

2. Types of Exploration: Drill Hole, Cone Penetration Testing (CPT), Test Pits

Drill Hole: Time to complete is a maximum of 14 work days (includes site reconnaissance/restoration and drilling). Diameter of hole is approximately 5 inches with a maximum depth of 225 feet. Backfill procedure is a cement bentonite grout. Information to be obtained is continuous soil sample profile, SPT-N values (Standard Penetration Test [The N-value is used as a basis for foundation design and as a primary index of liquefaction resistance.]), and strength of material.

CPT: Time to complete is 4-6 hours. Diameter of hole is approximately 2 inches with a maximum depth of 225 feet. Backfill procedure is cement bentonite grout. Information to be obtained is soil behavior type, shear wave velocity, liquefaction potential, and ground water level.

Test Pits: Time to complete is generally 2-4 hours. A typical pit is approximately 3 feet wide, 12 feet deep, and 20 feet long. Backfill procedures are to refill the pit with original material. Information to be obtained includes bulk sample, density testing, and soil profile.

3. Purpose of the Investigation

The purpose of the investigation is to gather necessary geotechnical information to support the preparation of an Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the proposed BDCP, feasibility, and preliminary engineering design for the Delta Habitat Conservation and Conveyance Program. These geotechnical explorations are necessary because of the lack of geotechnical data available within the project location.

See attached map labeled as Exhibit A for approximate location of each type of exploration.

4. Authority to Carry Out the Project for Geotechnical Investigations

A. The Authority of the Department of Water Resources for the State Water Project

Two key sets of statutes authorize and guide the design, planning, construction, operation and maintenance of the State Water Project. These include the Central Valley Project Act, Water Code Section 11100 et seq., and the California Water Resources Development Bond Act, Water Code Section 12930 et seq. (commonly referred to as the Burns-Porter Act).

1. The Central Valley Project Act authorized and approved the Department's participation in a state-wide water development, storage and distribution system. (Water Code Section 11125.) In addition, the Legislature stated that the Department may do such acts and make such agreements as may be necessary and desirable in connection with the construction, operation and maintenance of the water project. (Water Code 11160.)
2. The Legislature amended the Central Valley Project Act specifically authorizing the Feather River Project and diversion works from the Sacramento-San Joaquin Delta. (Water Code Section 11260.) Moreover, the Legislature provided authority to add other units to the water project which are consistent with and which may be constructed, operated and maintained in furtherance of a single unified water system. (Water Code Section 11290.)
3. The Legislature required the Department to design all of the works to be constructed for the project. (Water Code Section 11551.) The Department needs access to the lands where a facility may be located to determine whether the project is feasible and at what cost.
4. The Burns–Porter Act was a General Obligation bond measure that provided funding for the initial construction of the State Water Project and provided additional specific and general authority regarding the water project. For example, the Burns-Porter Act defined "State Water Facilities" to include an aqueduct system to transport water from or near the Delta, including intake and diversion works, conduits, tunnels, siphons, pipelines and pumping systems. (Water Code Section 12934(d).) The definition of "State Water Facilities" also includes master levees, control structures, channel improvements and appurtenant facilities in the Delta for water conservation, water supply in the Delta, transfer of water across the Delta, flood and salinity control and other functions. (Water Code Section 12934(d)(3).)

B. The Department's Authority to Acquire Interests in Real Property

The Central Valley Project Act and other statutes create the Department's authority to acquire the necessary interests in real property for the water project.

1. For the purpose of constructing the water project, the Department may acquire whatever interests in real property the Department determines to be required and necessary for the construction of the project. Water Code Section 11575. When the Department is unable to acquire the necessary property by agreement with the owner, the Department may exercise the power of eminent domain to acquire the property if the project for which the property is being acquired has been authorized and funds are available. Water Code Sections 11577, 11580.
2. In addition, other provisions of law authorize the Department to acquire by eminent domain any property necessary for state water or dam purposes. Water Code Sections 250, 253. The authority for the Department to acquire real property for water and dam purposes includes the authority to acquire such property for future needs. Water Code Section 258.
3. The Department has the authority to enter onto property to do studies, examinations, tests, borings, samplings and similar activities related to the uses for which it has the power of eminent domain. Code of Civil Procedure Section 1245.010.
4. The Department is pursuing permanent easements for the geotechnical investigations based on the trial court's determination that the proposed entry was too invasive to allow without the payment of just compensation.

C. The Department Has Ample Authority to Study Water Resource and Related Issues

The Department has numerous bases of specific and general authorities to study a wide variety of water resource project related issues; a few of these are described below:

1. The Department may carry our surveys and investigations into matters relating to the water resources of the State. Water Code Section 225. The Department has authority to investigate conditions of the quality of all waters within the state and may recommend steps which might be taken to improve or protect the quality of such waters. Water Code Section 229. One of the purposes of the BDCP and DHCCP study efforts is to identify a project that will protect the quality and reliability of the water supply for the State Water Project, while improving Delta habitat.
2. The Department is charged with the evaluation of the potential impacts on water supplies derived from the Delta from subsidence, earthquakes, floods, changes in precipitation, temperature and ocean levels (collectively climate change variables), and combinations of these kinds of occurrences. Water Code Section 139.2.
3. The Department, in cooperation with the Department of Fish and Game, is charged with determining the principal options for addressing various Delta problems, such as: the potential disruption of water supplies; improving quality of drinking water; reducing salinity; maintain Delta water quality; preserving Delta islands; and protecting infrastructure, including levees. Water Code Section 139.4.

4. The Sacramento-San Joaquin Delta Reform Act of 2009 provided additional direction and authority to study Delta improvements, including the Bay Delta Conservation Plan (BDCP). Water Code Section 85320. This Act required the Department to study and analyze a reasonable range of Delta conveyance alternatives, including the through-Delta, dual conveyance, and isolated conveyance alternatives and including further capacity and design options of a lined canal, an unlined canal, and pipelines. (Water Code Section 85320(b)(2)(B).)
5. The Water Resources Law of 1945 provides various specific and general authority to the Department of investigating potential water resources projects:
    1. The Department may conduct investigations in any part of the State. (Water Code Section 12606.)
    2. The Department has the power and duty to make necessary studies and surveys, make investigations and prepare plans and estimates of costs and benefits of proposed water resources projects. (Water Code Section 12609.)
    3. The Department may conduct investigations of the water resources of the State, and formulate plans for the control, conservation, protection and utilization of water resources. (Water Code Section 12616.)
    4. The Department may investigate, conduct surveys and studies, prepare plans and estimates and produce reports concerning control, conservation, protection and utilization of water resources, including recommendations for plans and projects. (Water Code Section 12617.)
    5. The Department may recommend the construction of any water resources project and the amount of funds that should be allocated for such a project. (Water Code Section 12618.)
    6. It is the Legislature's intent that the Department shall investigate all phases of any proposed water project so that the public and the Legislature may have the benefit of the investigations and recommendations for such projects in order to assure the fullest development of the water resources of the State. (Water Code Section 12627.)

D. FUNDING: Under executed funding agreements for the BDCP and DHCCP, the participating State Water Contractors and the San Luis & Delta Mendota Water Authority have provided funding for the program, including geotechnical explorations.

Conclusion

The Department's "project" for the geotechnical investigations of Delta soils is an authorized activity and "project" for which funding is available. Therefore, the Department may exercise eminent domain pursuant to Water Code Sections 250 and 11580.

STATISTICS

AS OF SEPTEMBER 14, 2011			
# of Parcels to be Acquired	# of Parcels Acquired	# Right of Entry	# of Owners to Appear
62	0	0	48

PARCEL INFORMATION

1. Detail Parcel Description:

The subject property is a 336.3-acre irregular rectangular shaped parcel improved with a single family residence and two farm residences with outbuildings. Additional improvements include young cherry orchard along the levee with an underground irrigation system along with agricultural equipment buildings. The subject ownership is located in an unincorporated area of Solano County, fronting the Deep Water Channel. The property is accessed from State Route 84 in southern Solano County.

Zoning: Agricultural Preserve Zone 1 (A-P)
Current use: Agriculture-Irrigated Field Crops

2. Status of Parcel:

Property owner has met with DWR staff at the subject property to review the drill site location. Property owner is interested in the temporary easement and requested to revise the contract to limit access to fourteen days. Negotiations are on-going.

3. First Written Offer (FWO):

- Date of FWO: July 7, 2011
- Amount of Agency's Latest Written Offer: Offer made pursuant to approved staff appraisal.
- Amount of Owner's Counteroffer: None
- Rights Sought:

Parcel Number	Area	Rights to be Acquired
Unit A	16 sq. ft.	Permanent Non-Exclusive Easement
Unit B	10,000 sq. ft.	Temporary Construction Easement
Unit C	2,290 sq. ft.	Temporary Access Easement

4. Location:

- The attached Exhibit A shows the parcel boundary and approximate location of the rights to be acquired.

- DWR proposes to conduct one (1) CPT and one (1) drill hole within the 4' x 4' permanent easement area. The proposed drilling activities are necessary as the subject property lies within the footprint of the West option. The geologic data collected will help identify impacts on the local environment and community as a result of canal excavation and will help to evaluate the stability of the canal embankments.
- The proposed drill site location was selected to minimize impacts to agricultural operations.

PROPERTY OWNER

1. A listing of owner's primary concerns and DWR's response:

- Property owner expressed concerns regarding domestic well located about 25 feet from drill site.
  DWR response: The drill site will not impact the domestic well.

- Property owner requested more information about the drilling operations: number of people, vehicles, support equipment, etc.
  DWR response: DWR addressed property owner's questions and concerns during on-site meeting.

2. A description of any design or right of way modifications suggested by the owner, including DWR's opinion on the feasibility of these suggestions and the basis for DWR's opinion (why they are not feasible):

Property owner did not provide any design modifications for DWR to consider.

3. A description of official contacts or attempted contacts with the property owner (or representative) involving acquisition and formal offers:

- October 2008: DWR mailed letter inviting property owner to attend BDCP meetings being held in the Delta.
- January 2009: Temporary Entry Permit mailed. Phone calls and letters were exchanged. Owner referred DWR to their attorney. TEP was not signed.
- July 2011: Mailed First Written Offer to secure easements for geotechnical activities. Phone calls were exchanged and meeting held on-site to review drill location. Negotiations are on-going.

4. A description of alternatives to the proposed taking that have been considered by DWR:

- Temporary Entry Permit requested. (January 2009)
- Permanent and Temporary Easements requested. (July 2011)
- Right of Way Contract for Temporary Easement offered. (August 2011)

For further information please contact Allan Davis at (916) 952-2779 or by email at aldavis@water.ca.gov.

Solano County

N.T.S.

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
DIVISION OF ENGINEERING - GEODETIC BRANCH

This exhibit does not represent a Survey and is for informational purposes only

DELTA HABITAT CONSERVATION AND CONVEYANCE PROGRAM
EXHIBIT A