



NATIONAL CITY MARINA DISTRICT LAND USE STUDY

Task 6 – Summary Report
March 30, 2016

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Table of Contents

Executive Summary.....	5
1 Introduction	9
1.1 Purpose of the Study	9
2 National City Marina District.....	10
2.1 Site Description.....	10
2.2 Key Issues, Opportunities and Constraints	12
2.3 Review of Key Documents and Relevant Background Information.....	14
2.4 Benchmarking Case Studies.....	14
2.5 Balance of Uses in Port Areas	15
2.6 The Marina District – A Balanced Approach.....	16
3 Principles and Development Parameters	17
3.1 Marina District Land Use Plan Objectives	17
3.2 Guiding Principles.....	17
3.3 Policy requirements	19
3.4 Preliminary Design Parameters.....	19
4 Preliminary Land Use Configurations.....	21
4.1 Priorities for Preliminary Land Use Configurations	21
4.2 Balanced Land Use Requirements.....	21
4.3 Preliminary Land Use Alternatives	22
4.4 Summary of Land Use Configurations.....	23
5 Stakeholder and Community Engagement.....	29
5.1 Introduction.....	29
5.2 Stakeholder Engagement – Key Stakeholders.....	29
5.3 Summary of the Stakeholder Workshops	30
5.4 Community Engagement.....	31
5.5 First Design Charrette.....	32
5.6 Second Design Charrette.....	33
6 The Preferred Land Use Alternative.....	38
6.1 The Preferred Land Use Alternative	38
6.2 Development Potential and Building Footprints.....	42
6.3 Implementation and Phase 0	42
7 Conclusion.....	44
8 Next Steps.....	45

Appendix A – Review of Policy Documents & Background Information	46
Appendix B – Case Studies.....	54
Appendix C – Planning Areas	61
Appendix D – Design Charrettes	64
Appendix E – Possible Development and Building Footprints	67
Appendix F – References	77

List of Tables

Table 1: Comparison of Preliminary Land Use Configuration Alternatives	23
Table 2: Comparison in Acreage of Preferred Land Use Options	36
Table 3: Acreages of the Preferred Alternative	40

List of Figures

Figure ES.0.1: Preferred Land Use Alternative.....	7
Figure 2.1: National City Marina District Study Site – Existing Conditions	11
Figure 2.2: Site Analysis – Opportunities and Constraints	13
Figure 2.3: Scale Comparison of the Marina District Site With the Benchmarking Studies	15
Figure 4.1: Existing Land Use	24
Figure 4.2: Preliminary Land Use Alternative 1	25
Figure 4.3: Preliminary Land Use Alternative 2	26
Figure 4.4: Preliminary Land Use Alternative 3	27
Figure 4.5: Preliminary Land Use Alternative 4	28
Figure 5.1: Preliminary Proposed Double-track Rail Alignment	31
Figure 5.2: Discussions During the Design Charrettes	32
Figure 5.3: Preliminary Land Use Alternative Option A.....	34
Figure 5.4: Preliminary Land Use Alternative Option B.....	35
Figure 5.5: Preliminary Landscape/park Design Concept (1).....	36
Figure 5.6: Preliminary Landscape/park Design Concept (2).....	36
Figure 6.1: Preferred Land Use Alternative	41

Executive Summary

In November 2015 The San Diego Unified Port District ("the Port") engaged UDP International LLC ("UDP International") for the preparation of a balanced land use study for the National City Marina District ("Marina District").

As a result of different economic development processes and societal aspirations, the current zoning of the Marina District no longer adequately safeguards optimization of the land use and potential future uses. The strategic vision of the Port is to balance the uses of the maritime industry, commercial development for tourism, leisure and recreation, with environmental stewardship and public safety. The goal is to protect the Tidelands Trust resources and ensure economic vitality and community benefit for the City of National City ("the City") while ensuring proper uses of the Port's resources. This report summarizes the different steps that were undertaken to develop a balanced land use configuration.

The project started with analysis of the site and surrounding context and review of key policy documents to ensure the eventual land use configuration would be in accordance with these documents or take them into account as appropriate. International port cities were analyzed to highlight successful relationships between a working port with more urban leisure and recreation functions. Although certain aspects of a working port may need abatement measures in terms of noise or other potential pollution sources, the examples studied show that these proximities can successfully co-exist and can even be used as an advantage.

Development principles and design parameters were formulated to guide the development of a balanced land use configuration. Communal aspiration for more and contiguous public open space and opportunity for more commercial-recreational development would have to be balanced with existing maritime industrial operation. A new railway alignment through Lot K is proposed that would greatly enhance operational efficiency of maritime industrial operations within the Marina District.

A collaborative place making and sustainable development approach and a well thought out stakeholder and public outreach and community engagement strategy developed by UDP International was integral to the project. An extensive public outreach program was launched that included two stakeholder workshops and two community design charrettes. The rail alignment and preliminary land use configurations were presented during stakeholder workshops to ensure that their requirements are taken into consideration. Structured discussions during the design charrettes were instrumental to bringing together diverse community aspirations with stakeholder requirements. The public outreach that included key stakeholders as well as the wider community resulted in valuable input to develop a preferred alternative for a balanced land use configuration.

UDP International worked closely with the Port staff to develop the preliminary land use configuration alternatives. During the first design charrette, community aspirations, concerns and issues with the Marina District were discussed along with the preliminary land use alternatives that were presented. Based on the community feedback, the preferred alternative options were presented along with preliminary landscape proposals during the second community design charrette. Structured interactive discussion and positive feedback during breakout sessions of the design charrettes resulted in consensus building towards the Preferred Alternative.

The Preferred Land Use Alternative (“Preferred Land Use Alternative” or “Preferred Alternative”) allows for double tracking of the new rail to the north of the railway alignment. A new road is aligned along the new railway track as a buffer for new development and to provide a contiguous development parcel for commercial recreation land use providing flexibility towards building orientation and configurations within the lot. The Preferred Land Use Alternative will ensure good use of the Port’s land resources while improving the quality of life of National City residents and visitors as well. The Preferred Alternative developed addresses the connectivity and accessibility issues for the Marina District and offering a contiguous waterfront extension of Pepper Park with a network of pedestrian and bike paths and open space, connecting the waterfront park with linkages to the Paradise Marsh.

Pepper Park is extended further west onto the southern portion of the First Point of Rest (FPR) with a wider waterfront park and a larger open space. Pepper Park will have a bigger area in a layout that will enable flexible uses for different activities. The boat launch is retained in its current position. Landscaping will enhance the joined-up public access network of the Marina District with existing Marina Way retained as a visual corridor towards the waterfront and forming an integral part of the pedestrian and bike path network.

The Preferred Alternative addresses the issues of linkage and accessibility to the Marina District and community aspirations for leisure and recreation to make the Marina District an attractive destination. The Preferred Alternative also satisfies stakeholder requirements for optimization of marine industrial operations and opportunity for more commercial development to make the Marina District commercially viable and environmentally sustainable.

Next steps will require the Preferred Land Use Alternative to be reviewed pursuant to the California Environmental Quality Act (CEQA), as well as preparation of a Port Master Plan Amendment (PMPA) to incorporate the proposed land use changes. The CEQA document and draft PMPA require approval by the Board of Port Commissioners. The PMPA also requires approval by the California Coastal Commission. After completion of CEQA review and final approval of the PMPA, issuance of Coastal Development Permit(s) would be required before any development consistent with the Preferred Land Use Alternative could occur.

It was furthermore found that waterfront developments typically take a long time and therefore it is recommended that in the period before the Preferred Land Use Alternative is implemented, that the Marina District is promoted and used for temporary and public-oriented activities. This interim period, also known as “Phase 0”, can be used to promote the Marina District as an attractive destination before the full development potential of the site is realized. Public events and concerts can be considered as part of Phase 0.

Figure ES.0.1 shows the Preferred Land Use Alternative.

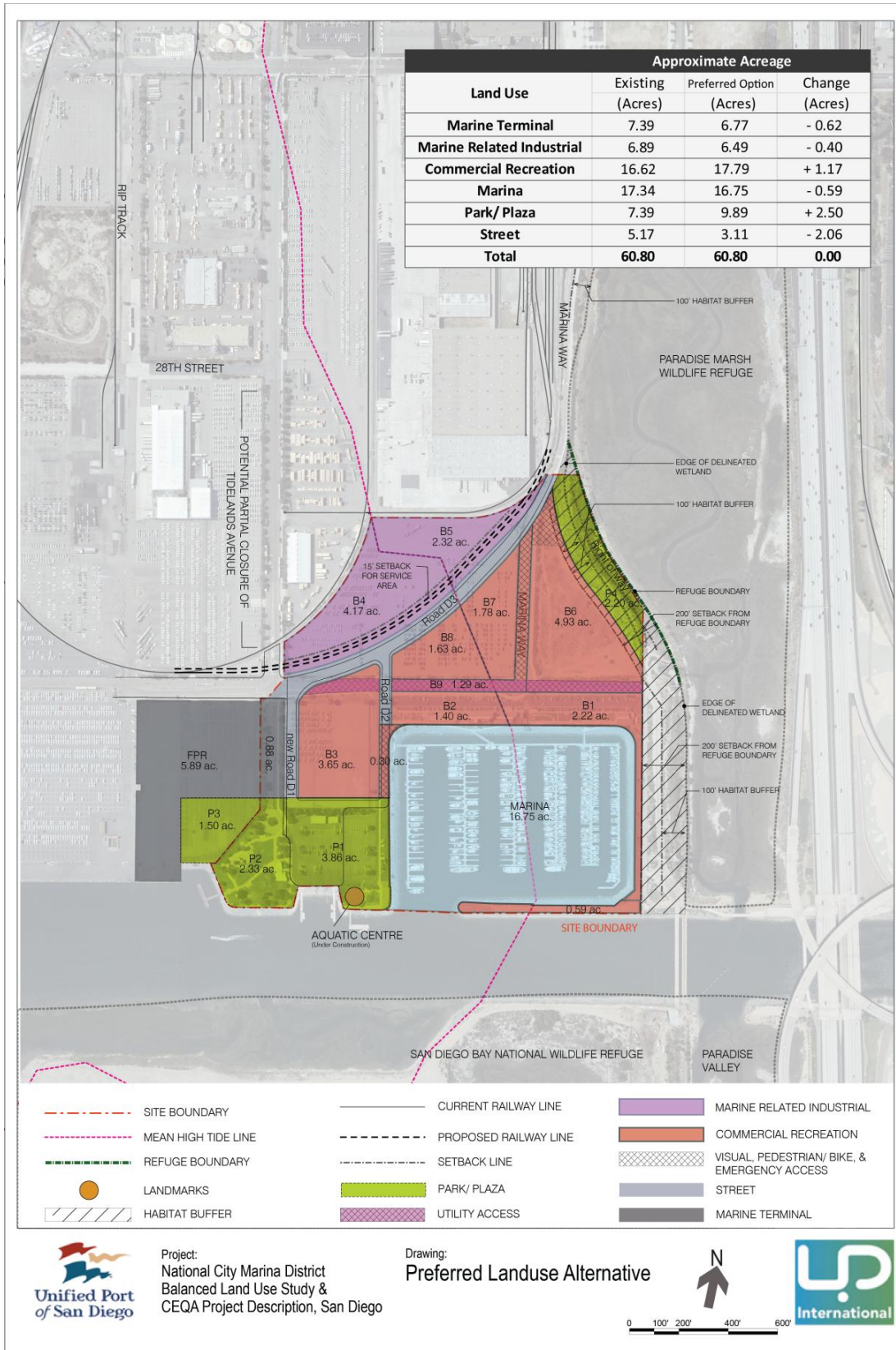


Figure ES.0.1: Preferred Land Use Alternative

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1 Introduction

1.1 Purpose of the Study

The Port engaged UDP International for the preparation of a balanced land use study for the Marina District. The Marina District is in the San Diego Bay area and occupies an area in close proximity to an active maritime port and the waterfront, and is subject to various economic development and societal aspirations. The current land use designations of the Marina District no longer adequately safeguards optimization of the land use and potential future uses. The strategic vision of the Port is to balance the uses of the maritime industry, commercial development and tourism, and leisure and recreation, with environmental stewardship and public safety. The goal is to protect the Tidelands Trust resources and ensure economic vitality and community benefit for the City of National City while ensuring proper uses of the Port's resources.

A vision plan was completed in 2011, with the Port and the City working together and engaging stakeholders to come up with alternative plans and recommending a preferred plan. However, this plan was more commercially driven and not pursued because of uncertainty with regards to entitlements. The current project seeks to maximize opportunities for marine related industrial uses, commercial development, park and community land uses which will ensure a balanced land use plan that is implementable and achievable while assuring flexibility.

This report summarizes the tasks undertaken for the project:

- A detailed analysis of the site area to identify key qualities and concerns;
- A review of key policy documents that a balanced land use configuration should be based on or take into account;
- An international benchmark study to develop ideas for the optimization of future use for the Marina District including different ways maritime and commercial uses can co-exist;
- Formulation of preliminary development principles and design parameters;
- Development of preliminary alternatives for a balanced land use configuration;
- Successfully conduct public outreach through stakeholder workshops and community design charrettes; and
- Selection of a preferred alternative and the preparation of a project description for the land use configurations that can be used for evaluation under the California Environmental Quality Act (CEQA);

2 National City Marina District

2.1 Site Description

The UDP International team conducted site visits for a good understanding of the Marina District and its surrounding context. The Marina District is strategically located with an expansive waterfront and adjacent to a nature reserve with primarily vehicular access. The site is bounded by the Sweetwater Channel waterfront to the south, and the Paradise Marsh reserve to the east. Marine-related industrial uses are on the north side and marine terminal uses on the west side of the site. The site consists of Marine Terminal, commonly referred to as the First Point of Rest and Pepper Park in the southwest, the Marina in the southeast, Lot K in the north and vacant land in the northeast section of the site.

The site has a number of strengths: It is a strategically located within the San Diego Bay, between the industrialized and more urban northern part of the Bay and the southern half which has an emphasis on nature. Located next to and opposite nature reserves, and next to a working port, it has the potential to develop into an attractive waterfront destination. The area offers a boat launch for eight vessels and the marina offers slips from 28 to 65 feet. The Marina District generates income for the Port and there is interest among tenants for further development of the Marina District.

The area does have a few weaknesses: In spite of its location halfway down the eastern coast of San Diego Bay and its proximity to the freeway, the area is somewhat remote and access is less than straightforward. There are limited public amenities with no access by public transportation. The current configuration allows for limited commercial-recreational opportunities.

Both the qualities and weaknesses were addressed during the development stage of a balanced land use configuration. Figure 2.1 shows the existing condition of the study area.

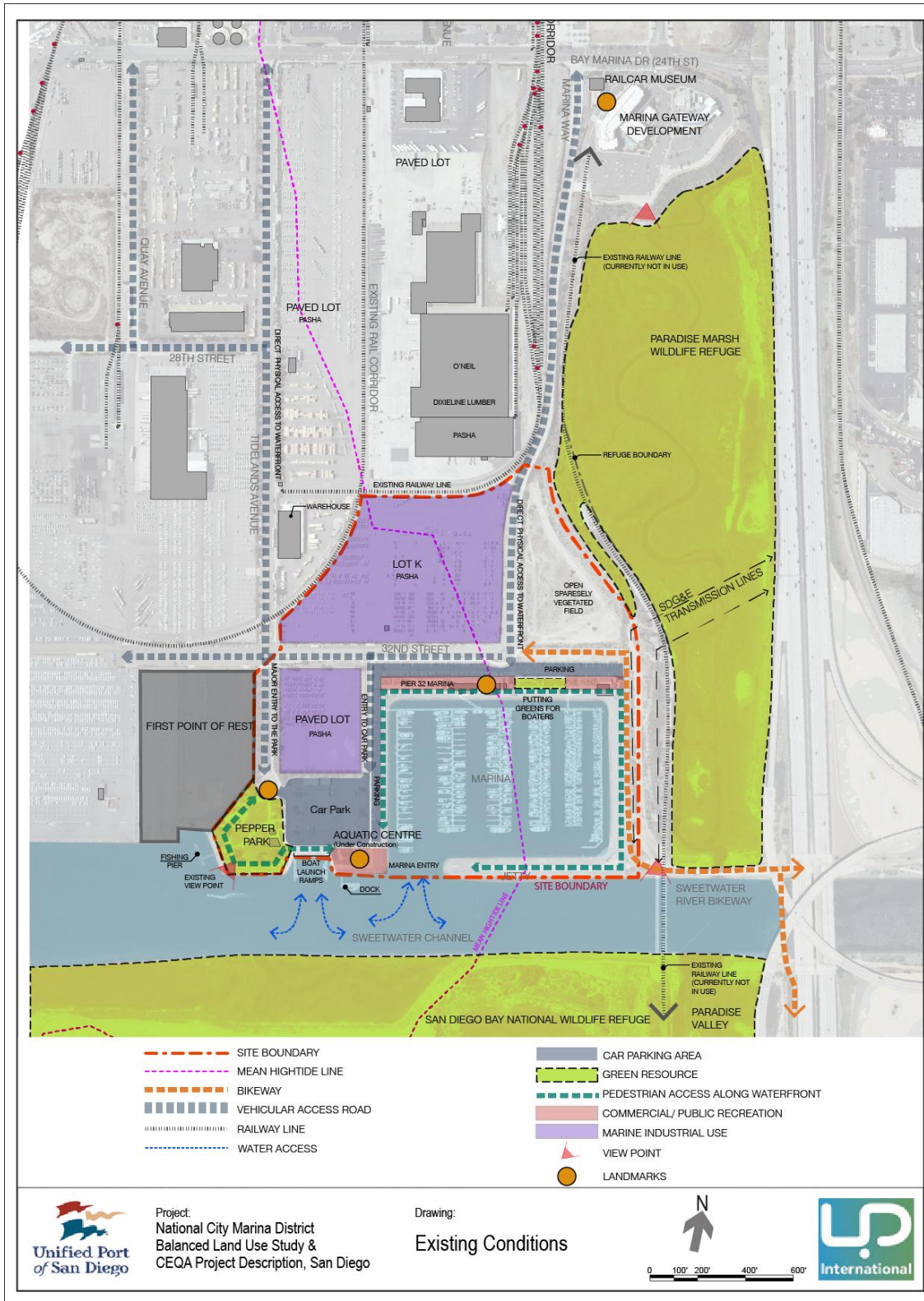


Figure 2.1: National City Marina District Study Site – Existing Conditions

2.2 Key Issues, Opportunities and Constraints

Based on the site visit, analysis and initial review, the key issues are detailed below.

- Continued demand for marine industrial use;
- Potential for commercial development of the site;
- Community aspiration for recreation and public enjoyment;
- Aspiration for more public accessibility and connectivity to the site;
- Opportunity for a more diversified area in terms of use and revenue;
- Optimization of Port's land resources; and
- Optimization of revenue.

These issues have helped to develop a strategic framework, design parameters and tradeoffs likely in the development of the alternative land use plans and are further elaborated upon in section 2.6 and chapter 3.

Figure 2.2, below, shows the opportunities and constraints of the Marina District.

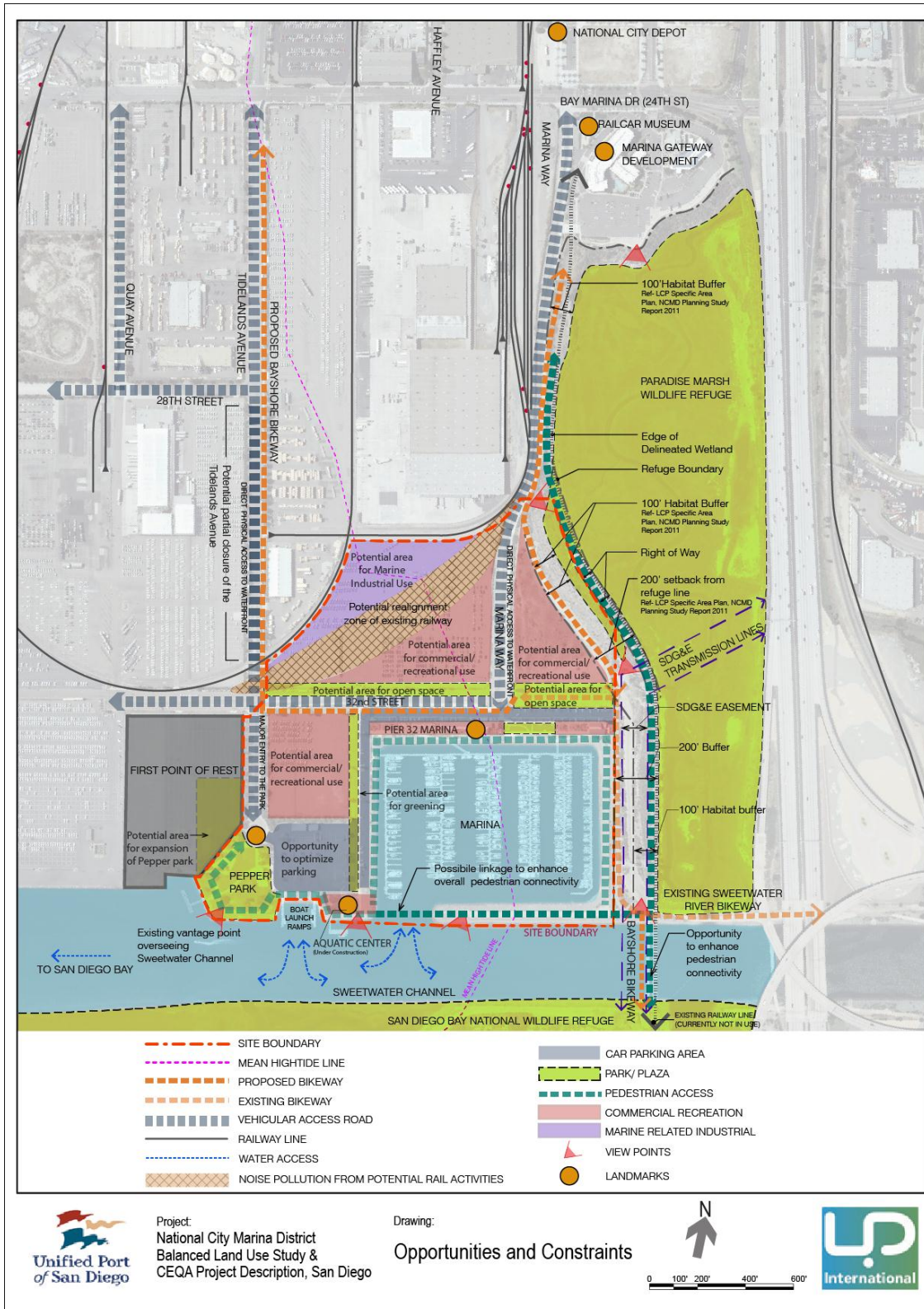


Figure 2.2: Site Analysis – Opportunities and Constraints

2.3 Review of Key Documents and Relevant Background Information

The National City Marina District Land Use Study builds on studies previously prepared which were reviewed as part of background research. The balanced land use study aims to be consistent with policies in the following documents:

- Public Trust Doctrine
- California Coastal Act (1976, as amended)
- San Diego Unified Port District Act (2008, as amended)
- San Diego Unified Port District Compass Strategic Plan 2012-2017
- Port Master Plan (2015)
- Integrated Planning Port Master Plan Update Framework Report (2015)

The following documents were also reviewed for purposes of background information:

- Bayshore Bikeway Plan (March 2006)
- City of National City Harbor District Specific Area Plan (1998)
- National City Bayfront Marina District Vision Plan (2011)
- National City General Plan (2011)
- Mercator Report (2013)
- SANDAG Forward/Regional Transportation Plan (October 2015)
- Vickerman & Associates NCMT Optimization Study (2015)

These documents are briefly reviewed in Appendix A.

2.4 Benchmarking Case Studies

In order to analyze and to showcase the coexistence of working, commercial and recreational uses along waterfront sites the following benchmarking case studies of local and international waterfront examples were considered:

- Queensway Bay, Long Beach, Los Angeles
- Central waterfront, Seattle
- Granville Island, Vancouver, Canada
- Port Vell, Barcelona, Spain
- Lloydkwartier, Rotterdam, Netherlands
- Singapore Cruise Terminal, Singapore
- West Kowloon Cultural District, Hong Kong

Figure 2.3 shows a scale comparison of these seven examples with the Marina District (in red box). More detail about these case studies can be found in Appendix B.



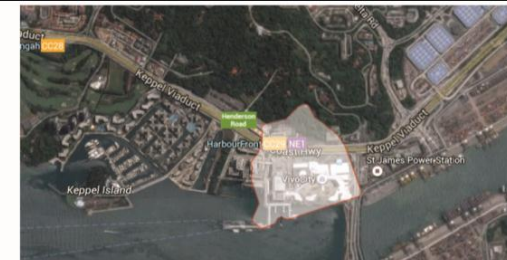
Long Beach, Los Angeles, USA



Central Waterfront, Downtown, Seattle USA



Schiehaven-Mullerpij, Rotterdam, Netherlands



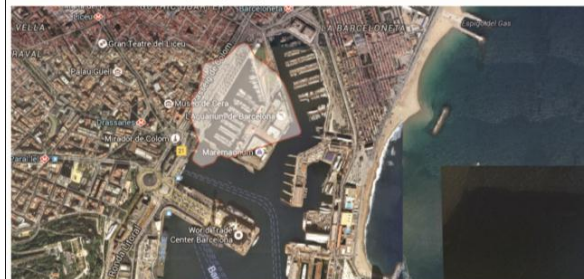
Singapore Cruise Terminal, Singapore



West Kowloon Cultural District, Hong Kong



Granville Island, Vancouver, Canada



Port Vell, Barcelona, Spain



National City Marina District, San Diego

Figure 2.3: Scale Comparison of the Marina District Site With the Benchmarking Studies

2.5 Balance of Uses in Port Areas

All major port cities in the world have been subject to significant changes in economic spatial structure, with dramatic consequences for how the areas operate. As technology advances, port activities change in nature and scale. Often the very structure of coastal areas has changed. At the same time port cities face changing demographic circumstances and environmental justice is more relevant than ever. Port cities are thus facing constantly differing demands for available space resources.

Most port cities have examples of adjacencies of port uses and more urban uses. These urban functions would often service the port functions but may grow into a center of its own strength. Experience from other port cities demonstrates that surprisingly many seemingly incompatible uses can exist side by side without too much inconvenience to either.

2.6 The Marina District – A Balanced Approach

Most port areas are characterized as remote or isolated areas. This aspect has advantages and disadvantages. Routes regularly include detours, indistinct industrial areas and extra distance travelled as compared to more downtown areas. Most of these areas are out of sight of regular city life and therefore can suffer from a lack of recognition (design treatments and maintenance). For many people, however, the increased effort in getting there makes this sense of arriving even more satisfying. Its remote and isolated location often means that the place is relatively serene in nature, benefitting from proximity to relatively unknown natural environments. These are the “hidden gems” of a large metropolis.

The Marina District is in a similar position. Although its location is not as remote or isolated as other areas in the San Diego Bay, it is outside the view of most people and the route towards it is not self-explanatory or easy to find. Motorists passing on I-5, would, in general, move too quickly to appreciate the potential value of the Marina. Other than advertisements, other promotional efforts, or word of mouth, or other Marina users who make their way across the Sweetwater Channel would be aware of the existence of the Pier 32 Marina or Pepper Park.

The Marina District has great potential to be a destination in its own right, being adjacent the dynamic 24/7 working port environment of the National City Marine Terminal (NCMT), as well as the Sweetwater Marsh Wildlife Refuge which further enhances the visual contrast, providing an interesting and engaging experience for visitors.

The marine industrial uses need to be further strengthened without compromising public access or the potential for commercial recreation uses. Several interventions and enhancements have been made over the years, for example the development of the Marina and related uses, the new Aquatic Centre and the public restroom facilities. However, there is a lack of critical mass to ensure the success of the Marina District to become a destination.

Nevertheless, there is a great opportunity to develop the Marina District as a major node, an attractive destination along the San Diego Bay to benefit the community, the various stakeholders including the Port and the City. In order to achieve a successful balance of land uses a critical mass of activity may be required to pull people into the area.

The current project is to focus on the Port's land resources and is expected to build off of the following preliminary site opportunities and constraints:

- Provide an additional 2-3 acres of active and/or passive park space;
- Provide a connector rail track through Lot K, which will also serve as the separation point for maritime and commercial/recreation land uses;
- No more than one acre shall be removed from the existing lumber first point of rest;
- No impacts to or loss of deep water berth;
- Optimize maritime operations;
- Optimize the layout of recreational space;
- Optimize the layout of commercial space;
- Existing 100-foot “no touch” buffer from the National Wildlife Refuge, plus an existing 100-foot “transition” buffer where low-impact uses such as, but not limited to, public access and trails with non-motorized vehicles can be located; and
- Optimize parking for the land uses, including the Pepper Park boat launch ramp.

3 Principles and Development Parameters

3.1 Marina District Land Use Plan Objectives

The aim is to develop land use configurations for the Marina District that:

1. Ensure balanced land uses for marine industrial, commercial, leisure and recreation;
2. Allow space for public access and enjoyment;
3. Improve accessibility by providing for sustainable mobility options with suitable transport requirements by land and water;
4. Create an attractive destination for the residents of National City, San Diego Port, and the people of California, and visitors from the region and beyond;
5. Develop a Marina District that is commercially viable for both the Port, the City and various stakeholders;
6. Develop a Marina District that is socially acceptable and responsive to the community addressing stakeholder requirements, community aspirations, key issues and concerns; and
7. Optimize the operations of the National City Marine Terminal while promoting environmental stewardship and ecological sensitivity.

3.2 Guiding Principles

Development Principles

L1) Provide land uses that will support current investments through activation of the waterfront.

L2) Reserve land use for waterfront activities and uses that require water access such as maritime operations and recreation.

L3) Arrange land uses in such a manner where one land use does not negatively affect other land uses.

L4) Where land uses cannot be adequately separated, provide buffering design solutions that mitigate negative affects while contributing to the positive built environment.

L5) Provide a combination of land uses that support the tourism industry including lodging aimed at various levels of affordability and experience such as low cost RV camping, cabanas, tent platform camping, hotel and luxury hotel.

L6) Provide land uses that support waterfront play including boating, passive park, active park, bike trail systems, walking areas, nature observation and special events.

L7) Users of the area should be pulled to the water's edge with activities that allow entry into the water and observation of water recreation, industry and aquaculture.

L8) Identify tenant types and facility types that fit into the maritime industrial zones that have a component for the public to utilize and for generating points of sale from visitors, such as boat storage, boat repair, warehouse based retail, auto auctions and auto accessory shops that may increase activation of the waterfront as well as increase the sales tax base, provided that these uses are in alignment with the Public Trust Doctrine and land use designations.

Design Principles

- D1) All design treatments should relate to the sense of place established by the waterfront location of Sweetwater River and Paradise Marsh.
- D2) The value of the coastal resources, both natural and man-made, should be integrated into all design aspects.
- D3) The character of the area has been established by the Pier 32 Marina development and design treatments in Pepper Park that should be strengthened while being further enhanced.
- D4) The historic rail line should be highlighted and a sense of history should prevail through new treatments of the waterfront and the abandoned rail corridor, providing a contrast of old and new.
- D5) The industrial areas will persist and can not be hidden, so key visual access should be celebrated and stories of the role of the waterfront should be told.
- D6) Periodic views into the expanded rail line should be encouraged and done in a “windows” approach where noise can be kept out but views of the operations provided.
- D7) The positive perception of industrial and working waterfronts can be achievable if art, history and explanation are worked into the design of the interface between recreational and industrial uses.
- D8) The natural water based setting is what makes this area unique and it needs to be expressed, celebrated and communicated in all aspects of future development.

Mobility Principles

- M1) Although the distance to Downtown and Old Town National City and the trolley is not far, perceptually it is at a great distance and needs continuity of design and wayfinding to make the connections.
- M2) Improved walking and biking connections need to be made in order to re-engage the community to its waterfront.
- M3) A circulating shuttle system should be provided that connect points in the downtown with the waterfront and with the light rail trolley stations.
- M4) The experience of cyclists, runners and walkers of the Bayshore Bikeway system needs to be considered along with safety and directness of route.
- M5) The alignment of roadways and parking lots must be done in a manner that builds on the sequential experience of the traveler and allow for views of the waterfront and the built environment that contribute to the character of the waterfront area.

Sustainability Principles

- E1) Man-made and natural environments should be given equal concern for protection, enhancement and impact avoidance.
- E2) A balance between access to natural areas and protection of those areas needs to be obtained.
- E3) The negative effects of industrial activities, such as noise, views, runoff and smells, must be minimized in order for scarce public waterfront resources to be enjoyed.
- E4) Noise mitigation is essential in providing some acoustical and visual separation between the harsh industrial nature of the rail oriented industrial areas and the passive and quiet contemplation activities associated with hotels, RV parks, and parklands of the waterfront.

E5) The use of natural landforms, dunes, terraces and meandering trails and walkways can reintroduce naturally appearing improvements even when placed next to noise walls and industrial areas.

E6) All landscape treatments in the area must focus on sustainable storm water runoff opportunities, native re-vegetation, drought tolerance and avoidance of invasive species.

3.3 Policy requirements

As stated above, the balanced land use plan will need to be consistent with the policies in the Public Trust Doctrine, California Coastal Act (1976, as amended), San Diego Unified Port District Act (2008, as amended), San Diego Unified Port District Compass Strategic Plan 2012-2017, Port Master Plan (2015), and the Integrated Planning Port Master Plan Update Framework Report (2015). Previous land use proposals could help guide the development of the land use plan alternatives proposed with the help of the stakeholder and community engagement process. However, the marine industrial, commercial recreation and public access to the Marina District must be balanced. Design principles and parameters were further refined during the design process and the metrics were used to assess the alternative land use options that were developed for the Marina District. The land use configuration proposed will need to be environmentally, socially, and economically sustainable and to ensure that the Marina District is an attractive destination for residents and visitors. This will result a win-win for the Port, the City, and the stakeholders.

3.4 Preliminary Design Parameters

The preliminary design parameters are highlighted below.

Accessibility

- Provide access to the Marina District from adjacent areas and neighboring regions with vehicular egress and ingress to the parcels within the Marina District;
- Enhance the pedestrian and bike network within the Marina District with pedestrian linkages along the streets and to the waterfront and a bicycle pathway along the Paradise Marsh; and
- Enhance open space and the green network with high quality public spaces that will activate the waterfront and provide linkages to the surrounding ecological zones.

Land Use Interface

- Ensure a smooth transition from Marine Related Industrial use to Commercial Recreation use with ample Park / Plaza space for public activities along the waterfront and that transition from the Marsh and nature preserves on the eastern and southern edges of the site; and
- Provide a balanced land use configuration without compromising the marine related industrial uses while still accommodating commercial recreation use with different public spaces- retail space, indoor retail, indoor and outdoor dining facilities, terraced public areas, etc. without compromising the marine industrial use.

Rail Alignment

- Provide a potential rail alignment suitable to the site context that optimizes the commercial / public recreation land use without compromising the existing maritime industrial operation;
- A minimum 15 ft. service area is recommended on each side of the rail alignment; and

- Provide for additional buffer space between the rail service area and non-maritime uses that could accommodate a wall to lessen any potential noise and visual issues resulting from the rail operation.

Site Orientation and Views

- Orientation while moving towards the Marina District and within the site;
- Best utilization of water and views of nature; and
- Preserving and enhancing line of sight and views to the waterfront

Quality Public Realm

- Expansion of Pepper Park with more waterfront access and enhanced facilities; and
- Increase of existing open spaces that will create a network of high quality public realm spaces within the Marina District for public enjoyment;

Effective Road Infrastructure

- Maintenance of access with alternate routes to the Marina District and parcels for maximizing commercial development potential of the site including:
 - Marina Way (Arterial Street): Ultimate Minimum Right-of-Way 80 feet, Curb to Curb Distance 60 feet;
 - Tidelands Avenue (Collector Street): Ultimate Minimum Right-of-Way 60 feet, Curb to Curb Distance 40 feet;
 - 32nd Street (Local Street): Ultimate Minimum Right-of-Way 60 feet, Curb to Curb Distance 40 feet;
 - Neighborhood Main Street: Typical Right of Way 94 feet, Curb to Curb Distance 64 feet;
 - Commercial Shared Street: Typical Right of Way 30 feet, Curb to Curb Distance 22 feet;
 - Neighborhood Local Street: Typical Right of Way 50 feet, Curb to Curb Distance 30 feet;
 - Bicycle Path: 12 feet minimum width; and
 - Bicycle Lane: 5 feet minimum width.

Given that the Port does not maintain design standards for public roads, the above measurements could be used as a guide and adjusted as appropriate to determine the optimal road infrastructure in relation to the land use alternatives and the balanced land use plan. The road layout and dimensions of the preferred alternative generally follow these guidelines and have been adjusted as appropriate as detailed later in Section 6.

4 Preliminary Land Use Configurations

4.1 Priorities for Preliminary Land Use Configurations

The following design principles and measures, which are derived from the associated policy and planning documents, have guided the development of the four preliminary land use alternatives.

The preliminary design parameters of the proposed alternatives:

- Provide a workable rail alignment that retains as much existing marine industrial uses to avoid a compromise in operational viability;
- Enhance place making opportunities within the site by improving the open space network within the site and its connection to the surrounding areas;
- Maximize commercial / recreational potential with regards to development with views and access which can be optimized for higher floor area and higher revenue generation for the Port and the City;
- Offer possibilities of land use configurations suitable to the site context with an aim to develop the Marina District as an active waterfront destination; and
- Suggest alternative preliminary land use configurations, all of which are developed with an aim to retain maritime uses (e.g. marine related industrial and marine terminal) while maximizing the commercial recreation land use with a network of public parks and plaza areas to create a balance of land uses for the Marina District.

4.2 Balanced Land Use Requirements

The strategic vision of the Port is to balance the uses of maritime industry, tourism, water and land recreation, environmental stewardship and public safety. The goal is to protect the Tidelands Trust resources and ensure economic vitality and community benefit for the state and the region while ensuring proper uses of the Port's resources as well.

The Balanced Land Use Plan requirements as set out by the Port in the project brief are summarized as follows:

- Open / Recreational Space
 - Provide an additional 2 to 3 acres of active and / or passive park space;
 - Optimize the layout of recreational space;
- Commercial Space
 - Optimize the layout of commercial space;
- Lumber First Point of Rest
 - Minimum 6 acres to be retained for the existing lumber first point of rest;
- Rail Alignment
 - Provide a connector rail track through Lot K, which will also serve as the separation point for maritime and commercial / recreational uses;
- Road Alignment

- Re-alignment of road space to optimize parking for the land uses, including Pepper Park and the boat launch ramp; and
- Buffer Area for Environmental Purposes
 - Minimum 100-foot “no touch” buffer from the National Wildlife Refuge, plus a minimum 100-foot “transition” buffer where low-impacts uses such as, but not limited to, public access and trails with non-motorized vehicles can be located.

4.3 Preliminary Land Use Alternatives

Four preliminary land use configurations alternatives were proposed that range from minimal, moderate, and maximum changes to the existing land use and road circulation pattern for the site area. They share some common features as follows:

- Pepper Park is extended to the FPR in all the alternatives, however the area that is reduced varies up to a maximum of 1.0 acre. As required within the project brief there is provision of at least 6 acres, which remains unaltered in all the alternatives to avoid disruption of the operation of the marine terminal activities with certain variations as detailed within each alternative;
- A setback of 15 feet is recommended on the southeast side of the proposed rail alignment as a buffer area. A noise wall/buffer is recommended within this setback as a noise and visual abatement measure. Green features may be proposed to soften the visual impact of this barrier. There are variations to the buffer zone within each alternative. The transition of land use from marine related industrial uses to commercial recreation can be achieved by providing commercial recreation use south of the rail track in Lot K for all the proposed alternatives;
- An eventual closure of Tidelands Avenue between 32nd Street and Bay Marina Drive would result in Marina Way being the only public access vehicular road into the Marina District. Care should be taken that this road is able to accommodate the transport needs of any planned future development. Any closed-off Tidelands Avenue may have to remain available for emergency vehicles;
- All alternatives propose to retain Marina Way either as a vehicular road or as a visual corridor with pedestrian and bike paths within the site area;
- Any roadways that are 40 feet wide could accommodate parking on each side except near major intersections where it may be good to install a left turn lane. Any one-way roadways that are 20 feet or wider could accommodate parking on one side of the street. Road D3 could be one way southbound in both Alternatives 2 and 3;
- Space for a bike path is allotted for along the west edge of Paradise Marsh connecting to the existing bike path to the south east of the Marina District. The trail can be connected near the neighboring wildlife refuge areas where the path leading north and south can be enhanced with jogging trails, vantage points, and shaded bikeways. However, the feasibility of the bikeway will largely depend on the flexibility to enable changes in certain areas, as there are critical sections that might hinder the implementation of the bikeway;
- The waterfront edge for the Pepper Park is further enhanced and expanded for all the options, however the alternatives differ in the way the park is reconfigured; and the boat launch area and related parking within has been retained in all the options with eight launch bays;
- It is recommended that in the period before the balanced land use plan is implemented the Marina District is promoted and used for temporary and public-oriented activities. This interim period (Phase 0) can be used to promote the Marina District as a place and new destination, as the full development potential of the site will only be realized

after the Marina District becomes an attractive destination. Public events such as concerts, art fairs, street markets, and other fun activities can be considered as part of Phase 0. These events would substantially enhance the exposure of the Marina District so that people in the wider community would be made aware of the different opportunities there. A 'critical mass' of activities and events during Phase 0 could make Marina District a great place for residents and visitors alike.

- There is an opportunity to create a venue for events, exhibitions, perhaps a car museum including a vintage car show to showcase the extensive Pasha marine related industrial operation. In addition tours and sponsored events and activities can be organized so the Marina District becomes an attractive destination for the residents and visitors alike starting from Phase 0;
- Opportunities for mixed use development including hotel, office, retail, and restaurant uses including outdoor dining will be included as part of the Commercial Recreation use within the various lots available within the respective land use configuration alternatives; and
- If possible a maritime institute supporting the Marine Related Industrial and Marina Operation uses could be explored by the Port, in consultation with the State Lands Commission, and as the market dictates. This could bring in more people on a daily basis and make the Marina District an attractive and vibrant destination.

4.4 Summary of Land Use Configurations

The four preliminary land use configuration alternatives provide a basis for the exploration of the potential development within the commercial recreation land uses and the potential for a connected public space network to make the Marina District more accessible to the general public while ensuring it is commercially viable to the Port and the City without compromising the existing operations of Pasha or the Pier 32 Marina.

The four preliminary land use configuration alternatives gave adequate variation for further discussion with the stakeholders and the community as well during the January 2016 design charrettes (see Chapter 5). These alternatives were further refined after discussion with key stakeholders and the larger community before a preferred option was recommended. The four alternatives showed different balances between the commercial recreation land uses, maritime-related land uses and the public space network whilst seeking to be viable for all major stakeholders.

Table 1 shows the changes in acreage of the four alternatives compared to the existing situation.

Table 1: Comparison of Preliminary Land Use Configuration Alternatives

Land Use	Approximate Acreage				
	Existing (Acres)	Alternative 1 (Acres)	Alternative 2 (Acres)	Alternative 3 (Acres)	Alternative 4 (Acres)
Marine Terminal	7.39	6.39	6.69	7.39	7.39
Marine Related Industrial	6.89	6.14	6.65	6.89	6.49
Commercial Recreation	16.62	16.73	14.95	14.60	15.94
Marina	17.34	17.34	17.34	17.34	17.34
Park/ Plaza	7.39	9.69	9.94	10.24	9.37
Street	5.17	4.51	5.23	4.34	4.27
Total	60.80	60.80	60.80	60.80	60.80

Figure 4.1, below, shows the existing land uses in their current configuration, and Figures 4.2 through 4.5 depict the four alternatives.

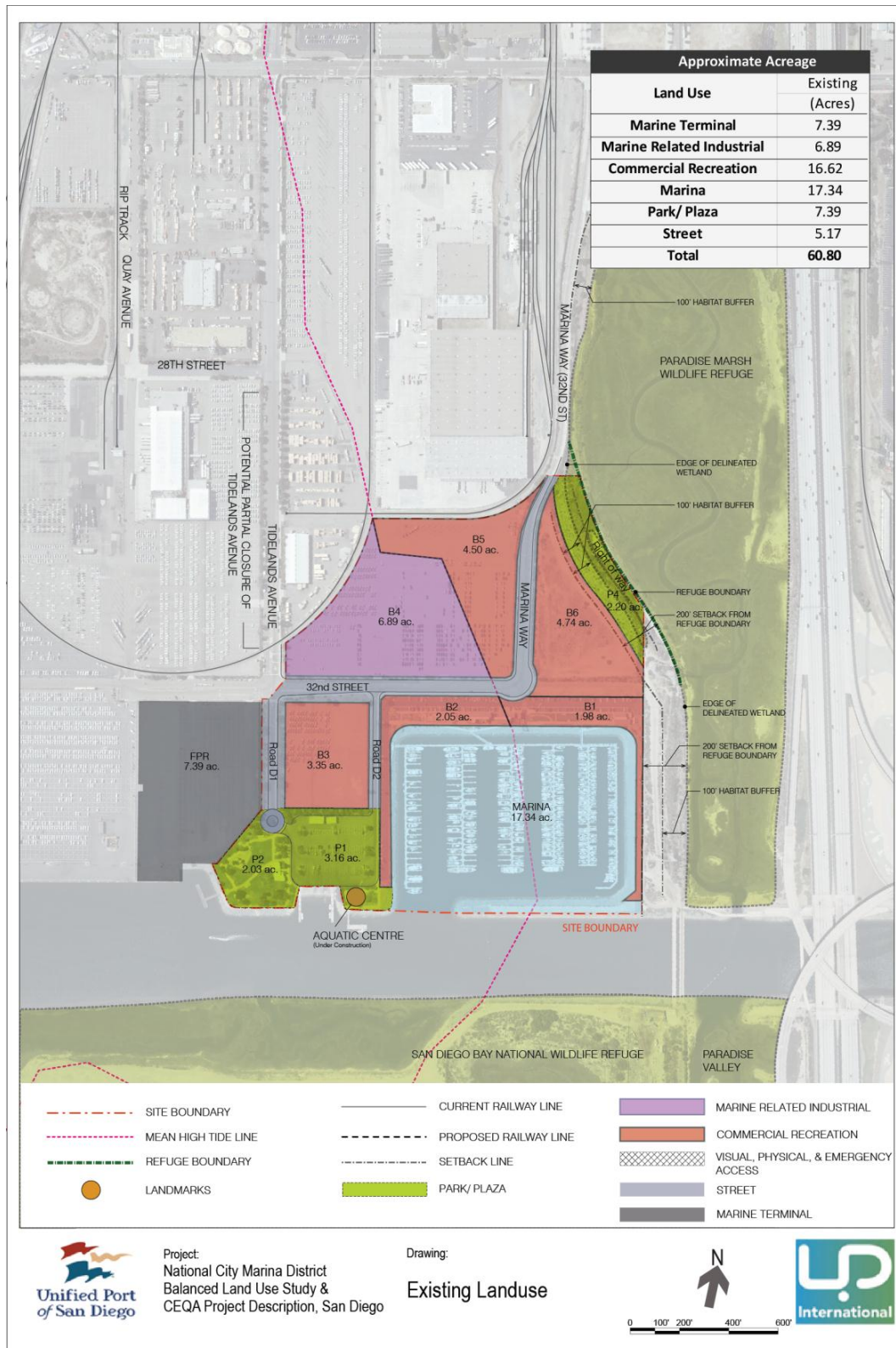


Figure 4.1: Existing Land Use

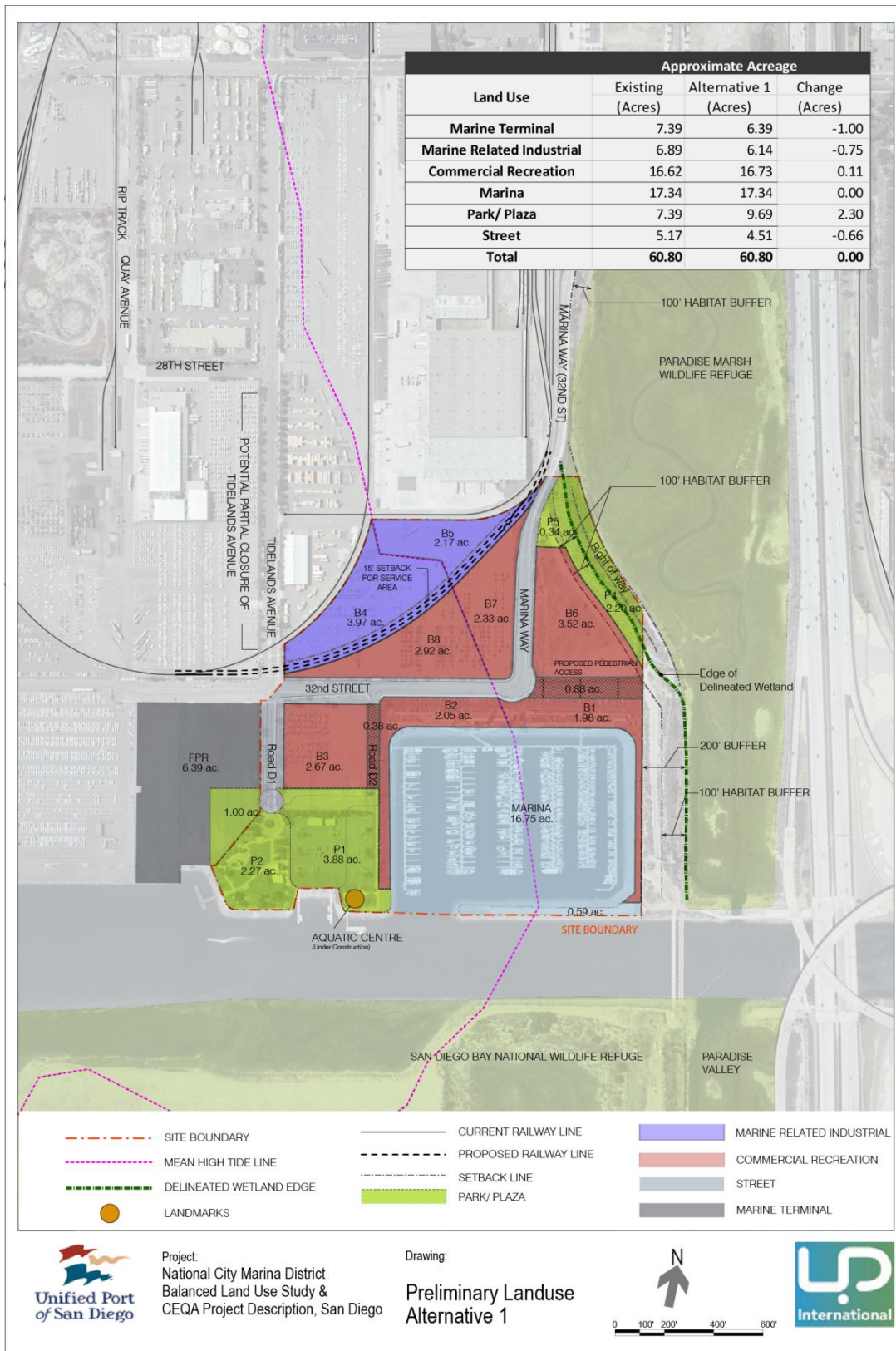


Figure 4.2: Preliminary Land Use Alternative 1

NATIONAL CITY MARINA DISTRICT BALANCED LAND USE STUDY

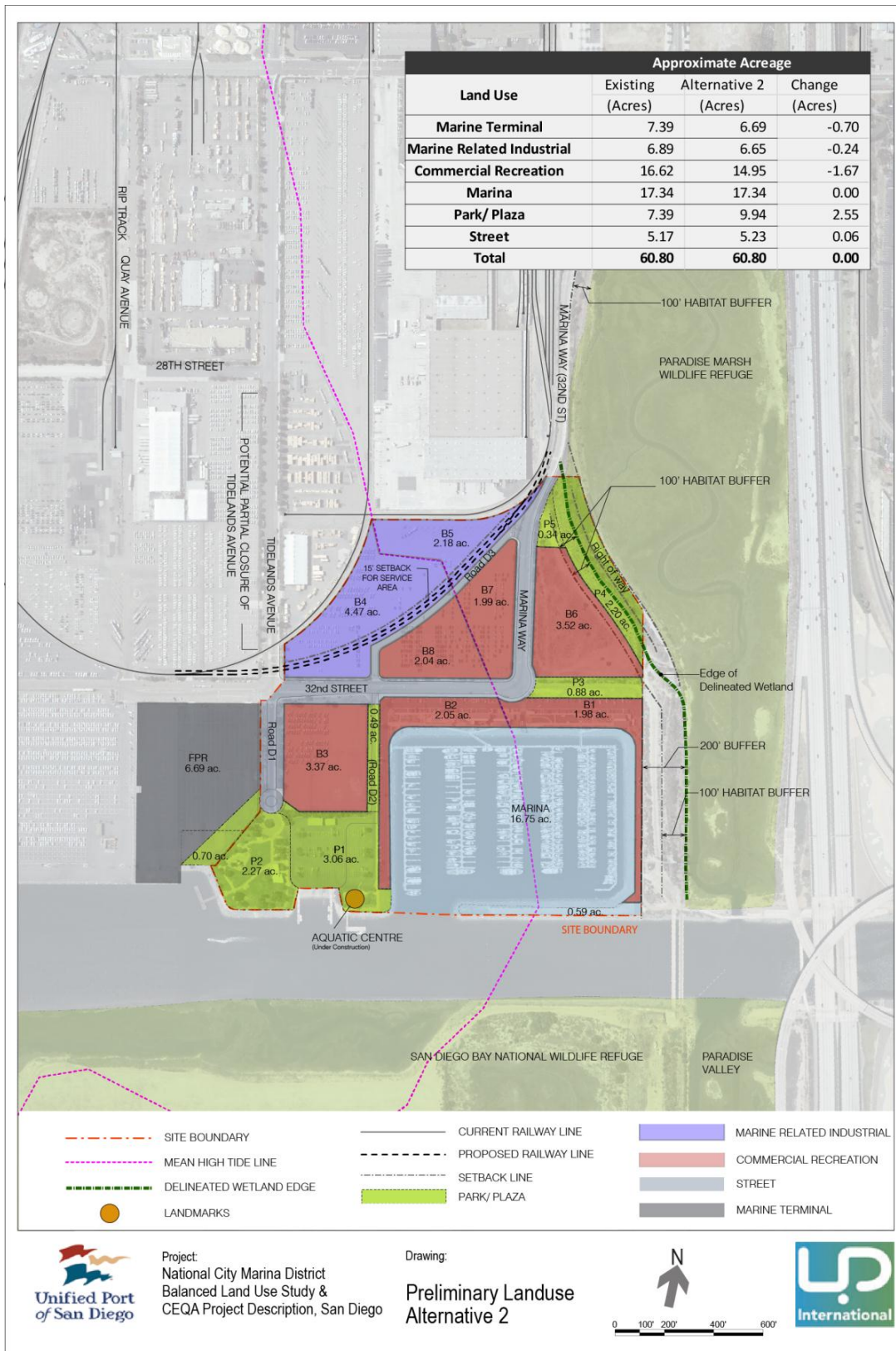


Figure 4.3: Preliminary Land Use Alternative 2

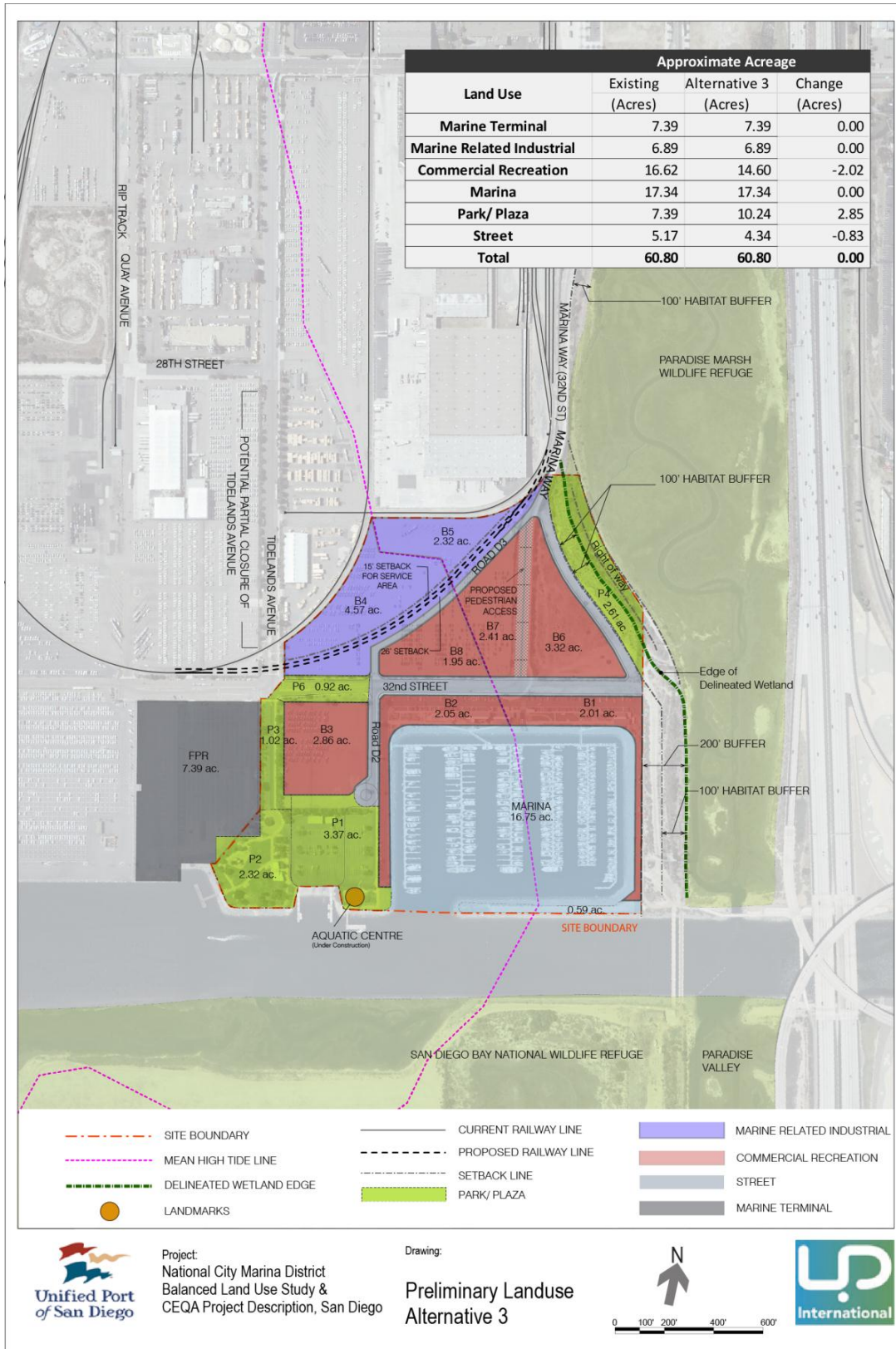


Figure 4.4: Preliminary Land Use Alternative 3

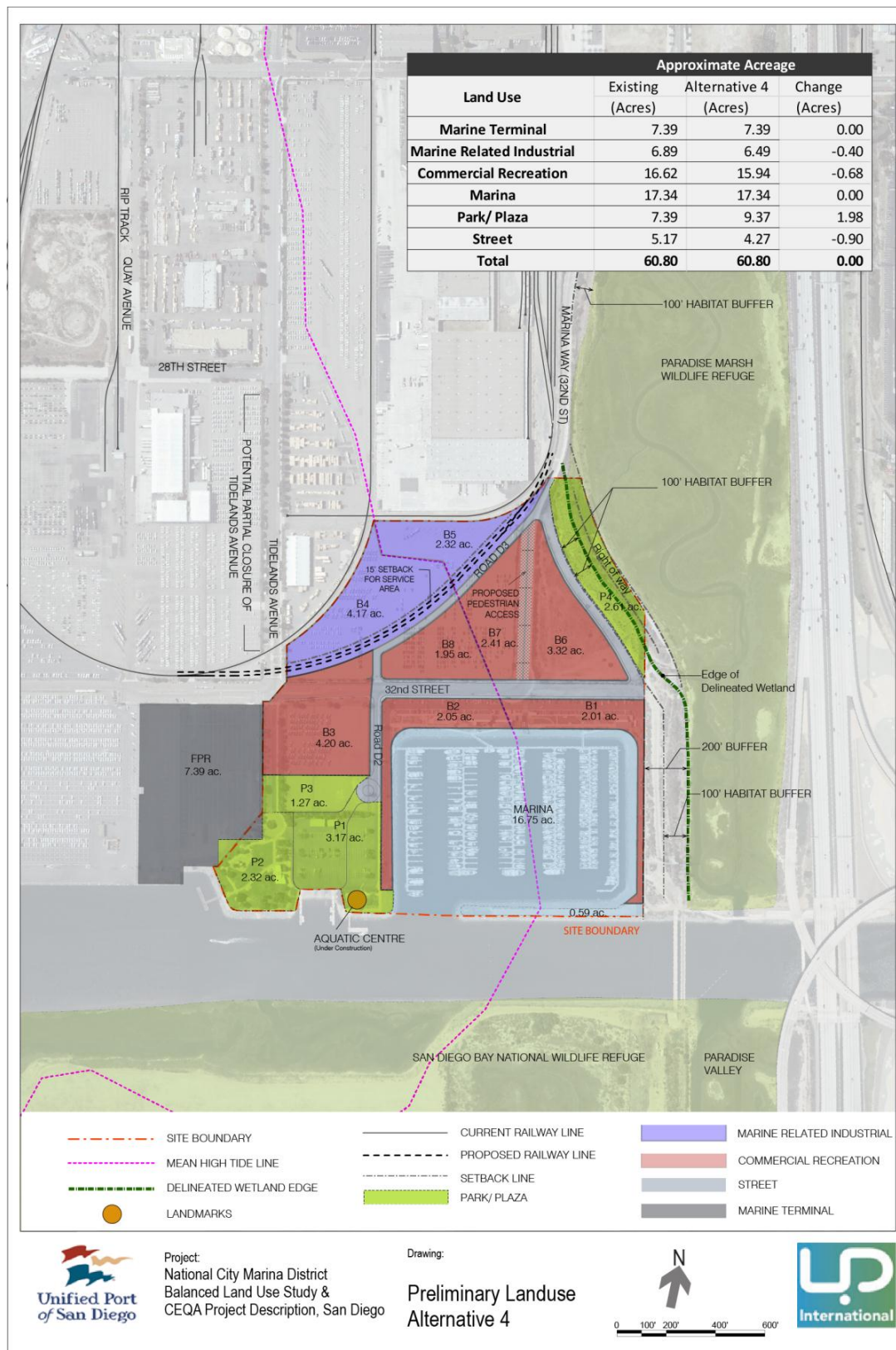


Figure 4.5: Preliminary Land Use Alternative 4

5 Stakeholder and Community Engagement

5.1 Introduction

An outline of the stakeholder and public engagement strategy including the design charrettes for the development of the land use plan configurations was prepared which included stakeholder workshops early on in the process to identify key concerns, issues and aspirations regarding the project.

Based on prior experience and working with the District staff, major stakeholders were identified. A working session with the District, the City and the various stakeholders was arranged early on in the project. The objective of this working session was to gain a better understanding of the aspirations of the major stakeholders, and the development opportunities and constraints within the site, which helped develop the Preliminary Draft Land Use Configurations. This working session also helped develop a strategic framework, design parameters and trade-offs likely in the development of the alternative land use plans. This included the identification of relevant local, regional and international benchmarking case studies that might be useful in considering various alternative plans. This was followed by a second stakeholder workshop that was held before the community design charrettes.

Two design charrettes were planned that were aimed at the wider community. The first design charrette was used to explore community aspirations, issues, concerns, site opportunities and constraints, general design parameters as well as preliminary land use configuration alternatives. In the second design charrette comments were invited on more refined options for balanced land use configurations as well as preliminary park design proposals. In the text below more details are given on these design charrettes.

This strategy ensured building consensus among the stakeholders and the public, which is essential in developing a preferred land use alternative that addresses the collective community aspirations and stakeholder requirements.

5.2 Stakeholder Engagement – Key Stakeholders

It was important to identify the major stakeholders, and determine their interests, the expectations and requirements that each stakeholder may anticipate from the project. This working session was in the form of stakeholder workshops early in the planning process. The aim was to get the various stakeholders involved in the process. Based on prior experience and working with the Port's staff, some of the key stakeholders identified and involved in the stakeholder workshop are listed below:

- San Diego Unified Port District
- City of National City
- Pasha Group
- GB Capital Holdings
- Environmental Health Coalition
- Working Waterfront Group

- Burlington Northern Santa Fe Railroad
- San Diego Association of Governments
- Sycuan Tribal Development

5.3 Summary of the Stakeholder Workshops

The first stakeholder workshop was held on December 17, 2015, hosted by the Port. During the workshop, a presentation on the initial findings from the analysis of the Marina District was given, the details of key documents reviewed, site analysis completed and key issues highlighted. Preliminary rail alignment, benchmarking case studies and initial land use alternatives were presented to get feedback from the stakeholders. This led to a discussion related to the rail alignment and related land uses, including marine related industrial uses, commercial recreation uses, park and public plaza space. One of the stakeholders shared a potential rail alignment that retained the marine industrial use acreage and also represented a plan that assured operational viability.

Some of the key concerns highlighted in the workshop were:

- Protect current economic viability of marine related industrial uses;
- Safeguard current jobs and future employment opportunities;
- Address transportation related issues for efficient truck movement and optimum marine related industrial operations;
- Enhance opportunities for commercial recreation uses without compromising the operation of marine industrial uses;
- Improve accessibility with better connectivity to the Marina District for pedestrians, bicyclists, and vehicles, including trucks;
- Provide for public transit access in the form of buses to the Marina District, especially during events;
- Enhance operational arrangement for trucks for logistics and freight industries within the Marina District;
- Prepare a new balanced land use plan that respects the current zoning and acreage;
- Strike a balance between the rail alignment with regards to operation and retaining acreage for marine related industrial uses while maximizing commercial recreation, park and public space opportunities; and
- Accelerate a decision by the Port to ensure certainty to key stakeholders that a plan will be implemented without further delay. This will require the Port to decide on rail alignment with its needed buffers and land use configuration plan to be balanced.

A preliminary rail alignment that provided the most direct route north across Lot K and the associated preliminary land use configurations were discussed in the stakeholder workshop.

Several views and concerns were expressed by key stakeholders during the workshop with regards to the rail alignment and the balancing of land uses and building on the consensus arrived at by previous efforts by the City. From the perspective of those concerned about Maritime Operations, the rail alignment should be placed in a location that balances the land use mixture. From the perspective of National City and Commercial Retail interests, the rail line location should be moved as far to the north as possible, recognizing the need for the track and that it be efficient and adequate for rail operations. Taking into account the views and

concerns expressed, a revised preliminary double-track rail alignment was formulated with the goal to address the stakeholders' concerns as far as practicable. The revised preliminary rail alignment is shown below in Figure 5.1.



Figure 5.1: Preliminary Proposed Double-track Rail Alignment

The connecting track alignment across Lot K was developed with consideration of a future parallel track. The track curvature allows for a smooth transition across Lot K from the existing 'balloon track' to the leads for additional Autorack storage near the National Distribution Center. The proposed railway alignment was developed to best fit the site context and to optimize the land uses on either side. The alignment does this by balancing the commercial / public recreational land use without significantly compromising the existing maritime industrial operation, while providing operational efficiency of the railway connection.

A second stakeholder workshop was held on January 11, 2016 presenting the currently proposed rail alignment and the preliminary land use configurations developed to get feedback from the various stakeholders. The feedback received was used to further refine the preliminary land use configurations before the design charrettes as part of the community engagement.

5.4 Community Engagement

The two community design charrettes contributed valuable input into potential future development of the area, adding to the insights from the stakeholder workshops. Consensus was sought to determine which alternative, or combination of different alternatives, would best achieve the objectives of the Port, major stakeholders and the wider community. Spanish translation services were provided at both design charrettes.

5.5 First Design Charrette

The first Marina District Design Charrette took place on January 20, 2016 in the Martin Luther King Jr. Community Center in National City and approximately 50 people participated. The first design charrette started with a brief introduction of the Port of San Diego and the background of the project by senior staff of the Port. The UDP International team then presented the constraints and opportunities of the site, and the introduction of Phase 0 for the interim period before actual development takes place. The proposed new rail alignment through Lot K and the four preliminary land use configurations were also presented for further discussion. Figure 5.2 shows discussions during the break out sessions at the Design Charrettes.



Figure 5.2: Discussions During the Design Charrettes

The attendees were split in to four groups in order to discuss the key issues, their aspirations, the importance of “Phase 0” and the potential uses and activities within Marina District as well as their views on one of the proposed alternatives at each table.

During the first breakout session the discussions were focused on what the table members currently enjoy about the Marina District and how often they come and what they use the Marina District for. A discussion took place about people’s aspirations for Marina District, what they would like to see improved at the District and their views on the importance of Phase 0 and potential public uses and activities within the area.

During the second breakout session the discussions were focused on the preliminary land use configuration alternatives that were presented. Participants also voiced considerations that should be made when looking to alter the land-use of the Marina District.

Key Points from the First Design Charrette

The most consistent points between the groups were evident after the group presentations at the end of the first breakout session. The rail alignment proposed through Lot K was not contested and participants appreciated the relevance of Phase 0 to make the Marina District a destination and a fun place to be for residents and visitors alike. Some of the major points discussed were the need for more contiguous park space, ease of access to the area through some form of public transit, increased parking, and more choice in healthy and affordable activities, food offerings and other commercial and recreational uses. For various reasons Alternatives 1 and 2 were more favored by the participants. A more detailed summary of the discussion can be found in Appendix D.

5.6 Second Design Charrette

The second Marina District Design Charrette took place on January 28, 2016 in the Martin Luther King Jr. Community Center in National City and approximately 50 people participated. After a quick summary of the first Design Charrette findings, UDP International presented two preferred alternative options and preliminary landscape proposals for the park extension and improved accessibility with better pedestrian and bike connectivity.

The two land use alternative options presented showed a mix between the well-received features from alternatives 1 and 2 in the first Design Charrette. The main difference between the two options was the location of the roadway into the Marina District – option A (Figure 5.3, below) retained the current roadway configuration for Marina Way and 32nd Street, and option B (Figure 5.4, below) created a new roadway (Road D3) that curved along the proposed new rail alignment.

Similar to the first Design Charrette, the attendees were split into four groups to discuss the preferred alternative options and the preliminary landscape proposals shared. During the first breakout session table members were asked about what they liked and what they had concerns about when presented with alternative options A and B. Both land use options were well-received and after much discussion a general consensus was reached for preference of option B.

During the second breakout session the discussion was focused on preliminary landscape proposals. There was an engaging discussion about various possible uses within the expanded park with participants were generally happy with the contiguous park extension close to the waterfront. Participants liked the bike and pedestrian connectivity throughout the site and potential transit access with flexible space for events, performances, family picnics, healthy food choices with markets and art fairs. There was discussion to relocate Granger Hall to the Marina District but this idea was opposed by some participants.



Figure 5.3: Preliminary Land Use Alternative Option A



Figure 5.4: Preliminary Land Use Alternative Option B

Table 2 compares acreages of the two land use options with the existing situation.

Table 2: Comparison in Acreage of Preferred Land Use Options

Approximate Acreage			
Land Use	Existing (Acres)	Option A (Acres)	Option B (Acres)
Marine Terminal	7.39	6.39	6.69
Marine Related Industrial	6.89	6.14	6.65
Commercial Recreation	16.62	16.73	14.95
Marina	17.34	17.34	17.34
Park/ Plaza	7.39	9.69	9.94
Street	5.17	4.51	5.23
Total	60.80	60.80	60.80

Figure 5.5 and Figure 5.6 show preliminary landscape and park design concepts for the Marina District. These preliminary concepts were presented during the second Design Charrette.



Figure 5.5: Preliminary Landscape/park Design Concept (1)



Figure 5.6: Preliminary Landscape/park Design Concept (2)

Key Points from the Second Design Charrette

All groups had a majority preference for alternative option B with the road acting as a buffer and point of distinction between marine industrial and commercial / park. A shortage of car parking spaces was identified as a problem at both tables. Many people liked parts of the preliminary Pepper Park design and hoped that some of these features are adopted and others are not. Participants preferred to have space for flexible uses such as events, fairs, concerts, pickup ball games, family picnics, etc. The proposal to move Granger Hall to the Marina District was strongly opposed by some group members as it was felt to be more appropriate at the train depot site nearby within National City. Although the concept of a public performance venue on the waterfront is well-established world-wide, the available space at the Marina District is too limited, in particular the southern section next to Pepper Park. From an urban design perspective Granger Hall would diminish the openness of the area given its volume and the closed-off design of the structure itself. This would have an adverse effect on the attractiveness of the area and provide less area for open concerts and special events in the park. Given the building design and its cultural heritage the Granger Hall would be better suited closer to the train depot site giving it the critical mass and together could become an attractive destination in National City. However the programs at Granger Hall could be further linked to future events in the Marina District and make the place vibrant and attractive.

Overall the two Design Charrettes were well structured and quite successful and consensus reached that helps point towards the right direction. There was positive energy and consensus reached as a result of the presentations made and discussion between participants. After the second design charrette the preferred alternative Option B was further revised to ensure more direct access to the marina and smoother transition from Marina Way to the Road D3.

A more detailed summary of the discussion can be found in Appendix D.

6 The Preferred Land Use Alternative

6.1 The Preferred Land Use Alternative

The Preferred Land Use Alternative (see Figure 6.1, below) will adopt a number of land use proposals from the four alternatives and the two preferred options that were studied and discussed at the stakeholder meetings and the design charrettes, and will comprise some notable changes from the existing situation.

The Preferred Alternative will include a new railway track through Lot K, which will follow an alignment that best fits the site context and will optimize the interests of the relevant stakeholders. The alignment will balance the Commercial Recreation land use and Marine Related Industrial land use, while it will provide operational efficiency of the railway and also allow for double tracking of the rail to the north of the railway alignment.

A new road (D3) is proposed that will run along the southern boundary of the new rail alignment through Lot K, providing additional buffer from the rail activity. The proposed buffer zone is a minimum of 26 feet wide, which could include a 15-foot-wide service area for the rail south of the rail alignment and an additional landscaped buffer zone with a noise wall as a divider between the two uses with windows to provide opportunity to view the marine related industrial operations. The new Road D3 will connect with a realigned Road D1, which is proposed to be moved slightly to the east to allow adequate space for the FPR. Additional parking is to be provided along Road D1 and Road D3.

Road D2 will be shifted towards the east where the current marina parking is, providing direct access to the marina and Lot B3 from Road D3. However, the southern portion of the realigned Road D2 is proposed to be closed off for through-traffic but retained for emergency access. This will provide better pedestrian connectivity and the potential for more synergy between the Commercial Recreation land use on Lot B3 and the marina.

From a transportation point of view, the proposed external access to the project site is similar to the existing access. The project site would still have access to the local and regional street system via Marina Way. Within the Marina District, the Preferred Land Use Alternative would provide slightly more convenient access to Pepper Park and slightly less direct access to the marina than the existing transportation network. Three new roadways are proposed:

- Road D3 would be the main access roadway to the Marina District. It would connect to existing Marina Way at the entrance to the Marina District and would run parallel to the proposed new rail alignment through Lot K. It would have a right-of-way of approximately 70 feet and could provide a two-lane roadway, parking, bicycle lanes, and pedestrian facilities. A southbound left turn lane could be accommodated at the intersection with Road D2, with parking prohibited near the intersection in order to provide for the left turn lane.
- Road D2 would connect to Road D3 and would provide access to the marina. It would have a right-of-way of approximately 50 feet and its primary purpose would be to provide access to the parking facilities at the marina.
- Road D1 would connect to Road D3 and would provide access to Pepper Park. It would have a right-of-way of approximately 60 feet.

Opportunities for pedestrian and bicycle access would improve, since major north-south and east-west access ways would be provided. Much of the existing right-of-way used for Marina Way and 32nd Street would be preserved for pedestrian and bicycle use and for emergency access.

The Commercial Recreation area would ultimately require a system of internal access drives and parking areas, but the Preferred Land Use Alternative does not specify this level of detail as it is considered best to leave this to the designers of any future developments proposed for the site.

The potential for providing transit service to the Marina District was discussed during the design charrettes. The Preferred Land Use Alternative could physically accommodate transit service along Marina Way and Road D3.

The closed-off portion of the existing Marina Way is proposed to be retained as a visual corridor towards the waterfront, free of buildings and used for pedestrian and bicycle access as well as emergency vehicle access. In a similar manner, the portion of existing 32nd Street east of Tidelands Avenue is proposed to be closed off for through-traffic and converted to pedestrian and bicycle space, as well as emergency vehicle and utility access. These linear spaces, will benefit orientation, but can also become part of the pedestrian and bike network and establish a more human scale environment. Easy pedestrian movement between the different functions and buildings in the area, supported by good landscaping, will help to unify the area as a single destination and stimulate its use. The existing Marina Way and 32nd Street space can be maintained as view corridors in order to create an attractive environment and also provide for emergency access.

Pepper Park will be extended further west onto the southern portion of the FPR with a wider water frontage and a larger open space. This open space could be multi-functional and would also be adequate recreational space for pick-up ball games and other activities. Pepper Park will have a bigger area in a layout that will enable flexible uses for different activities. The boat launch will be retained in its current position. Under the Preferred Land Use Alternative, access to the boat launch will be more direct using the new Road D3 and the re-aligned Road D1. The existing parking area will be retained as far as possible and will provide ample turning space for cars and boat trailers. Landscaping will enhance the joined-up public access network of the Marina District.

The new Road D3 south of the rail alignment (whilst retaining the existing Marina Way as a visual corridor with bike and pedestrian access) gives the opportunity for a large commercial recreation area (combining Lots B1, B2, B6, B7 and B8) providing flexibility towards building orientation and configurations within the lot. Lot B3 is the other commercial recreation lot where mixed uses including a hotel with waterfront and park views could be developed. However, the Preferred Land Use Alternative will limit opportunities for multiple developers to be involved in the future development of the Marina District. South of Lot B3 there will be provision for adequate recreational space for pick-up ball games and other activities north of the Aquatic Centre.

The table below indicates the changes in land use acreages. The area for Marine Related Industrial uses is proposed to be reduced by 0.40 acres, while the area for Marine Terminal (the First Point of Rest) is proposed to be reduced by 0.62 acres, however these reductions will be compensated by construction of the new rail connector track through Lot K, which will greatly benefit the marine-related industrial uses within and outside the site. The area for Streets will be significantly reduced, by 2.06 acres, and this area will be reconfigured for both Commercial Recreation and Park/Plaza. The reduction of 0.59 acres for Marina is the result of a re-designation in land use of the peninsula of land south of the marina from Marina to Commercial Recreation.

Table 3: Acreages of the Preferred Alternative

Approximate Acreage			
Land Use (Acres)	Existing	Proposed	Change
Marine Terminal	7.39	6.77	- 0.62
Marine Related Industrial	6.89	6.49	- 0.40
Commercial Recreation	16.62	17.79	+ 1.17
Marina	17.34	16.75	- 0.59
Park/ Plaza	7.39	9.89	+ 2.50
Street	5.17	3.11	- 2.06
Total	60.80	60.80	0.00

The pros and cons of the Preferred Land Use Alternative are highlighted below.

Pros

- Increased Park and Public Space and Commercial Recreation area. Pepper Park will be significantly enlarged to the north and west, with an extended water frontage, and increased multi-functionality.
- Provision of new rail alignment through Lot K will ensure a more efficient operation of Marine Related Industrial land use with a buffer zone including space for a noise wall and landscaped area south of the rail alignment.
- New Road D3 south along the new rail alignment will provide a spatial buffer between the Marine related industrial use and Commercial Recreation use.
- Road D2 is realigned and extended to connect to Road D3 to provide direct access to the marina and Lot B3. But it is partially closed to the south with a better pedestrian environment and a better link (with emergency access) between the Commercial Recreation use and the marina.
- The configuration of both Commercial Recreation parcels, and their connectivity with the marina itself, will be suitable for a range of uses including hotel and retail.
- The large size of the Commercial Recreation parcel north of the marina will enable a comprehensive and planned development and provide more flexibility for a master developer but will still need adequate urban design guidelines.
- The existing Marina Way will be retained as a visual corridor providing pedestrian and bike access and views towards the marina and the waterfront.
- 32nd Street will be retained for utility access and could provide more permeability with pedestrian, bike and visual access as well.

Cons

- The large size of the Commercial Recreation parcel north of the marina may impede opportunity for multiple developers to participate in the development process.
- The Pier 32 Marina will be less easily recognized and identified by motorists as Road D3 swerves away from the main marina buildings, hence retaining the existing Marina Way as a visual corridor providing pedestrian, bike, and emergency access is needed.

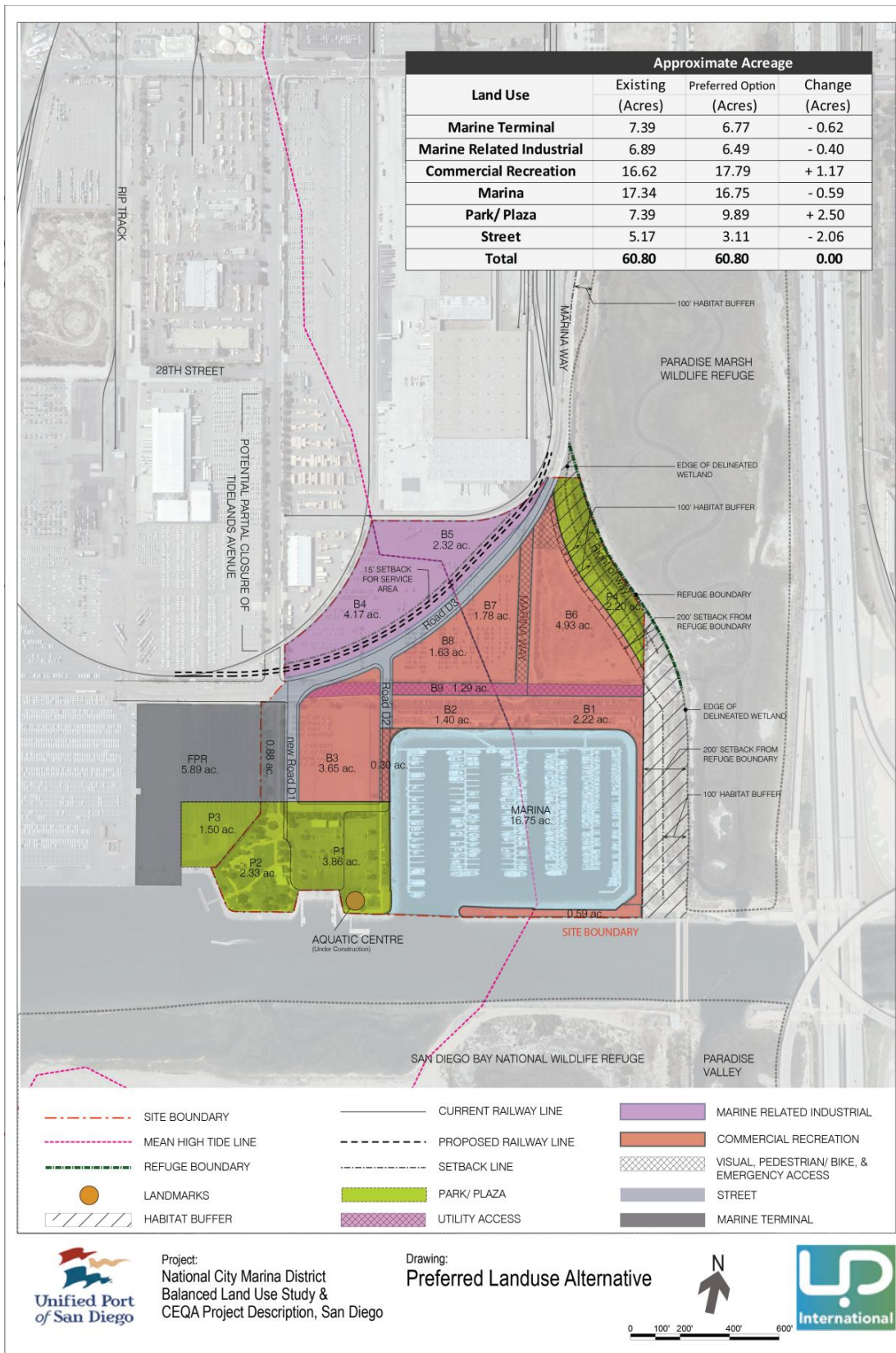


Figure 6.1: Preferred Land Use Alternative

6.2 Development Potential and Building Footprints

Possible development and building footprints for the Commercial Recreation zone could include mixed-use development with hotel, retail and restaurant food and beverage uses in addition to exhibition and event spaces. Appendix E shows a number of reference examples for the types of development possible with the range of footprints and floor areas possible. Below are potential locations for these uses.

Hotel Use

The lot north of Pepper Park (Lot B3) and the lot west of the Paradise Marsh (Lot B6) are suitable for hotel, and restaurant use which could include outdoor dining.

Retail Use

Retail can be developed as part of the hotel development to ensure an active street frontage.

Museum / Exhibition / Event Venue

The parcel south of the proposed rail alignment through Lot K (Lot B7 and/or B8) is ideal for an Exhibition / Event Venue possibly including a car or maritime museum attracting visitors to the Marina District

A Maritime School

There is a potential for a maritime school within the Marina District (e.g. Lot B7 and/or B8) if not as commercial recreation use perhaps as marine related industrial land use, if that use is determined to be consistent with that land use designation and the Public Trust Doctrine, and as the market dictates.

Farmers' Market

There is a potential for a farmers' market within the site near Pepper Park or north of the Marina.

Upgraded Playground

Pepper Park could be upgraded to include a splash pad and upgraded playground equipment.

RV Park

An RV Park could potentially be included along the eastern edge of the Marina as well as the triangular lot adjacent to the Paradise Marsh area.

Dry Boat Storage

Dry Boat Storage could be included along the marina edge to the east and south.

Appendix E shows a number of possible footprints and site configurations for the above mentioned land uses.

6.3 Implementation and Phase 0

The scale of the potential development will offer a critical mass of uses and activities and is likely to be developed in a phased manner, hence Phase 0 with interim uses is inevitable and necessary. Further discussion should take place on the precise phasing as consensus has been reached on the Preferred Land Use Alternative.

It is recommended that in the period before the Preferred Land Use Alternative is implemented that the Marina District is promoted and used for temporary and public-oriented events and activities. This interim period can be used to promote the Marina District as an attractive destination before the full development potential of the site is realized. Public events and concerts can be considered as part of Phase 0 in addition to arts fairs etc.

Already the area is used for many temporary and public-oriented activities such as the Mariachi festival. The prospect of a comprehensively revamped Marina District, however, enables the Port and other stakeholders to establish a wider recognition for the area through a unified branding strategy for the various temporary and public-oriented activities.

7 Conclusion

The National City Marina District balanced land use plan, was developed for the Port of San Diego by UDP International and its sub consultants. The project was undertaken by UDP International team working closely with the Port since November 2015 to develop several land use configuration alternatives to maximize marine-related industrial use, commercial development and public space with adequate accessibility and connectivity for the Marina District. This was done after a comprehensive analysis phase that included site visits, site analysis, site context analysis, opportunities and constraints analysis, background research and policy review, as well as local, regional and international benchmarking case study analysis.

An extensive public outreach and community engagement strategy was developed including two stakeholder workshops and two community design charrettes. Several issues were discussed such as the rail alignment on Lot K, maximizing the marine-related industrial uses, commercial development as well as park and public space for community needs. The process of stakeholder and community engagement revealed different views but consensus was sought for the preferred alternative to garner support for eventual implementation of the Balanced Land Use Plan. The collaborative process, place making, and sustainable development approach adopted for the project for the National City Marina District balanced land use plan were critical in the development of the Preferred Land Use Alternative.

The balanced land use configuration in the Preferred Land Use Alternative responds to the views of the various stakeholders. The Preferred Land Use Alternative addresses the needs of the community for an accessible waterfront with the expansion of Pepper Park for active and passive use including family picnics, art shows, musical events, weekend fairs, street markets, and active recreation, offering good connectivity with transit and public access through its open space, pedestrian and bike network.

The Preferred Alternative addresses the needs of the marine industrial operators by providing a rail alignment through Lot K, improving the marine industrial operations. A new road south of the rail alignment along with a buffer area will act as an adequate buffer from the noise from the rail activities. In addition, to help to reduce the potential noise levels, the buffer wall could potentially provide viewing opportunities to the marine industrial operations north and west of the rail alignment from a landscaped buffer zone. The Preferred Land Use Alternative also addresses the commercial development needs without compromising access to the Pier 32 Marina and opportunity for mixed-use development including hotels, retail, restaurant and larger venues for flexible uses such as events and exhibitions.

The concept of Phase 0 was developed so that the National City Marina District becomes an attractive destination for National City residents, workers and tourists. The Preferred Land Use Alternative will ensure effective use of the Port of San Diego's land resources within the National City Marina District and is beneficial for National City as well.

8 Next Steps

Next steps will require the Preferred Land Use Alternative to be reviewed pursuant to CEQA, as well as preparation of a PMPA to incorporate the proposed land use changes. The CEQA document and draft PMPA require approval by the Board of Port Commissioners. The PMPA also requires approval by the California Coastal Commission. After completion of CEQA review and final approval of the PMPA, issuance of Coastal Development Permit(s) would be required before any development consistent with the Preferred Land Use Alternative could occur.

Appendix A – Review of Policy Documents & Background Information

POLICY DOCUMENTS

The following policy documents were reviewed prior to commencing work efforts on the balanced land use study.

Public Trust Doctrine

The Public Trust is a sovereign public property right held by the State or its delegated trustee for the benefit of all the people in the State. The right limits the uses of these lands to water-related commerce, navigation, fisheries, open space, water-related open recreation, or other recognized Public Trust purposes.

The State's interest in portions west of the mean high tide line, which includes a portion of the Marina District, was granted in trust to the City of National City and was subsequently transferred to the Port. The areas east of the mean high tide line were acquired by the Port and are subject to common law Public Trust Doctrine and the Port's statutory trust. Therefore, uses in the Marina District are subject to the Public Trust Doctrine.

Pursuant to the Public Trust Doctrine, any commercial use of public trust lands must be water-dependent or water-related visitor-serving. Park and open space, too, must also have a relationship to the water and serve a statewide or at least a regional benefit.

A distinction would be made by the California State Lands Commission between general commercial recreational, mixed-use office retail and civic/cultural uses that are considered to *generally* serve the local citizenry and are therefore not water-related or visitor-serving; and those commercial recreational, office, retail and civic/cultural uses that are deemed to be visitor-serving, catering to the regional or statewide general public, and are water-related.

Permanent sports fields, for example, would not be considered consistent with the Port's statutory grants or the Public Trust Doctrine.

California Coastal Act (1976, as amended)

The California Coastal Act was enacted in 1976 by the State legislature. The Act indefinitely extended the authority of the California Coastal Commission as a regulatory oversight agency over land use and public access in the California coastal zone. The Act established policies and permitting procedures to which local plans must conform.

The basic goals of the state for the coastal zone are to:

- (a) Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources;
- (b) Assure orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the state;
- (c) Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners;
- (d) Assure priority for coastal-dependent and coastal-related development over other development on the coast; and

- (e) Encourage state and local initiatives and cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial uses, including educational uses, in the coastal zone.

Water-dependent uses are considered a high priority under the Coastal Act.

San Diego Unified Port District Act (2008, as amended)

The San Diego Unified Port District Act was enacted to provide a regulatory framework for the different parts of San Diego Bay, some of which are not incorporated or otherwise statutorily planned for. The Act establishes overarching principles with regards to the development, operation, maintenance, control, regulation, and management of the harbor of San Diego. It also establishes the authority and powers of the Unified Port District.

San Diego Unified Port District COMPASS Strategic Plan 2012-2017

The COMPASS Strategic Plan outlines the vision, mission, values and goals of the Port as directed by the Board. A number of strategies are outlined to achieve the goals.

The Port's Vision is to *"foster a world-class port through excellence in public services"*.

The Port's Mission is to: *"protect the Tidelands Trust resources by providing economic vitality and community benefit through a balanced approach to maritime industry, tourism, water and land recreation, environmental stewardship and public safety."*

The Port's Values include: Accountability; Courage; Fairness; Fun; Inclusiveness; Innovation; Integrity; Teamwork; and Transparency.

The Port's Goals are:

- A thriving and modern maritime seaport;
- A Port that the public understands, trusts and values;
- A vibrant waterfront destination where residents and visitors converge;
- A Port with a healthy and sustainable bay and its environment;
- A Port with a comprehensive vision for Port land and water uses integrated to regional plans;
- A Port that is a safe place to visit, work and play;
- A Port with an innovative and motivated workforce; and
- A financially sustainable Port that drives regional job creation and regional economic vitality

Port Master Plan (2015)

The Port Master Plan will be utilized to determine the latitude and flexibility of existing land uses and guidelines and how well they can accommodate each of the primary stakeholder's concerns and requirements. Where the flexibility is not enough to meet these requirements, recommended changes in land use and development standards will then be identified. Some of the requirements will be determined by the review of previous studies and through the stakeholder outreach efforts. This input will result in a matrix of quantifiable building program requirements, acreage minimums, site requirements, site amenities, physical access needs and acceptable site conditions (including acceptable noise and activity environments).

Development and Conservation Strategy

Direct Port District involvement will stimulate the private sector to invest in projects that conform to overall development guideline that will be set forth and also adhere to the development and conservation strategy that emphasizes upon balanced approach. *“The Port development seeks to minimize substantial adverse environmental impacts; minimize potential traffic conflicts between vessels in the port; give highest priority to the use of existing landscape within harbours for port purposes; and provide for a full array of beneficial activities including recreation and wildlife habitat uses.”*

Dredging, Filling and Shoreline Protection

The Pier 32 Marina was built by dredging the land and the area was developed with the help of the marina owners and the Port, which owns the property and other nearby tidelands, including Pepper Park. Any alterations to be proposed in the future for the land use alternatives will adhere to the recommendations made for shoreline protection and shoreline enhancement in the Port Master Plan. However temporary structures could be proposed for enhancement of the overall value of the area.

Public Access to the Shoreline

Visual and physical access points will be identified for the Marina District site for visual enhancement. The current Master Plan identifies a Vista area on Pepper Park; however it does not identify a major view corridor for the given site. The current public access to the shoreline as per the Master Plan is from the Pepper Park area. The promenade demarcated in the Precise Plan for Planning District 5 shows access around the southern side of the site and this promenade also shares an edge with the lumber yard area.

Permitted Uses

The Port Master Plan identifies the major waterfront for Marine Related Industrial use and the Pier 32 Marina area for Commercial Recreation use. A portion of the site is also identified for commercial use. As the site forms a transition of land use from a working harbour front on the North to a more ecologically sensitive and public recreation harbourfront to the South, it is essential that the land use configuration enunciates this transition through a balance of mixed use and industrial land use.

Integrated Planning Port Master Plan Update, Framework Report (2015)

The Framework Report (2015) acts a final portion of a visioning process as part of the Integrated Planning effort by the Port. The Framework Report contains planning ideas in the following key areas: land use, water use, mobility, public access and recreation, natural resources, safety and resilience, environmental justice, and economic development. The Report serves as a guiding document for the comprehensive update to the Port Master Plan.

The Framework report establishes six Planning Principles and five Values and Standards to guide development actions in the San Diego Bay. These Planning Principles and Values and Standards are listed in the two tables below, the second column consists of implementation ideas for the Marina District.

Planning Principles	As applied to Marina District
I. Honor the water	Enhance access to the Sweetwater Channel, increase water-dependant uses where possible. Minimise water pollution.
II. Guarantee the public realm	Enhance the connectivity of the remote area of the Marina District. Where possible utilise accessibility across the Sweetwater Channel towards and from Chula Vista. Increase quantity and quality of public space.
II. Celebrate nature and ecology	Provide information about natural environment in both Paradise Marsh and Sweetwater Marsh Wildlife Refuge. Option of free to use binoculars.
III. Create a comprehensive open space plan	Seek to make the Marina District part of a joint-up open space network.
IV. Provide ease of mobility on land and in water	Enhance connectivity for different modes of transport: bicycle, public transport, and water access, in addition to the private car.
V. Streamline the approval process	Flexible plans yet in conformance with the Port Master Plan and its principles and guidance.

Values and Standards	As applied to the Marina District
I. Achieve solidarity among partnering agencies and stakeholders.	Any plan for the Marina District should seek to address the needs of key stakeholders and the community and further strengthen partnering between the Port and the National City with proper functional and spatial relations and achieve a balance between marine industrial, commercial recreational and open space with public access to the waterfront.
II. Promote clean air, healthy communities, and environmental justice.	Promote different modes of transport to the Marina District, including bicycling and public transport. Promote the Marina District as a healthy lifestyle destination: with active watersports, grass-based sports, walking jogging with an opportunity for general exercise.
III. Ensure job creation, prudent economic policies, and financial sustainability.	Maximise the commercial potential of the area.
IV. Preserve the working port as a dynamic and thriving element of the region's economy and cultural history.	Strengthen the marine industrial uses of the area.
V. Incorporate state of the art	Ensure climate change adaptation measures,

sustainability practices.	including renewable energy sources (sun, wind), re-use of water.
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BACKGROUND INFORMATION

The following background information was reviewed prior to commencing work efforts on the balanced land use study.

Bayshore Bikeway Plan (March 2006)

In the Bayshore Bikeway Plan, SANDAG proposed to run the Bayshore Bikeway through the study area. The proposed path of the Bayshore Bikeway is south along Tidelands Avenue from Bay Marina Drive and east along 32nd Street connecting to an existing segment of the bikeway. However, SANDAG, the Port and the City are currently exploring alternative routes to complete the bike path in this area.

National City Harbor District Specific Area Plan (1998)

The Harbor District Specific Area Plan (HDSAP) was adopted by the City of National City to fulfil the requirement of the certified National City Local Coastal Program (LCP) for a detailed, resource-based, environmental implementation plan to establish site-specific conservation and development standards. The Harbor District Specific Plan pre-dates the development of the Pier 32 Marina.

The plan outlines setbacks and buffer zones with regards to the wildlife refuge, as well as recommended planting. In addition, the plan provides for structure height limitations within the plan area. Although some areas of the Marina District that are discussed in the HDSAP are owned by the Port District but not within the Port Master Plan, some development guidelines, such as setbacks and buffer zones, may be required for any future development in the Marina District.

National City Bayfront Marina District Vision Plan (2011)

National City Bayfront Marina District Vision Plan (the Vision Plan) study area (which covered approximately 108 acres) differs from the study area for this balanced land use study and CEQA description. The Vision Plan aims to protect land use recommendation only. The aim is to protect maritime uses; enhance the working waterfront; increase public access to the waterfront; provide additional public amenities; establish additional visitor-serving uses; consider compatibility of adjacent and transitional land uses; solicit public and stakeholder input to assist in the design of the plan; comply with environmental regulations and protect coastal resources; and develop a plan that is financially feasible and provides a fiscal benefit to both the Port and the City.

Three land use alternatives were prepared and subsequently formulated into a preferred alternative, taking into account received public opinions during the public workshops relevant to the Vision Plan. Key features were as follows:

- No net loss of maritime industrial uses;
- A possible opportunity to allow public viewing of certain working waterfront operations for visitors experience and education purpose;

- Increase of public accessibility to the waterfront area via development of additional parkland;
- Additions of commercially-designated land for visitor-serving uses and public amenities and uses on Port lands must be in consistency with the Public Trust Doctrine, i.e. water-dependent or water-related visitor serving;
- Realignment of Tideland Avenue to create a proper buffer in between the industrial uses to the west and the commercial components to the east;
- Commercial; industrial (non-maritime); industrial (maritime) are proposed to be amended from approx. 24 acre to 67 acre; 33 acre to 13 acre; and 36 acre to 13 acre respectively.

The preferred alternative placed an emphasis on commercial development, which could compromise the marine industrial nature of the Port, hence the need for a balanced land use plan for the Marina District.

National City General Plan (June 2011)

The National City General Plan covers the elements of land use, circulation, housing, safety, noise open space, conservation, community character, agriculture, sustainability, nuisances, health & environmental justice, education and public participation. The general plan's maps, diagrams, and development policies serve as the basis for the tools, i.e. the zoning ordinance, subdivision ordinance, design guidelines and the capital improvement program, which implement the general plan. It provides a general description of land use designations with the restricted FAR assigned for various zones. It also sets out citywide goals and policies with reference to the elements aforementioned.

Mercator Report (2013)

Mercator International LLC ("Mercator") was engaged by the Port to assess land and rail capacity needs for the National City Marine Terminal (NCMT). The report made the following key observations about NCMT and the operation of its main tenant, Pasha Automotive Services (Pasha):

- *"NCMT is the most efficient RO-RO marine terminal in California, and among the most efficient on the US West Coast, in terms of vehicles handled per year per acre.*
- *NCMT's acreage, berth positions, and on-dock rail track infrastructure are highly competitive with other RO-RO terminals on the West Coast.*
- *About 90% of Pasha's current volumes through NCMT are imported vehicles, 45% of which move inland by BNSF train service. This means that NCMT needs to receive regular supplies of empty multi-level railcars to evacuate import vehicles from the terminal to their inland destinations.*
- *BNSF typically delivers empty railcars to (and departs loaded railcars from) NCMT only 4 to 5 times per week, because of restrictions regarding when freight trains can run on the San Bernardino – San Diego line and due to irregular daily volumes of empty railcars. Consequently, PAS needs to have a buffer inventory of empty railcars to avoid congestion.*

- *The number of vessels delivering import vehicles to NCMT fluctuates widely (from 1 to 7) on a week-to-week basis (due to the nature of the international automobile market), causing the number of vehicles parked on the terminal to swing significantly up and down. Consequently, PAS needs to have sufficient acreage to handle the majority of the peak volumes of import vehicles.”*

The study concludes that Pasha is well-positioned to capture projected demand growth in the automotive production industry. Reconfiguring certain NCMT land areas for more effective vehicle storage, combined with an increase of railcar storage, would allow Pasha to expand its business at the terminal.

The study identifies different possible rail alignments and associated operational capacity increase but notes that any option is likely to increase noise pollution to the Marina District as well as to guests staying at the gateway Hotel.

SANDAG Forward/Regional Transportation Plan (October 2015)

This plan does not propose any transportation improvements within the Marina District study area. The nearest major improvements are along Interstate 5, where widening is proposed to ten lanes plus two managed lanes north of SR 54 and eight lanes plus two managed lanes south of SR 54.

Vickerman & Associates NCMT Optimization Study (2015)

The NCMT Optimization Study focuses on the marine terminal operational improvement opportunities, with particular attention to infrastructure and transportation options.

In terms of cargo the NCMT area deals with automobile import and exports, lumber, and domestic coastwise cargo between Hawaii and NCMT. The terminal rail is run by BSNF railroad. The main rail is the only access for cargo in to deeper areas of the country.

The long term vision for NCMT comprises four key strategies:

1. *“Preserve and enhance the maritime cargo terminal areas at NCMT through realignment of parcels, street closures and terminal infrastructure improvements and improved terminal operations.*
2. *Increase the intermodal rail switching, rail car storage and rail terminal capacity.*
3. *Focus planning and marketing efforts to establish a new integrated National City Logistics Park using the current National Distribution Center as an anchor development.*
4. *Continue to support the domestic coastwise Hawaii trade (Pasha Hawaii Transport Lines).”*

The study indicates that the maximum practical capacity of NCMT is between 1,167,000 and 1,617,000 metric tons. Due to the area not consistently operating at maximum practical capacity, the “sustainable terminal capacity” is 70% of the maximum practical capacity value, i.e. about 1,131,900 metric tons.

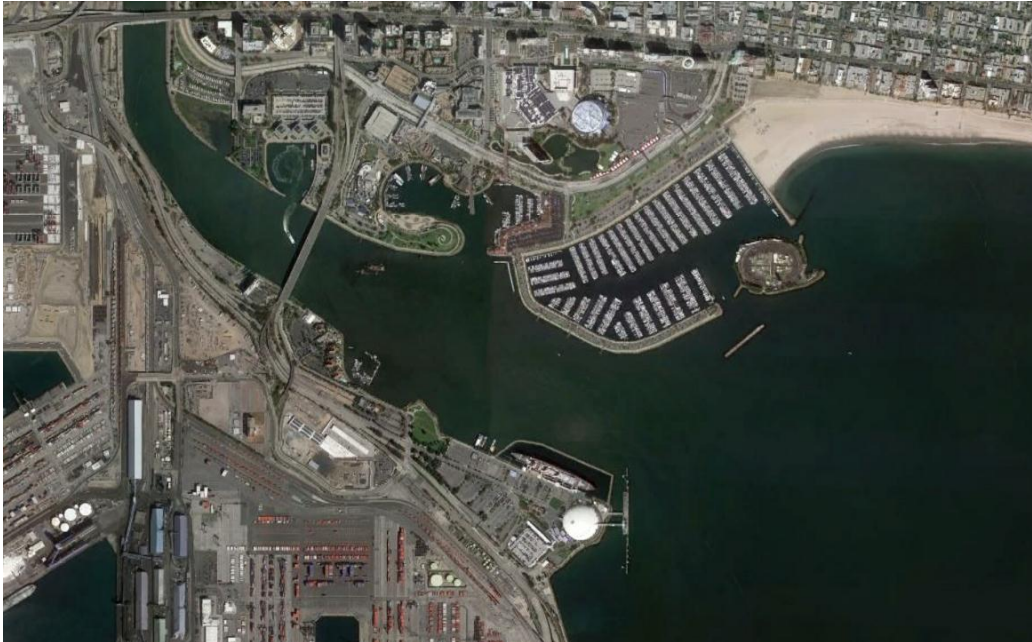
“The focus of the findings and recommendations of the Optimization Study remain market driven. Cargo will flow to the “Lowest Cost – Best Service Levels”, and this level must be viewed as the total logistics costs from origin to destination. The National City Marine Terminal clearly provides the San Diego Unified Port District and region with a highly competitive multipurpose terminal that provides significant economic benefits.”

The study concludes that the BSNF Railroad needs to be improved significantly in order to increase the efficiency of the area regarding cargo movement and domestic transportation. Maximum Practical Capacity and Sustainable Terminal Capacity both need to be considered when redeveloping the site. Overall, the NCMT Optimization Study addresses several issues with the NCMT in its current state and these issues are relevant to the project at hand.

Appendix B – Case Studies

Benchmarking case studies of local and international waterfront examples (as detailed below) are considered to showcase the coexistence of working, commercial and recreational uses along waterfront sites.

Queens Bay, Long Beach, Los Angeles

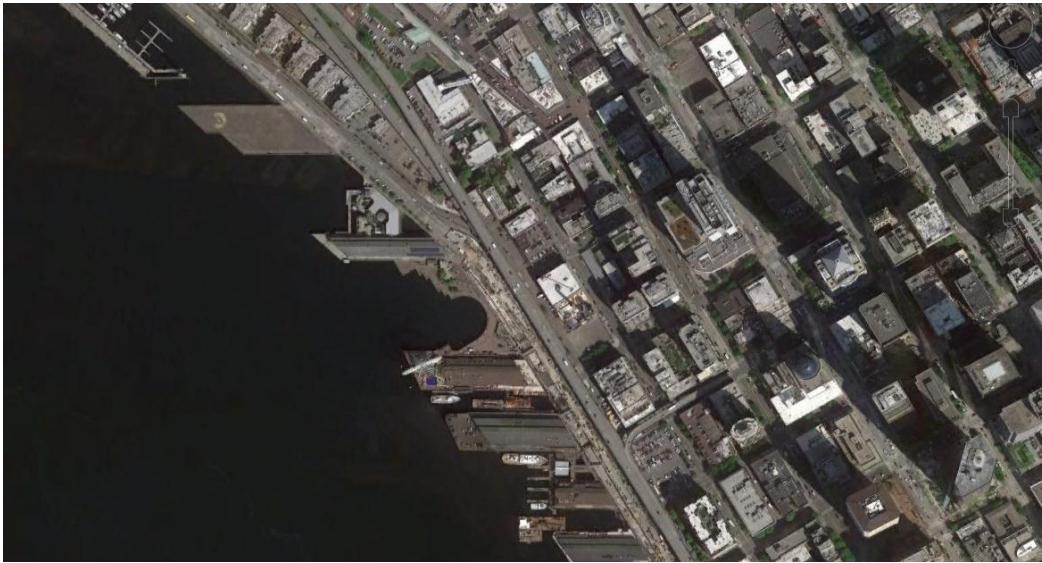


Varied Uses – One of the biggest ports in the USA is adjacent to the Queensway Bay area in Long Beach, CA. The access to this major waterfront area is along the Queensway highway that serves the Queen Mary hotel and the cruise terminal. This water edge is the lesser active public zone in comparison to the rainbow harbor which houses major dining, retail and public activities. However the diversity of uses such as the floating museum and hotel, the cruise terminal, the Harry Bridges Memorial Park helps add value all year round with different activities. The Marina District could benefit from a similar mixed use to ensure all year round activity in the area.

Identity – Royal Mail Ship (RMS) Queen Mary is a retired ocean liner that sailed primarily on the North Atlantic Ocean for the Cunard Line and was purchased by the City of Long Beach in 1967 for conversion to a hotel and maritime museum. This interpretation facility renders an essential historical character to the area and helps connect with the maritime activities which are very relevant to its history and present day context. The Marina District has the opportunity to create an identity through tours for man-made or natural attractions. The theme can be designed for the Marina District site to create an identity rooted in its context with relevant available contextual resources and can be implemented through different programs such as aquatic life interpretation centre, or the automobile industry and marine industry interpretation tours.

Events as a way of engaging public – Long Beach Marathon, sailing, annual water ski race, and various small public events bring vibrancy to the area and help the commercial and retail facilities thrive.

Central Waterfront, Seattle, USA

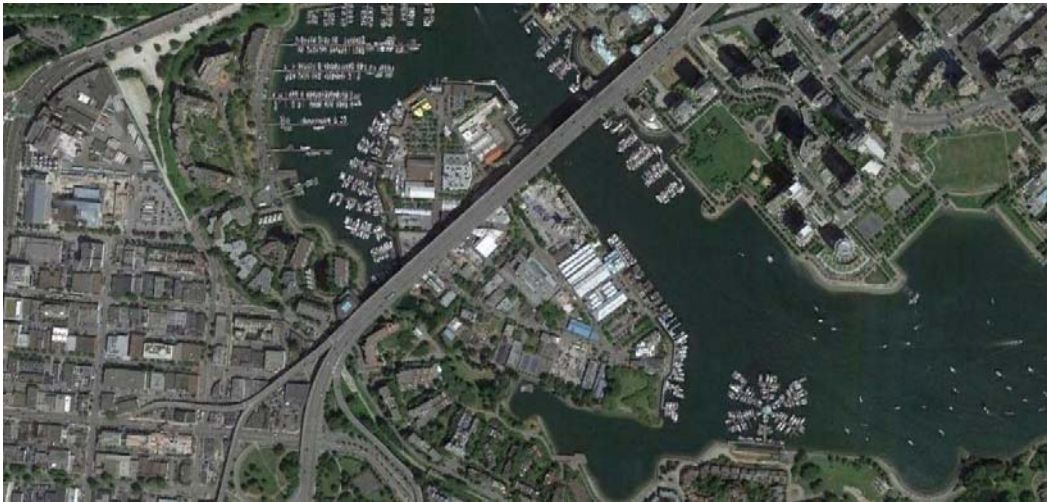


Vision plans for the waterfront development – Waterfront Seattle is a multi-year program to rebuild Seattle’s waterfront which is led by the City of Seattle’s Office of the Waterfront, working closely with civic leaders, stakeholders and the broader Seattle public to create a “Waterfront for all.” The city has adopted an official Waterfront Concept Plan. The planning process has remained progressive with the help of Vision Plans, Visioning Charettes, and community engagement activities. The transformation of a major working port and improvement of its connection with the Downtown has been a continual process and has helped in reviving the waterfront.

Varied use of the waterfront – The Central Waterfront was once the hub of Seattle’s maritime activity. Since the construction of a container port to its south in the 1960s, the area has increasingly been converted to recreational and retail uses. The Central Waterfront is adjacent to the working port at Elliot Bay. The Harbour Island and the Industrial District West form major working harbour areas of Seattle. Seattle waterfront is an example of the area under the transition of use over a period of time along with its current day co-existence with industrial harbour which is comparable to the Marina District.

Accessibility – The park viewing platforms and other facilities can be reached both by stairs and a wheelchair-accessible ramp. Several crosswalks have been provided at every crossing under the Alaskan Way Viaduct. Pedestrian accessibility has supported the site in accommodating more public friendly spaces. Despite the presence of major transport networks adjacent to the waterfront, pedestrian connections with universal accessibility have increased the commercial use potential of the waterfront sites.

Granville Island, Vancouver, Canada



A mixed use development for achieving waterfront vibrancy – Granville Island consists of various uses ranging from shop and services of various kinds (incl. farmer/public markets), dining places of café and bar, educational institutions, etc. The diverse mix of usages attracts locals and visitors 24/7. Since Granville Island and the Marina District site are of similar scale and sizes, similar mix of uses could be made reference to.

Good connectivity to the nearby district – accessibility to the Granville Island via land-based and water-based transits are common and such transit arrangement can facilitate people movement in and out of the Island, bringing energy and vibrancy to the Island.

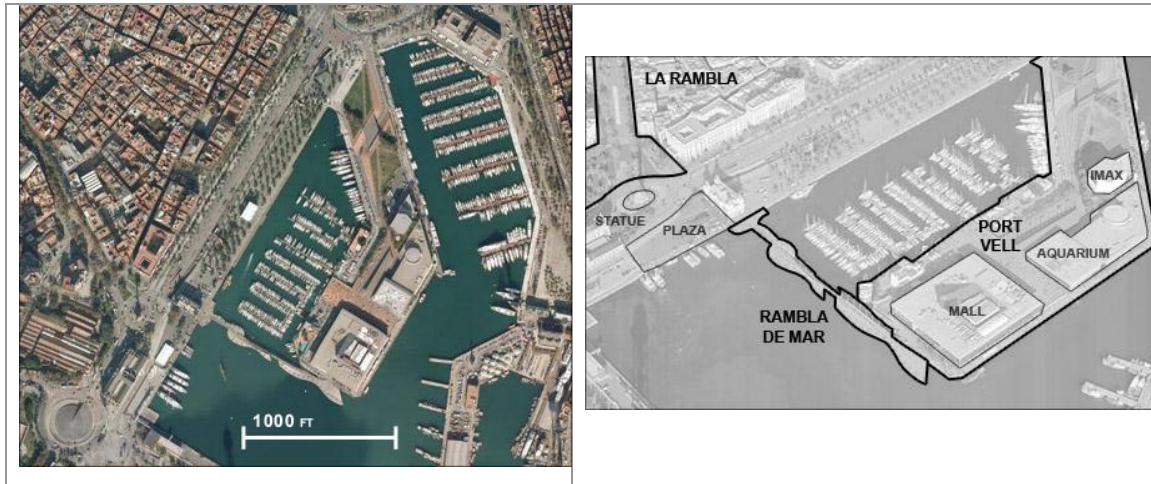
Utilization of anchor users for attracting locals and Visitors – Educational institutes of Emily Carr University of Art + Design and the Arts Umbrella are anchor users of the Island, attracting a large number of locals and visitors to visit the Island daily. The Island also hosts international festival such as the Vancouver International Jazz Festival, the Vancouver International Writers Festival, and the Vancouver Fringe Festival year-round. The Marina District could make reference to look for major anchor users that are consistent with the Public Trust, building a critical mass for tourist and local attractions.

Public accessibility to the waterfront area – a large portion of the waterfront area within the Granville Island is accessible by the public. Establishments of eating place choose to locate near the water body, energizing the waterfront area.

Sensible arrangement for soothing undesirable land use interface – Ocean Concrete is the oldest and the largest tenant on Granville Island. Mitigation has been carried out to meet the environmental requirements and it has now become an industrial component of the mixed uses on Granville Island. Consideration of sensible design could be referenced for the Marina District.

Adaptive Re-use – The Granville Island adopts an adaptive re-use approach, turning old industrial premises into various uses of retail, entertainment, educational institution and industrial premises. In terms of the urban design, buildings on the Island are about 2 – 3 stories (a few may be up to 4 stories) tall with a building height about 65 to 82 feet. At grade integration (i.e. the adoption of alfresco / patio areas) are commonly seen on the Island. The Granville Island provides a good reference in terms of place making to the future development of the Marina District as they share common characteristics such as commercial / industrial / marine port facilities interfaces, adjacency to marina, etc.

Port Vell, Barcelona, Spain



Direct pedestrian connection – The success of Barcelona's redeveloped waterfront is due to the fact that the project takes a strong axis in the city and directs it to an arguably better terminus. Once connected to a major pedestrian axis of La Rambla, Port Vell became a novelty for its location on water. The strong pedestrian connection transformed the area and the marina into a public place.

Optimizing area for pedestrian and vehicular traffic movement – The government re-aligned the highway underground, thus, connecting the city and the waterfront and provided the pedestrians a comfortable access of street crossing experience. Rambla de Mar played a very basic role as a pedestrian bridge to span across the harbor and to connect the land and the pier.

Vibrant harbourfront – The public was given both easy access to Port Vell, and several activities to keep them engaged at the destination: a shopping center, an aquarium, an iMax theater and a series of public spaces. The public spaces are also well-connected to other tourist attractions in the vicinity. This would be an important consideration for the Marina District.

Quality of public space as a pull-factor – Port Vell also demonstrates that in a warm climate where people are able to spend significant time outdoors there is great benefit in investment in public infrastructure. The City of Barcelona has spent significant amounts of resources in the design, quality and management of public space and public infrastructure. The quality of the space attracts people to use it and prolong their visit.

Lloydkwartier, Rotterdam, Netherlands



Balanced land uses – Lloydkwartier is a good example of a port area that has been repurposed to a mixed maritime/urban quarter. The contrast between the two seemingly incompatible land uses is emphasized by planning for a high-density urban environment, surrounded by the active port of Rotterdam.

Public attraction – Lloydkwartier is a popular place to experience the dynamic 24/7 world of a working port without being altogether removed from ‘regular’ city life. The sense of isolation is emphasized by the location next to a major park to the east. The plan-making celebrates the working port by carefully integrating them into the transformed port area. The working port is made visible and functions as an integral part of the attraction of Lloydkwartier. Similarly, the working port of the Marina District could be developed as an attraction.

Use of public space – A significant portion of the quay areas is giving over to public use, again reinforcing the symbiotic relationship between urban functions and a working port. The sports fields are well-used and serve to show that regardless of a relatively remote location, people will find their way if an opportunity presents itself.

Singapore Cruise Terminal, Singapore



Enhanced multi-mode transport system – The commercial development at the Singapore Cruise Terminal has been successful owing to the excellent connectivity with rest of the city through public transport (MTR, Cable Cars, Ferry, Cruise, Bus interchange, road access) and International connectivity through the cruise terminal.

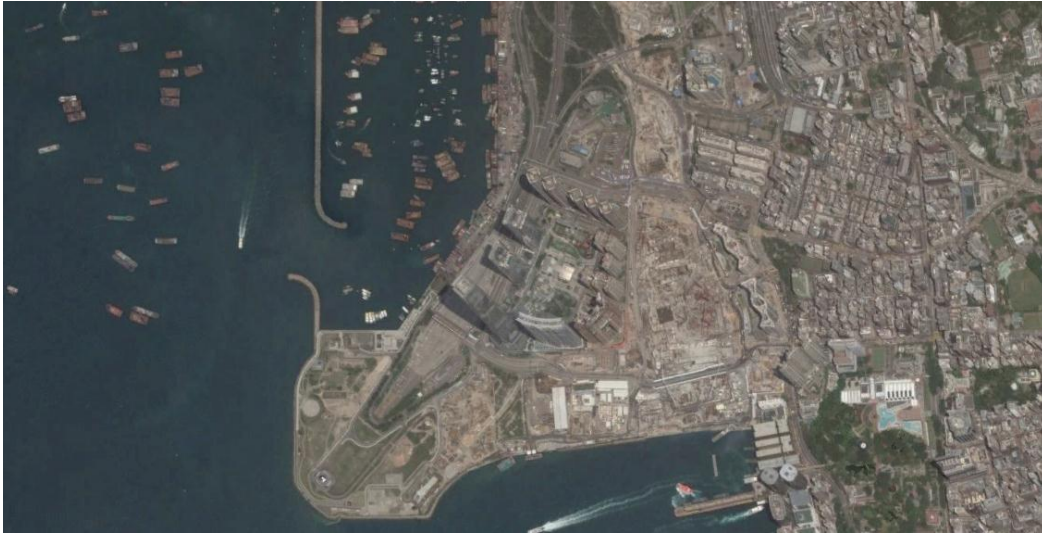
Pedestrian access – The zones segregated with major roads have been connected with overhead pedestrian walkways to allow free movement of public not only within the site but also to the nearby areas such as nightclubs that are used at different times of the day.

Commercial development – The new development such as VivoCity, and adaptive reuse of St James Power Station- the old coal-fired power plant- with nightclubs and live entertainment destinations has made the area vibrant and open for public use.

Balance of development with ecological conservation and connectivity to nearby destinations – The Harbourfront development in the Bukit Merah Planning Area is balanced with ecological conservation area in the area. The cruise terminal along with all the commercial development and marina in close vicinity share a backdrop of the Mount Faber Park, the oldest secondary rainforest. The Singapore cable car system connects HarbourFront Centre to the peak of Mount Faber and Sentosa. The physical and visual connection to such a large ecological zone enhances the value and attractiveness of the physical and biological entity. Sweetwater Wildlife refuge and Paradise Creek can balance the industrial activity and can be enhanced with native plantations.

Variations and transitions in the land use – The Singapore cruise terminal is flanked by PSA Singapore Terminals on the east which is designed to operate a total of 57 berths at its container terminals in Tanjong Pagar, Keppel, Brani and Pasir Panjang. They operate as one seamless and integrated facility. The Keppel Bay on the West has a Marina with facilities like sailing club, training institute, and has a luxury residential complex. The Vivo City commercial facility along with its neighbouring dining and recreation facilities forms an important buffer between the varied land uses within the area and ensures compatibility through various public facilities. Transition of land use from industrial to commercial and marina could be a relevant example for the Marina District.

West Kowloon Cultural District, Hong Kong



Theme-oriented approach – The West Kowloon Cultural District (WKCD) was planned with a strong cultural theme and is part of a wider reclamation project carried out in the 1990s. As reclaimed land, the area was unknown to the public for much of the time after completion in 2003. A nearby metro station was opened with associated housing, office and retail space but the WKCD area was difficult to get to and therefore outside of the public mind.

Creating “Phase 0” – A series of cultural and entertainment events were held to allow the public to become more familiar with the character and image of the WKCD, to regard it as a place for arts and culture. These pre-development stage activities included arts participation, music festivals such as Clockenflap and exhibitions such as the Biennale. Over time this helped to harness public support for the project. “Phase 0” activities could be considered for the Marina District.

Appendix C – Planning Areas

The following is a discussion of the National City Bayfront Planning District (Planning District 5) and the subareas of Planning District 5, as described in the Port Master Plan.

Planning and Site Area

The National City Bayfront planning area contains a total of roughly 420 acres, consisting of 250 acres of land and 170 acres of water. The Master Plan assigns most of the land to Marine Related Industrial and Marine Terminal use, with Commercial Recreation, Park and Recreational Boat Berthing located north of the Sweetwater Channel (p. 80 of Port Master Plan). The study site area for the Marina District site is around 60 acres. The site forms a part of the National City Bayfront Planning Subareas number 58, 59 and 55. The sub-area no. 59 includes the marina docking area and commercial and public facilities such as restaurants, promenade etc. The First Point of Rest lies in the sub-area number 57.

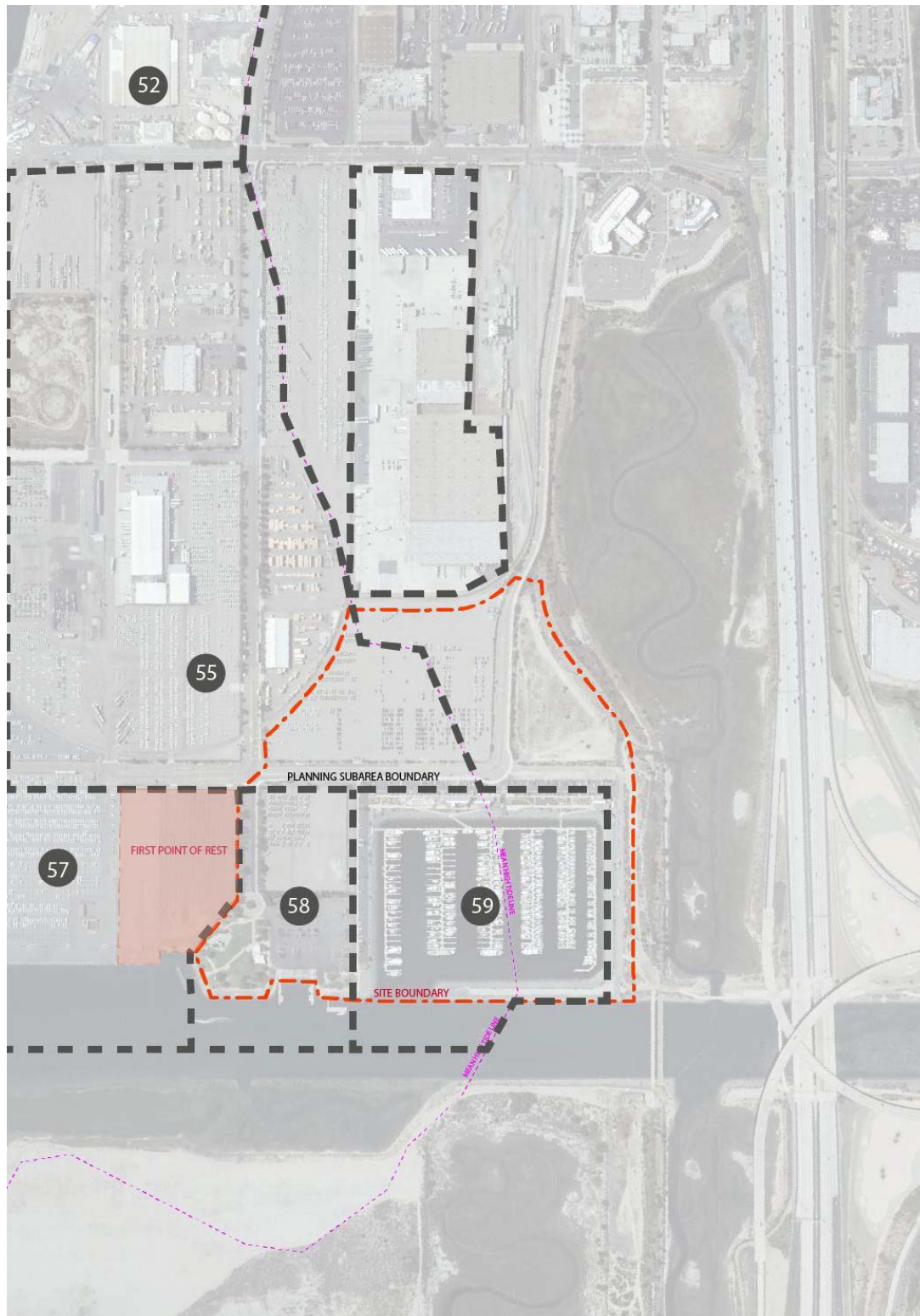
Lumber Yards (55)

At present the area back of the National City Marine Terminal is used almost exclusively for storage, assembly and handling of lumber and wood products with other uses such as fuel oil storage farm and a food cold storage locker. These uses display the benefits of water linkage with the marine terminal and require a considerable amount of space (p. 82 of Port Master Plan). A portion of the sub-area number 55 namely Lot K is included in the Marina District site. For revitalization of the Pier 32 Marina area, compatible industry should be allowed in this area which also forms a transition area between industrial and commercial activity. Abatement measures for potential noise and traffic will have to be proposed for effective public use of the sub area no 59 and 58. Logistic capabilities will have to be met without restricting access.

Launching Ramp (58)

This public recreation area includes a park lawn area, a public fishing pier, a boat launch ramp and a parking area serving the entire site. The boat launch has 8 lanes for boating access, a restroom and a dock facility on the Sweetwater Channel. An aquatic center facility soon to be completed, primarily for public programs, events, and organized activities, is located at the waterfront near Pepper Park. Continued use of this public recreation area is anticipated for active yachting, instructional turf play and the more passive activities of fishing, picnicking and sightseeing. The existing National City small craft-launching ramp provides landing and shore side support services (p. 82 of Port Master Plan).

With the site intensification increase in public activity is anticipated. Public transport facilities can help mitigate the demand for private vehicle parking to optimize road area. This could provide opportunity to allocate a portion of the less accessed roads and parking areas to the expansion of the park area, or reallocation of area for Marine Terminal use or commercial use.



Planning Sub-areas of National City Bayfront District in Port Master Plan

Marina (59)

This commercial recreation area is designed to accommodate the needs of workers in the nearby industrial area, people enjoying the nearby recreational park, and the adjacent marina and attendant commercial facilities. Uses recommended as per the Port Master Plan could include a restaurant or coffee shop, convenience store, bait and tackle shop, boat slips and dry storage, lodging and other business activities consistent with public demand. Activities associated with the boat launch ramp, such as the sale and repair of trailered boats, boating equipment sales, water ski gear, and selected marine hardware, are appropriate uses (p. 85 of Port Master Plan).

The Pier 32 Marina currently offers amenities for the boaters such as boater's lounge, captain's quarters (710 sqft apartment), pool and Jacuzzi area, boater's store, common areas, dining, marina/slip, etc. Further enhancement of the complex could encourage better use and make the marina (and its related facilities) more commercially viable. The additional traffic and increased activity in this presently isolated property would greatly enhance its attractiveness for commercial enterprise.

Paradise Marsh (adjacent to Planning Subarea 59)

Paradise Marsh forms an important ecological element, and is part of the Sweetwater Marsh National Wildlife Refuge. It will be essential that this natural edge is revitalized for public access perhaps with the location of the segment of the Bayshore Bikeway with pedestrian connectivity to the Sweetwater Reserve to the south of the site. Currently an inactive rail line passes along the edge of the Paradise Marsh from the Mid-Bayfront towards the north terminating at the Marina Gateway. Although this is not a sub-area in the Port Master Plan and is not Port District property, this sub-area can become an important node of development and confluence of activity zones.

Appendix D – Design Charrettes

Below is a summary of both Design Charrettes that were held in January 2016

First Design Charrette

Table 1 – Alternative 1

Table 1 which was the Spanish speaking group felt that the park area was a nice tranquil space with potential for further enhancement. However it was mentioned that in terms of the current usage most members use Pepper Park a few times a week to a few times a month. The park area is too small with not enough room for children to actually play any games that involve running. Parking was also a prevalent issue and group members were asking for more parking, as there is not any easy way to get to the Marina District other than driving.

In terms of Phase “0” table 1 wanted to see more events like the Mariachi festival to take place in the area. Other examples that were given include: low cost farmer’s markets, benefit concerts, and a venue for performances.

Table members felt that the green space distribution was a little to spread out and would really enjoy contiguous park space with as much green space as possible, as commercial areas are generally not too interesting to the members of the group. There is preference on a “Central Kiosk” area like a band stand or an open gazebo area. They feel that the rail should have trees as noise buffers as well as shrubs. Lighting was another issue, members felt the area was less safe at night due to the lack lighting and bright street lights would help increase the safety in the area.

Table 2 – Alternative 2

Table 2 enjoyed the park area as well as the aquatic center and fishing pier. Consensus was that the current park and aquatic center size was not big enough. However, they felt that access to the area is currently limited and not ideal. The group also expressed that the Marina District seems to be unknown and it lacks presence within the area.

For Phase “0” the group suggested any sort of activities with cultural and community interest such as the Mariachi Festival or a Car Show.

They would like to see expansion to the Pepper Park area as well as bus routes, and signage for wayfinding increased. In their view the goal should be to create a “sense of place” and identity for Marina District as a destination for residents and visitors. The idea for a landmark visible from the freeway was also mentioned.

Table 3 – Alternative 3

Table 3 enjoys Pepper Park and had several members that use it frequently, but they feel the size is definitely too small and the access is very limited especially with the limited parking available. There was consensus within the group the need for public transport to the area. A few group members are bike enthusiasts and are waiting patiently for the Bayshore Bikeway which will be great for residents and visitors as well.

For Phase “0” the table listed a few options: A field area for union meetings and pick up sports games, cultural events that focus on all different cultures in National City, and a Farmer’s Market.

Table 3 felt that more contiguous park space was the best option along with additional parking for the area. They also felt that roads will need to be widened if they are going to be used for the boat launch as the space right now is not adequate enough.

Table 4 – Alternative 4

Table 4 enjoys the tranquility of the area, especially Pepper Park. One of the members at the table is a bike rider and he enjoys visiting the Pier 32 Marina for coffee during his bike rides.

Table 4 would like to see a landmark sort of showcasing that this area is National City Marina District. Like the other tables, table 4 would also like to see more contiguous park space rather than spread out park space which is ultimately “unusable”. They also would like more linkage to other areas and bike paths from the National City to the Marina District.

Second Design Charrette

Table 1 – Alternative A & B

Table 1 was very happy with the proposed land use configurations and was curious to see how the designated commercial land use would affect parking in the area. They really hope there will not be a seaport village parking situation where it costs a lot to park. They want to ensure that all views are preserved with whatever ends up being developed in the commercial area. Group members were happy to see that Pepper Park is being expanded and has significant contiguous park space in that expansion. Overall, Table 1 preferred option B as they liked the road acting as a buffer between industrial and commercial / park.

In terms of Marine Industrial Uses, Table 1 is concerned about the road being wide enough and safe to walk and bike on. In terms of commercial use, Table one members want some sports rental facilities and healthy food options as opposed to fast food chains. In terms of Events they felt that in addition to the Mariachi Festival, Music Events, Night Movies, and Art shows / exhibitions. Table 1 was very happy with the proposed Pepper Park, but they would like to see some flat grass area that is ideal for sports and exercise classes.

Table 2 – Alternative A & B

Table 1 indicated that they preferred alternative option B as the road buffer from the marine industrial makes the most sense to them. The table was really concerned about the parking available in the area and hopes that the new commercial expansion does not inhibit parking opportunity but instead boosts available parking. They were happy to see that Pepper Park was being expanded but would like all of the park area to be consolidated in to one area rather than split between sides of the parking lot. Granger Hall being put in the Marina District was heavily opposed and given its heritage and closed building typology, it was suggested that it should be placed near the rail depot instead.

Table 2 was happy with what was proposed for the Marine Industrial Use, and thus had few comments on the proposed land use. For Commercial, they felt that there should be parking given in the area that also serves as supplemental park area if the current parking for Pepper Park is not adequate. For Pepper Park, they felt the expansion was nice and like the proposed idea of a sprayground and gazebo / plaza area for events and shows but they would like some more event area that’s on the grass so event goers can watch and sit on the grass.

Table 3 – Alternative A & B

Table 3 also preferred option B, access to the Marina was important. Their initial thoughts on the design was that Granger Hall needed to be across from the railroad depot as there is definitely not enough parking for both Pepper Park and Granger Hall. Table three is also concerned about the amount of parking available. They also would like some sort of transit implemented to improve accessibility to the Marina District.

Table 3 preferred if there was no loss in Marine Industrial space as well as an increase in total contiguous park space. They feel as though currently, National City doesn't connect to the waterfront and the workers don't connect to National City but this plan will help connect them.

Table 4 – Alternative A & B

Table 4 also preferred option B. There was a consensus at the table that the road dividing up maritime and commercial / park was preferred as it helped create a distinction between both sides of the marina district. There were concerns regarding safety with Pepper Park being so close to the FPR. Parking was mentioned as an issue again, they are hoping that some more space is dedicated to park parking.

Table 4 preferred if there was no loss in Maritime Industrial space as well. One of the members was hoping that the acre taken from the FPR would be returned to Marine Terminal. In terms of commercial ideas like a brew house, farmer's market, and affordable restaurants were voiced. For Pepper Park, the table wanted to see a water feature and a built in music stage.

Appendix E – Possible Development and Building Footprints

Reference Examples:

Event Venue, Exhibition and Museum

Long Beach Convention & Entertainment Center

Dimension: approx. 853 ft x 853 ft

Building footprint: approx. 572,387 ft² (i.e. 13 ac.)

Number of floors: 3



Maremagnum , Port Vell, Barcelona, Spain

Dimension: approx. 416 ft x 364 ft

Building footprint: approx. 151,739 ft² (i.e. 3.48 ac.)

Number of floors: 3



Esplanade, Singapore

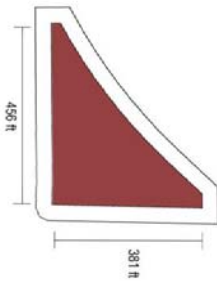
Dimension: approx. 619 ft x 422 ft

Building footprint: approx. 261,360 ft² (i.e. 6 ac.)

Number of floors: 4



Possible Development



Dimension

Width: approx.456 ft

Length: approx.381 ft

Development Parameters

Building footprint: approx.90,078 ft²

Number of storeys: ranges from 3 - 4

Floor area: ranges from approx.270,234 ft² – 360,312 ft²

Size of lot:

approx.152,896 ft² (i.e. 3.51 ac.)

Museum

Vancouver Maritime Museum, Vancouver, Canada

Dimension: 138.4ft x 51.1ft

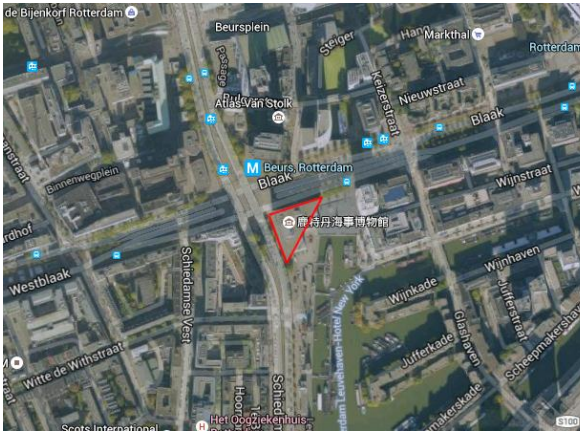
Building footprint: 7,046 ft²



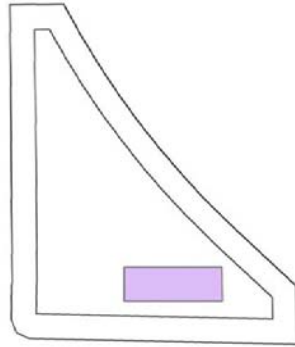
Maritime Museum Rotterdam, Rotterdam, Netherlands

Dimension: 263.5ft x 244.0ft

Building footprint: 34,161ft²



Possible Development



Dimension

Width: approx.140 ft

Length: approx.50 ft

Development Parameters

Building footprint: approx.7,000 ft²

Number of storeys: ranges from 3 - 4

Floor area: ranges from approx.21,000 ft² – 28,000 ft²

Size of lot:
approx.152,896 ft² (i.e. 3.51 ac.)

Hotel

Omni San Diego Hotel, San Diego, California, USA

Dimension: approx.171ft x 72.3ft

Building footprint: approx.6,062 ft²



Four Seasons Hotel Seattle, Central Waterfront, Seattle, Washington, USA

Dimension: approx.130 ft x 203 ft

Building footprint: approx.24,050 ft²



STROOM Rotterdam, Lloydkwartier, Rotterdam, Netherlands

Dimension: approx. 57 ft x 162 ft

Building footprint: approx. 8,096 ft²



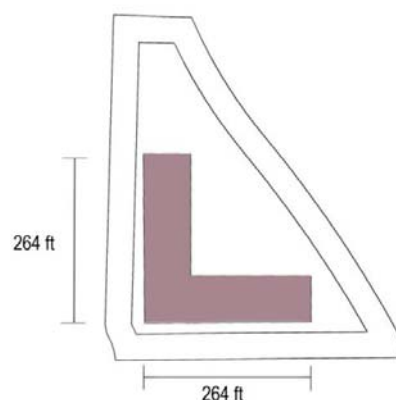
Granville Island Hotel, Granville Island, Vancouver, Canada

Dimension: approx. 185 ft x 90 ft

Building footprint: approx. 14,874 ft²



Possible Development



Size of lot:
approx. 153,331 ft (i.e. 3.52 ac.)

Dimension

Width: approx. 264 ft

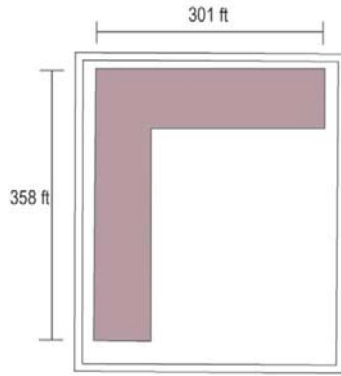
Length: approx. 264 ft

Development Parameters

Building footprint: approx. 28,291 ft²

Number of storeys: ranges from 2-3

Floor area: ranges from approx. 56,582 ft² – 84,873 ft²



Size of lot:
approx. 116,305 ft² (i.e. 2.67 ac.)

Dimension

Width: approx. 301 ft

Length: approx. 358 ft

Development Parameters

Building footprint: approx. 107,758 ft²

Number of storeys: ranges from 5-10

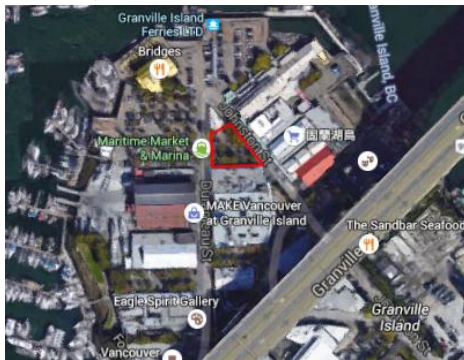
Floor area: ranges from approx. 538,790 ft² – 1,077,580 ft²

Market

Triangle Square (Outdoor farmer's market), Granville Island, Vancouver, Canada

Dimension: approx. 83 ft x 96 ft

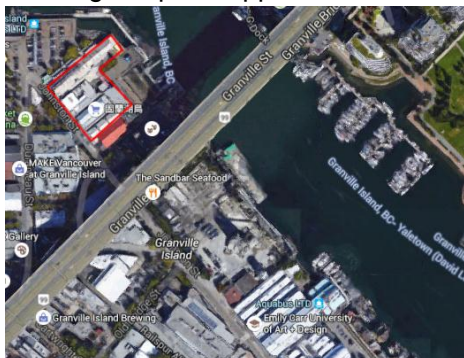
Building footprint: approx. 7,165 ft²



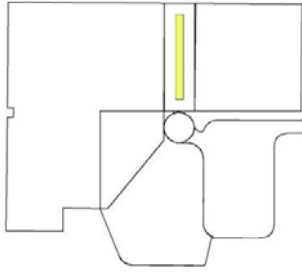
Granville Island Public Market (Indoor), Granville Island, Vancouver, Canada

Dimension: approx. 231 ft x 241 ft

Building footprint: approx. 40,190 ft²



Possible Development



Size of lot:
approx.26,488 ft (i.e. 0.608ac.)



Size of lot:
approx.86,249 ft (i.e. 1.98 ac.)

Dimension

Width: approx.269 ft
Length: approx.22 ft

Development Parameters

Building footprint: approx.5,918ft²
Number of storeys: ranges from 1-2
Floor Area: ranges from approx.. 5,918ft² - 11,836 ft²

Dimension

Width: approx.480 ft
Length: approx.64 ft

Development Parameters

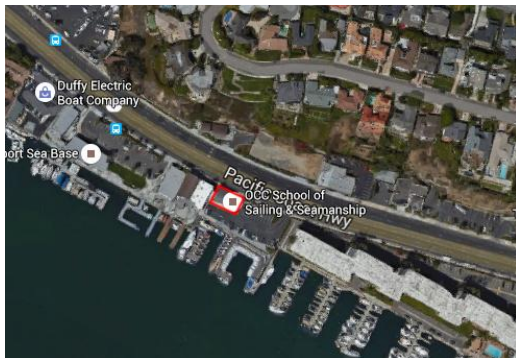
Building footprint: approx.30,720ft²
Number of storeys: ranges from 1-2
Floor Area: ranges from approx.. 30,720ft² - 61,440 ft²

Maritime School

Orange Coast College School of Sailing & Seamanship, Costa Mesa, California, USA

Dimension: approx.74 ft x 30ft

Footprint: approx.2,635 ft²



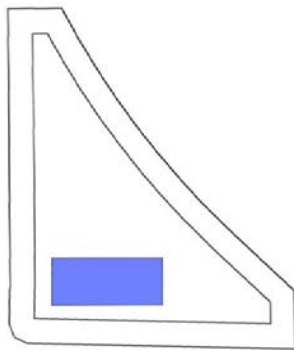
Center for Maritime Economics and Logistics Rotterdam, Erasmus University Rotterdam, Rotterdam, Netherlands

Dimension: approx.239 ft x 61 ft

Footprint:12,522 ft²



Possible Development



Dimension

Width: approx. 73 ft

Length: approx. 174 ft

Development Parameters

Building footprint: approx. 12,702

Number of storeys: ranges from 4-6

Floor area: ranges from approx. 50,808 ft² - 76,212ft²

Size of lot:
approx. 152,896 ft² (i.e. 3.51 ac.)

Shops and gallery

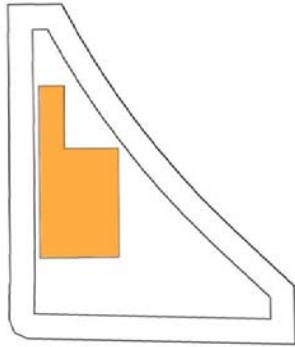
NET LOFT, Granville Island, Vancouver, Canada

Dimension: 199ft x 155ft

Building footprint: 26,958ft²/ 0.619ac.



Possible Development



Dimension

Width: approx. 271 ft

Length: approx. 125 ft

Development Parameters

Building footprint: approx. 25,500 ft²

Number of storeys: ranges from 4 - 6

Floor area: ranges from approx. 102,000 ft² - 153,000 ft²

Size of lot:
approx. 152,896 ft² (i.e. 3.51 ac.)

Other uses

Water Park

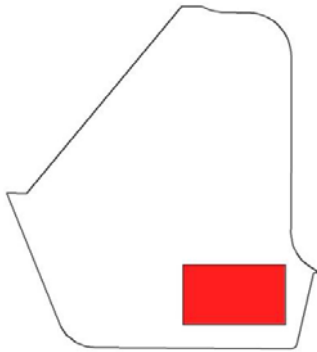
Kids water park, Granville Island, Vancouver, Canada

Dimension: 111ft x 76.3ft

Building footprint: 8429.53 ft²



Possible Development



Dimension

Width: approx.118 ft

Length: approx.49 ft

Development Parameters

Area: approx.5,782ft²

Size of lot:
approx.101,494 ft (i.e. 2.33 ac.)

R.V. Park

Pechanga RV Resort, San Diego, California, US

Dimension: 869.2ft x 639.7ft

Building footprint: 521788.38 ft²



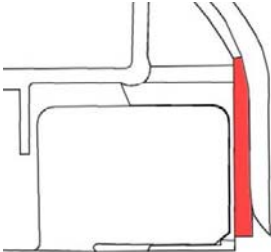
Trailer Inns RV Park of Bellevue/Seattle, Seattle, Washington, USA

Dimension: 341ft x 360ft

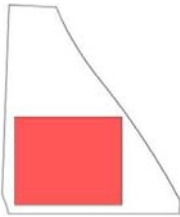
Building footprint: 103069.61 ft²



Possible Development



Size of lot:
approx. 73,616ft (i.e. 1.69 ac.)



Size of lot:
approx. 73,616ft (i.e. 1.69 ac.)



Dimension

Width: approx.91 ft
Length: approx.931 ft

Development Parameters

Building footprint: approx.73,616 ft²

Dimension

Width: approx.270 ft
Length: approx.223 ft

Development Parameters

Building footprint: approx.60,210ft²

Appendix F – References

All aerial photos by Google Earth

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