# SANDWICH MARINA DISTRICT STUDY

FINAL REPORT

JULY 10, 2015





### UNION STUDIO

ARCHITECTURE & COMMUNITY DESIGN

www.unionstudioarch.com



rustpoint advisory, Ilc

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The Town of Sandwich in collaboration with MassDevelopment asked Union Studio and its consultants, Horsley Witten and Rustpoint Advisory, to generate a conceptual masterplan vision for the area around the marina at East Boat Basin in Sandwich, Massachusetts, known as the Marina District. The primary motivation for the study was to propose a plan for a roughly 22.5 acre parcel owned by the Town that is immediately adjacent to the marina. However, the Town also identified a number of other adjacent parcels for which a larger vision was to also be considered.



PERSPECTIVE VIEW OF PROPOSED MASTERPLAN

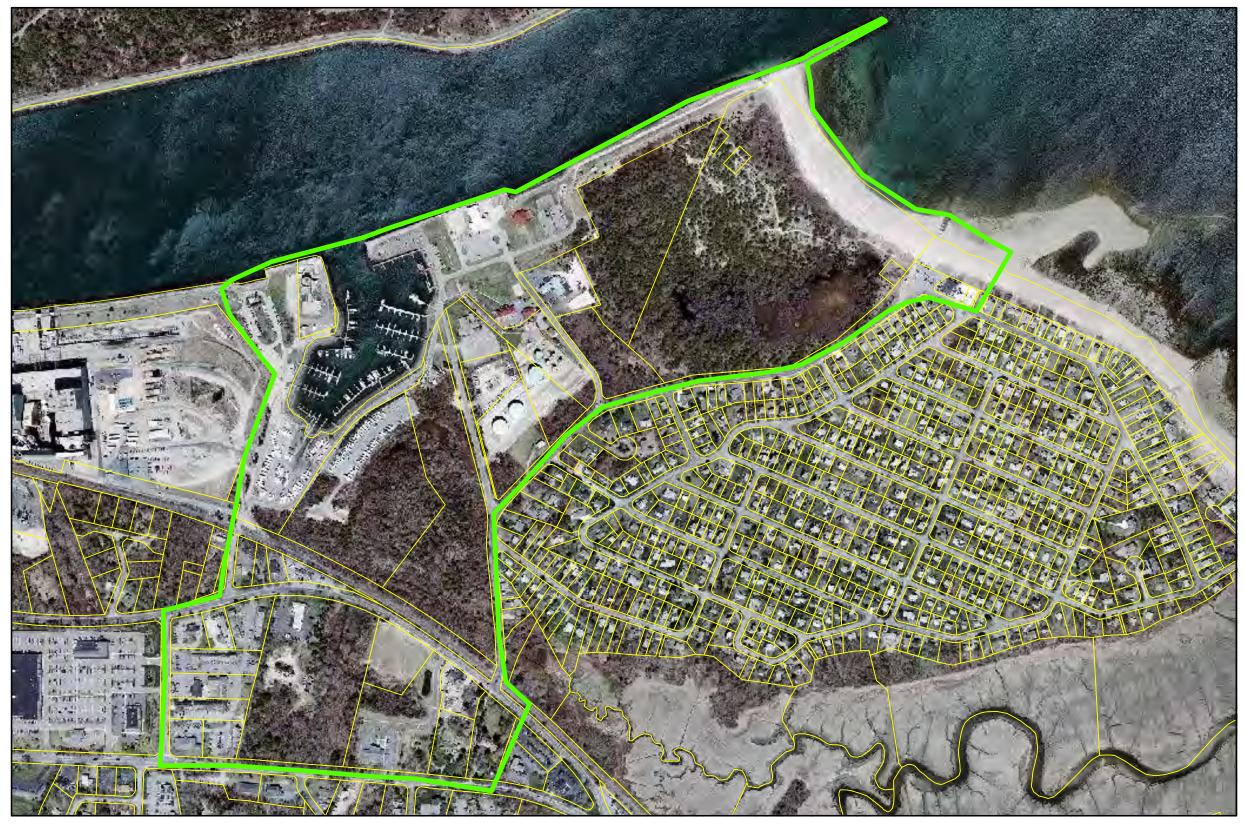
The resulting plan was developed and revised through a series of meetings with both public and private stakeholders in which the team was able to garner feedback through presentation and discussion. The plan has sought to balance the most appropriate uses with the realities of the local context, allowable densities, infrastructure capacity and general market viability. Union Studio has been primarily responsible for facilitating the process and generating the overall vision. Horsley Witten has assisted relative to civil engineering concerns including existing condition mapping and strategizing relative to utility and infrastructure needs and constraints. Rustpoint Advisory has assisted relative to a conceptual market analysis including highlevel economic feasibility and conceptual budgeting.



STUDY AREA

Prior to the commencement of work, the Town of Sandwich identified the overall scope for the masterplan study. At the center of the study area is a roughly 22.5 acre parcel currently owned by the Town, bound by Ed Moffit Drive to the west, Gallo Road and Town Neck Road to the east and the railway easement adjacent to Tupper Road to the south. The majority of the site includes a combination of bordering vegetated wetlands and isolated jurisdictional wetlands as well as a stream that runs along the southern portion of the site. The parcel also includes a large parking lot and informal storage area along the western edge of the site that is used seasonally for either overflow marina parking or boat storage.

In addition to the Town-owned land, a number of adjacent parcels held by varying owners were also identified to be included as part of the masterplan study. To the north of the Town-owned parcel, along the canal's edge, the Army Corps of Engineers control a large swath of land that includes the marina, some Coast Guard operations and spaces for additional public recreational uses. In the middle of the Army Corps land is a small, privately owned lot that previously included a freezer plant. While this land does rely on easements through the Army Corps land for vehicular access, it does include direct water access. Between the Army Corps land and Town Neck Road to the east of the Town-owned parcel are a series of privately held parcels that include a combination of restaurants and light industrial/propane storage uses. In addition, a large portion of this land is owned by the operator's of the power generation plant to the west (NRG) and is currently undeveloped. The study area also extended south of the Town-owned land, incorporating a number of primarily commercial properties including Merchant's Square, bound to the west by Merchants Road, to the south by Old Kings Highway and east to roughly the extension of Town Neck Road. This area also includes a fairly large parcel owned by the local water district.

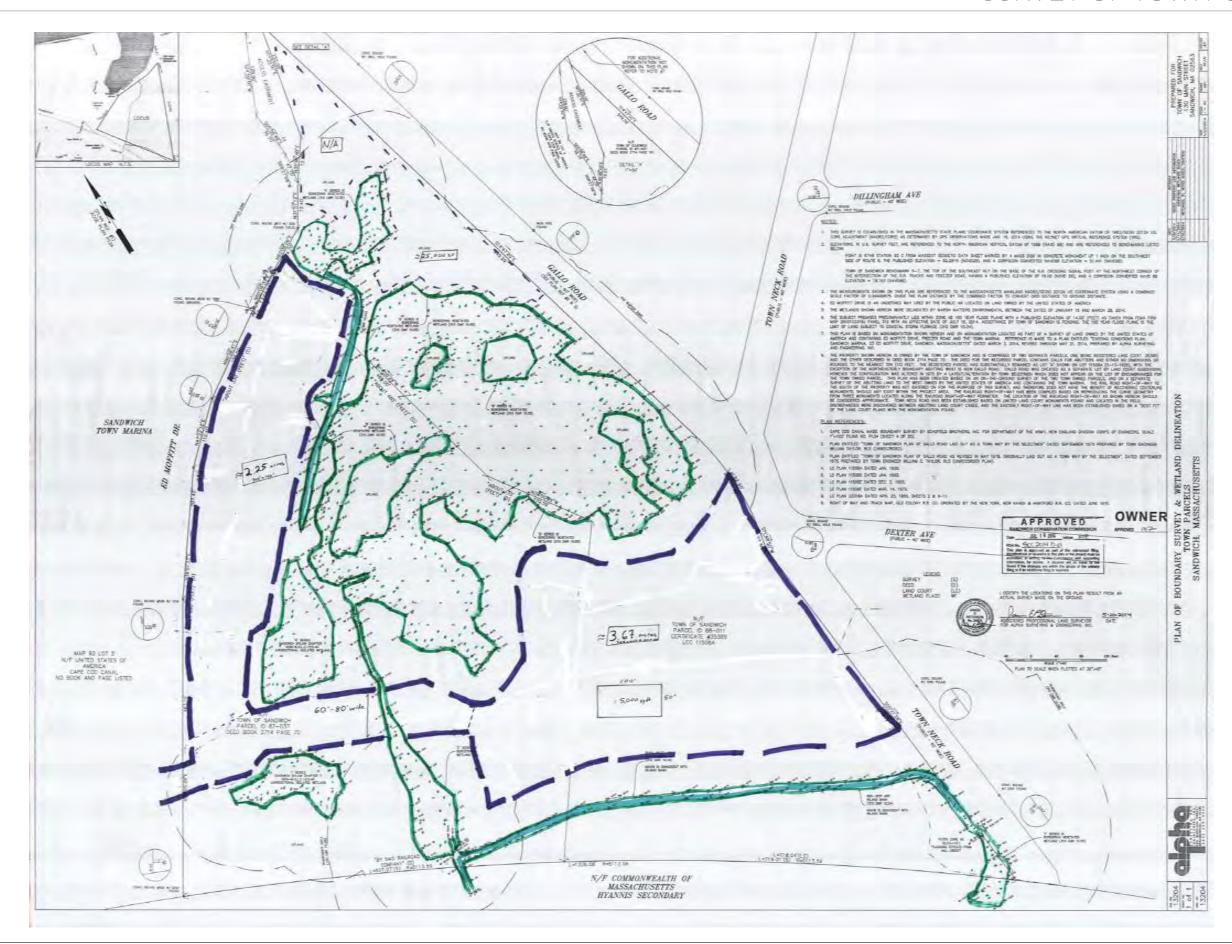




Produced by the Sandwich Planning and Development Department



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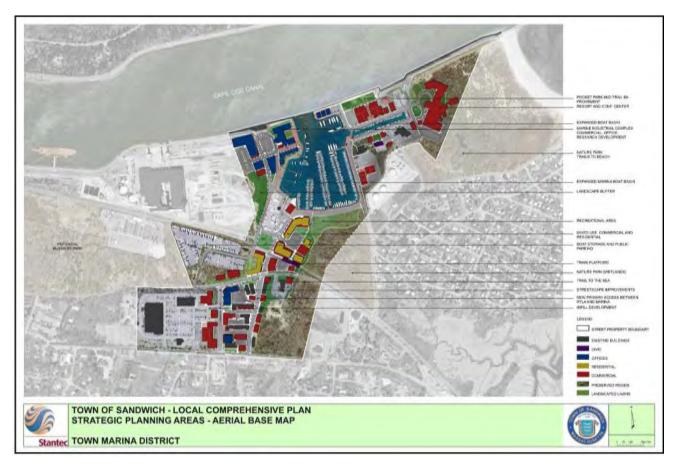


N.T.S.

Prior to starting the masterplan process, the project team reviewed a variety of background documents related to the Marina District including previous plans and reports. In addition, the team completed an assessment of existing conditions to determine potential opportunities and constraints for the various parcels including a review of local, state, and federal regulations and bylaws to determine impacts to regulated areas and areas where mitigation of those impacts may be possible. Base maps were generated using available MassGIS and Town of Sandwich GIS to show existing conditions via aerial and USGS maps, wetland resources, rare and endangered species, topography using LiDAR data and flood zones with minimum building finished floor elevations.

#### **Opportunities**

The Marina District has long been identified as an area of potential development for the Town its being designated as a growth area by the Cape Cod Commission. The primary asset of the Marina District is its adjacency to the marina/canal and the Town has long benefited from a good working relationship with the Army Corps of Engineers. While the Corps' mission restricts the use of their land to recreation and activities in support of the marina, such public access has long been understood as a positive attribute in both recreational and economic terms. However, the current uses and limited development in the adjacent area has long been considered a missed opportunity of the site's true potential. Evidence of this comes by way of a series of unrealized plans in years past, including the Comprehensive Marina Development Plan the Town generated in 1993 and the Marine Life Center plan studies the New England Aquarium generated in 1994. In addition, the Town's Local Comprehensive Plan from 2009 included an ambitious vision for this same area pointing out the importance of this area as the western gateway to Sandwich. The resulting plan included a mix of marine, commercial, residential and recreational uses meant to attract visitors to the area.



LOCAL COMPREHENSIVE PLAN 2009

#### **Constraints**

While the opportunities the Marina District presents are readily appreciable, there are also a number of constraints that need to be understood.

First and foremost, while the Town does own the 22.5 acre parcel immediately adjacent to the marina, the rest of the Marina District is controlled by a number of varying entities and any vision would need to overcome competing interests and include some level of cooperation from them.

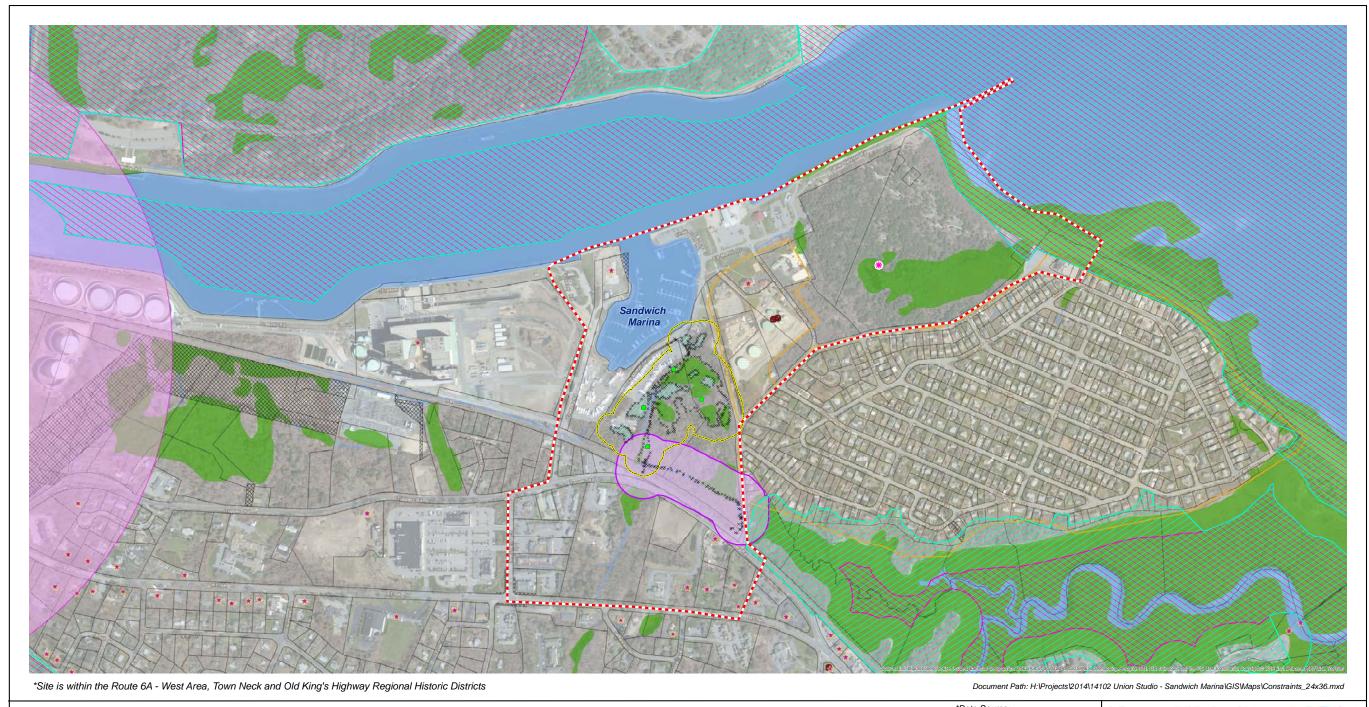
Second, the Marina District does include a number of wetlands, streams and potential vernal pools around which new development would need to be carefully considered.

Third, access to the bulk of the Marina District is fairly limited. Several points of access are currently controlled by the Army Corps of Engineers and additional connections out to Tupper Road and Old Kings Highway would be beneficial but are constrained by a combination of the existing natural features, varying ownerships and the railroad right of way that runs through the southern portion of the Marina District.

New development may also be limited by potential environment concerns from the existing site uses and would also need to carefully consider what type of development is appropriate relative to the immediate context/adjacent uses.



CONSTRAINTS



## Legend



Draft MassDevelopment Marina Study Area





Easements



Potential Vernal Pools

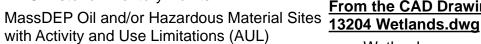


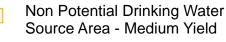
NHESP Priority Habitats of Rare Species

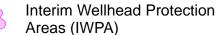


NHESP Estimated Habitats of Rare Wildlife

MHC Historic Inventory Points

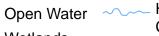








Wetlands



Hydrologic Connection

# \*Data Source: - Parcels - Town of Sandwich, 2014 - Constraints - MassGIS







100' Wetland Buffer



Bordering Vegetated Wetland (BVW) Line Riverfront Area 310 CMR - 200 ft.



**Existing Constraints** Sandwich Marina Sandwich, MA

Date: 9/5/2014

Figure X

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The generation of the vision plan for the marina area has included a series of meetings with both public and private stakeholders over the course of the last year. Throughout, the project team has worked in close collaboration with appropriate representatives from the Town and MassDevelopment.

Following the initial review of background material and understanding the Marina District's opportunities and constraints, an Initial Public Presentation was held in September of 2014 to report these findings to the public and to gather initial thoughts, questions and feedback residents might have. Over the course of the next few months, the team continued to meet with various local stakeholders, including a few of the adjacent property owners in the study area, for continued input. From these initial meetings, the project team developed a series of initial schemes that were shared with Town staff and MassDevelopment in November of 2014.

Based on those meetings and continued feedback the project team consolidated the preferred aspects for the various portions of the Marina District into a preferred draft scheme in January of 2015. The project team shared this concept with the Cape Cod Commission in February in an informal session intended to get their thoughts and confirm the general intentions were in line with their areas of oversight. Based on their feedback and feedback from continued stakeholder meetings over the next few months, the project team revised the draft scheme into the final masterplan in early June. The final conceptual masterplan included here was then presented to the Board of Selectmen and in a Final Public Presentation in late June.

Document Review/Pre-Design

• Initial Public Presentation

Initial Stakeholder Meetings

Concept Alternatives

• Draft Preferred Scheme

· Cape Cod Commission Meeting

Additional Stakeholder Meetings

Proposed Final Masterplan

Board of Selectmen Meeting

Final Public Presentation

July-August 2014 September 2014

October-December 2014

November 2014

January 2015

February 2015

March-May 2015

June 2015

June 2015

June 2015



INITIAL SITE SCHEME A





INITIAL SITE SCHEME B



DRAFT PREFERRED SCHEME



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Over the course of the project's development, a number of key objectives were identified. First, access to the water's edge should be improved and made as intuitive as possible in order to maximize its potential as a public asset. Second, the project should include a mix of uses that are economically viable in order to activate the area and attract new residents, existing residents and seasonal visitors. Third, more intensive uses should be focused along the waterfront, with less intensive uses serving as a transition back to the adjacent neighborhood. Fourth, natural areas should be preserved and protected. All of the various iterations of the plan generally adhered to this set of objectives but investigated varying degrees of density as well as testing out different configurations of the uses proposed. The site design also continued to evolve as more was learned about existing conditions, stakeholder interests and market feasibility. All of this work culminated in the final conceptual masterplan which addresses the key objectives in the following ways:

#### Access

Currently access to the waterfront is limited and non-intuitive. To improve upon this, the plan proposes making a direct connection out to Tupper Road with an extension of Ed Moffit Drive. The retail uses along Tupper would be reconfigured to allow this direct access while also serving as the start of a pedestrian friendly streetscape along the waterfront. By connecting to Tupper and focusing new development along its edge, Ed Moffit serves as the central spine for the overall redevelopment. At the far end, Ed Moffit is extended to connect out to a proposed resort hotel that will serve at the focus and terminus of the new waterfront sequence. In addition, by making Ed Moffit better connected and more intuitive, pressure is taken off of Town Neck Road and Freezer Road allowing them to serve primarily as access to the residential neighborhood to the east and power generation facility to the west respectively. The plan also proposes the formalization of the currently informal sequence of parking areas that run through Merchant's Square in order to make a more intuitive connection all the way down to Old Kings Highway while also increasing the visibility of the existing storefronts and making them feel seamlessly connected to the new mixed use district at the marina.



#### Mix of Uses

The final conceptual masterplan includes a variety of new uses that are sympathetic to the existing uses in the Marina District and local context. The plan proposes adding residential, commercial, hospitality and civic components to the site in amounts that have been deemed reasonable from a market perspective. The Town-owned parcel includes a string of mixed use buildings along Ed Moffit Drive including small retail spaces with condos above along with live-work units (townhouses with the option of small commercial uses on the lower level). This new district is built in the location of the existing parking/boat storage lot facing the marina. In exchange, a new parking/boat storage lot is proposed off of Town Neck Road in the buildable area towards the interior of the lot. This lot is connected back to the marina by a mixed use trail that gives visitors direct pedestrian/bike access in season and helps facilitate the storage of boats in the off-season. Adjacent to this lot is a new wastewater facility that can utilize the area under the parking lot for its disposal field. The plan also proposes a new multi-modal station adjacent to the railroad tracks. While a new passenger train stop is not currently being considered, the plan leaves this open as a future possibility assuming such a station could also serve as a bus stop for the area in the short term.

As part of the longer term vision, the plan suggests formalizing the open space area along Ed Moffit Drive adjacent to the existing restaurants and Coast Guard facilities in keeping with the Army Corps' recreational mission. Continuing along Ed Moffit Drive, as the plan transitions back to private land, the plan proposes a new waterfront park between Ed Moffit and the canal terminated by a new resort hotel at the point that serves as a semi-public destination at an important focal point. A series of smaller vacation cottages would front the opposite side of Ed Moffitt that could be owned and operated by the resort hotel. A small restaurant is proposed at the transition to the resort cottage area and a second new restaurant is proposed across the marina in the lot previously used as a freezer plant. In the space between Gallo and Coast Guard Roads, the plan proposes a mix of attached and detached single family housing.

OVERA	LL NEW PROGRAM	
	Formal Park Areas (and Possible Bandshell)	
	Retail Mixed Use (below Condos)	45,000 sf (40,000 net) 15,000 sf
報口を	Stand Alone	13,500 sf (8,500sf net)
	Restaurants	2 Totaling 11,000 sf
	Resort Hotel/Cottages Function Space	95 Rooms/20 Cottages 10,000 sf
1/0	Residential	98 Units
OL/A	Condos (over Retail)	30 Units
	Live/Work	10 Units
	Single Family Attached	23 Units
	Single Family Detached	35 Units
O	Multi-modal Transit Station	4,000 sf
	Wastewater Plant	10,000 sf
Per	Disposal System Area	31,000 sf

#### Distribution of Uses

The new uses proposed generally are arranged so as to promote the most activity along the waterfront. This includes the mixed use district in the Town-owned parcel adjacent to the marina, the new restaurants and the resort and cottages out at the point. These uses help support the use of the marina and water's edge by the public. Along Town Neck Road, the plan proposes a mix of natural preserve areas, attached and detached single family houses and the new wastewater facility. These uses are sympathetic with the primarily residential character of the existing neighborhood to the south/east and are intended to help the new development feel like an extension of that community.

#### Natural Areas

With the exception of the proposed relocation of a limited amount of isolated jurisdictional wetlands adjacent to the marina area, the plan intends to preserve and buffer the existing bordering vegetated wetlands, vernal pools and streams that run through the site. These areas not only serve as a natural transition between the proposed development and the existing neighborhood, they also serve as important environmental resources that contribute to the character of this portion of Sandwich. While not overtly illustrated, it would be beneficial to also include a series of trails through these areas that provide public access and additional pedestrian connections through the site.





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AERIAL PERSPECTIVE FROM EAST N.T.S.

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Throughout the course of design, the team considered a number of civil engineering aspects from a conceptual perspective to help assure the ideas proposed were reasonable and ultimiately feasible. This included wastewater treatment options, approaches to stormwater mitigation, potential limitations as a result of existing activity and use limitations (AULs) and understanding the nature of the various wetland resource areas known and perceived within the Marina District.

#### Wastewater

Based on several programs for the potential development, a neighborhood-sized wastewater treatment plant (WWTP) was conceptually sized and located. The WWTP was placed at the southeast corner of the Townowned lot based on a number of factors including; flood zone elevation, proximity to wetlands and ocean, length of pipe/infrastructure, separation from residential/retail occupied space, available open space, and other factors. At this location the above-ground components would include a single building which could be designed in keeping with the primarily residential character of the local context and include some strategic landscape screening as needed. The below ground components, including tanks, pump stations, leaching fields, would be co-located partially or fully below grade and under proposed parking for the marina. This is a fairly common and permittable use. This location also allows the Town to entice development by offering the land and/or WWTP to developers as part of a public-private partnership.

#### Stormwater/Landscaping

As part of the project design, the team considered varying approaches to stormwater management. Even with the increase of impervious area due to new development, it was determined that the sites could accommodate the required stormwater infrastructure. We would envision this to include low impact design elements such as grass swales, raingardens, tree wells, porous pavement, or other aspects to reduce the amount of runoff and create a landscape that also acts to pretreat stormwater prior to discharge to a resource area (e.g., nearby wetlands, river or ocean).

#### Hazardous Waste Sites

The team researched and investigated several releases of oil or hazardous materials to the environment as have been identified at the 3 Coast Guard Road property. Remedial activities completed at that parcel included the removal of contaminated soil, but residual contamination remains. Due to the remaining soil contamination, an Activity and Use Limitation (AUL) was implemented on the property in 1999.

The AUL limits site activities to those that are consistent with the current commercial / industrial use of the property, and places restrictions on any site activities that involve site excavation (e.g., utility installation or repair). These restrictions are intended to minimize the potential for site workers to be exposed to potentially harmful levels of soil contamination that remain on site.

In accordance with the AUL, use of the property "as a setting for single-family or duplex residences, school, kindergarten, child day care center, recreation area, or playground" is prohibited, as these uses could potentially result in a significant risk of harm to site residents / visitors / workers. Therefore, redevelopment of the site would require the removal of contaminated soil or implementation of other site controls (e.g., capping) that would eliminate the potential risk of harm to human health. Development on hazardous waste sites is fairly common and capping can be used to mitigate residential development.

#### Wetland Resource Areas

There are several wetland, riverfront and ocean resource areas within the project area. These were identified either via MassGIS, on in the case of the Town-owned parcel, they were flagged and surveyed (by others) as Bordering Vegetated Wetlands (BVWs), isolated Freshwater Wetlands, Inland Bank, Land Under Water Bodies and Waterways, Riverfront Area, and Land Subject to Coastal Storm Flowage (coastal flood zone), and are regulated under the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131 § 40), its implementing Regulations (310 CMR 10.00), and/or the Town of Sandwich Wetlands Protection Bylaw and associated guidelines and policies. The wetland areas may also be regulated under the Federal Clean Water Act (33 U.S.C. 1251, et seq.) as waters of the United States. The southern portion of this land is designated as Riverfront Area, defined at 310 CMR 10.58(2)(a)3 as "the area of land between a river's mean annual high-water line measured horizontally outward from the river and a parallel line located 200 feet away." Activities proposed within these resource areas, or within 100 feet of the BVW or Freshwater Wetland, are subject to the performance standards under the state and local regulations.

The Conservation Commission issued a Determination of Applicability for the wetland boundaries on the Town-owned parcels (Map 87-Parcel 037 and Map 88-Parcel 011), totaling approximately 23.4 acres. This determination is good for three years from the date of issuance.

The performance standards for BVW limit alterations to 5,000 SF or less. In general, if proposed alterations of BVW were to exceed 5,000 SF, there are essentially two avenues by which this could be accomplished, as a "Limited Project" or "Wetland Protection Act Variance". Please see Horsley Wittens's Wetlands Alteration Memo (following pages) for additional details.

Based on this assessment and discussions with the Massachusetts Department of Environmental Protection (MADEP), development in the buffer zone is allowable, and there is potential for wetland mitigation as some of the areas on the Town-owned parcel could be deemed low-value wetland resources.



# Memorandum

**TO:** Claire O'Neill, MassDevelopment

**CC:** Doug Lapp, Town of Sandwich

FROM: Amy M. Ball / Joe Longo

**DATE:** July 10, 2015

**RE:** Sandwich Marina Master Plan

Horsley Witten Group (HW) has prepared the following for consideration by the Client Group regarding the potential for development of two Town-owned parcels in the Sandwich Marina area. This regulatory assessment is being completed as part of the planning stages of a master planning project for the marina area. The Client Group has inquired as to whether the wetlands within these parcels can be filled in order to accommodate the project. HW offers the following for consideration.

#### **Existing Conditions**

The wetland areas have been identified (flagged and surveyed) as Bordering Vegetated Wetlands (BVWs), isolated Freshwater Wetlands, Inland Bank, Land Under Water Bodies and Waterways, Riverfront Area, and Land Subject to Coastal Storm Flowage (coastal flood zone), and are regulated under the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131 § 40), its implementing Regulations (310 CMR 10.00), and/or the Town of Sandwich Wetlands Protection Bylaw and associated guidelines and policies. The wetland areas may also be regulated under the Federal Clean Water Act (33 U.S.C. 1251, et seq.) as waters of the United States. The southern portion of this land is designated as Riverfront Area, defined at 310 CMR 10.58(2)(a)3 as "the area of land between a river's mean annual high-water line measured horizontally outward from the river and a parallel line located 200 feet away." Activities proposed within these resource areas, or within 100 feet of the BVW or Freshwater Wetland, are subject to the performance standards under the state and local regulations.

The Conservation Commission issued a Determination of Applicability for the wetland boundaries on the Town-owned parcels (Map 87-Parcel 037 and Map 88-Parcel 011), totaling approximately 23.4 acres. This determination is good for three years from the date of issuance.

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#### Permitting of Resource Area Alterations

As noted below, the performance standards for BVW limit alterations to 5,000 SF or less. In general, if proposed alterations of BVW were to exceed 5,000 SF, there are essentially two avenues by which this could be accomplished.

- 1) <u>Limited Project</u>. The Wetlands Protection Act allows certain projects to move forward under the limited project provisions at 310 CMR 10.53(3); provided that the projects present an alternatives analysis, demonstrating that the project has avoided and minimized resource area alteration, and provides for resource area mitigation to the extent practicable. Depending upon the proposal for these parcels, one or more of the limited projects may apply (e.g., construction of an elevated pathway, for instance).
- 2) <u>Wetlands Protection Act Variance</u>. The Wetlands Protection Act, through the Massachusetts Department of Environmental Protection (MassDEP) Commissioner, has the discretion to "waive the application of any regulation(s) in 310 CMR 10.21 through 10.60 when he finds that:
  - 1. there are no reasonable conditions or alternatives that would allow the project to proceed in compliance with 310 CMR 10.21 through 10.60.
  - 2. mitigating measures are proposed that will allow the project to be conditioned so as to contribute to the protection of the interests identified in M.G.L. c. 131, § 40.
  - 3. variance is necessary to accommodate an overriding community, regional, state or national public interest; or that it is necessary to avoid an Order that so restricts the use of property as to constitute an unconstitutional taking without compensation."

The DEP Commentary provided under 310 CMR 10.05(10), states that issuance of a Variance, "which provides that the Commissioner may waive the application of one or more of the regulations on the basis of overriding public benefit is intended to be employed only in rare and unusual cases."

#### Additional Permitting that May be Required

Please note that once BVW alterations exceed 5,000 SF threshold, additional review and permitting through other state and federal agencies is required. These include, but may not be limited to, review under Massachusetts Environmental Policy Act (MEPA); permitting under Section 404 of the Clean Water Act, through either a Programmatic General Permit (PGP), or depending on the magnitude of the alteration, through an Individual Permit, which would be issued by the U.S., Army Corps of Engineers; and permitting under Section 401 of the Clean

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Water Act through a Water Quality Certification (WQC) issued by the Massachusetts Department of Environmental Protection (DEP).

#### Recommendation

We understand that the extent of invasive plant species in the wetlands and within the immediate buffer zone may greatly diminish the functions and values of these wetlands and their ability to protect the interests under the Wetlands Protection Act. This may be another avenue to explore in the context of proposed project planning, beyond the limited project provisions or seeking a Variance under the Wetlands Protection Act.

At this time, HW recommends that the Town meet with its Conservation Commission and a representative(s) from MassDEP to discuss potential options for development within wetland areas on these two parcels. An on-site meeting may also be beneficial to all parties.

Please do not hesitate to contact HW with any questions regarding this memo.

#### Regulatory References: Wetland Resource Areas and Performance Standards

#### **BVW**

Alterations to BVW up to 5,000 square feet (SF) may be permitted so long as the project is designed to meet the performance standards under 310 CMR 10.55 (4)(C)(1 through 7), that the applicant has demonstrated the extent to which adverse impacts can be avoided and minimized, and the extent to which mitigation measures, including replication or restoration, are provided to contribute to the protection of the interests identified in the Wetlands Protection Act. In the exercise of this discretion, the issuing authority (e.g., Conservation Commission) will consider the magnitude of the alteration and the significance of the project site to the interests under the Wetlands Protection Act.

#### Freshwater Wetland Alterations

The local Bylaw prohibits wetland filling except when mitigated through wetland replication, and allows for no more than 2,500 SF of wetlands to be filled. The Bylaw expressly states the following:

Wetlands replication, in order to make lands buildable, by fulfilling septic system setbacks, flood elevation requirements or other construction setbacks, or to achieve lot area requirements is prohibited. ... Replication may be permitted in projects that provide access to otherwise buildable uplands, where no other upland access is possible. Replication may also be permitted with an overriding public purpose can be demonstrated [Section 7.40, Parts 2 and 3].

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The local Bylaw also protects the 50-foot buffer zone as a no disturbance area to all freshwater wetlands.

#### Riverfront Area Alterations

Alterations with in the 200-foot Riverfront Area are limited to 5,000 SF or 10% of the Riverfront Area on the lots, whichever is greater, since these lots were each recorded on or before October 6, 1997, and subject to the performance standards under 310 CMR 10.58(4). Work within Riverfront Area will also require that the applicant undergo an alternatives analysis. The issuing authority has the discretion to require a wildlife habitat evaluation (WHE) for alterations within Riverfront Area exceeding 5,000 SF.

#### Inland Bank and Land Under Water Bodies and Waterways

In addition to the provisions listed above, alterations to the existing streams (intermittent and/or perennial) are also subject to performance standards under 310 CMR 10.54(4) (Bank) and 310 CMR 10.56(4) (Land Under Water). Alterations beyond 50 linear feet of Bank or up to 10% or 5,000 SF of Land Under Water (whichever is less) may also require a WHE.

#### Market Feedback

As part of the Master Planning process, the team has sought and incorporated preliminary feedback from a number of stakeholders in Q4 2014 and in early Q1 2015. Included in the discussions have been local real estate market professionals that work in the community. The purpose of these conversations, and in garnering such feedback, is to better understand the level of existing and planned supply and demand, as well as obstacles, opportunities or trends that may impact the Master Plan or the economic viability of implementation of the plan. Local experts were asked for feedback on both residential and commercial/retail components, as well as to provide opinions on hospitality elements within the plan. The feedback and interaction with those most familiar with the Sandwich real estate market helped to inform the plan, including scale and land use.

It should be noted that the discussions and preliminary conclusions are based upon basic concepts and were formed through informal discussions, not a detailed market or economic study.

#### **General Viability by Land Use Type**

#### Residential

Demand for varied housing types in the existing area along Town Neck Road remains very desirable and offers a range of opportunities from \$200,000 for first time home buyers to luxury homes of over \$1million. Roughly 40% of the buyers are second home buyers (trending upward). Despite this trend, the neighborhood continues to offer a wide demographic. Second home buyers are primarily from RI, CT, NY and NJ. Many homes are available for weekly rentals during the summer season. Many year round residents commute regularly to Metro-Boston for employment. The access and proximity to the bridges is stated as a key factor that is driving demand in all sectors.

Although the current supply is limited, preliminary feedback was positive regarding the demand for condominiums, townhomes and smaller units. Maintenance free options, as well as modern, new buildings with access to the water were deemed in high demand, but limited in supply.

It is understood that many aging residents in Sandwich are now challenged by the lack of single story/elevatored and maintenance free options. There may be an opportunity to design for and target 55+ or older couples or individuals. Given the lack of supply, this demographic is currently relocating to other communities or remaining in homes that are ill-suited for their needs.

Positive feedback was also provided regarding rental apartments, with the assumption of year round demand. Generally speaking, monthly apartment rents of approximately \$1100 for one bedrooms and \$1400 for two bedrooms may present economic challenges to support the financing of new construction. But, the scale and efficiency of such units, as well as land and infrastructure costs would have to be considered. It has been noted that real estate property taxes would negatively impact the economic viability of such a product that relies upon operating cash flows for financing/profitability.

The potential for a few live/work options (either rental or for sale) was also noted as likely, but the market may be limited, and perhaps seasonal.

Properly designed and scaled residential uses at a conceptual level, in the subject area, were generally deemed as a feasible approach to drive the growth as outlined in the Master Plan.

#### Commercial

Feedback from local market professionals on the commercial elements of the Master Plan was not as enthusiastic as the residential outlook, but still trended positive in regard to the general plan and strategy. Support and neighborhood scale retail would be most desirable with visibility and access from Tupper Road. Office space, primarily for small service-based users such as real estate offices, accounting, dentist/orthodontist, etc. are viable. Existing building stock for commercial uses in Sandwich is slightly older and new, modern and well located alternatives could be desirable. An area of potential concern would be increased vacancy or downward pressure on rents for existing commercial spaces as the new spaces are absorbed.

Secondary offices for professionals that commute to Boston several days a week would also likely be in demand. These uses may trend toward smaller footprints and simple layouts, potentially with limited shared amenities such as a common conference room, printing/copying area, etc.

Medical-related locations are desirable due to a high density of families in Sandwich, but are trending toward more economies of scale given industry challenges. Therefore, such uses are more prone to larger footprints and the opportunity for congregations of similar users.

As residential density is increased, the viability of properly scaled neighborhood retail and office users will be further bolstered.

#### Hospitality

The Master Plan contemplates the opportunity for a resort/hotel. The setting, with access and views to the canal and beach is highly desirable. Much of the hospitality and lodging on the upper cape is dated and does not provide many of the options of newer lodging offerings. Given the location and relatively easy access from the bridges, a resort offering with fractional ownership/membership and/or varied room and cottage types may be viable. As in many Northeast locations, seasonality would present a challenge. Currently, a number of other developments in the broader submarket may impact the opportunity and are seeking to establish a year-round operation. For example, Newport Hotel Group's efforts in Hyannis seek a year round level of activity. Current or planned developments such as the hotel/mixed-use complex on Perry Avenue in Buzzards Bay, or the recent (2010) repositioning of the Sea Crest Beach Hotel in North Falmouth could be used as benchmarks.

#### **Key Items for Consideration**

The economic viability for all components, as described, are impacted by both the level of density and infrastructure costs. As what may be a simplistic statement, private developers seek density in rent paying or saleable square footage. The revenue producing spaces must absorb land costs as well as site and infrastructure costs. As a result, streetscape improvements, sidewalks, parking, wetland mitigation, utility upgrades and sewer/septic components are costs that must be balanced in presenting a viable investment opportunity to the market. Also, the cost of operations, most notably utility costs and real estate property taxes, are also significant factors in the equation - particularly for rental apartments and commercial/retail.

With these noted constraints, the proposed Master Plan presents opportunities to leverage existing infrastructure or to be efficient in new infrastructure investments.

In the 'Town Owned-Area', replacing the Marina overflow parking and storage areas are essential for the continued vitality of the marina, but may present a challenge to the viability of the proposed mixed-use building program. The same is true for required wetland mitigation and for the Wastewater Plant/Disposal Area. As an illustration, a conceptual case study is provided.

It is recommended that external funding sources are researched and sought to help offset these cost burdens, which are essential components for moving forward. Federal and state grants should be considered, and an analysis should be done to understand the extent of engineering and design that is required for various grant programs.

Also, with potential revenue producing infrastructure elements such as the marina parking/boat storage and a Wastewater Plant, public/private funding mechanisms may be possible based upon system development charges or annual storage fees to offset financing costs. These predictable and sustainable revenue streams could be leveraged through a bond instrument or to recover infrastructure investments that support the attraction of private investment.

During the Masterplan process, a number of stakeholder discussions gravitated toward the balance of infrastructure components and public realm improvements - against potential private investment.

The following high-level analysis seeks to provide an order of magnitude impact on real estate property taxes related to the Masterplan. The analysis is intended to help establish a framework for further discussion and thought on how any potential public investment may be offset by revenue increases to the Town.

Given much variability in the components of the vision set forth, the following approach was taken to provide a rough approximation - by using the cost of potential investment as a measure of valuation. The approach may be a conservative method, but was deemed to have less variability then forecasting revenue and sales prices at the Masterplan level. Significant components of the plan, such as the resort hotel and related cottages, offer a vast array of potential structures and valuation methods that could lead to a high degree of variability in projecting tax revenues.

#### The analysis provided herein:

- a. Lists each component of the Masterplan and applies approximate square footages (as informed by the physical representations and by market feedback and survey).
- b. Applies approximate construction costs to each building and building type. The costs include a measure of potential private site improvements and related costs to support the development. A level of soft costs (design, engineering, marketing, legal) is also added. It should be noted that land value is not included, as a means to mitigate the fact that some portion of the land is currently paying real estate property taxes and therefore would not represent a net increase.
- c. As the costs were compiled, a check was performed on a per residential unit, or per hotel key basis. This was done to confirm that the results were within a reasonable market value per building/component.
- d. The preliminary total of applicable private investment is used as a basis for tax assessment valuation. To that total, the current tax rate is applied to provide the potential real estate property taxes generated by the new developments.

Consistent with the Masterplan itself, further refinement is necessary and encouraged in estimating total property tax increases. A proper and detailed analysis would account for net impacts by measuring additional town services (education, public safety), revenues from permitting and other taxes. Timing would also be considered. Also, current tax revenues from existing landowners, as well as forecast increases or decreases, over time should be weighed. The detailed analysis would evolve as the development plans and exact program within the proposed vision are refined.

						APPROXIMATE & PRELIMINA
					Preliminary	
					Building	Appro
	Pro	gram (Units, Square	e Footage)		Cost /SF	Total Investme
TOWN-OWNED AREA						
Residential					see 'Case Study'	
Condos						\$5,850,00
Live/Work						\$2,860,0
Retail					see 'Case Study'	
First Floor (under Condos)+ North of W	/etlands					\$2,392,5
Other						
Multi-modal Station						not incl for this analy
Wastewater Plant						not incl for this analy
Parking						not incl for this analy
Storage (Boat)						not incl for this analy
Disposal Area (Under prkg)						not incl for this analy
Site Improvements (not incl. public infr	astructure)					\$825,0
TRACK-SIDE AREA						
Total Retail			12,000		\$140	\$1,680,0
			12,000		\$140	\$1,000,0
Site Improvements						343,0
GLOBAL AREA						
Residential	Units	Avg. SF /Unit				
Single family - Detached	27	2,200	59,400		\$135	\$8,019,0
Single family - Attached	23	1,800	41,400		\$130	\$5,382,0
Site Improvements		2,000	12) 100		Ų.100	\$1,850,0
						+ =, == =, =
FREEZER PLANT AREA						
Retail			7,500		\$185	\$1,387,5
Other						
Private Boat Launch						\$100,0
Site Improvements						\$75,0
ARMY CORPS AREA						
Public/Programmed Green Spaces						not incl for this analy
Tublicy Frogrammed Green Spaces						not net for this analy
NRG AREA			· ·			
Residential	Units	Avg. SF /Unit				
Single family - Detached	8	2,500	20,000		\$160	\$3,200,0
Hotel						
Keys (Resort)	95	325	30,875	70%	\$165	\$7,277,6
Keys (Cottages)	20	1,200	24,000		\$160	\$3,840,0
Function/Banquet			10,000		\$150	\$1,500,0
Retail						
Dining			3,500		\$225	\$787,5
Site Improvements						\$1,500,0
		Total   Order of M		nstruct		\$48,571,1
			12%		Soft Costs	\$5,828,5
			A	cquisitio	on & Land Costs	ĆE4 200 7
					/64 4 F7 /64 00 C	\$54,399,7
					(\$14.57/\$1000)	
			Co	mmerci	al + Residential	
	Tota	Il Potential Annual	Real Estate	Dronor	v Tay Revenue	ĊZO2 G
	iota	n rotential Annual	near Estate	rropert	y rax nevenue	\$792,6

All costs, projections and assumptions are approximate based upon Master Plan-level, order of magnitude estimates and market-based observations/assumptions. Model is intended only for conceptual discussions based upon the information available. These materials are intended as an analytical tool to highlight the opportunity, and do not purport to be all of the information that an investor/lender would require in order to understand or value the asset. This is not an asset appraisal, real estate appraisal, valuation opinion, or fairness opinion.

Throughout stakeholder discussions, a consistent focus was placed on redeveloping the Town-Owned area. For numerous reasons, this portion is a recommended early step as both a catalyst for the larger opportunity and due to its current ownership.

To support and inform the Master Plan process, a conceptual case study was developed to measure the general market or economic viability of an investment to redevelop the area.

The Conceptual Case Study includes three basic steps, as outlined herein. Each was informed by stakeholder input, physical and regulatory constraints, as well as through feedback from brokers on residential and commercial market demand, sales prices, and areas of unmet supply.

Please note that all inputs and assumptions are conceptual and only provided to serve as an outline for thought and discussions on the positioning of this important property for redevelopment.

#### Step One | PROGRAM:

Based upon the Master Plan, a potential development program was refined to provide ballpark square footages for residential, live/work units, and retail/commercial footprints.

							Other/		
Building	Description	Condos		Retail	Live/Work Units		Infrastructure		
		Units	SF (gross)	SF	Units	SF (gross)	SF(gross		
A	Multi-Modal Transit Station						4,000		
В	Mixed-use (Condos)	6	9,000	3,000					
С	Mixed-use (Condos)	6	9,000	3,000					
D	Mixed-use (Condos) + Live/Work	6	9,000	3,000	5	11,000			
E	Mixed-use (Condos) + Live/Work	6	9,000	3,000	5	11,000			
F	Mixed-use (Condos)	6	9,000	3,000					
G	Retail (Stand-alone/Gallo)			1,500					
Н	Wastewater Plant						10,000		
		30	45,000	16,500	10	22,000	14,000		
	e Scale of Program:								
16,500									
7,700	, , , , , , , , , , , , , , , , , , , ,								
40	Total Residential Units								
97,500	Total Approximate Square Footage								
83,500	Total Approx. Square Footage   Market/Private (not incl. Infrastructure components)								

#### Step Two | BUDGET:

Order of magnitude cost estimates were applied to approximate the potential scale of investment. Assumptions are based upon comparable projects, high level discussions with engineers, and industry benchmarks.

Line items that may be considered 'Infrastructure' were included, but highlighted to illustrate the approximate amount of investment that would be used to support these necessary elements (such as the relocated wetlands, relocated boat trailer parking/storage and access road).

GET   CONCEPTUAL MASTERPLAN				
Land Value   Acquisition		PSF/%	NOTES:	
Land Value   Acquisition	\$0		TBD	
Buildings/Vertical				
Residential (Condos)	\$5,850,000	\$130	Based upon approx. per square foot cost to build   based on comparable projects	
Residential + Commercial (Live/Work)	\$2,860,000	\$130	Based upon approx. per square foot cost to build   based on comparable projects	
Retail- Shell	\$1,815,000	\$110	Based upon approx. per square foot cost to build   based on comparable projects	
Retail - Tenant Fit-out/Allowance	\$577,500	\$35	Based upon market; depict an average as exact use is TBD	
Site				
Utilities [Allowance]	\$75,000		Allowance per preliminary discussions with team, general scale	
Sewer Connection Fee		TBD	Placeholder	
Road & Sidewalk Improvements [Allowance]	\$150,000		Allowance per preliminary discussions with team, general scale	
Landscaping, Stormwater, Lighting [Allowance]	\$300,000		Allowance per preliminary discussions with team, general scale	
Parking Areas for Buildings	\$300,000	\$12	Allowance per discussions with team; approx. 25,000 square feet	
Infrastructure				
Wetlands Relocation [Allowance]	\$100,000		Allowance per preliminary discussions with team, general scale	
Access Road to Parking Lot (Grading, Paving)	\$52,000	\$12	Allowance per discussions with team; approx. 3500 square feet + bridge	
Parking Lot (Grading, Paving)	\$579,600	\$8	Allowance per discussions with team; approx. 72,000+ square feet	
Wastewater Disposal Area	\$341,000	\$11	Allowance per discussions with team; approx. 30,000+ square feet	
Wastewater Plant	\$1,500,000		Allowance per preliminary discussions with team, general scale	
Multi-modal Transit Station	<u>\$0</u>	\$0	Not incl. for simple analysis   probable later phase	Infrastruc
	\$2,572,600		Infrastructure Subtotal; For purposes of Case Study - only	14%
				of Total C
Permits [Allowance]	\$55,000		Allowance; based upon current fee schedule	
Construction Contingency	<u>\$856,385</u>	5%	Approximation; pending complete analysis, design and engineering	
Subtotal: Hard/Construction Costs	\$15,411,485			
Soft Costs + Development				
Soft Costs, incl. Financing & Carry	\$1,849,378	12%	Approximation for purposes of case study   based on comparable projects	
Soft Cost Contingency	\$55,481		Approximation for purposes of case study   based on comparable projects	
Developer Admin/Fee	\$432,909	2.50%	Per industry comparables; to be refined	
Total Budget (Approximate)	\$17,749,253			

# CASE STUDY | TOWN OWNED AREA

#### Step Three | VALUE APPROXIMATION

As a general measure of viability, the approximate cost/scale of the investment was compared to a potential market value to a developer. At a highly conceptual level, market prices were applied to 'For Sale' components such as the condominiums and the live/work units. It is assumed in this simple analysis that the retail or commercial spaces are rental components. These assumptions are applied to represent only one potential scenario. Prices and rental rates are based upon rough comparables from a preliminary survey. The market assumptions will be based upon many factors, and are intended only to be a starting place for a simple conceptual analysis.

Valuation: For-Sale Components

Proceeds from the sale of condos and live/work units are calculated by netting out the cost of broker's fees and transaction costs. A measure of profit and overhead is factored-in assuming that a private investor or developer would seek a level of profit for risk and time incurred.

Valuation: Rental (Annual | Stabilized)

To determine a preliminary approximation of the 'value' of the retail spaces, total potential income is calculated. After assuming a level of vacancy loss and landlord operating expenses, an approximate Net Operating Income (NOI) is determined. To covert annual NOI to a market value, a capitalization rate is applied. This is a standard valuation technique for income-producing real estate properties. However, it should be noted that the rate utilized depends on many market factors and is typically determined through a detailed analysis. The rate of 8.75% is a preliminary placeholder for the purposes of the Master Plan-level study.

#### **VALUE APPROXIMATION | CONCEPTUAL MASTERPLAN**

ldng	Description		Condos		etail	Live/Work Units		
			Cala a Para	C.F.	D (AIAIAI)		Cala a Dida	
	Multi-Modal Transit Station	Units	Sales Price		Rent (NNN)	Units	Sales Price	
	Mixed-use (Condos)	6	in this analysis   subsequen \$415,000	3,000	\$12.00			
	Mixed-use (Condos)	6	\$415,000	3,000	\$12.00			
	Mixed-use (Condos) + Live/Work	6	\$415,000	3,000	\$12.00	5	\$440,000	
	Mixed-use (Condos) + Live/Work	6	\$415,000	3,000	\$12.00	5	\$440,000	
	Mixed-use (Condos)	6	\$415,000	3,000	\$12.00	3	3440,00	
	Retail (Stand-alone/Gallo)	U	3413,000	1,500	\$12.00			
	Wastewater Plant			1,500	\$14.00			
	Revenue (gross)		\$12,450,000		\$201,000		\$4,400,00	
	Valuation: For-Sale Components		(from above)					
	Gross Sales Proceeds							
	(Condos + Live/Work)		\$16,850,000					
	Less: Cost of Sale	6%	(\$1,011,000)					
	Net Sales Proceeds		\$15,839,000					
	Required Profit & Overhead (approx.)	15%	(\$2,375,850)					
	Approx. Market Value   For-Sale		\$13,463,150					
			(6 )					
	Valuation: Rental (Annual   Stabilized)		(from above)					
	Gross Potential Income	4.00/	\$201,000					
	Less: Vacancy & Collection Losses  Effective Gross Income	10%	(\$20,100) \$180,900					
	Operating Expenses (NNN)	5%	(\$9,045)					
	Net Operating Income	370	\$171,855					
			, , , , , , ,		1			
	Capitalization Rate (to determine approx. market value)	8.75%	based upon preliminary ma sales; for purposes					
			4					
	Approx. Market Value   Rental (as Stabilized)		\$1,964,057					
oncept	tual draft							
	Total Approximation of 'Market Value'							
	(per above conceptual analysis)		\$15,427,207	\$185				
	Total Approximation of Project Budget [Investment] (per conceptual budget provided)		\$17,749,253	\$213				
	(bei concebraai paager brovidea)		(2,322,046)	کریک				

## CASE STUDY | TOWN OWNED AREA

The preliminary Conceptual Case Study illustrates that the approximate 'Market Value' is approximately \$2.3mm less that the potential scale of investment. Based upon this initial, high-level analysis, the total cost of components of the necessary Infrastructure may be challenging the economic viability of the redevelopment.

Again, it should be noted that there are many variables within this analysis that should be challenged and refined before any firm conclusions can be derived.

The intent of the exercise is to provide a framework for such discussion and analysis as part of a roadmap to redevelop these key parcels. The conceptual analysis was used to help inform the Master Plan, and included to help bolster and inform additional analysis focused upon the opportunity of redeveloping the Town Owned Area.