

# **City of Huntington Beach**

## **Newland Avenue Widening & Storm Drain**

### **Summary:**

The City of Huntington Beach is currently finalizing the design for a project that will widen Newland Street from Pacific Coast Highway to Hamilton Avenue.

Newland Street right-of-way is 80' wide from the intersection of Pacific Coast Highway to approximately 700' north of the intersection, where the Right of Way changes to 40' East of centerline and 20' west of Centerline. This section of Newland Street is a popular path used by pedestrians and bicyclists to access the beach. Currently there is only a single lane of travel in each direction with no sidewalk or bike lane for a majority of the distance within the project area.

Additionally, a significant grade differential exists where Newland Street crosses the Huntington channel. This grade differential creates a significant stopping sight distance deficiency at the intersection of Newland Street and Edison Way, as cars traveling south on Newland Street do not have sufficient time to react if another car has stopped to make a left hand turn onto Edison Way.

The City's objective is to widen Newland Street, from Pacific Coast Highway to Hamilton Avenue, from the current width to a 44' - 48' wide traveled way section, with bike lanes, a sidewalk and center striped median. The proposed widening will also address stopping sight distance deficiency, by raising the road grade at the Huntington Channel and providing a left turn lane at the intersection of Newland and Edison Way. As part of the widening, 2 existing streetlights will be relocated, and 3 additional streetlights, similar to those existing, will be installed along the east side of Newland, per City of Huntington Beach standards.

It is anticipated that construction will occur in the Fall of 2006, and take approximately 6 to 8 months to complete.

The proposed widening improvements will impact the existing drainage along Newland St., requiring an unimproved drainage ditch to the east of the roadway to be replaced. The drainage ditch has had a history of problems, as there is no natural outlet for this ditch.

In previous years, the City had a pump system set up at the downstream end of the ditch to automatically turn on and pump the stormwater from the ditch, through a force main, to a culvert located at the intersection of Newland Street and Pacific Coast Highway. A few years ago, when there was concern over high bacteria levels within the coastal waters, the city removed the automated pump system during the dry season, to eliminate the ditch as a possible source of bacteria. The City would set up a temporary pump system during storm events to keep the ditch from flooding Newland Street.

It is proposed to replace the existing unimproved drainage ditch with a 39"RCP storm drain & associated catch basins. This will eliminate the need for a pump/force main to provide the drainage for Newland Street from the Huntington Channel to Pacific Coast Highway. In addition, the City will be installing a sewer line stub connecting into the OCSD Trunk Main in Newland Street, at the

intersection of Newland & Edison for a future relocation of the existing sewer line serving the properties along Edison Way into the existing right-of-way.

A Reinforced Concrete Box (RCB) acts as a bridge where Newland Street crosses the Huntington Channel. In order to accommodate the road widening, the ends of this box must be lengthened within the channel, requiring the removal of the headwalls on the upstream and downstream ends, and forming and pouring of extensions to the ends of the RCB.

The county recently completed a significant capacity expansion of the Huntington channel, by driving sheet piles along the banks and removing fill, converting the channel from an earthen walled trapezoidal channel to a rectangular steel walled channel. The County stopped their sheet piling approximately 20' short of the Newland Street Bridge on both the upstream and downstream sides, in order to accommodate for the City's widening of the bridge. In order to provide interim protection of the existing bridge against erosion, the County placed Rip Rap to prevent scouring around the headwall of the RCB. As part of this project, the City will remove the rip-rap material placed within the channel during the County's recent work on the Huntington Channel, and clean out any sediment that accumulate within the existing RCB cells.

As part of the bridge widening within the Huntington Channel several existing utilities hung on the side of the existing RCB shall be relocated to pass underneath the expanded portion of the RCB. These utilities include a privately owned fuel line, and a City owned 12" water main. In addition the City will be installing a 36" steel sleeve underneath the upstream section of the lengthened RCB to minimize the impact to the channel for a future Water Transmission main.

Work within the channel will require the use of an excavator to remove the existing rip-rap material and to clear a portion of the channel floor to form the RCB extensions. Temporary dams or some other method of isolating the RCB from the channel flow will also be required to facilitate the construction of the lengthened sections. The method used will be at the contractors discretion, but could include the use of inflatable dams.