



CITY OF NEWPORT BEACH
COMMUNITY DEVELOPMENT DEPARTMENT
BUILDING DIVISION

100 Civic Center Drive | P.O. Box 1768 | Newport Beach, CA 92658-8915
www.newportbeachca.gov | (949) 644-3200

DRAINAGE
PLAN REVIEW COMMENTS

Project Description:

Project Address:

Plan Check No.:

Permit App. Date:

Permit App. Expires:

CY Cut/Fill:

Permit Valuation:

Adjusted Valuation:

Architect/Engineer:

Phone:

Applicant/Contact:

Phone:

Plan Check Engineer:

Phone:

Engineer email:

1st Review: (date)

2nd Review:
Italic comments

3rd Review:
By Appointment

The project plans were reviewed for compliance with the following codes and standards:

2013 CBC; 2013 CPC; 2013 California Green Building Standards Code (CALGreen); & Chapter 15 of the Newport Beach Municipal Code (NBMC).

The code section references are from the 2013 CBC, unless otherwise stated.

- **TO EXPEDITE PROJECT APPROVAL:** Please provide a written response indicating how and where each comment was resolved on the plans.
- Resubmit all previously reviewed plans, updated plans and supporting documents with each subsequent review.
- **AFTER 2nd PLAN REVIEW:** Please call the plan check engineer listed above or Debi Schank at (949) 644-3284 to schedule a plan review appointment, to expedite project approval.
- For clarification of any plan review comment, please call the plan check engineer listed above.
- Plan review status is available online at www.newportbeachca.gov. Project status is also available using the interactive voice response system at 949-644-3255, or by speaking with a permit technician at 949-644-3288 during business hours.

GENERAL:

1. Please note on plan: "ISSUANCE OF A BUILDING PERMIT BY THE CITY OF NEWPORT BEACH DOES NOT RELIEVE APPLICANTS OF THE LEGAL REQUIREMENTS TO OBSERVE COVENANTS, CONDITIONS AND RESTRICTIONS WHICH MAY BE RECORDED AGAINST THE PROPERTY OR TO OBTAIN PLANS. YOU SHOULD CONTACT YOUR COMMUNITY ASSOCIATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION AUTHORIZED BY THIS PERMIT."
2. Please note on plan: "PRIOR TO PERFORMING ANY WORK IN THE CITY RIGHT-OF-WAY AN ENCROACHMENT PERMIT MUST BE OBTAINED FROM THE PUBLIC WORKS DEPARTMENT."
3. Include the following on all plan sheets in the title block:
 - a. Site address,
 - b. Plan preparer's name, address and telephone number,
 - c. Property owner's name, address and telephone number.
4. Final drawings which will be approved for permit issuance shall be signed by the respective design professionals (electronic signature is acceptable). This comment will remain up to and include at the time of permit issuance.

SURVEY CORRECTIONS:

5. Provide a site survey, stamped and signed by a State Licensed Land Surveyor or authorized Civil Engineer (License Number below 33,966). Provide note on plan, "Surveyor or engineer shall permanently monument property corners or offsets before starting grading."
6. Show north point and scale.
7. Show location and description of all corner monuments.
8. Show and identify all property lines. Dimension length and specify bearing.
9. Show driveway, curb and gutter, and all existing site improvements (structures, walls, planters, stairs, etc.).
10. Identify all finish surface materials.
11. Provide a legend for all symbols used.
12. Locate all trees in public-right-of-way facing or within 20 feet of the subject property; power poles; utility boxes, etc.
13. Show center line of street and dimension width or ½ width.
14. Specify benchmark used for survey.
15. Provide elevations at the following locations:
 - a. All property corners.
 - b. Around existing structure(s) at corners, including corners at jogs of exterior walls.
 - c. At interior finish floor elevations.
 - d. At bottom of all site walls. Indicate wall height.
 - e. At bottom of elevated planters. Indicate planter height.
 - f. At maximum spacing of 25' along the length and width of the property on all sides of an existing structure.
 - g. Elevation contours for sloping sites every one foot elevation change.
 - h. Three elevations (min.) equally spaced in the side yard of adjacent properties.
 - i. Three elevations along the flow line in gutter and alley adjacent to site.

DRAINAGE CORRECTIONS:

16. For projects NOT requiring a WQMP report (see items 63 and 64 below) design the drainage system to retain concentrated and surface sheet flow water from dry-weather run off and minor rain events within the site. Sheet flow through lawn area to a minimum 15' long French drain in crushed rock bed wrapped with filter cloth is acceptable as shown in Figure A, on last page, provided (a) site meets infiltration feasibility criteria as set forth in Table 2.7 of the Technical Guidance Document and (b) one French drain per maximum of 2,000 sf of impervious area having appropriate hydraulic source controls. For sites not suitable for infiltration per Table 2.7, considerations should be given to feasibility of harvest and use per Appendix X of TGD, and if not feasible bioretention and finally biofiltration to treat design capture volume prior to discharge. Locate French drain away from foundations and slopes. (Alternate: Provide hydrology calculations and design retention system to retain $\frac{3}{4}$ " of rain over 24 hr.)
17. Provide a trench drain at bottom of driveway as shown in Figure B on last page. (Exception: When driveway is less than 10' long, trench drain is not required).
18. Provide a minimum grade fall of 6 inches within the first 10 feet from foundation wall. Show flow arrows to define drainage pattern around proposed structures. (CRC R401.3 – See allowable exceptions).
19. The placement of building and structures on or adjacent to slopes steeper than one unit vertical in three units horizontal shall conform to CRC R403.1.7 & CBC 1808.7.
20. The site shall be planned and developed to keep surface water from entering the building. The Plot / Site Plan provided does not adequately define site drainage. Construction plans shall indicate how the site grading or drainage system will manage surface water. Provide sufficient existing/proposed contours or ground elevations to define both onsite and offsite drainage pattern.
21. Proposed work alters existing drainage on adjacent property. Provide revised drainage plan that does not affect the adjacent property.
22. Provide for the contributory storm water by constructing interceptor or other approved devices. Show details of all pertinent drainage devices e.g., sizes, elevations, type of material, inlet and outlet structures, energy dissipators.
23. Define roof drainage. Show down spout and location of discharge to ground surface which shall be at least 5 feet from foundations walls or to an approved drainage system. Unless otherwise recommended by a Geotechnical Engineer (CRC R801.3).
24. Clean-outs are required at all points of closed drains where the grade changes from a steep to a relatively flat slope. Clean-outs must be provided every 100 feet for residential projects.
25. Provide concrete swale behind wall. Provide detail of swale.
26. Provide subdrains for all concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade. (CRC R405.1).
27. Provide waterproofing for walls or portions thereof that retain earth and enclose interior spaces and floors below grade. (CBC 1805 & CRC R404, R405 & R406)
28. If there is evidence that the surface water does not readily drain from the building site, the grade in the under-floor space shall be as high as the outside finished grade, unless an approved drainage system is provided. (CRC R408.6).
29. The project requires a sump pump to outlet drainage from the site. Submit sump pump sizing calculations along with pump manufacturers design information and rating curves. Plans must show complete details for sump pumps on the plans including pipes, valves, dimensions, material type and size, elevations, cross sections, and construction notes. A separate electrical permit from Building Division is required. Calculations must be stamped and signed by a Registered Civil Engineer.
30. Pursuant to Section 1808.7.4 of the 2013 CBC "the top of any exterior foundation shall extend above the elevation of the street gutter at point of discharge or the inlet of an approved drainage

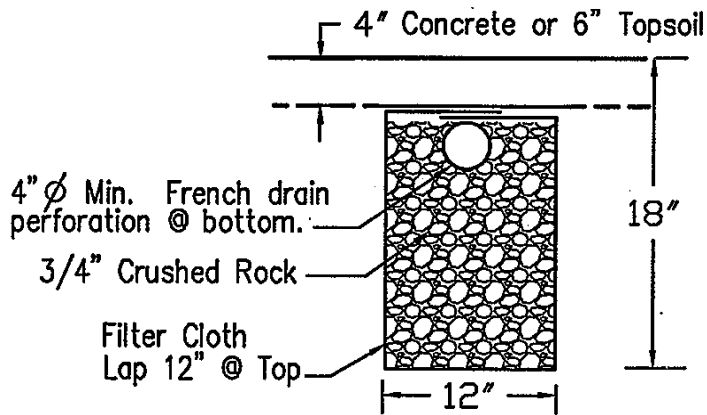
devise a minimum of 12 inches plus 2 percent." Drainage shall conform to Section 15.10.120 (f) of the NBMC.

31. Provide a drainage design that prevents entrance of drainage water from the street/alley onto property.
32. Clearly show elevation of adjacent properties and the distance from property lines to adjacent structures.
33. Comply with the minimum slope at the following areas (NBMC 15.10.120 F):

Earth	2.0%
Concrete	0.5%
Concrete gutter in paved area	0.2%
Asphalt	1.0%
Subterranean drainage pipe	1.0%
34. Show finish grades by spot elevations to indicate proper drainage in all areas. Use arrows to indicate direction of drainage.
35. Provide a drainage swale at side yard. Draw a section through swale.
36. Show top of drain elevations and drain invert elevations.
37. Provide specifications for drain lines. Specify diameter 4" (min.) and type of material. The following drain line materials may be used:
 - a. ABS, SDR 35
 - b. ABS, SCHEDULE 40
 - c. PVC, SDR 35
 - d. PVC, Schedule 40
 - e. ADS 3000 with PE glued joints
38. Use UPC Table 11-2 to determine required site drain pipe size (diameter) and slope.
39. The minimum distance between exterior finish grade and bottom of treated sill plate shall be as follows (CRC 317.1):
 - a. 3" to concrete finish
 - b. 8" to soil

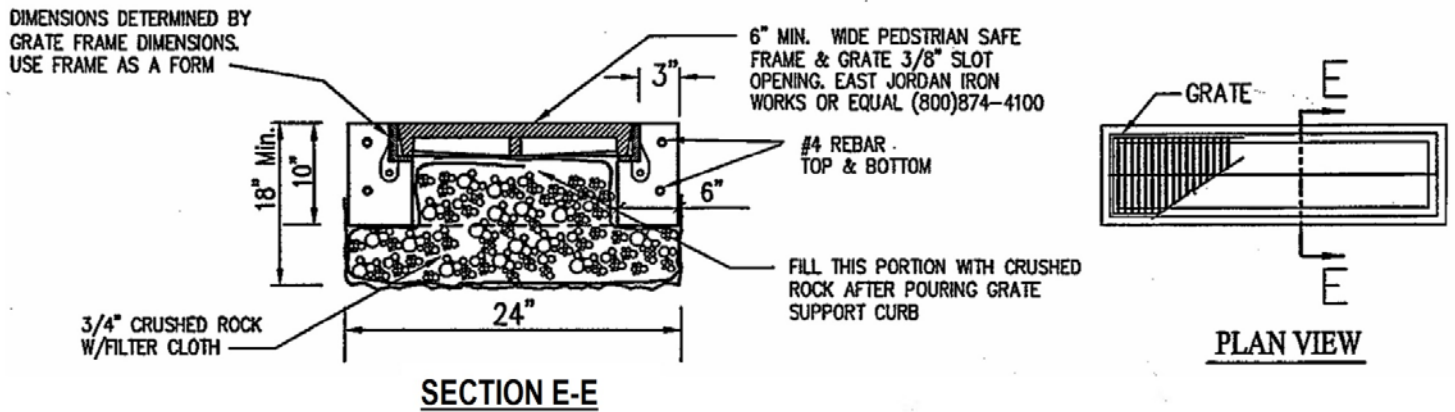
ADDITIONAL CORRECTIONS:

40. See drawings for additional corrections.



PERFORATED DRAIN/TRENCH DETAIL

Figure A



BOTTOMLESS TRENCH DRAIN

Figure B

- a- Dig a 24" wide X 18" minimum depth trench
- b- Place filter cloth in the trench. Lap 12" @ top
- c- Fill bottom of the trench with 3/4" crushed rock.
- d- Form and pour perimeter concrete curb.
- e- Fill the rest of the trench with crushed rock to 4" from top of trench.