

Design Review

Although not technically a part of the CEQA review process, Design Review offers an opportunity to impose conditions with fewer restraints than CEQA because of the lack of a requirement for a nexus for each mitigation condition. Design Review is a powerful tool, but there has been a pattern among city staff in the Planning Department, City Attorney's Office and even in the City Manager's Office, to diminish the authority and jurisdiction of the Design Review Board.

This has been part of a general trend by staff to relegate Design Review to superficial elements of building exteriors and sites. With respect to projects in the Chevron Refinery, staff has tended to further restrict jurisdiction, justifying that projects deep within the refinery are not visible to the general public, do not require landscaping and therefore are out of the realm of design review because there are few, if any, aesthetic issues.

I believe that the staff effort to diminish Design review is unjustified, particularly with respect to refinery projects. There is nothing in RMC 15.930, Design Review, that provides a basis for reinterpreting and weakening the applicability of Design Review. Staff has justified their activities in this respect by arguing that the current ordinance is not rational or that it is going to be changed sometime in the future. There is no legal basis for either of these assertions.

First of all, other than relating to "exterior construction,"¹ there is no limitation on the applicability of the DRB's authority or jurisdiction. Indeed, the enabling ordinance was not titled "aesthetic review" or "landscape review;" it is given the broad and comprehensive title of "Design Review."

The term "design" is not defined in Chapter 15.04 or any other part of the RMC. However, *Wikipedia* provides a good discussion of the meaning of "design:"

Design, usually considered in the context of [applied arts](#), [engineering](#), [architecture](#), and other [creative](#) endeavors, is used both as a [noun](#) and a [verb](#). As a verb, "to design" refers to the process of originating and [developing a plan](#) for a product, structure, system, or component. As a noun, "a design" is used for both the final (solution) [plan](#) (e.g. proposal, drawing, model, description) or the result of implementing that plan (e.g. object produced, result of the process). More recently, processes (in general) have also been treated as products of design, giving new meaning to the term "*process design*".

Designing normally requires a [designer](#) to consider the [aesthetic](#), [functional](#), and [many other aspects of an object or a process](#), which usually requires considerable [research](#), [thought](#), [modeling](#), interactive [adjustment](#), and re-design.

Similarly, the purpose of Design Review is broadly defined (15.04.930.020.B)

¹ 15.04.930.020 Applicability. A. The Design Review Board shall review and/or approve, as the case may be, the design of [exterior construction](#) or modifications for which a building permit, zoning permit, certificate, or discretionary planning approval is required

The purpose of this section is to promote orderly, attractive, and harmonious development; to recognize environmental limitations on development; to enhance land values and investments; to maintain and enhance the character of existing residential, commercial, and industrial areas; and, to promote the general welfare by preventing development having qualities that would not meet the specific intent, clauses, or performance standards of this chapter or that are not properly related to their sites, surroundings, or their environmental setting.

There is no waiver, exemption, or reduction in jurisdiction or authority for heavy industrial sites, such as the Chevron Refinery. In fact, just the opposite intent is made clear. In the requirements for Heavy Industry Zoning Districts, conformance with Performance Standards (RMC 15.04.840) is specifically required, including Design Standards (Design Review).

15.04.840.070 Design Standards. Projects shall be subject to site and development review per Section 15.04.930 of this chapter. Particular emphasis shall be placed on project design, site planning, building elevations, and neighborhood/area compatibility. Projects shall conform with specific design standards included in area and specific plans as applicable.

Development Standards include:

15.04.330.050 Development Standards. The following is a partial listing of standards that shall apply in the M-3-heavy industrial districts. For a complete delineation of all development standards applicable refer to Section 15.04.830. If the property is located within an area governed by a specific plan, then its provisions would apply.

15.04.330.055 Exterior Development Standards. Exterior development is permitted in this industrial district (M-3) subject to the following minimum setbacks and landscaping requirements. Exterior development allowed includes:

1. Exterior activities: outdoor processing, assembly, or fabrication of goods, maintenance, repair and salvage of equipment;
2. Exterior storage: outdoor storage of raw or finished goods, including gases, ore, chemicals, gravel, etc., building materials, packing materials, salvage goods, machinery, equipment, damaged vehicles, etc.
 - Landscaping (see Section 15.04.820 for definitions)
 - Minor Street: 10 foot setback and Green growing ground cover, and high solid screen
 - Collector street: 25 foot setback and Green growing ground cover, low hedge, and high solid screen

Exterior development subject to vehicular traffic and accessible by driveway and/or curb cut shall be paved per the requirements of the Department of Public Works.

15.04.330.060 Performance Standards. The uses in this district must comply with all applicable performance standards delineated in Section 15.04.840.

15.04.330.070 Parking and Loading Standards. In addition to the number of parking spaces which follow, all parking and loading must comply with the provisions contained in Section 15.04.850.

15.04.330.080 Signs. All signs must comply with the applicable provision of Section 15.04.860, in addition to Chapter 15.06, Sign Ordinance, and Chapter 4.04, Sign Code.

15.04.330.090 Administrative and Enforcement Procedures. All activities, development and uses allowed in this district are subject to the provisions contained in Section 15.04.900. Provisions of this section and any conditions of approval will be enforced in accordance with the provisions set forth in Sections 15.04.950 and 15.04.990.

Standards in the referenced 15.04.840 include:

- 5.04.840.040 Lighting and Glare Standards. All lighting, reflective surfaces or any other sources of illumination shall be utilized in a manner which produces no glare on public streets or on any other parcel. Lights shall be shielded at lot lines so as not to be directly visible from an adjoining residential district.
- 15.04.840.070 Design Standards. Projects shall be subject to site and development review per Section 15.04.930 of this chapter. Particular emphasis shall be placed on project design, site planning, building elevations, and neighborhood/area compatibility. Projects shall conform with specific design standards included in area and specific plans as applicable.
- 15.04.840.120 Screening of Activities and Mechanical Equipment. All exterior mechanical equipment shall be screened from public view. Equipment to be screened includes but is not limited to, heating, air conditioning, water tanks, transformers, satellite receiving antennas (greater than 3 feet in height and 12 inches in diameter). Screening materials may be solid concrete, wood or other opaque material and shall effectively screen mechanical equipment so that it is not visible* from a street or adjoining lot.

No operation or activity shall be permitted which will be directly visible to public view or to adjoining properties. Activities requiring the storage of wastes, materials or parts or assembly facilities must be screened from view. Machinery or equipment which, because of size and function, cannot be installed for practical purposes within an enclosed building shall be screened.

Due to its size, some outdoor equipment which is ancillary to operations in M-3 and M-4 districts may not be fully screened from view and therefore operators of such equipment shall be required to provide screening which is consistent with provisions of 15.04.820.013, Requirements Applicable to Commercial and Industrial Properties. Further, all mechanical equipment, switching boxes, transformers, etc., shall be screened from off-site view.

*NOTE: Visible means noticeable by a person 6 feet tall in height walking on a

street or sidewalk two years after installation of any planting intended to screen a view.

- 15.04.840.130 Maintenance. Each person, company or corporation residing in and/or utilizing a property in the City of Richmond shall, at all times, maintain such property in good order. This shall include a litter management program and repair and maintenance of all structures, fences, signs, walks, driveways, lawns, landscaping, painting, etc., as may be necessary to preserve a quality environment.

The above referenced 15.04.820.13, includes the following:

- 5.04.820.013 Requirements Applicable to Commercial and Industrial Properties. Fence Requirements.
 - A. Solid Fencing. Any activity may have a solid fence. All outside storage/maintenance areas are required to be screened from public streets by a painted, view-obscuring wood board fence or masonry wall of uniform material that is designed and constructed to withstand a 15-pound-per square foot wind load and deterioration resulting from contact with soil, vermin and weathering. In industrial zone areas, the following specifications for low solid screen, high solid screen and/or solid screen fencing shall also apply. For industrial areas adjacent to residential uses, a solid wall as described below is required unless an alternate plan is approved by the development review organization (DRO), or other designated design review body.
 1. Low Solid Screen. A fence or wall 3 to 4 feet high and fully sight-obscuring. It may be painted, view-obscuring wood board fence or masonry wall of uniform material that is designed and constructed to withstand a 15 pound-per-square foot wind load and deterioration resulting from contact with soil, vermin and weathering. Wire fences with dark colored, durable, matte finishes (both wire and posts) and vinyl slats are permitted if also planted with fast growing trees, hedge plants, upright shrubs or evergreen vines and used in combination with green growing ground cover or low hedge landscaping.
 2. High Solid Screen. A screen 6 to 8 feet high and sight-obscuring. It may be painted, view-obscuring wood board fence or masonry wall of uniform material that is designed and constructed to withstand a 15 pound-per-square foot wind load and deterioration resulting from contact with soil, vermin and weathering. Wire fences with dark colored, durable, matte finishes (both wire and posts) are permitted if also planted with trees, hedge plants, shrubs or vines and used in combination with green growing ground cover or low hedge landscaping. May also be a masonry wall with lattice work resulting from an open brick pattern or use of open masonry blocks.
 3. Solid Wall. A wall 6 to 8 feet high and fully sight-obscuring. The wall may be masonry, brick, concrete or exposed aggregate and is designed and constructed to withstand a 15 pound-per-square foot wind load and deterioration resulting from contact with soil, vermin and weathering.
 - B. Open or Semi-Open Fencing. A chain-link (nonmetallic finish) fence with or without vinyl slats may be used if a solid fence is not required. No fence or wall that adjoins a residential lot, residential district or fronting on a public thoroughfare or highway shall incorporate barbed wire or other sharp, protruding objects, pursuant to Section 11.88.020 of this Code.
 - C. Height. No fence or wall shall exceed 3 feet in height, except if the

Development Review Organization grants an adjustment when such installation is deemed necessary.

D. Maintenance. Fencing shall be continuously maintained. There shall not be any sign of disrepair. Fence should be periodically treated to maintain finish in a rust-free condition.

Landscaping Requirements. A. Minimum Landscaped Area. All lots with 5000 square feet or more of total land area shall provide a landscaped area of at least 10% of the total land area including open areas except when otherwise specified by the Development Review Organization. Street trees shall be planted as provided in Section 15.04.820.012B. These areas shall be incorporated into the landscape plan for the whole site and treated and maintained as a unit. The Development Review Organization (DRO) or other designated design review body may approve the inclusion of areas maintained in a native planting or naturalistic state as green growing ground cover in calculating the landscaped area.

For industrial zone areas, the following material specifications for open areas, green growing ground cover, low hedge and/or high hedge shall apply:

1. Open Areas. Required open areas shall be landscaped, seeded or left in natural vegetation, and may include trails, pathways, recreational areas or furniture for pedestrians. Open areas may not be paved, graveled, filled, excavated, covered by structures, or used as storage areas.
2. Green Growing Ground Cover. May include grass, shrubs, perennial flowers, and vines. Plantings should be made in such number or size to cover 100 percent of the landscaped area within two growing seasons. Where required ground cover areas are 15 feet or wider, a line of trees shall also be provided at the rate of one tree for every 50 linear feet, or fraction thereof. Where required ground cover areas are less than 15 feet, trees may be required by Development Review Organization.
3. Low Hedge. May include hedge plants and shrubs. Plants should be of such type and number to reach a height of three feet within three years and to be of such density as to be at least 75 percent opaque year round.
4. High Hedge. May include trees, hedge plants and large shrubs. Plants should be of such type and number to reach a height of six feet within three years and to be of such density to be at least 75 percent opaque year round.

B. Parking Areas. In addition, a minimum of 10% of all site area devoted to parking shall be landscaped unless otherwise specified by the Development Review Organization. (See Section 15.04.850.050, Parking Landscape Design Standards.)

C. Maintenance. After initial installation, all landscaping must be maintained in a reasonably litter-free condition and shall be replaced when necessary. Vegetation shall be pruned back from pedestrian areas and vehicle travel areas. An automatic irrigation system shall be installed within all landscaped areas upon initial construction or occupancy of the property. The automatic irrigation system is required to establish and maintain plants. With the exception of access driveways, curbs and sidewalks, the landscaped areas of off-street parking lots; and front and street side yards shall be maintained in a landscaped, decoratively treated condition, largely or wholly covered with living plant materials. In no case shall more than 75% of the required front yard or street side yard be used for a purpose other than landscaping as described herein.

On property at any corner formed by intersecting streets, the landscaping shall not be higher than 3.5 feet, above the level of the center adjacent intersection

within that triangular area between the property line and a diagonal line joining points on property lines 25 feet from the point of their intersection. (See Section 14.64.050 of this Code.)

D. Compliance with Landscape Design and Development Guidelines. In addition to the provisions contained in this section of the ordinance, all landscaping plans shall comply with the provisions of the landscape design and development guidelines adopted by the City Council. Landscape plans, including irrigation plans, must be submitted for the required landscaped or screened area. They shall be drawn to scale. Planting schedules shall show species by common and botanical names, size and placement of plants. Materials, size and placement of screens shall be shown. In the event of conflict between the provisions contained in this subsection and those in the guidelines, the more restrictive provisions shall apply. All required landscaping and irrigation must be in place before occupancy permit and gas and electric service is released by the City.

All commercial and industrial development requires:

15.04.820 Commercial and industrial provisions.

15.04.820.010 Fencing and Landscaping Standards.

15.04.820.011 Applicability. The purpose of these regulations is to provide guidelines for design, construction and maintenance of fencing and landscaping in the commercial and industrial districts of the City. Landscaping shall be a major component of site design in order to create a City that has a strong landscaped character. The provisions of this section shall apply as a minimum standard for commercial and industrial projects requiring approval of a planning permit under the provisions of this chapter.

15.04.820.012 General Requirements. The following requirements shall apply to all commercial and industrial districts:

A. Landscaped Area. All required yard and setback areas shall be landscaped primarily with live, drought-resistant plant material. Decorative landscape features such as brick, stone, art, fountains and ponds may be used within the landscaped area, provided such materials present an attractive setting consistent with the intent of the landscaping requirements.

B. Street Trees. All new developments shall provide at least one street tree with a minimum caliper of 1 1/2 inches or a minimum 15-gallon size for each 50 linear foot of street frontage. The actual size and number of trees required will vary depending on location. The Director of the Department of Public Works will review all preliminary plans and can make the determinations as to the number of trees and placement. All street trees and/or any other tree plantings within 10 feet of the public right-of-way including sidewalks, curbs and gutters, or street surface, shall be installed with approved root barriers and deep water tubes (2 per tree).

C. Other Required Trees. Deciduous trees at the time of planting shall be fully branched, have a minimum caliper of 1 1/2 inches, and a minimum height of eight feet. Evergreen trees at the time of planting shall be fully branched and have a minimum height of six feet.

D. Maintenance. All landscaped and paved areas shall be maintained in a neat and orderly condition with healthy ground coverings, plants, shrubs and trees, free of litter.

Furthermore, it was anticipated that the Design Review board may be faced with large and technically complex projects, such as those at the Chevron Refinery, that require outside technical expertise, paid for by the applicant, to effectively evaluate and review (15.04.930.070.I):

Technical Assistance. If, in the opinion of the DRB any design proposal that may cause the emission of dangerous or objectionable noise, odors, lights, dust, smoke, or vibrations, or may result in inappropriate design for the site or inappropriate landscaping for the site, the DRB may refer the application for investigation and a report to one or more expert consultant(s) qualified to advise as to whether the design proposal will conform to the appropriate regulations, policies, development standards, and performance standards of the City of Richmond. Such consultant(s) shall report in writing to the DRB and a copy of such report shall be furnished to the applicant and shall be made available to the general public. Management of said consultant shall be under the direction of the Planning Department. The applicant shall be required to pay the fee for services performed by said consultant(s) plus overhead costs as established by the City Council.

The Planning Department has, unfortunately, fallen into a pattern of processing incomplete applications that has resulted in a lot of problems. The motivation may be well-intentioned in the case of small projects where the applicant doesn't have the sophistication or wherewithal to retain professionals to provide detailed applications. Despite the frequent resulting problems, the Planning Director does have some discretion for small projects (15.930.090.D.8):

Smaller scale projects may have certain submittal requirements waived at the discretion of the Planning Director or designee.

The Chevron Energy and Hydrogen Renewal Project is not a small project by any measure.

Overall, the Proposed Project would add approximately 40 new structures ranging in height between 10 and 300 feet above ground level.²

A Design Review application was submitted that was incomplete. An application requires the following information, without exception (15.930.090.D). The items underlined were either missing or incomplete:

D. Required Application Materials. All of the following materials shall be required to be submitted as part of any design review application and shall be of an appropriate scale to indicate all pertinent information:

1. Topographic survey including, but not limited to, all existing conditions on and surrounding the project site including uses, buildings, fences, grades, landscaping, streets, sidewalks, fire hydrants, and drainage.
2. Site plan indicating location and configuration of all buildings and proposed uses, parking spaces and circulation, fencing, street improvements, fire hydrants,

² DEIR 4.1-22

refuse and waste areas, proposed grading and drainage, and other significant site features. The site plan shall include computations on the number and types of parking spaces provided, amounts of usable open space or interior yard area, and lot area coverage. Commercial and industrial developments shall include floor area ratio (FAR) calculations, net and gross lot area, and identify the square footage and location of all easements on the project site.

3. Project summary including a complete description of all activities proposed for the site, the assessor's parcel number(s), general plan designation, zoning district, land area, building area, floor area ratio, building coverage, open space calculations, parking calculations.

4. Landscaping plan indicating the location of all existing and proposed landscape plant materials including a plant list showing quantities, sizes, common and botanical names; design details for such items as walls, fences, lighting, paving, arbors, benches, and other site features; and preliminary irrigation plans including basic location, types, sizes, and quantities of fixtures. The removal and/or replacement of existing vegetation shall be clearly shown either on the submitted landscape plan or on a separate tree removal map.

5. Building floor plan(s) of sufficient clarity to indicate the nature and extent of the proposal and to illustrate in detail that it will conform to the provisions of all relevant laws, codes, ordinances, rules, and regulations. Sloping lots exceeding 15% grade shall include finished floor elevations.

6. Building elevations of sufficient clarity to indicate the nature of the exterior appearance of the proposal and its relationship to its surroundings.

7. Typical building cross sections indicating the general nature of the method of construction along with screening of any roof-top mechanical equipment.

8. Color and material samples securely fastened to an exhibit board showing samples of all proposed materials and colors of the exterior elevations.

Depending on the complexity of the application, additional materials such as presentation illustrations, three dimensional models, or photometric analysis may be required by the Planning Department. Smaller scale projects may have certain submittal requirements waived at the discretion of the Planning Director or designee.

Instead of discussing in detail how Richmond's Design Standards should be applied to this project, the DEIR dismisses the issue entirely:

In summary, the proposed new Refinery equipment would not obstruct scenic vistas or substantially degrade the character of the area, would be constructed in already industrialized areas on the Refinery property, and would be of the same materials and painted to match the Refinery's existing color-scheme in consultation with the City of Richmond to minimize the visual contrast between these new equipment and their surroundings. Mitigation: None required.

The Design review Board's authority is broad and not necessarily limited to simply tweaking the aesthetics of a building and its site:

B. The Design Review Board shall have the authority to impose reasonable conditions related to design impacts caused by the project when approving the design review application in order to:

1. Achieve the specific purposes of the zoning district in which the project is to

be located, the general purposes of the zoning ordinance, and consistency with the City of Richmond's general plan.

2. Protect the public health, safety, and welfare of the citizens of the City of Richmond.

3. Ensure that the design of the proposed project will be compatible with the area surrounding where it will be located.³

Pursuant to 15.930.070.C,⁴ Since 1988, the City Council has adopted several Design and Development Policy Resolutions, including:

- [Landscape Design and Development Guidelines](#). Adopted July 25, 1988.
- [Design Review Guidelines](#), Resolution 30-99, March 23, 1999
- [Infill Housing](#), June 5, 2001
- [Ahwahnee Principles](#), April 10, 2001

Three of these are relevant to industrial construction. The apparent intent of the DEIR's treatment of design is to create the perception that the project is aesthetically innocuous. But there is more to the City's Design Review requirements than aesthetics. For example, B.1 of the Design Review Guidelines states:

All areas not otherwise occupied by structures or paved areas shall be landscaped and irrigated by an adequate irrigation system.

And B.9 states:

Paved areas shall only be as large as necessary to serve parking. Circulation, and open space needs, and their appearance shall be enhanced by landscaping.

Since the vast interior of the refinery is virtually devoid of landscaping for understandable functional reasons, there is an opportunity to transfer the application of this requirement to other areas of Richmond. The requirement doesn't go away; it simply gets applied in a way that makes more sense. This project includes the top two carbon generation activities: transportation and electrical power production.

The outpouring of greenhouse gases from North America far outstrips the ability of the continent's fields, forests and wetlands to absorb all the carbon in the

³ RMC 15.04.930.010.B

⁴ C. Design and Development Policy Resolutions. From time to time, the City Council may establish a policy resolution for the purpose of conserving and enhancing the appearance of specific areas within the City of Richmond. These policy resolutions are intended to be used in areas of existing or potential scenic value, of historical note, of architectural merit, or of interest to visitors, and for the purpose of assisting property owners to maintain and enhance the appearance or architectural character of business districts and residential neighborhoods. The development of such policy resolutions shall be the responsibility of the DRB. The resolutions may be suggested by the Planning Commission, the City Council, or by the DRB. Following adoption by the City Council, such policy resolutions shall supplement the design review guidelines and the design criteria for administrative design review and exempt residences and residential additions.

atmosphere, and the United States alone remains the world's largest emitter of climate-warming carbon dioxide, scientists reported Wednesday.

All told, the burning of fossil fuels by the United States, Canada and Mexico releases nearly 2 billion tons of carbon each year into the atmosphere, and the United States accounts for 85 percent of that total, says the report by the Climate Change Science Program, a research effort by government and private scientists sponsored by the Bush administration.

Until now, many scientists had thought the continent holds enough vegetation to absorb most of the carbon dioxide emissions, but the new report refutes that assumption and warns that the disparity is increasing.

The entire continent accounts for 27 percent of all the carbon dioxide emissions in the world, says the report, but China, where more and more coal-burning power plants go online every year, is already forecast to soon become the world's worst emitter.

"This is the first systematic assessment of America's contribution to the carbon budget in the context of global climate change, and it tells us what we really need to know," said Christopher B. Field of the Carnegie Institution's Department of Global Ecology at Stanford.

Field is the lead author of a section of the report that deals with the carbon cycle - a kind of balance sheet calculating how much climate-changing gas is emitted by North American power plants, vehicles and industry and how much is absorbed by the forests, crops, soils and surrounding ocean waters that constitute what scientists call the carbon sink.

"By burning fossil fuel and clearing forests, human beings have significantly altered the global carbon cycle," Field said.

As a result, he and his colleagues who drew up the report calculated that the continent emits more than three times the amount of carbon dioxide than its varied sinks are capable of absorbing. All the rest stays in the atmosphere and creates the heat-trapping greenhouse effect that has been warming the planet for the past century.

"The conversion of fossil fuels to energy, such as electricity generation, is the single largest carbon contributor, with transportation second," the report said.⁵

One condition the Design Review Board could impose would be a massive tree planting throughout Richmond to provide a carbon offset and comply with the Design Guidelines for landscaping. This could also include the acquisition and preservation of open space, such as the North Richmond Shoreline.

⁵ *North American flora can't absorb continent's greenhouse gas output*, [David Perlman, Chronicle Science Editor](#), Thursday, November 15, 2007

Or how about the following excerpts from the Ahwahnee Principles, as applied to this project?

- The community should contain an ample supply of specialized open space in the form of squares, greens and parks whose frequent use is encouraged through placement and design.
- Streets, pedestrian paths and bike paths should contribute to a system of fully-connected and interesting routes to all destinations. Their design should encourage pedestrian and bicycle use by being small and spatially defined by buildings, trees and lighting; and by discouraging high speed traffic.
- Wherever possible, the natural terrain, drainage and vegetation of the community should be preserved with superior examples contained within parks or greenbelts.
- The community design should help conserve resources and minimize waste.
- Communities should provide for the efficient use of water through the use of natural drainage, drought tolerant landscaping and recycling.
- Materials and methods of construction should be specific to the region, exhibiting a continuity of history and culture and compatibility with the climate to encourage the development of local character and community identity.