



Federal Emergency Management Agency

Washington, D.C. 20472

JUN 06 2002

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:
Case No.: 01-09-393R

The Honorable Debbie Cook
Mayor, City of Huntington Beach
City Hall
2000 Main Street
Huntington Beach, CA 92648

Community: City of Huntington Beach, CA
Community No.: 065034

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Dear Mayor Cook:

This responds to a request that the Federal Emergency Management Agency (FEMA) comment on the effects that a proposed project would have on the effective Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) report for Orange County, California and Incorporated Areas (the effective FIRM and FIS report for your community), in accordance with Part 65 of the National Flood Insurance Program (NFIP) regulations. In a letter dated February 5, 2001, Theodore V. Hromadka II, Ph.D., Ph.D., Ph.Dc., P.H., P.E., Exponent Failure Analysis Associates (Exponent), requested that FEMA evaluate the effects that the proposed Shea Homes Parkside Estates development along the northern overbank of East Garden Grove-Wintersburg Channel from approximately 3,200 feet downstream to just downstream of Graham Street would have on the flood hazard information shown on the effective FIRM and FIS report. The proposed development will consist of:

- 1) Placement of fill in the overbank areas bordered on the south by East Garden Grove-Wintersburg Channel, on the east by Graham Street, on the north by a property line that is approximately parallel to and 100 feet south of Kenilworth Drive, and on the west by a north-south tract boundary that is approximately 2,200 feet west of Graham Street (Shea Homes property);
- 2) Construction of a gated 10-foot-diameter culvert beneath the East Garden Grove-Wintersburg Channel;
- 3) Addition of two 147-cubic-feet-per-second (cfs) pumps to the Slater Pump Station;
- 4) Construction of steel sheet-pile walls along the southern boundary of the development; and
- 5) Development of an internal drainage system to convey the interior drainage and potential flows that may result from levee breaches.

The request also included a revised hydrologic study for East Garden Grove-Wintersburg Channel.

In addition, the request included a study entitled "Final Response to FEMA May 2, 2002, Comments on February 5, 2001, Request for Conditional Letter of Map Revision: Shea Homes Parkside Estates Tentative Tract Nos. 15377 & 15419: Expanded Watershed Analysis of East Garden Grove-Wintersburg Channel Watershed from the Tide Gates to I-405 Freeway," prepared by Exponent, dated May 16, 2002. This study is comprised of detailed proposed conditions "with-levee" and "without-levee" HEC-UNET, Version 4.0, models dated May 16, 2002. These models include East Garden Grove-Wintersburg Channel

from its confluence with the Pacific Ocean to its crossing over the San Diego Freeway; Ocean View Channel from its confluence with East Garden Grove-Wintersburg Channel to its crossing over the San Diego Freeway; and associated levees, pump stations, bridge structures, and gated culverts. Because the existing levees along East Garden Grove-Wintersburg Channel are not certified in accordance with Section 65.10 of the NFIP regulations, the modeling involved failing levees in accordance with the FEMA *Guidelines and Specifications for Flood Hazard Mapping Partners*, dated February 2002. As a result of these hydraulic models and a revised delineation of the Special Flood Hazard Area (SFHA), the area that would be inundated by the flood having a 1-percent chance of being equaled or exceeded in any given year (base flood), the FIRM and FIS report can be revised not only for the Shea Homes property but also for the entire study reach.

All data required to complete our review of this request for a Conditional Letter of Map Revision (CLOMR) were submitted with letters from Mr. Neil M. Jordan, P.E., Senior Engineer, also with Exponent, and Dr. Hromadka.

Because this request also affects the unincorporated areas of Orange County, a separate CLOMR for that community was issued on the same date as this CLOMR.

We reviewed the submitted data and the data used to prepare the effective FIRM for your community and determined that the proposed project meets the minimum floodplain management criteria of the NFIP. The effective HEC-RAS model dated January 26, 2000, was used as the base conditions model in our review of the proposed conditions model for the CLOMR request. We believe that, if the proposed project is constructed as shown on the map entitled "Tentative Tract Map No. 15377," prepared by Hunsaker & Associates, dated February 1, 2001, and the data listed below are received, a revision to the FIRM would be warranted.

As a result of more detailed topographic information, the water-surface elevation (WSEL) of the base flood will decrease compared to the effective base flood WSEL along East Garden Grove-Wintersburg Channel. The maximum decrease in base flood WSEL, 1.9 feet, will occur approximately 1,000 feet downstream of Gothard Street.

As a result of the more detailed topographic information, the proposed project, and the failure of uncertified levees, the base flood WSEL will decrease compared to the effective base flood WSEL along the northern overbank of East Garden Grove-Wintersburg Channel. The maximum decrease in base flood WSEL, 6.4 feet, will occur in an area bordered on the west by Graham Street, on the east by Springdale Street, on the south by Warner Avenue, and on the north by Heil Avenue. The base flood WSEL within the Shea Homes property will be 2.2 feet, referenced to the National Geodetic Vertical Datum of 1929. The width of the SFHA will decrease from approximately 2,120 feet downstream of Graham Street to just downstream of the San Diego Freeway.

As a result of the more detailed topographic information, the proposed project, and the failure of uncertified levees, the base flood WSEL will decrease compared to the effective base flood WSEL along the southern overbank of East Garden Grove-Wintersburg Channel. The maximum decrease in base flood WSEL, 5.9 feet, will occur in an area bounded approximately on the west by the Slater Pump Station, on the east by Gothard Street, on the south by Central Park Drive, and on the north by Slater Avenue.

Upon completion of the project, your community may submit the data listed below and request that we make a final determination on revising the effective FIRM and FIS report.

- Effective June 1, 2000, FEMA revised the fee schedule for reviewing and processing requests for conditional and final modifications to published flood information and maps. In accordance with this schedule, the current fee for this map revision request is \$3,400 and must be received before we can begin processing the request. Please note, however, that the fee schedule is subject to change, and requesters are required to submit the fee in effect at the time of the submittal. Payment of this fee shall be made in the form of a check or money order, made payable in U.S. funds to the National Flood Insurance Program, or by credit card. The payment must be forwarded to the following address:

Federal Emergency Management Agency
 Fee-Charge System Administrator
 P.O. Box 3173
 Merrifield, VA 22116-3173

- As-built plans, certified by a registered professional engineer, of all proposed project elements
- Community acknowledgment of the map revision request
- Please provide evidence that the proposed levee along the southern boundary of the Shea Homes property ties into the high ground at both ends.
- Please ensure that the proposed levee system surrounding the Shea Homes property conforms to all requirements of Section 65.10 of the NFIP regulations, in particular the provisions concerning freeboard, closure devices and mechanisms for interior drainage, anticipated erosion, embankment stability, retention of freeboard during settlement, and operation and maintenance plans.
- Hydraulic analyses, for as-built conditions, of the base flood, if they differ from the proposed conditions models. Please note that the HEC-UNET models dated May 16, 2002, must be resubmitted if they differ from the proposed conditions models.
- Please note that the work map entitled "Certified Topographic Workmap," prepared by Hunsaker & Associates, dated May 16, 2002, does not correctly represent the base flood WSEL for Storage Areas 8 and 20. Please submit a corrected work map.

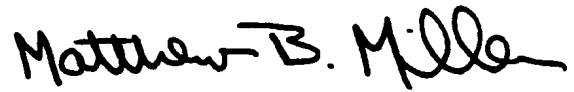
After receiving appropriate documentation to show that the project has been completed, FEMA will initiate a revision to the FIRM and FIS report. Because Base Flood Elevations (BFEs) would be established as a result of the project, a 90-day appeal period would be initiated, during which community officials and interested persons may appeal the BFEs based on scientific or technical data.

The basis of this CLOMR is, in whole or in part, a culvert project. NFIP regulations, as cited in Paragraph 60.3(b)(7), require that communities assure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained. This provision is incorporated into your community's existing floodplain management regulations. Consequently, the ultimate responsibility for maintenance of the culvert rests with your community.

This CLOMR is based on minimum floodplain management criteria established under the NFIP. Your community is responsible for approving all floodplain development and for ensuring all necessary permits required by Federal or State law have been received. State, county, and community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction in the SFHA. If the State, county, or community has adopted more restrictive or comprehensive floodplain management criteria, these criteria take precedence over the minimum NFIP criteria.

If you have any questions regarding floodplain management regulations for your community or the NFIP in general, please contact the Consultation Coordination Officer (CCO) for your community. Information on the CCO for your community may be obtained by calling the Chief, Community Mitigation Programs Branch, Mitigation Division of FEMA in San Francisco, California, at (415) 923-7184. If you have any questions regarding this CLOMR, please call our Map Assistance Center, toll free, at 1-877-FEMA MAP (1-877-336-2627).

Sincerely,



Matthew B. Miller, P.E., Chief
Hazards Study Branch
Federal Insurance and
Mitigation Administration

Enclosures

cc: The Honorable Cynthia P. Coad
Chair, Orange County
Board of Supervisors

Mr. Sara Bavan
Manager
Flood Control Planning
County of Orange

Mr. David Webb
City Engineer
Department of Public Works
City of Huntington Beach

Mr. Neil M. Jordan, P.E.
Senior Engineer
Exponent Failure Analysis Associates

Mr. Ronald C. Metzler
Vice President, Planning and Development
Shea Homes