Kitsap Transit
Connecting Communities

Ferry Maintenance Facility Siting Study

June 2024

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Appendices

Acronyms and Abbreviations

KT	Kitsap Transit
Study	Ferry Maintenance Facility Siting Study
WSF	Washington State Ferries

Executive Summary

Overview

Kitsap Transit (KT) conducted the Ferry Maintenance Facility Siting Study (Study) to identify and evaluate potential locations for a KT-owned and operated ferry maintenance facility that will expand KT's capabilities to perform scheduled maintenance and emergency repairs to support their growing ferry fleet.

Since launching its Fast Ferry service in 2017, KT's ferry program has quickly grown to include a diverse fleet of 10 vessels, now the second-largest ferry fleet in Washington State. Throughout this expansion, the KT Marine Services Department maintenance staff has met the vessel maintenance and repair needs of the fleet using makeshift facilities without a dedicated and fully capable ferry maintenance facility. KT staff perform limited maintenance and repair activities at the various passenger terminals or moorage docks when the vessels are not in service. However, any vessel maintenance activities, repairs, or inspections that require specialized equipment or supporting infrastructure are performed at local area shipyards, typically leading to a delay in returning the vessel to service and increased maintenance costs.

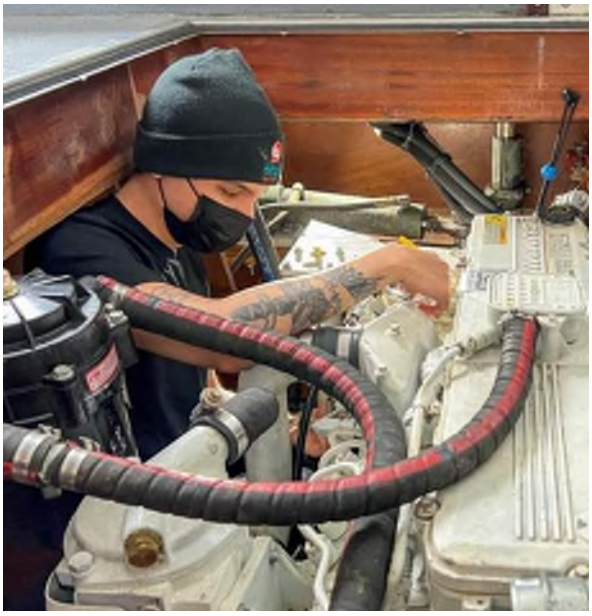


Figure Ex.1. Onboard Work by KT Ferry Maintenance Staff

Having a facility dedicated to fulfilling the varying needs of the KT fleet is critical to meeting the region's transportation demands. The facility will enhance service reliability by enabling regular, efficient, and cost-effective vessel maintenance. It will also centralize operations to reduce vessel transportation and staff travel time and expand moorage capacity for the KT fleet.

The primary goals for development of a KT Ferry Maintenance Facility include the following:

- Provide an appropriate facility to perform requisite ferry preventative maintenance and repairs and improve ferry system reliability
- Reduce KT's current reliance on area shipyards with limited availability for ferry maintenance and repair
- Reduce the costs and time out of service currently required to transport vessels and staff to area shipyards
- Improve system efficiency by consolidating vessel equipment and parts inventories to a single location
- Reduce or eliminate the high cost of dive contracts for underwater inspections
- Provide needed, consolidated vessel moorage

Alternatives Development and Evaluation Approach

This report summarizes the process that was used to define the physical and operational needs of the KT Ferry Maintenance Facility, identify potential facility site locations, and evaluate site alternatives for their suitability to meet the needs of the KT ferry maintenance program.

The site screening and alternatives evaluation process included the following steps:

- Determine Facility Goals and Requirements: The first step in the process was to determine and document the envisioned KT ferry maintenance and repair activities and develop the facility programming needs to support those activities, including equipment, infrastructure, facilities, and spaces. The identified functional requirements informed the development of the minimum size and location criteria used to screen potential sites.
- Identify and Screen Potential Sites: High level criteria were developed to assess the ability of sites to support a maintenance facility that would meet the identified minimum programming requirements. This step included review of all Kitsap County shorelines and site screening based on the minimum criteria.

  In turn, a detailed ranking methodology was developed to analyze required site location components such as environmental feasibility, community impact, land features, among others. This methodology was used to select a list of three alternative sites.
- Evaluate Alternative Sites: At each of the three resulting site alternatives, potential facility layouts were developed to understand the opportunities and challenges, as well as environmental considerations at each site. Additionally, a public survey was conducted to gather feedback on potential project impacts to inform the site evaluation. From this evaluation, a single preferred alternative was selected.
- Outline next steps: Based on the conceptual facility site layouts of the preferred site alternative, information was developed to inform next steps for the project, including estimated construction costs, development considerations, and next steps for environmental assessment and design investigations.

Community outreach and engagement was conducted throughout the study to provide information on the purpose and need for the project and solicit input on the site evaluation.

Results of Alternatives Evaluation

Two alternatives were identified that could sufficiently support the minimum programming requirements for the KT Ferry Maintenance Facility. Both alternatives share three privately-owned parcels on Sinclair Inlet west of Port Orchard, including the current Kitsap Marina and Suldan's Boat Works sites, with the second option adding an adjacent residential parcel.

The summary below shows the conceptual facility layouts at each alternative, identifying key site programming elements and the differences between the two alternatives resulting from the inclusion of the residential parcel.

Two facility layout alternatives identified to meet the minimum facility programming needs

Alternative 1
Kitsap Marina & Suldan's Boat works Combined Properties – 3-Parcel Option

- Moorage for four vessels
- Boat lift and space for two vessels hauled out on shore
- Heated shop space (9,000 square feet)
- Heated storage space (6,720 square feet)
- Administrative and staff spaces (3,000 square feet)
- Staff/visitor/delivery parking
- Extra parking and Conex box storage (22,000 square feet)

Alternative 2 (Preferred)
Kitsap Marina & Suldan's Boat works Combined Properties – 4-Parcel Option

- Same facility programming included in Alternative 1
- Additional 2,000 square feet of site space, providing opportunity for improved vehicle and parking access and future design flexibility
- Space and opportunity for additional/future environmental mitigation

While the addition of the residential parcel in Alternative 2 provides a small increase in developable site space to support facility programming, the key opportunities provided by inclusion of the parcel center around the valuable environmental mitigation opportunities it offers, including removal of overwater coverage and restoration of natural shoreline. Because of the additional opportunities for future flexibility in design and environmental mitigation, Alternative 2 was adopted by the KT Board as the proposed preferred alternative.

1. INTRODUCTION

Since launching its Fast Ferry service in 2017, Kitsap Transit's (KT's) ferry program has quickly grown to include a diverse fleet of 10 vessels, now the second-largest ferry fleet in Washington State. To meet its recurring and ongoing maintenance needs, KT is planning to construct a new, KT-owned and operated ferry maintenance facility that will expand KT's capabilities to perform scheduled maintenance and emergency repairs to support their growing ferry fleet.

Development of a dedicated and capable facility that accommodates a broad suite of KT vessel maintenance activities will streamline and centralize completion of the necessary vessel maintenance and repair functions, improving service reliability and reducing operational and maintenance costs. This facility will provide significant value to KT ferry users and the Kitsap County community by giving KT the ability to expand the types of vessel maintenance and repair functions that can be performed directly by KT staff, increasing reliability, minimizing service disruptions associated with shipyard availability, and encouraging the continued use of KT ferries as a transportation alternative.

As a first step toward development of the facility, KT conducted the Ferry Maintenance Facility Siting Study (Study) to identify and evaluate potential locations that would support a facility capable of meeting KT's long-term vessel maintenance needs. The goal of this Study is to identify a preferred alternative site and serve as a basis for future environmental assessment and facility design, informed by agency needs, criteria assessment and with feedback from public and stakeholders.

Project Need

The service reliability of KT's fleet of vessels throughout their anticipated lifespan is largely dependent upon the completion of timely, professional preventative maintenance and repair work. As further discussed in Section 2, delivery of this maintenance is currently constrained by the lack of a dedicated marine maintenance facility and the reliance on constrained shipyard availability and workforce.

Maintenance activities are currently performed at different and distant locations not designed or intended for this type of work. Even for routine maintenance activities, the geographic separation of KT fleet assets between Southworth to the south and Kingston to the north, along with the access to the inventory warehouse, requires staff to make long, repeated transits to obtain materials needed to perform required vessel maintenance and repairs. When using a shipyard to perform maintenance activities, the vessels must be moved to that location (as far north as Anacortes), requiring added lengthy transport of crews. In addition, maintenance staff assigned to perform work or monitor the vessel while in the shipyard must either travel long distances or arrange for temporary lodging throughout the duration of the shipyard availability. Finally, moorage for KT's fleet of vessels is currently accommodated at both KT-owned and KT-leased locations and depends on available mooring space at nearby marinas where maintenance is either not possible or very difficult.

In summary, the need for a dedicated KT vessel maintenance facility is driven by the facts that:

- KT is the largest passenger-only ferry operator in the Puget Sound region, served by a diverse fleet of vessels and with no dedicated marine maintenance facility.
- Current KT-owned facilities do not have sufficient overnight moorage capacity for the existing fleet, requiring KT to lease moorage space from nearby marinas for four ferries.

- There are a limited number of local shipyards that can serve the KT fleet, with limited availability to perform both scheduled and unscheduled vessel maintenance and required inspections.
- Maintenance/repair work is currently performed out of ad hoc maintenance facilities, with no dedicated shop space, limited tools and support infrastructure, and separate parts inventories and equipment warehouses.
- Current maintenance practices require distant, time consuming, and costly transportation for vessels and maintenance staff.
- Fleet maintenance scheduling is difficult and unpredictable, which increases the risk of missed vessel maintenance.
- Current maintenance practices and reliance on capacity-constrained shipyards lead to longer vessel time out of service, impacting system reliability.

Approach

To identify potential sites that could support a vessel maintenance facility, evaluate and rank possible sites, and ultimately recommend a preferred site alternative, the Study undertook the following steps.

1. **Determine facility goals and requirements:** The first step in the process was to determine and document the envisioned KT ferry maintenance and repair activities and develop the facility programming needs to support those activities, including equipment, infrastructure, facilities, and spaces. The identified functional requirements informed the development of the minimum size and location criteria used to screen potential sites.
2. **Identify and screen potential sites:** High level criteria were developed to assess the ability of sites to support a maintenance facility that would meet the identified minimum programming requirements. This step included review of all Kitsap County shorelines and screened sites based on the minimum criteria.

   In turn, a detailed ranking methodology was developed to analyze required site location components such as environmental feasibility, community impact, land features, among others. This methodology was used to select a list of three alternative sites.
3. **Evaluate alternative sites:** At each of the three resulting site alternatives, potential facility layouts were developed to understand the opportunities and challenges as well as environmental considerations at each site. Additionally, a public survey was conducted to gather feedback on potential project impacts to inform the site evaluation. From this evaluation, a single preferred alternative was selected.
4. **Outline next steps:** Based on the conceptual facility site layouts of the preferred site alternative, information was developed to inform next steps for the project, including estimated construction costs, development considerations, and next steps for environmental assessment and design investigations.

Engagement and Feedback

Stakeholder and public engagement was conducted to both provide information on the Study and inform development of the project scope and need. Once sites were identified for review, engagement with the public and stakeholders provided guidance to inform the evaluation of potential sites. Additional details on public engagement are provided Appendix G.

2. BACKGROUND

Kitsap Transit Ferry Program

Kitsap Transit's passenger-only ferry program provides key transportation connections on two Foot Ferry routes across Sinclair Inlet and three Fast Ferry routes crossing Puget Sound.

Since 2002, KT has operated two Foot Ferry routes that connect the Kitsap County communities of Port Orchard and Annapolis to Bremerton, providing access to jobs, including the Puget Sound Naval Shipyard, bus connections at the Bremerton Transportation Center, and cross-sound KT and Washington State Ferries (WSF) routes to Seattle. Figure 1 provides maps of the five routes.

The KT Fast Ferry service, which connects three Kitsap County communities to downtown Seattle, was first launched in 2017 with service between Seattle and Bremerton. A second route, between Seattle and Kingston was launched in November 2018, and the third route serving Seattle and the community of Southworth, began operating in March 2021.

Figure 1. Kitsap Transit Ferry Routes

To reliably deliver these ferry services, the KT ferry fleet has grown to include 10 vessels, comprised of seven different vessel classes and now representing Washington State's second largest ferry fleet. In 2023 alone, KT's ferries carried more than 1 million passengers, a 33 percent increase over 2022 ridership, signaling a strong rebound in ridership from the impacts of COVID-19.[1]

The KT ferry program is anticipated to see continued ridership growth as passenger-only ferries provide a valuable alternative to congested roadways and to the slower WSF vehicle ferry routes. During times of recued service on WSF routes, KT ferries provide an opportunity to supplement cross-sound service levels.

The Kitsap Transit Ferry Fleet

The five KT ferry routes each possess their own unique operating characteristics and vessel requirements. As the KT ferry program has expanded, KT has capitalized on opportunities to acquire and modify vessels previously in service in other localities to meet KT needs. Further, KT has contracted for the design and construction of vessels designed uniquely to meet the distinctive needs of KT ferry routes throughout the Puget Sound. Altogether, the fleet of ten vessels (shown in Figure 2) represents seven different vessel classes, with unique designs, equipment, and maintenance requirements, ranging from a 100-year-old wooden vessel to high-speed, foil-assisted, low-wake vessels and a state-of-the-art hybrid electric vessel. Table 1 describes some of the pertinent data and operating characteristics of the vessels in the fleet.

[1] Kitsap Transit, Press Release, Kitsap Transit ferries carried more than 1 million passengers in 2023, January 5, 2024. Accessed February 2024. www.kitsaptransit.org/uploads/pdf/news-releases/20240105release_annual_ferry_statistics_final.pdf

Table 1. Kitsap Transit Ferry Fleet Matrix

Vessel	Year Built / Refurbished	Primary Route	Capacity	Length	Special Features
Rich Passage I	2010	Bremerton-Seattle	118 pax / 12 bicycles	72’	Ultra-low-wake fast ferry with a patented hydrofoil-assisted hull design
Reliance & Lady Swift	2019	Bremerton-Seattle	118 pax / 12 bicycles	75’	Ultra-low-wake fast ferries with a patented hydrofoil-assisted hull design
Finest	1996 / 2018	Kingston-Seattle	349 pax / 10 bicycles	114’	Side-loading aluminum-hulled catamaran fast ferry
Enetai & Commander	2020 2021	Southworth-Seattle	250 pax / 26 bicycles	128’	Capable of bow loading at WSF Dock in Southworth and sideloading at Pier 50
Solano	2004	Kingston-Seattle	350 pax / 24 bicycles	126’	Bow- and side-loading aluminum-hulled catamaran fast ferry
Waterman	2019	Port Orchard-Bremerton	150 pax / 5 bicycles	70’	The first hybrid-electric ferry to operate in the Puget Sound
Carlisle II	1917 / 2021	Port Orchard-Bremerton	140 pax / 5 bicycles	60’	A 105-year-old wood vessel—the oldest continuously operated ferry in the Puget Sound
Admiral Pete	1994 / 2012	Port Orchard/ Annapolis-Bremerton	120 pax / 5 bicycles	65’	Foot ferry with a long history serving in the Puget Sound

Figure 2. Kitsap Transit’s Ferry Fleet[2]

[2] Kitsap Transit’s Ferry Fleet, Video, https://www.youtube.com/watch?v=d1-7zSSinuM

Ferry Maintenance Considerations

Importance of Maintenance Schedule

The maritime environment in which KT Ferries operates is highly regulated, notoriously litigious, and subject to close public scrutiny. As a result, and to meet the goal of always operating safely and reliably, it is paramount that the vessels and their equipment consistently function as designed. This requires that all requisite preventative maintenance be completed on schedule, in accordance with the manufacturer's recommendations, and in compliance with all regulatory requirements. This includes the full spectrum of vessel systems such as main propulsion engines, propellers or jets, rudders or steering systems, electronic navigation and communications systems, and safety equipment. Without all systems fully functional, the risk to passenger safety is considered unacceptably high to continue operation, the U.S. Coast Guard must be notified, and the vessel will not be considered fit for passenger ferry service until appropriate maintenance or repairs are complete.

Further, by nature of operating in the relatively harsh marine environment, ferries require ongoing and extensive preventative maintenance, including both external structures and internal systems, especially those that are exposed to corrosive saltwater conditions. Regular vessel cleaning, application of appropriate lubricants to moving parts, and hull coatings repair is necessary to minimize corrosive damage and maintain the vessel's hull and superstructure in a state of good repair. In summary, the performance of regular preventative maintenance and repairs is essential to efficient and reliable ferry service and is integral to the vessels safely and effectively reaching their useful lives.

Regulatory Requirements

As certificated vessels that carry passengers, KT's fleet is subject to a comprehensive federal regulatory regime that governs the operation, condition, and maintenance of the vessels and associated equipment. This regime is enforced by the U.S. Coast Guard and includes, among other things, routine in-water (at least annually) and out-of-water (at least biennially) inspections, notification of equipment failures, and operational and maintenance oversight. The inspections cover a wide breadth of vessel systems and equipment types, all considered integral to the safe, efficient operation of the vessel and its equipment in furtherance of safe and reliable passenger ferry operations.

Emergency Repairs

Operating in the marine environment comes with unexpected hazards to the vessel and its equipment that can result in damage necessitating emergency repairs prior to the vessel being placed back into passenger service. Depending upon their nature, these repairs may be able to be made dock side or may require the vessel to be hauled out of the water. As examples, striking an undetected deadhead may result in propeller damage, getting an adrift fishing net caught in the jet intakes, or damage to the foil system may each require the vessel to be pulled out of the water to affect repairs. Whether alongside the dock or out of the water, the existence and availability of the necessary infrastructure and equipment that make it possible to complete timely repairs is directly linked to the speed with which the vessel can be returned to service.

Maintenance Program Activities

Vessel maintenance and repair activities can generally be categorized as either Routine, Intermediate, or Extensive. Table 2 provides a summary description of each category, along with examples of typical activities falling under each category.

Table 2. Categories of Maintenance Activities

Routine	Intermediate	Extensive
Routine maintenance/repairs can be readily performed while the vessel is moored at the home dock (where the vessel moors when out of service) when the vessel is not providing ferry service. This work includes a variety of high frequency activities, such as monitoring of fluids, equipment checks, routine maintenance, and troubleshooting.	Some intermediate maintenance and repair activities may also be performed at the home dock, but they are made more challenging by the lack of supporting infrastructure. However, many of these activities cannot be safely/effectively accomplished without capabilities only available at a ship repair and maintenance facility.	Extensive maintenance and repair activities are comprised of those that require specialized equipment or unique skills not available at routine maintenance facilities or by in-house staff, typically necessitating that they be performed at a shipyard.
• Engine oil change • Engine tune up & Injector Replacement • Pump repair/replacement	• Hull inspections/damage repair • Waterjet maintenance/repair • Bucket maintenance/repair • Engine overhaul • Propeller repair/replacement • Shaft/bearing repair/replacement • Rudder service/repair • Fuel oil systems repair/replacement • Pull heat exchanger • Potable water system maintenance/repair • Sewage system maintenance/repair • Fire/bilge system maintenance/repair (welding) • HVAC maintenance/repair • Electrical systems (circuits, boards, etc.) • Interior painting • Swinging engines / battery replacement (overhead crane) • Detailed interior cleaning • Change/repair foil • Sewage/water oily water separator	• Mid-life overhaul • Hydraulic clean room • Electronics repair (contracted) • Exterior Painting/coatings • Hull fittings (welding) • Safety equipment (work requiring certification) • Wood hull repair (could be performed on-site by contractor) • Composite hull repair (could be performed on-site by contractor)

3. Current Maintenance Program

The KT Marine Services Department maintenance program is responsible for ensuring safe, efficient, and reliable ferry service. Currently, KT Marine Services maintenance staff perform routine, as well as some of the intermediate, activities at their home dock, making the best out of the ad hoc capabilities that exist at those locations. The sections below provide an overview of the organization and operations of the KT ferry maintenance program.

Staff

The current Kitsap Transit Marine Services maintenance staff is comprised of 15 employees with varying roles, responsibilities, and skill sets. This staff is predominantly dedicated to fleet maintenance, including preventative maintenance and repair, for the full spectrum of marine system, such as diesel engines, electrical systems, heating and air conditioning, fresh, gray and black water systems, and electronic equipment. Consequently, the staff must be qualified to maintain and repair a wide range of marine-specific systems and equipment and possess the corresponding knowledge and necessary expertise.

KT Maintenance Locations

Vessel Maintenance

KT staff-performed marine maintenance work is currently completed onboard the vessels or within small sheds or shipping containers at the ferry dock in three different and disparate tie-up locations: Port Orchard, Bremerton, and Kingston, described below. These docks are adjacent to, or part of, the passenger terminals, meaning that maintenance activities being performed at these locations must be accomplished either alongside passenger operations or when passenger service is not being provided. These alternatives both have drawbacks, with the former not conducive to a favorable passenger experience and a potential safety issue, and the latter limiting the time and availability that maintenance can reasonably be performed.

- Port Orchard (4 vessels): one 10-foot-by-20-foot floating shed (shown in Figure 3) used as both vessel crew break room and maintenance staff workspace.
- Bremerton (4 vessels): one 20-foot container and one 6.5-foot-by-14-foot shed used for storage and mechanic workspaces.
- Kingston (2 vessels): one 20-foot container and one 8-foot-by-10-foot tough shed used for storage and mechanic workspaces.

Figure 3. Port Orchard Floating Shed Crew Space & Mechanic Workspace

Warehouse and Storage

In addition to the small storage capability located at vessel tie-up locations, the Marine Services Department utilizes warehouse and storage space at the KT-owned Gateway Center in Bremerton. While the maintenance staff makes this arrangement work, it is very inefficient as vessel parts and equipment inventories are not co-located with the vessels. Further, the repair activities that can be performed at the facility are limited by building conditions, including missing concrete flooring and the risk of dust contamination from the unfinished building.

KT Maintenance Program Limitations

As detailed in the previous sections, KT staff perform a limited set of maintenance and repair activities at vessel tie-up locations. Any maintenance activities, repairs and inspections that require specialized equipment or supporting infrastructure are performed at shipyards around the Puget Sound, as shown in Figure 4.

Without a ferry maintenance facility, KT ferry maintenance staff are currently limited to completing Routine and select Intermediate maintenance activities (detailed previously in Table 2). Available workspaces, including small sheds and shipping containers, create challenging working conditions and limit the size of equipment, the nature of the repairs and maintenance that can be completed, and the number of staff that can work at one time. The type of tools that can be employed is also limited by space constraints, reducing the activities that can be safely undertaken. Because the vessels operating in passenger service are located close to the ad hoc maintenance facilities, passengers using the ramps and floats to move to or from the vessel may pass close by ongoing maintenance activities creating a potential safety concern, and negatively impacting the passenger experience.

Shipyard Reliance

Many of the Intermediate and all of the Extensive vessel repairs identified in Table 2, including any work that requires a vessel to be hauled out of the water, must be conducted at one of five available shipyards in the region. (Although there are nine shipyards in the Puget Sound region which could theoretically service KT vessels, four are located in Lake Union with extremely limited capacity and their access periodically restricted by lock closures). The viability of a shipyard for specific repair needs is further dependent on vessel size restrictions and aluminum welding capabilities which are not universally available.

Any work conducted at a shipyard, whether for routine inspections and maintenance or for emergency repairs, must be planned, scheduled, and performed within the shipyard's limited availability. Shipyards are increasingly unable to immediately accept KT vessels for unplanned maintenance and repair, especially in recent years as shipyards have experienced reduced staffing, parts inventory, and mooring capacity. As space in one of the available drydocks is becoming more and more difficult to acquire, emergency repairs are taking longer to remedy, especially for the larger KT vessels where only one shipyard is consistently available to bid on repair work. The additional time out of service due to shipyard scheduling can lead to cancelled passenger service, impacting KT's service reliability and corresponding patron trust.

The distances of shipyard locations from KT routes and facilities provides additional challenges. Paid staff time and fuel costs are required to transport vessels between the terminal and the shipyard. Additionally, KT staff routinely perform or oversee work at shipyards, with long driving times increasing operating costs and negatively limiting the length of the workday available on-site. Figure 4 shows the approximate locations of the regional shipyards used by Kitsap Transit for various maintenance activities.

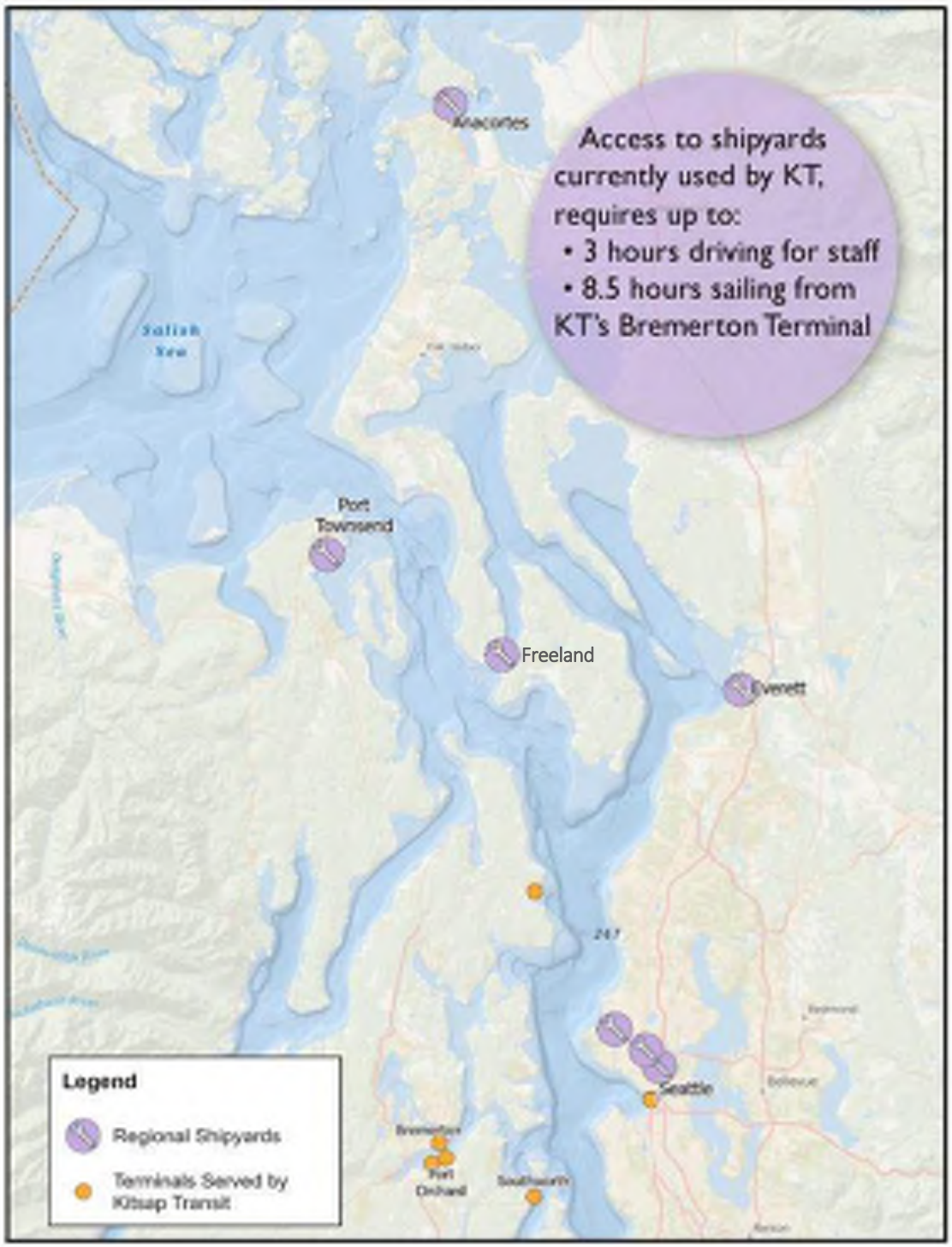


Figure 4. Regional Maintenance Service

4. Facility Programming Needs

As a first step in identifying potential locations for a KT Ferry Maintenance Facility, the Study documented KT's ferry maintenance needs, goals and program elements required in a new facility. This understanding led to a comprehensive list of maintenance capabilities and activities that need to be accommodated at the site, including facility infrastructure, equipment, and spaces required in support of reliable KT ferry operations.

Goals for the KT Ferry Maintenance Facility

A KT-owned and operated maintenance facility is envisioned to enhance the reliability and resiliency of the KT ferry program, as summarized by the following nine goals:

1. Increase KT's capabilities to provide reliable, consistent, and safe use of its ferry vessel fleet to riders throughout the Puget Sound region.
2. Provide a KT-owned and dedicated facility in a central location for KT vessel maintenance activities, staff, and inventory to conduct routine maintenance, emergency repairs and regular inspections of KT's fleet in a more timely and cost-effective manner than can be supported by area shipyards.
3. Provide a boat lift capable of lifting KT vessels out of the water for inspections and repairs.
4. Improve service reliability by minimizing service disruptions associated with shipyard availability, providing KT increased control over vessel maintenance and repair schedules.
5. Enhance KT's ability to promptly address unplanned maintenance needs associated with unpredictable equipment failures or damages tied to operating in the marine environment.
6. Increase moorage availability for KT vessels with direct access to an available maintenance facility, relieving the reliance and burden on neighboring marinas.
7. Provide the infrastructure necessary to support the energy and maintenance needs of future electric vessels.
8. Lower maintenance costs by reducing reliance on limited shipyard availability, increasing the maintenance activities that can be performed by KT staff, consolidating parts inventories and maintenance capabilities to a primary location, and reducing maintenance staff and vessel crew travel time between the proposed maintenance facility and moorage location.
9. Provide KT marine staff with the infrastructure and tools necessary to safely and efficiently perform their jobs and ensure KT vessels are consistently maintained in a state of good repair and are available to consistently serve the region's multimodal users throughout their service life.

Planned Marine Maintenance Program

The envisioned future KT Ferry Maintenance Program, capable of supporting KT's long-term goals is contingent on the construction of a dedicated Ferry Maintenance Facility to expand and centralize the current capabilities of the KT Marine Maintenance Program. As referenced in Section 2, intermediate maintenance covers a wider and more common range of maintenance activities. A new maintenance facility would allow KT to perform most routine and intermediate maintenance work, therefore strengthening the reliability and resiliency of the fleet with more efficient use of staff resources.

Table 3 below provides a summary comparison of KT's current vessel maintenance capabilities to the envisioned future capabilities supported by a dedicated Ferry Maintenance Facility.

Table 3: Maintenance Activities and Impacts of New Facility to Maintenance Capabilities

Type of Maintenance or Repair Activity	Current Vessel Maintenance Program	Future Vessel Maintenance Program
Routine Periodic maintenance/repairs that can be readily performed by in-house maintenance staff while the vessel is moored and out of service.	CURRENT LOCATION: LANDING SITE Completed by KT staff at one of three vessel tie-up locations.	FUTURE LOCATION: LANDING SITE OR AT NEW KT MAINTENANCE FACILITY Activities will likely continue to be provided at vessel tie-up locations but could more easily be accomplished at central maintenance facility when practicable.
Intermediate Preventative maintenance or repair work that either requires more than basic tools, must be performed apart from passenger services, or requires or is made easier by hauling a vessel out of the water.	CURRENT LOCATION: SHIPYARD Most activities cannot be accomplished without appropriate facilities/equipment and require use of a shipyard. Select intermediate activities are currently performed by KT staff at the home dock but are often challenging due to the lack of supporting infrastructure.	FUTURE LOCATION: NEW KT MAINTENANCE FACILITY Future KT Ferry Maintenance Facility would allow KT staff to conduct most or all intermediate activities, with needed equipment and available space to haul vessels out of the water. Area of largest impact
Extensive Major vessel maintenance, refurbishment or repair activities that either require specialized equipment and/or unique skills not possessed by maintenance staff.	CURRENT LOCATION: SHIPYARD Extensive maintenance and repairs are currently performed at local area shipyards.	FUTURE LOCATION: SHIPYARD Activities requiring specialized equipment and/or unique skills would continue to be performed at a shipyard.

Minimum Maintenance Facility Programming Requirements

The list of future maintenance activities defines KT's needs for a maintenance facility, including those related to the location and size needed to support KT's ferry program, the number of maintenance staff, the number and types of facility spaces, and the equipment required. These programmatic requirements define the spatial and geographic needs for a facility that meets the KT minimum expectations for a future ferry maintenance facility. Key facility requirements are described in the following sections with more specific detail provided in Appendix A.

Location and Access

- Proximity to KT ferry operations: To best serve the KT ferry system needs and support delivery of reliable service, the maintenance facility must be located within reasonable distance of existing KT ferry routes and terminals. This allows the transport of vessels and staff to and from maintenance work without excessive time and costs.
- Waterside access: The future ferry maintenance facility will require safe and efficient vessel access, with considerations including water depths, waterway navigability, and nearby vessel traffic.
- Roadway access: The location of the facility must also consider the ease of access for maintenance staff, considering travel time as well as potential traffic and closure impacts associated with areas with limited roadway or bridge access.

In and Over-Water Structures

- Moorage for four KT vessels: Currently, KT facilities only have capacity to moor eight vessels, with moorage space for the remaining two vessels leased from private marinas near the Port Orchard and Bremerton terminals. Developing sufficient moorage spaces for the fleet by providing moorage for four KT vessels at the maintenance facility will ensure long-term KT control and provide future flexibility, simplify operations, and reduce program costs.
- Pier and boat lift: The ability to lift boats out of the water will allow KT to complete vessel inspections, maintenance and repairs that currently require costly vessel haul outs at area shipyards or dive contracts. A 200-ton boat lift will be capable of hauling out all vessels in the fleet and transferring them to on-shore laydown areas.

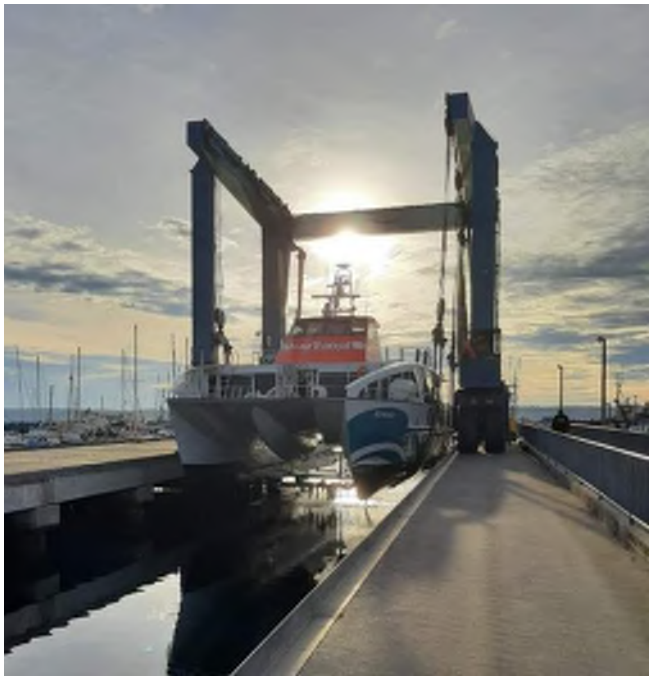


Figure 5: KT Ferry in a Boat Lift (Port Townsend, WA)

Uncovered Shoreside Spaces

- Vessel laydown area: An on-shore area sized to accommodate KT's largest vessels simultaneously, for two vessels to be laid down on blocks to allow inspections, maintenance, or repair work to be completed, including clear space required for the boat lift to maneuver while moving boats between the pier and on-shore laydown area. While assessment of potential sites considered alternative design options including over-water laydown area on a pier, use of uplands space for vessel laydown supports the widest range of maintenance activities, provides the most efficient access for equipment and staff to the vessel, and requires less mitigation for environmental risks because maintenance work would not occur over water.

- Parking and delivery receiving area: Facility operation requires adequate parking for staff vehicles, visitors, and maintenance vans. A delivery area and space for delivery trucks must also be provided.

Covered and Enclosed Building Spaces

- Workshop: To meet the maintenance and repair needs of the KT fleet, an enclosed/heated workshop space is needed to allow maintenance staff to perform the wide spectrum of maintenance and repair activities required to keep the fleet of KT vessels fully operational year-round. A detailed needs assessment was performed to identify the size and capabilities offered for a workshop.
- Storage: An enclosed/heated storage space was identified as a need to securely house the vast inventory of parts required to properly maintain the diverse fleet of KT vessels. This includes elements such as: small parts inventory, spare/replacement equipment, safety equipment, consumable inventories and fluids.
- Office - Administrative & Staff: Office space necessary to support administrative functions at the facility, as well as break room, locker, and other spaces for the staff that will routinely work at this location, including inventory control specialists and marine mechanics.

These key facility requirements informed development of minimum criteria used to evaluate potential site locations and the viability of potential site layout alternatives.

5. Identification of Potential Sites

Potential sites were identified through a staged process (shown in Figure 6) that began with review of all shoreline properties within Kitsap County. From there, shoreline areas were narrowed to those that met goals for a centralized and proximate location to existing KT ferry service routes and where land use was compatible with future maintenance facility use. Once these areas were identified, site specific screening was conducted to identify specific parcel or parcel configurations that best met the ferry maintenance facility programming requirements for both in-water and upland spaces.

Ultimately, the review of properties narrowed from nearly all eastern shorelines of Kitsap County to three sites identified for further analysis. This staged evaluation of potential properties is summarized in the sections below. Additional detail on the process and criteria used for identification of potential sites is provided in Appendix C.

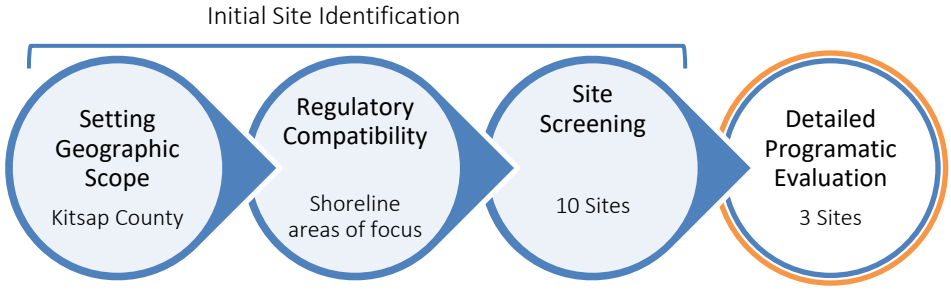


Figure 6. Site Identification Approach

Stage 1: Establish Geographic Scope of Review

The first stage of the initial site screening defined the shoreline areas to be reviewed for potential sites by applying broad criteria focused on the operational needs of a maintenance facility related to its location. Specific location needs considered in the first stage include:

- Geographic scope: KT established the goal for construction and operation of the new facility to occur within Kitsap County jurisdictional boundaries.
- Waterside access: To best serve the needs of the KT ferry maintenance program, the maintenance facility must be located within reasonable distance of existing KT ferry routes and terminals with in-water access.
- Landside access: The location of the facility must also consider the ease of shoreside access for maintenance staff and crew (i.e., not reliant on a single bridge or roadway subject to traffic congestion or closures). This element eliminated all Bainbridge Island locations from further consideration because access to the island is constrained to State Route 305, which is subject to challenging traffic conditions and closures.

Figure 7 highlights the resulting area of Kitsap County that was carried forward to Stage 2.

Figure 7. Result of Stage 1 Criteria: Area for Review of Shorelines

Stage 2: Review Regulatory Compatibility

The second stage of the site screening process focused on identifying site alternatives that provide opportunity for development and long-term use as a ferry maintenance facility under current land use regulations and existing land uses.

Table 4 summarizes the environmental criteria used to identify locations where a maintenance facility could be sited under current land use regulations.

Table 4. Stage 2 Criteria

Focus Area	Need	Criteria
Shoreline environmental designation	Shoreline area allows construction and long-term operation of a ferry maintenance facility	Ferry maintenance facility is an allowed use
Shoreline context / existing uses	Shoreline context is conducive to establishment of a maintenance facility (consideration for environmental review and public, stakeholder, and tribal outreach)	Shoreline stretch has some established compatible high-intensity uses
Site zoning	Site reasonably supports construction and long-term operation of a ferry maintenance facility	Ferry maintenance facility is an allowed use

Criteria application during this stage included a review of shoreline environmental designations to identify shoreline areas where a ferry maintenance facility would be an allowable use, including areas designated as High Intensity and Shoreline Residential (where a maintenance facility may be conditionally approved). The goal of this process was to identify stretches of shoreline with some level of existing commercial or industrial use where the shoreline context and environmental designation would be conducive to the establishment of a ferry maintenance facility.

Figure 8 highlights the Kitsap County shoreline areas resulting from this review. A total of eight areas of shoreline were identified that possessed regulatory compatibility. Further review of land use and property size compatibility revealed 10 specific sites, listed below by area, that warranted additional consideration. This more detailed compatibility review did not identify any viable sites around Kingston, Poulsbo, or Silverdale.

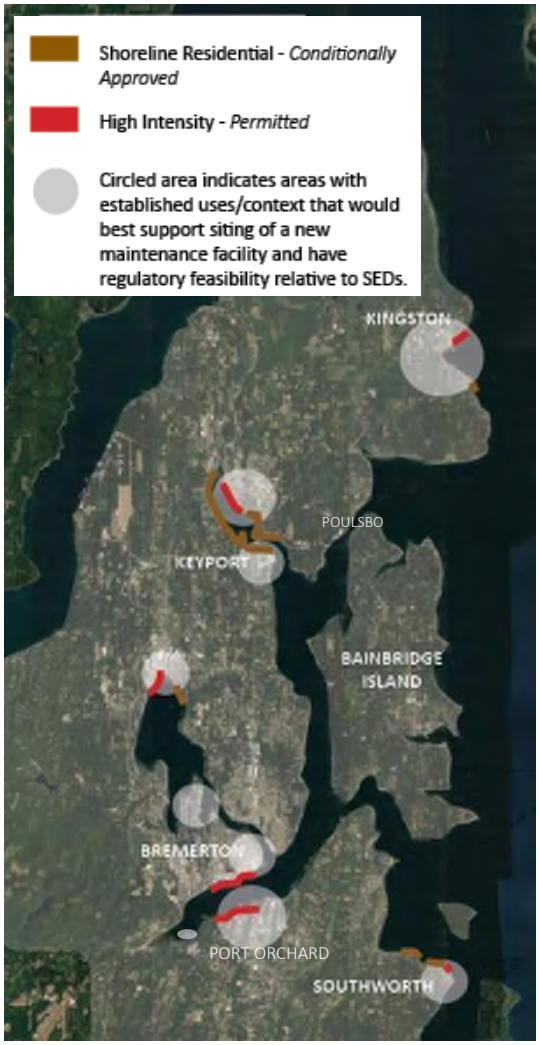


Figure 8. Results of Criteria Application: Shoreline Stretches for Review

Southworth:

- Southworth Ferry Terminal Area

Port Orchard / Sinclair Inlet:

- Kitsap Marina
- Suldan's Boat Works
- Railway Marina
- Bar and Grill
- Sinclair Inlet Marina
- Bay Street Parcels
- Annapolis Quay / Whiskey Gulch

Bremerton

- Shaw Island Residences

Keyport

- Keyport Area Residences

Additional detail on the review completed in Stages 1 and 2 is provided in Appendix B.

Stage 3: Site Screening

The ten sites identified in Stage 2 were evaluated for uplands and in-water space available against programmatic needs outlined in Section 4. In cases where multiple parcels were located adjacent to each other, both individual and combined parcel sizes were evaluated.

The area required to allow Kitsap Transit to lift two vessels out of the water for repair work (vessel laydown area) was identified as the most restrictive site space need and was used to inform the Stage 3 screening criteria. Screening criteria considered the vessel laydown space for two vessels together, whether uplands or some combination of uplands and overwater. When applying the upland space needs as a review criterion to the sites, only five sites, or site combinations, remained as viable alternatives, as summarized in Table 5.

Table 5. Sites Meeting Initial Site Screening Criteria

Site No.	Site Name	Meets min. uplands space	If insufficient uplands space, meets min. in-water space	Site met initial screening criteria
1	Kitsap Marina	☑	☑ *(would require buildout beyond current marina infrastructure)*	Yes
2	Suldan's Boat Works	No	☑ *(would require buildout beyond current marina infrastructure)*	Yes *(in combination with Kitsap Marina)*
3	Port Orchard Railway Marina	No	☑	Yes *(combined 2 parcels)*
4	Bar & Grill	☑	No	
5	Sinclair Inlet Marina	No	☑	Yes *(combined 2 parcels)*
6	Bay Street Parcels	No	☑ *(assumes Sinclair Inlet Marina or adjacent in-water space)*	
7	Annapolis Quay / Whiskey Gulch	No	No *(based on existing water depths)*	No
8	Keyport Area Residences	No	No	No
9	Shaw Island Residences	No	☑	Yes
10	Southworth Ferry Area Residences	No	No	No

The five resulting sites, shown below in Figure 9, were carried forward for further site evaluation and ranking. Four of these sites are in the Sinclair Inlet along the Port Orchard waterfront, while the Shaw Island Residences site is in Phinney Bay north of Bremerton.

These five remaining site combinations were evaluated and ranked using a relative scoring process, the goal of which was to select up to the top three sites to be carried forward for further detailed assessment and development of conceptual layouts. This evaluation focused on assessing the relative ability of each site to support the KT ferry maintenance program's short and long-term programming and operational needs. Accordingly, the evaluation criteria used to narrow the potential sites down to those that would undergo detailed site analysis and conceptual design focused on the three broad categories detailed in Table 6.

Figure 9. Five Sites Identified for Further Site Evaluation and Ranking

Table 6: Summary of Primary Evaluation Criteria

Focus Area	Need	Criteria for Evaluation and Site Ranking
Site Access	Facility location that supports the operational and service needs of the KT ferry system	• Distance from KT terminals/routes • Distance from KT Bremerton administrative offices • Distance/access for maintenance contractors & equipment vendors • Ease of landside waterfront access • Water depths / waterside access
Environmental Considerations	Site that provides a viable opportunity for permitting and construction of a maintenance facility; minimize environmental impacts	• Proximity/impacts to residents or businesses • Permitting complexity (overwater coverage, neighboring uses, etc.) • Potential impacts to low-income and minority populations
Site Space and Constructability	Facility with space and flexibility to meet KT's current and future ferry maintenance needs; consider facility construction costs and timeline	• In-water space: ease of vessel navigation and access, space for additional berths, space for truck access to berths • Uplands space: total square footage to support maintenance shops, office space, and other facility programming • Site construction considerations / cost impacts (site grade, access, etc.) • Availability of utilities • Space for future needs (flexibility/expansion)

Initial Site Screening Findings

The evaluation focused on identifying the relative advantages and disadvantages at each site. Based on the results of the evaluation, two sites were found to have significant challenges and were eliminated from further analysis as summarized below:

Figure 10: Sinclair Inlet Marina and Adjacent Site Parcels

Sinclair Inlet Marina and Adjacent Property *(two parcels)*

Key challenges – why the site was not moved forward:

- Significant space restrictions and design challenges due to the narrow shoreline
- Due to gradual slope, requisite water depths are located further offshore, requiring a longer pier structure and significant over-water coverage.
- Would require the use of a barge to fulfill the vessel haul out demands.
- While the site may be available for acquisition, there would be negative business impacts associated with the loss of the marina.

Shaw Island Properties *(three parcels)*

Key challenges – why the site was not moved forward:

- Project would impact private residences and residential shoreline.
- Roadway access is limited to a single, one-lane, privately maintained bridge. Access for larger delivery vehicles would likely be restricted.
- Would require the use of a barge to fulfill the vessel haul out demands.

Figure 11. Shaw Island Site Parcels

With the elimination of these two sites, the following three site options were retained and recommended for further analysis.

Figure 12. Port Orchard Railway Marina and Bar and Grill Parcels

Port Orchard Railway Marina is a two-parcel site currently in use as a private boatyard and marina. This site possesses approximately 59,000 square feet of usable shore space and potential room to accommodate vessels ashore, but only moderate room to construct and place the maintenance facility.

Kitsap Marina is a privately owned single parcel site. It is currently in use as a private boatyard and marina. There is sufficient uplands space for a vessel laydown area, however there is not adequate space to accommodate vessel haul out and laydown capabilities along with the maintenance facility. This site has approximately 52,000 square feet of usable shore space. The site possesses easy navigation for vessel traffic and access by land.

Figure 13. Kitsap Marina Parcels

Figure 14. Kitsap Marina, Suldan's Boat Works, and Adjacent Residential Site Parcels

Kitsap Marina & Suldan's Combined Properties is a site option that combines two additional privately owned and adjacent parcels with the Kitsap Marine Property. By incorporating these adjacent parcels, KT would have the space available to lift and laydown vessels and build the requisite maintenance facility. The site has approximately 69,000 square feet of usable shore space.

6. Detailed Site Evaluation

Following the site screening process, each of the three potential sites were summarized for their suitability per the following criteria: site layout compatability, environmental considerations, and feedback from public engagement. The application of criteria and key findings are summarized below, followed by a summary of findings by site.

Conceptual Site Layouts

Site layouts were developed to understand the potential for each site to meet minimum facility programming needs including site circulation,parking, building space needs, vessel haulout, etc. Each site was considered in terms of its ability to support a potential site layout that would accommodate all the identified minimimum programmatic requirements. Layout options are included in Appendix E.

Findings:

As summarized in Figure 15, only one site, the Kitsap Marina and Sultan's Boat Works combined properties, provides the space needed to develop a facility that meets minimum site programming requirements, and supports KT's long-term goals.

Because of space limitations, the other two sites would each require one or both vessels to be hauled out over water and laid down on a pier structure, which would limit the amount and type of work that could be completed. The constrained space would also require some reduction from minimum programming for workshop, storage or staff spaces, as well as potentially eliminating or providing minimal parking on site. All of the programming tradeoffs required to layout facility programming on the two smaller sites would result in reduced operational capabilities, resulting in a facility that would not meet the long-term, or even current needs, of the KT ferry maintenance program.

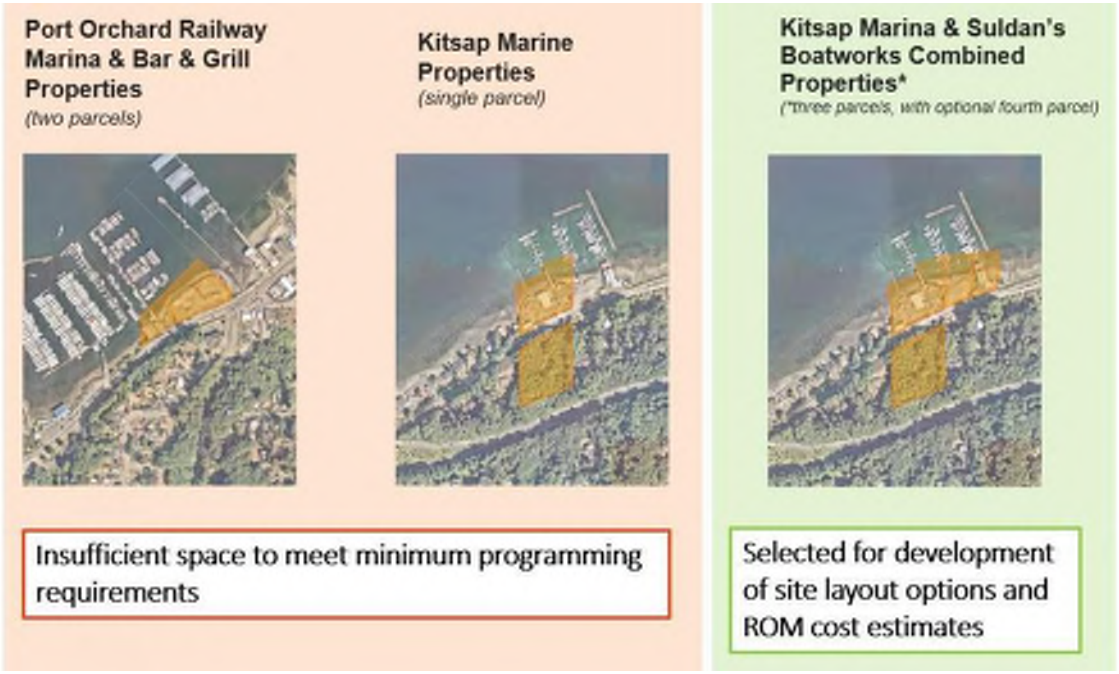


Figure 15. Summary of Available Space to Meet Programming Needs at the Three Site Options

Environmental Considerations

Assessment of environmental considerations was progressed and refined based on the conceptual site layouts. The environmental review process aimed to provide full and open consideration of potential environmental impacts from the proposed facility, including assessment of possible measures to avoid or minimize adverse impacts or enhance the quality of the environment.

Appendix H provides discussion of environmental considerations and next steps for evaluation.

Findings:

The proposed Kitsap Transit Ferry Maintenance Facility Project will result in impacts to the natural environment, built environment, tribal fishing, and private businesses. Based on the conceptual facility layouts at each site, the type of impact is similar at each potential site; meaning that none of the sites avoid one or more of the impact types altogether. Additionally, the potential severity of impacts at each of the three site options was found to be relatively similar. The most significant difference between the sites is the greater opportunity for on-site mitigation presented by the option which combines the Kitsap Marina site with the adjacent Suldan's Boat Works and residential parcels.

- Impacts to current use: Construction of the ferry maintenance facility would displace the existing recreational moorage (and existing private businesses) at each potential site. Based on facility size and intended operations, reconfiguration of the recreational moorage alongside the ferry maintenance facility is not feasible. Impacts to businesses and tenants from the project would require mitigation.
- Overwater coverage: Conceptual-level layouts of the facility represent a reduction in the amount of overwater coverage at each site, assuming demolition of existing marina structures. This reduction would occur by removing the existing recreational moorage and replacing it with a ferry maintenance facility, which would represent a smaller footprint than the existing recreational moorage in each case.
- Environmental mitigation opportunities: Opportunities for shoreline softening and riparian planting appear feasible at each site; however, the site which combines the Kitsap Marina property with adjacent parcels provides the greatest opportunity, especially with inclusion of the adjacent residential parcel. Providing shoreline enhancements at the sites, if feasible, would be a significant benefit that is highly valued in the conservation calculator and by the regulatory agencies and tribes.

Community Engagement

To provide information on the project goals and sites under consideration, KT shared an informational StoryMap to the project webpage. The interactive StoryMap explained the objectives of a new maintenance facility, detailed the siting process undertaken by KT and presented the three sites under consideration. The tool was posted to the KT website, blog, and social media accounts. The StoryMap introduced the site options, of which individuals were asked to share their sentiments in the accompanying public survey.

Kitsap Transit surveyed Kitsap County residents, business owners, ferry riders and other interested parties to gather input on a proposal to site a vessel maintenance facility in Kitsap County to meet the ongoing needs of the KT ferry fleet.

The survey consisted of nine questions and was fielded from December 11, 2023, to January 10, 2024, using the Survey Monkey platform. KT promoted the survey through KT's website, rider alerts, social media channels, the Headways[3] blog, and a news release.

Response to the survey was strong – 1,078 respondents answered at least some of the questions, and from those responses, 984 total individual open-ended responses about the proposed sites and Study were gathered.

The StoryMap and a summary of the results of the survey are included as Appendix G.

Findings:

Through the public survey, the consulting team was able to gauge public opinion surrounding the possibilty of development at each of the three sites. The magnitude of support in either positive or negative directions for each site is included in the summaries.

The Kitsap Marina and Suldan's Boat Works combined properties was most supported site option. Approximately 45% of open-ended comments were generally supportive, compared to 20% for Kitsap Marina and 17% for Port Orchard Railway Marina and Bar & Grill properties.

Summary of Findings by Site

The following pages summarize the results of conceptual layout development, environmental assessment, and public feedback on each of the site options.

[3] https://www.ktheadways.com/blog

PORT ORCHARD RAILWAY MARINA & BAR & GRILL PROPERTIES
(TWO PARCELS

Overview:

Owner: Private (two owners)

Site Uses: Private boatyard and marina

Environmental considerations: There is no mapped eel grass and no known eagle's nests at this site but smelt spawning does occur in this area of Sinclair Inlet. There is a fish-bearing stream directly adjacent to this site.

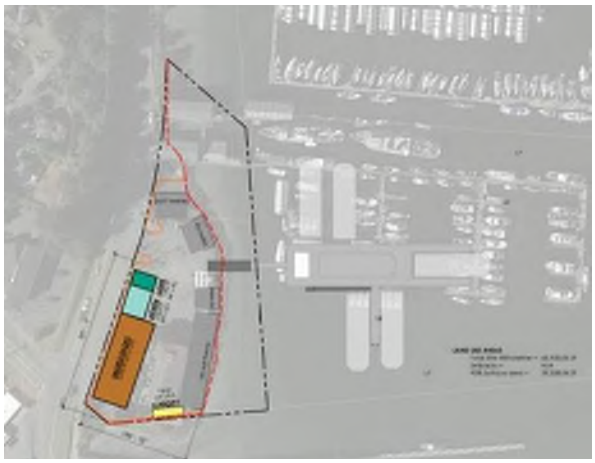


Figure 16. Conceptual Site Layout for Port Orchard Railway Marina and Bar & Grill Properties

Site Layout:

- Vessel laydown: Limited shoreside space would require overwater laydown for one or both vessels.
- Approximately 59,000 square feet of usable shore space. Full facility programming cannot be accommodated without tradeoffs.
- Vessel access: No navigational restrictions, with no commercial vessel traffic and moderate recreational vessel usage in close proximity. Sufficient waterfront and water depths to support the in-water components of a KT maintenance facility.
- Landside access: Located off state owned and maintained Hwy 166 (SW Bay St) near the city of Port Orchard, the site has good roadway access to major thoroughfares leading to KT office, facilities, services and supporting personnel, although slightly more distant than other sites.

Environmental:

- Proximity/impact to businesses: Acquisition of this site would likely eliminate the Port Orchard Railway Marina that provides recreational vessel moorage. This site would also displace a mixed-use building currently under development on the former Bar and Grill property.
- Compensatory mitigation opportunity: Overwater coverage from moorage could be used to offset the impacts of new development. If the barge option were used, this site would likely have increased overwater coverage, creating more nearshore impact than if onshore vessel laydown were feasible.
- Compatibility with visual aesthetics: Facility would be consistent with existing viewshed.

Engagement:

- Of the open-ended survey results received, 17% expressed generally positive sentiments toward potential use of this site.

Site not carried forward due to key challenges:

- Insufficient site space to lay down two vessels on shore.
- Mitigation would be required for impacts to existing businesses and mixed-use development currently under construction.

KITSAP MARINA
(SINGLE PARCEL)

Overview:

Owner: Private (single owner)

Site Uses: Private boatyard and marina

Environmental Considerations: There is no mapped eel grass and no known eagle's nests at this site but smelt spawning does occur in this area of Sinclair Inlet. A culvert on site identified as a fish passage barrier could be improved and a critical habitat created after correction.

Figure 17. Conceptual Site Layout for Kitsap Marina Site

Site Layout:

- Vessel laydown: Limited shoreside space would require overwater laydown for one or both vessels.
- Approximately 52,000 square feet of usable shore space, with room to accommodate vessels ashore but with limited room to place maintenance facilities.
- Vessel navigation: Water depths are sufficient throughout approach to support safe vessel navigation, with no commercial and limited recreational vessel traffic in close proximity.
- Water depths: Sufficient waterfront and water depths to reasonably accommodate the in-water components of a KT maintenance facility.
- Surface street network: Located directly off state-owned and maintained Hwy 166 (SW Bay St), the site has direct roadway access to major thoroughfares leading to KT office, facilities, services and supporting personnel.

Environmental:

- Proximity/impact to businesses: Major impact to active private boatyard and marina that serves the local population and maritime community.
- Compensatory mitigation opportunity: Overwater coverage from moorage could be used to offset the impacts of new development. If the barge option were used, this site would likely have increased overwater coverage, creating more nearshore impact than if on-shore vessel laydown were feasible.
- Compatibility with visual aesthetics: Facility would be consistent with existing viewshed.

Engagement:

- Of the open-ended survey results received, 20% expressed generally positive sentiments toward potential use of this site.

Site not carried forward due to key challenges:

- Insufficient site space to lay down two vessels on shore.
- Full facility programming cannot be accommodated without tradeoffs.

KITSAP MARINA / SULDAN'S BOAT WORKS / RESIDENTIAL PARCEL *(OPTIONAL)* COMBINED PROPERTIES *(three or four parcels)*

Overview:

Owner: Private (two owners)

Site Uses: Private boatyard and marina

Environmental considerations: There is no mapped eel grass and no known eagle's nests at this site but smelt spawning does occur in this area of Sinclair Inlet. A culvert on site identified as a fish passage barrier could be improved and a critical habitat created after correction.

Figure 18. Conceptual Site Layout for Kitsap Marina and Adjacent Parcels Combined Properties

Site Layout:

- The use of a barge and associated overwater coverage would likely not be necessary at this combined site.
- Approximately 69,000 square feet of usable shore space, with room to comfortably accommodate both vessels ashore and the requisite maintenance facilities.
- Vessel access Water depths are sufficient throughout approach to support safe vessel navigation, with no commercial and limited recreational vessel traffic in close proximity.
- Water depths: Sufficient waterfront and water depths to reasonably accommodate the in-water components of a KT maintenance facility.
- Site access: Located directly off state-owned and maintained Hwy 166 (SW Bay St), the site has direct roadway access to major thoroughfares leading to KT office, facilities, services and supporting personnel.

Environmental:

- Proximity/impact to businesses: Major impact to active private boatyard and marina that serves the local population and maritime community.
- Compensatory mitigation opportunity: Overwater coverage from moorage could be used to offset the impacts of new development. Additional environmental mitigation opportunities exist on site with the inclusion of the adjacent residential parcel.
- Compatibility with visual aesthetics: Facility would be consistent with existing viewshed.

Engagement

- Most supported site: Of the open-ended survey results received, 45% expressed generally positive sentiments toward potential use of this site.

Site carried forward for further evaluation

7. Summary of Findings

Based on the findings from the Site Alternatives Evaluation, the team identified the Kitsap Marina and Suldan's Boat Works combined properties as the only site option that could sufficiently support the minimum programming requirements for the KT Ferry Maintenance Facility. At this location, two alternatives were identified. Both alternatives incorporate three privately-owned parcels on Sinclair Inlet west of Port Orchard, including the current Kitsap Marina and Suldan's Boat Works sites, with the second alternative adding the residential parcel adjacent to the Suldan's Boat Works site.

Figure 19: Alternative 1

Figure 20: Alternative 2

The following sections discuss site layout and development considerations for these two alternatives, provide a comparison of the two options, and identify the selection of the preferred alternative by the Kitsap Transit Board.

Layout Considerations

Challenges of Maintaining Existing Marina Uses

Development of a ferry maintenance facility at this site will impact the existing public marina use. The Study assessed potential continued public marina operations in proximity to a ferry maintenance facility and found that co-location of both uses at this site would be infeasible given the constraints summarized below and detailed in Appendix F.

- Lack of space for uplands uses. The ferry maintenance facility requires use of most of the developable shoreside area on the site. Upon development of the facility, the site would lack sufficient space to provide marina administration, parking for marina staff and users, or access to a boat ramp.
- Vessel maneuvering space. The operation of small recreational vessels in proximity to larger passenger-only ferries would create safety concerns and risks.

- **Breakwater removal.** Removal of the existing breakwaters currently bordering the marina is required for ferry access, leading to reduced protection from wind and wave conditions for smaller recreational vessels.
- **Ferry security.** Safety and security regulations stipulate minimum distances that must be maintained by people and vessels from large passenger vessels, typically 100 yards for a vessel that are underway and 25 yards from a vessel that is moored, unless authorized by the on-scene official patrol or large passenger vessel master.
- **Environmental mitigation requirements.** Removal of existing pier and float structures will be required to mitigate the overwater coverage associated with maintenance facility structures.

Uplands Parcel Uses

The Kitsap Marina parcel includes area on both sides of Bay Street. The uplands area is currently undeveloped and is located on a steep slope with private residences on either side. A portion of the site is used for a septic drain field that serves the current marina facility.

The uplands area provides opportunity and space to meet the programming needs of the Ferry Maintenance Facility. The conceptual-level design developed as part of this study identifies a portion of the site for use as storage for large equipment, as shown in Figure 21, as well as for additional employee parking.

Figure 21: Spare KT Ferry Engine in Storage

- **Septic drainfield:** To support a future Ferry Maintenance Facility, the current drainfield use would need to be preserved or replaced with a new on-site drain field. Further analysis is required to understand the capacity and condition of the existing drainfield to support a future Ferry Maintenance Facility.
- **Slope mitigation:** The upland portion of the parcel is within a geologically hazardous area (erosion, seismic, and landslide hazard areas), introducing the need for additional geotechnical analysis. Development of this area for parking and storage would require construction of a retaining wall to address the steep slope. As such, the development package would include a land disturbing permit application and a geotechnical report with these recommendations and conclusions.

Future Flexibility

A key consideration for planning and design of the Ferry Maintenance Facility is incorporating opportunity for future flexibility in site layouts and spaces to accommodate future needs. For example, within the design life of the facility, KT will likely continue to transition their fleet to include hybrid- or all-electric vessels. Maintenance services, equipment, and inventory requirements will change as the fleet transitions.

Environmental Mitigation Opportunities

Construction of a ferry maintenance facility would result in new in-water, over-water, and shoreline infrastructure. This would result in impacts to the natural environment that must be offset in order to obtain the environmental permits and approvals that will be required prior to project construction. Appendix H provides an overview of the regulatory requirements for the proposed facility and identifies likely mitigation requirements and considerations.

At this stage of conceptual design, the in/over-water infrastructure associated with the facility at both alternatives has a smaller overwater footprint than the existing structures on the site. Using the Puget Sound Nearshore Conservation Calculator, which is the tool used to determine the project impact to nearshore habitats, the overwater coverage added by the pier and moorage floats can likely be mitigated by removal of the existing structures on site, including the marina floats, piers and breakwaters.

Based on this estimate, the project could be mitigated on site through removal of existing structures, potentially reducing the amount of overwater coverage at the site. However, the conservation calculator is not a static tool and continues to be updated. Future updates could change values that affect the initial output for this project. Additionally, the project is at a very early stage of design. As the design progresses, initial conceptual inputs into the calculator could change such that a greater mitigation requirement is needed.

The residential parcel included in Alternative 2, shown in aerial view in Figure 21, would allow for additional shoreline restoration and habitat enhancement. Upon acquisition of the property, the residential building would be demolished to allow for development of the facility. Removal of the house, as well as the associated concrete bulkhead and creosote pilings, is a mitigatory measure that would result in net positive environmental improvement.

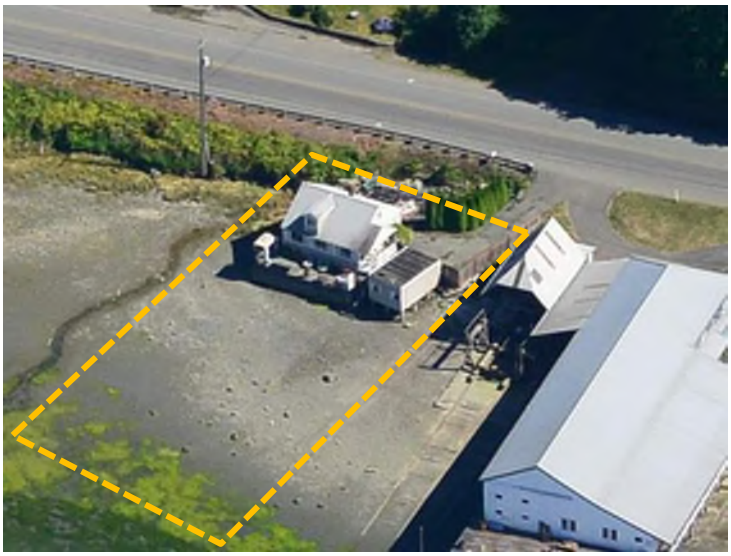


Figure 22. Aerial View of Residential Parcel

In a scenario where additional mitigation is needed to offset impacts from the project (either as a result of calculator updates or additional site development), mitigation onsite is typically orders of magnitude more affordable than credit purchase from a mitigation bank. Additionally, holding space within the parcel for habitat enhancement as part of the project or in the future would be looked at favorably by the regulators and tribes. Applications that show a net positive improvement are typically reviewed more favorably by the regulators than standard development applications.

Identification of the Proposed Preferred Alternative

On May 7, 2024, the KT Board selected Alternative 2 as the proposed preferred alternative. This alternative was selected due to the advantages provided by the inclusion of the residential parcel adjacent to the Suldan's Boat Works site, including environmental mitigation opportunities and additional space to provide design flexibility. A summary of the two alternatives, including conceptual layouts, a summary of programmatic elements, and the key advantages of Alternative 2 which led to its selection as the proposed preferred alternative, are presented below in Figure 23.

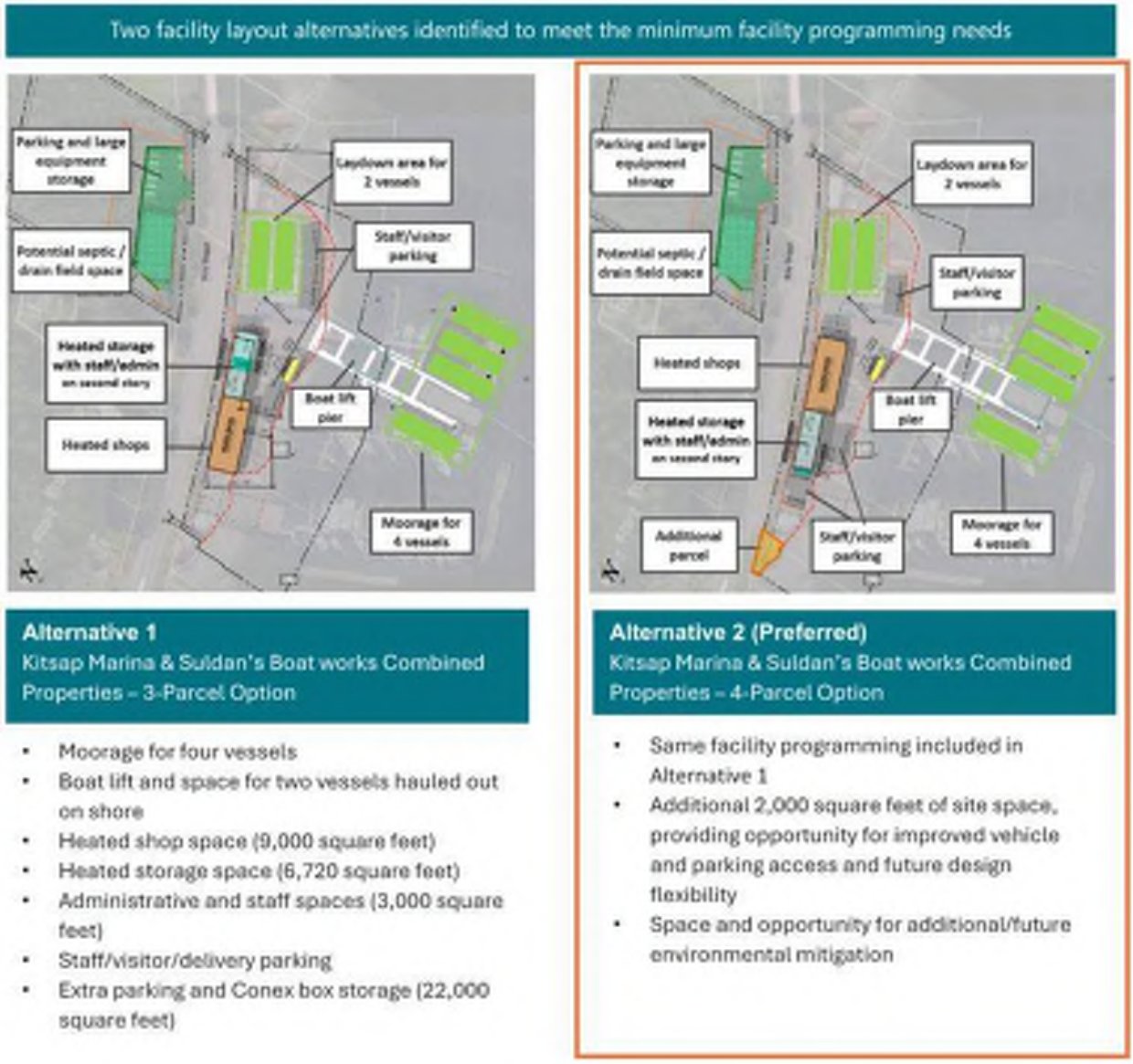


Figure 23: Comparison of Alternatives 1 and 2

Estimated Project Costs

Estimated Rough Order of Magnitude (ROM) costs for the proposed preferred alternative were developed based on the conceptual-level facility layouts. These estimated costs will be refined in future project phases as facility design is advanced and more is understood about environmental mitigation and other project requirements.

Table 7: ROM Project Costs

Item	ROM Cost
In/Over-Water Structures	$ 40.3 M
Shoreside/Uplands Facilities and Improvements	$ 19.2 M
Design and Permitting	$ 10.7 M
Total Facility ROM Cost	**$ 70.2 M**

Notes:

- *ROM costs developed based on conceptual-level site layouts*
- *ROM costs do not include property acquisition*

8. Next Steps

With preliminary site screening assessment completed and two reasonable alternatives identified, KT will begin environmental review for the project. The purpose of the environmental review process is to provide full and open consideration of potential environmental impacts from project alternatives, including a comparison between alternatives and a no-build condition. The process will also inform decision-makers and the public on any measures to avoid or minimize adverse impacts or enhance the quality of the environment, and provide robust community, stakeholder, agency, and tribal engagement and opportunities to gather project feedback.

Upon completion of the environmental review process, KT plans to advance design for the selected alternative, secure permits and necessary property rights, and construct the facility.

APPENDIX A

SUMMARY OF KT FERRY MAINTENANCE FACILITY NEEDS

MEMO

Date: May 15, 2024

To: Kitsap Transit

From: KPFF Consulting Engineers

Subject: Kitsap Transit – Maintenance Facility Siting Study
Establish Facility Programmatic and Operational Needs

Introduction

Kitsap Transit, supported by the KPFF consulting team, is conducting a Ferry Maintenance Facility Planning Study to locate potential sites, review and document site attributes, and assess the viability of alternatives for a Ferry Maintenance Facility. The ultimate goal of the study is to support the recommendation of a well-informed preferred alternative, or alternatives.

To support the development of a well-reasoned site evaluation and selection criteria, the KPFF team believes it is appropriate to first document the requisite maintenance and repair activities performed in support of reliable Kitsap Ferries operations, and to establish the programmatic and operational needs for a KT ferry maintenance facility. A workshop was held with KT staff and the consultant team on December 5, 2022, to discuss KT's current and planned maintenance activities and associated programmatic needs.

Purpose

This memo documents our understanding of current KT vessel preventative maintenance and repair practices, as well as the desired maintenance and repair capabilities to be provided at a dedicated KT ferry maintenance facility, based on discussion during the 12/5/22 workshop, with the objective of providing KT with initial lists for team review and feedback:

1. A summary of ferry maintenance and repair activities
2. A first draft of facility programmatic and operational needs for KT review and feedback.

Next Steps

The maintenance capabilities listed in this memo will be used to define maintenance facility programmatic requirements and the spatial needs for a unique facility that meets, or exceeds, the KT minimum expectations for a vessel maintenance facility. This information will inform the criteria used to assess the viability of potential site alternatives.

The next step in the process is for KT to review the two attachments and provide applicable feedback, aimed at correcting, adding, clarifying, or amplifying as appropriate. Feedback can come in whatever form is the most expedient for KT. If a working session would be preferable to provide this feedback, KPFF will be happy to set that up. With the goal of keeping the project moving, feedback is requested by the end of the calendar year.

Attachment 1: Current Maintenance & Repair Activities

Vessel maintenance and repair activities are categorized below using the basic descriptions in the following table:

Kitsap Ferries – Maintenance & Repair Activity Levels		
Routine	**Intermediate**	**Extensive**
• Performed by maintenance staff; usually accomplished when vessel is out of service at homeport location. • Employs no/minimal special tools or equipment.	• Performed by maintenance staff with vendor support as necessary; usually accomplished at a maintenance facility with added tools/equipment when vessel is out of service.	• Performed by personnel with special skills, equipment or facilities. • Involves capital work requiring solicitation of bids from commercial shipyards.

Routine Vessel Maintenance & Repair

Performed by KT maintenance staff at tie-up sites (Bremerton, Kingston & Port Orchard):

Hull & Main Propulsion Systems	Auxiliary Systems
• Engine oil change • Engine tune up & Injector Replacement	• Pump repair/replacement

Intermediate Vessel Maintenance & Repair

To be performed by KT crew with construction of a dedicated maintenance facility:

Hull & Main Propulsion Systems	Auxiliary Systems
• Hull inspections/damage repair (hull repair/welding to be contracted but completed on site) • Waterjet maintenance/repair • Bucket maintenance/repair • Engine overhaul • Propeller repair/replacement • Shaft/bearing repair/replacement • Rudder service/repair • Pull/clean heat exchanger	• Fuel oil systems repair/replacement • Potable water system maintenance/repair • Sewage system maintenance/repair • Fire/bilge system maintenance/repair (welding) • HVAC maintenance/repair • Electrical systems (circuits, boards, etc.) • Interior painting • Swinging engines / battery replacement (overhead crane) • Detailed interior cleaning • Change foil • Sewage/water oily water separator

Extensive Vessel Maintenance & Repair

To be performed in a shipyard or drydock, and would continue to be contracted out by KT even after maintenance facility construction:

Hull & Main Propulsion Systems	Auxiliary Systems
• Mid-life overhaul • Exterior Painting/coatings • Hull fittings (welding) • Composite hull repair (could be performed on-site by contractor) • Wood hull repair (could be performed on-site by contractor)	• Hydraulic clean room • Electronics repair (contracted) • Safety equipment (work requiring certification)

Attachment 2: Maintenance Facility – Desired Capabilities

Based on the list of routine and intermediate maintenance activities above, the following list of facility programming needs has been generated to support development of space type, size and layout criteria for the facility site assessment. Programming needs are grouped by 'minimum required' and 'nice to have' needs or spaces, with notes added where KT clarification would be helpful.

In-Water

Minimum	*Nice to have*	*Maintenance Activities Accommodated*
• 4 vessels berths (min. 140'x40' vessels) • Fresh water available • Sewage connections • Electrical/shore power connections • Vessel charging capability (min. one vessel)	• 6 vessel berths • Mobile crane with access to pier or wharf • Vehicle/truck access to vessel floats/wharf (**Note A**)	• Vessel moorage / water & sewage / vessel shore power & charging • Engine oil change • Engine tune up & injector replacement • Pump repair/replacement • Interior vessel cleaning • Fuel oil systems repair/replacement • Potable water system maintenance/repair • Sewage system maintenance/repair • HVAC maintenance/repair • Electrical systems (circuits, boards, etc.) • Interior painting

Vessel Yard / Laydown Area / Out-of-Water

Minimum	*Nice to have*	*Maintenance Activities Accommodated*
• Hoist lift (min. 300-ton capacity with breadth for KT vessels) (**Note B**) • Laydown area for 2 vessels (min. 140'x40' vessels) • Mobile crane (**Note C**) • Parking (min. 6 stalls for maintenance vehicles, plus staff parking) • Delivery receiving area / lowboy load pickup zone	• Vessel blocks (pre-laid out) • Covered vessel space (**Note D**) • Inventory area to house engines • Forklift-accessible warehouse • Overhead crane	• Annual/2-year out-of-water maintenance • Hull inspections/damage repair • Waterjet maintenance/repair • Bucket maintenance/repair • Propeller repair/replacement • Shaft/bearing repair/replacement • Rudder service/repair • Pull/clean heat exchanger • Swinging engines / battery replacement • Fire/bilge system maint./repair (welding) • Change foil

Enclosed Buildings

Minimum	*Nice to have*	*Maintenance Activities Accommodated*
<u>Workshop(s):</u> (**Note E**) • Workbench/tool storage for each staff • Tool room / tool repair bench • Welding equipment/table (**Note F**) • Engine maintenance & rebuild (overhead crane) • Parts washing station (**Note G**) • Machine shop	• Wood shop / gasket shop • Sandblast & painting shop (**Note H**) • Exterior covered vessel area	• Accommodate the list of all routine and intermediate maintenance (both in and out-of-water activities)
<u>Inventory/Equipment Storage</u> • Supplies/inventory general storage • Large parts/equipment • Parts washing station • Engine parts • Pumps/miscellaneous parts • Combustible fluids (separate fluids room) • Small break press (**Note I**)	• Rigging wall • Metal stock • Exterior covered storage • Storage to support all needs, with no separate locations	• Accommodate all storage needs in one location
<u>Crew Space & Office:</u> • Restroom/locker room • Break room / kitchen • Office / cubicles • Conference room	• Shower(s)	• Support future buildout (20-25 staff) • Maintenance program management

APPENDIX B

INITIAL REGULATORY REVIEW

FLOYD | SNIDER
strategy ▪ science ▪ engineering

Two Union Square
601 Union Street, Suite 600
Seattle, WA 98101
tel: 206.292.2078 fax: 206.682.7867

Memorandum

To: Kitsap Transit

Copies: Kelly Lesoing and KPFF Team

From: Tessa Gardner-Brown and Kim Mahoney, Floyd|Snider

Date: January 3, 2023

Re: **Desktop Siting Survey and Initial Regulatory Review for Kitsap Transit Maintenance Facility in Kitsap County**

To support Kitsap Transit and the KPFF Team in initial planning efforts for a new maintenance facility for ferry vessels, Floyd|Snider conducted a desktop evaluation of potential available sites across Kitsap County. This memorandum summarizes the methodology used in this exercise, provides a table of key findings for the identified sites, and attaches a copy of the slides that were reviewed with Kitsap Transit and the KPFF Team at the kick-off meeting on December 5, 2022, including updates to those slides following the subsequent analysis requested by Kitsap Transit in the kick-off meeting.

METHODOLOGY FOR PRELIMINARY ENVIRONMENTAL DESKTOP EVALUATION

A maintenance facility must include in-water infrastructure to support temporary vessel moorage and an upland service area where vessel maintenance and other ancillary support activities can occur. Siting for this type of in-water and shoreline development is guided by municipal zoning regulations and shoreline environmental designations; the regulatory process will include and consider public comments; and site-specific environmental conditions will influence the level and complexity of environmental review in the permitting process. Given these considerations, the following approach was used to evaluate potential sites across Kitsap County.

1. **Potential use definitions for the maintenance facility were identified and then shoreline environmental designations (SED) that allow the defined use(s) were evaluated**. The maintenance facility would likely be designated a different use definition across the four municipalities in Kitsap County (Kitsap County, Poulsbo, Bremerton, and Port Orchard). Shoreline use for a maintenance facility is only allowed in specific SEDs (refer to slide 2 for more detail). Floyd|Snider narrowed its search to stretches of shoreline where a maintenance facility could be permitted, and excluded review of shorelines where a maintenance facility cannot be permitted. Bainbridge Island and the Hood Canal were also excluded from the review due to limited surface-street access and length of vessel travel, respectively.

2. **Within the allowable SEDs, particular attention was given to areas with an established shoreline use or shoreline context that would be conducive to establishment of a maintenance facility, including areas where overwater coverage exists**. Identifying stretches of shoreline that already have some level of high intensity use is likely to ease public perception of the proposed maintenance facility and reduce opposition, compared to sites where there is no similar shoreline context already established. This is particularly important because the environmental process will solicit and consider comments from the public and Tribes. Establishing or expanding overwater coverage in areas where docks already exist will be received more favorably by the federal Services than natural or low intensity stretches of shoreline.

3. **Within allowable SEDs and in or adjacent to areas of established shoreline uses, ten sites were identified for an initial regulatory and site-specific evaluation.** There are limited development opportunities within allowable SEDs and in or adjacent to areas with established shoreline uses. Floyd|Snider used its best professional judgement to identify specific sites within these areas that have site-setting or site-characteristics that might lend itself best to potential acquisition and development, and may be least likely to draw opposition. After a potential site was identified, it was reviewed for its zoning. Use definitions that may be allowed within the zone were also identified, to determine whether there were any use restrictions from the underlying land use zone. Relevant site-specific characteristics were noted, ranging from shallow conditions that may require initial and long-term dredging, to potential acquisition of a viable business that would require impact disclosure in an environmental review and alternatives analysis.

CONCLUSION

A table of key findings from this siting survey and initial regulatory review is attached. Of the ten sites that have been identified, four were identified by Kitsap Transit, three were identified by Floyd|Snider and brought to the December 5 kick-off meeting, and three additional sites were identified after discussion with Kitsap Transit, given the understanding that a need to acquire residential parcels should not exclude a site from consideration. All three sites that were added after the kick-off meeting would require residential acquisition, and only two have regulatory feasibility.

All sites within Sinclair Inlet appear to have regulatory feasibility and many seem viable. One is currently listed for sale.

A more detailed environmental review and screening of the sites can occur after they are evaluated by the KPFF Team for their ability to support intended layout requirements for the maintenance facility.

LIST OF ATTACHMENTS

Summary Table of Findings from Initial Regulatory Review

PDF of Slides from December 5 Kick-off Meeting (with new site additions, slides 1-26)

	Shoreline Designation	*Shoreline Use*	*Zoning*	*Potential Land Use Definition*[i]	*Alternate Land Use Definition*	*Regulatory Feasibility*	*Key Environmental Characteristics and Other Notes*[ii]	*Max Height*[iii]
1. Kitsap Marine Properties, Port Orchard	High Intensity	Boating Facility	Light Industrial	Marina (Conditionally approved)	Light Manufacturing (Permitted outright)	✓	Would require acquisition of operating viable marine business (unlikely seller); environmental review would disclose an impact from displacement of commercially viable business; existing overwater coverage could be converted to facilitate ferry maintenance operation/moorage (limits needed compensatory mitigation)	35’
2. Suldan’s Boat Works, Port Orchard	High Intensity	Boating Facility	Commercial Corridor	Marina (Conditionally approved)	Light Manufacturing (**Not** permitted)	✓	Would require relocation of marina vessels or maintenance facility integration with marina; two separate docks provide ability to separate maintenance operations and marina if the marina use is maintained; existing overwater coverage could be converted to facilitate ferry maintenance operation/moorage (limits needed compensatory mitigation); currently available upland office; viable parcel with large upland space; adjacent to private residence	35’
3. Port Orchard Railway Marina, Port Orchard	High Intensity	Boating Facility	GMU, Downtown Height Overlay	Marina (Conditionally approved)	Light Manufacturing (**Not** permitted)	✓	Would require relocation of marina vessels or maintenance facility integration with marina; existing overwater coverage could be converted to facilitate ferry maintenance operation/moorage (limits needed compensatory mitigation); currently available upland office space	48’
4. 429 Bay St. - Former Bar & Grill, Port Orchard	High Intensity	Boating Facility	GMU, Downtown Height Overlay	Marina (Conditionally approved)	Light Manufacturing (**Not** permitted)	✓	Compensatory mitigation would be needed to offset new overwater coverage where none exists; large waterfront lot with ample space and adjacent maritime uses; acquisition would not result in displacement of an operating business (grill is closed)	48’
5. Sinclair Inlet Marina, Port Orchard	High Intensity	Boating Facility	GMU, Downtown Height Overlay	Marina (Conditionally approved)	Light Manufacturing (**Not** permitted)	✓	Would require relocation of marina vessels or maintenance facility integration with marina; existing overwater coverage could be converted to facilitate ferry maintenance operation/moorage (limits needed compensatory mitigation); parking and buildings currently on pile-supported structure. Property is currently listed for sale.	48’
6. Bay St. Parcels, Port Orchard	High Intensity	Boating Facility	GMU[iv], Downtown Height Overlay	Marina (Conditionally approved)	Light Manufacturing (**Not** permitted)	✓	Compensatory mitigation would be needed to offset new overwater coverage where none exists; maintenance facility would be consistent with adjacent marine/industrial uses	48’[v]
7. Annapolis Quay, Port Orchard	High Intensity	Boating Facility[vi]	Public Facility	Marina[vii] (Conditionally approved)	Light Manufacturing (Permitted outright)	✓	Maintenance facility would be consistent with existing adjacent transit use; shallow waterfront conditions; dredging may be needed to obtain adequate depths and this would increase regulatory complexity and project costs	85’
8. Keyport Area Residences, Kitsap County	Shoreline Residential	Boating[viii] Facility	Keyport Village Commercial	Transportation terminals, marine[ix] (Conditionally approved)	Marina[x] (Conditionally approved)	✓	Maintenance facility would be consistent with adjacent marine/high intensity uses; existing overwater coverage could be converted and vessel relocation would be minimal; assumed aquatic leases with DNR and Kitsap County; would introduce ferry vessels to a new part of the central Sound; could leave one residence isolated	35’
9. Shaw Island Residence(s), Kitsap County	Shoreline Residential	Boating Facility	Urban Low Residential	Transportation terminals, marine (Conditionally approved)	Marina (Admin conditionally approved)	✓	All parcels on the island are under same ownership; nearby maritime use is established by Bremerton Yacht Club; existing overwater coverage could be converted to facilitate ferry maintenance operation/moorage (limits needed compensatory mitigation)	35’
10. Southworth-Area Residence, Kitsap County	Rural Conservancy	Boating Facility	Rural Residential	Transportation terminals, marine (**Not** permitted)	Marina (**Not** permitted)	✗	Maintenance facility would be consistent with adjacent ferry terminal and existing/potential future uses from Kitsap Transit at the site; would require a single residential acquisition only; would likely require removal of exceptional trees or other important riparian habitat; no current overwater coverage at this site	35’

[i] The land use description of this facility will be defined in coordination with the governing municipality. This table documents the use definition that would be needed to support siting of the facility at these potential locations, and potential alternate use definitions. There is latitude in the use definition that applies, and the consultant team would advocate for a favorable use definition to be accepted by the governing municipality as representing the facility. Regulatory feasibility relies on the governing municipality concurring with supportive use definitions.

[ii] Allowable daytime noise at all sites ranges from 57-60 dBA, as defined by statute. Noise would be restricted at night at sites adjacent to residential properties – a 10 dBA reduction from daytime allowable noise at the facility would be required. It is reasonable to assume that noise generated from the facility would not exceed these thresholds at adjacent receiving properties, which should largely remove noise as a decision-making factor. Most receiving properties would be further than 30’ from the facility, which is an adequate noise attenuation buffer.

[iii] For Properties 2-10, the regulations do allow for a variance request to the Hearing Examiner for increased building height, and there is no cap on/limit to height relief sought. This indicates that there is regulatory flexibility for increased height at these sites. However, there is a public comment component associated with the approval process and so adjacent land uses should be considered when evaluating potential extent of height request and likelihood for success.

[iv] GMU: Gateway Mixed Use zone

[v] Height in the Port Orchard Height District Overlay is measured by the average grade of the property, not necessarily the grade of a future maintenance building. This could result in a structure that is taller than the statutory limit for height (48’) without an additional regulatory process.

[vi] In the Port Orchard Shoreline Master Program, “Boating facilities” include both public and private marinas, boat ramps, haulout, launching and infrastructure required to support watercraft, and are vitally important to maintaining public access to the water. Public boating facilities and public boating provisions within private facilities are supported throughout the shoreline (Port Orchard SMP, Section 7.5).

[vii] In the Port Orchard Zoning Code, “Marina” is a facility that provides launching, storage, supplies, moorage, and other accessory services for six or more pleasure and/or commercial watercraft (POMC 20.39.385).

[viii] In the Kitsap County Shoreline Master Program, “Boating facilities” are public and private mooring structures and related services serving five or more boats, including piers, docks, buoys, floats, marinas, and facilities for the use of boat launching, boat storage, or boating supply sales, or for the service and maintenance of pleasure or commercial craft (Kitsap County SMP, 22.150.170).

[ix] In the Kitsap County Code, “Transportation terminals, marine” means a building, structure, or area that primarily supports ancillary facilities for water-borne transportation (e.g., commuter ferries, water taxis, hovercraft) or short-term excursions (e.g., charter boats, mini-cruises, sightseeing, gambling, dining, and entertainment on the water) including but not limited to: passenger terminals and berthing areas, storage, employee or passenger parking, administrative functions, ship servicing area, layover berths, fueling stations, and other boat or passenger services (KCC 17.110.727).

[x] In the Kitsap County Code, “Marina” means a public or private facility which for compensation provides water-dependent wet moorage for ten or more motorized vessels, whether personal or commercial, and generally including goods or services related to boating. Marinas also include wet moorage facilities where boat moorage slips may be leased or rented to individuals who are not a member owner of an associated residential development. Launching facilities and/or drydock storage may also be provided. Marinas may be open to the general public or restricted on the basis of property ownership or membership (KCC 17.110.480).

Methodology for Initial Siting and Regulatory Feasibility Review

1. Consider potential use definition for maintenance facility
2. Identify shoreline environmental designations (SED) across Kitsap County that allow the use
3. Closely focus on shorelines with similar established uses/context
4. Evaluate specific parcels within allowable SEDs, and along shorelines with established uses for potential development opportunity
   - Bainbridge Island excluded because of Agate Pass bridge
   - Hood Canal excluded because of length of vessel travel
5. If opportunities exist, define land use and confirm compatibility of a maintenance facility with upland zoning

Assumed Use Definitions & Allowable SEDs in the Study Area

Municipality	Shoreline Use Designation	Allowable SEDs & Areas of Initial Desktop Evaluation
Port Orchard	Boating Facility	SDP in High Intensity CUP in Urban Conservancy and Shoreline Residential
Kitsap County	Boating Facility	SDP for facilities with less than 10 vessels in High Intensity, Rural and Urban Conservancy, and Shoreline Residential
Poulsbo	Minor Boat Repair, Inspection and Service	SDP in High Intensity and Aquatic CUP in Shoreline Residential-1
Bremerton	Boat Sales, Storage, and Repair (for upland), and Dock (for in-water)	SDP in Commercial, Downtown Waterfront, and Industrial CUP in Recreation

- Within the allowable SEDs and where similar shoreline use is established, feasible sites were only identified in the Keyport area, Bremerton waterfront, and Port Orchard waterfront.
- Other sites were considered but after review, were not permittable and/or did not have sufficient established shoreline context. See following slides for summary.

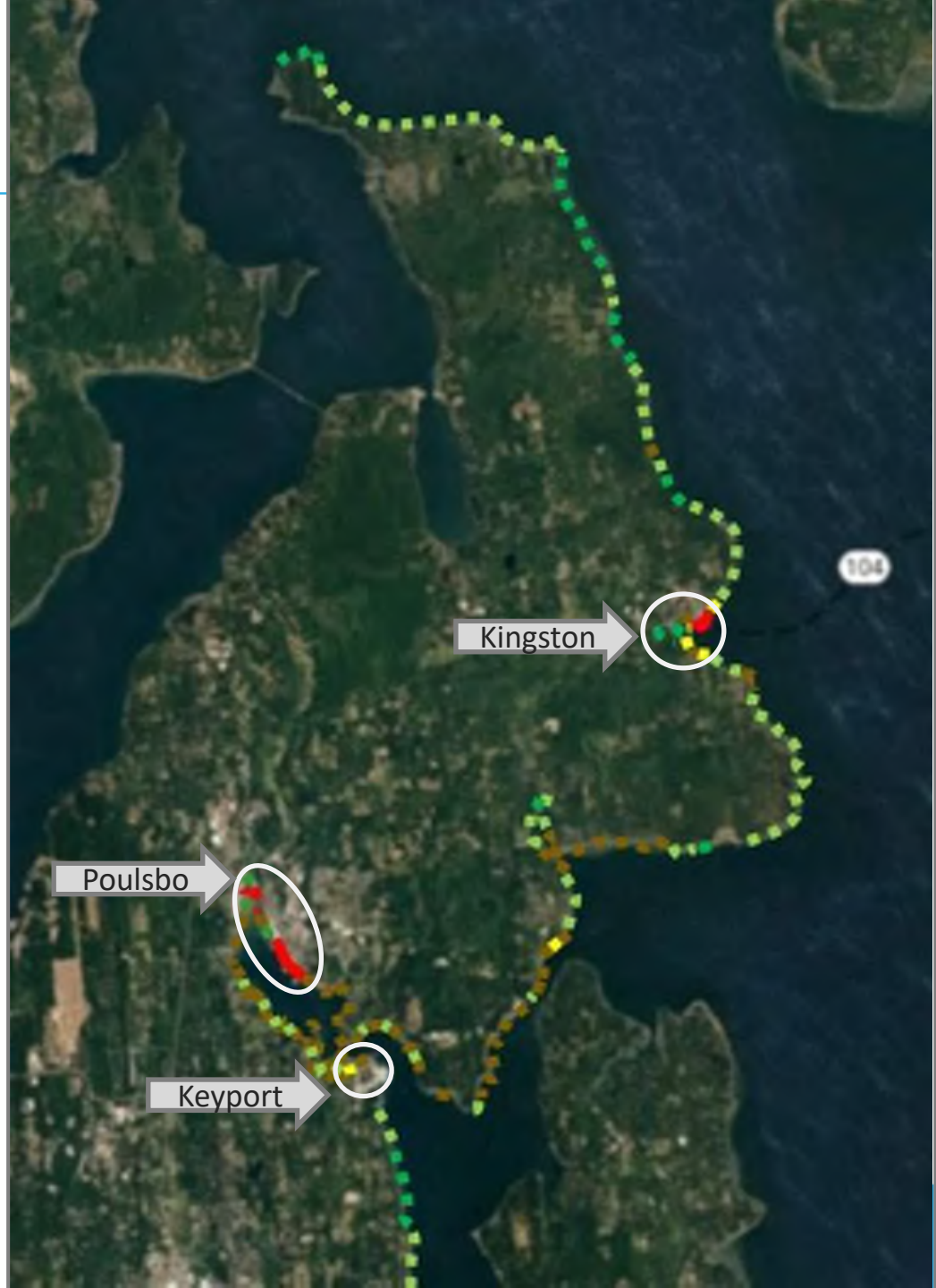
Shorelines Evaluated In Desktop Review – North Kitsap

- Kingston Waterfront
- Poulsbo Waterfront
- Keyport Area

Natural
Rural Conservancy
Shoreline Residential
Urban Conservancy
High Intensity

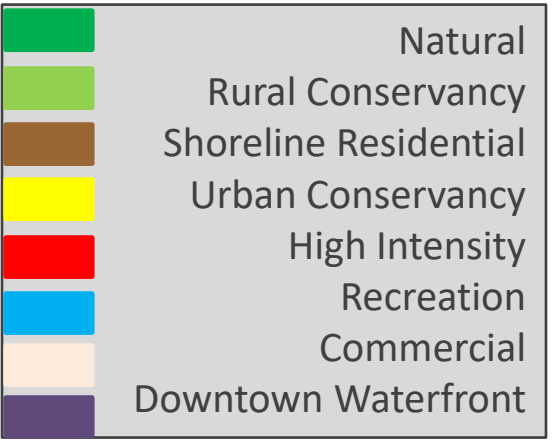
Notes for Shoreline Maps:

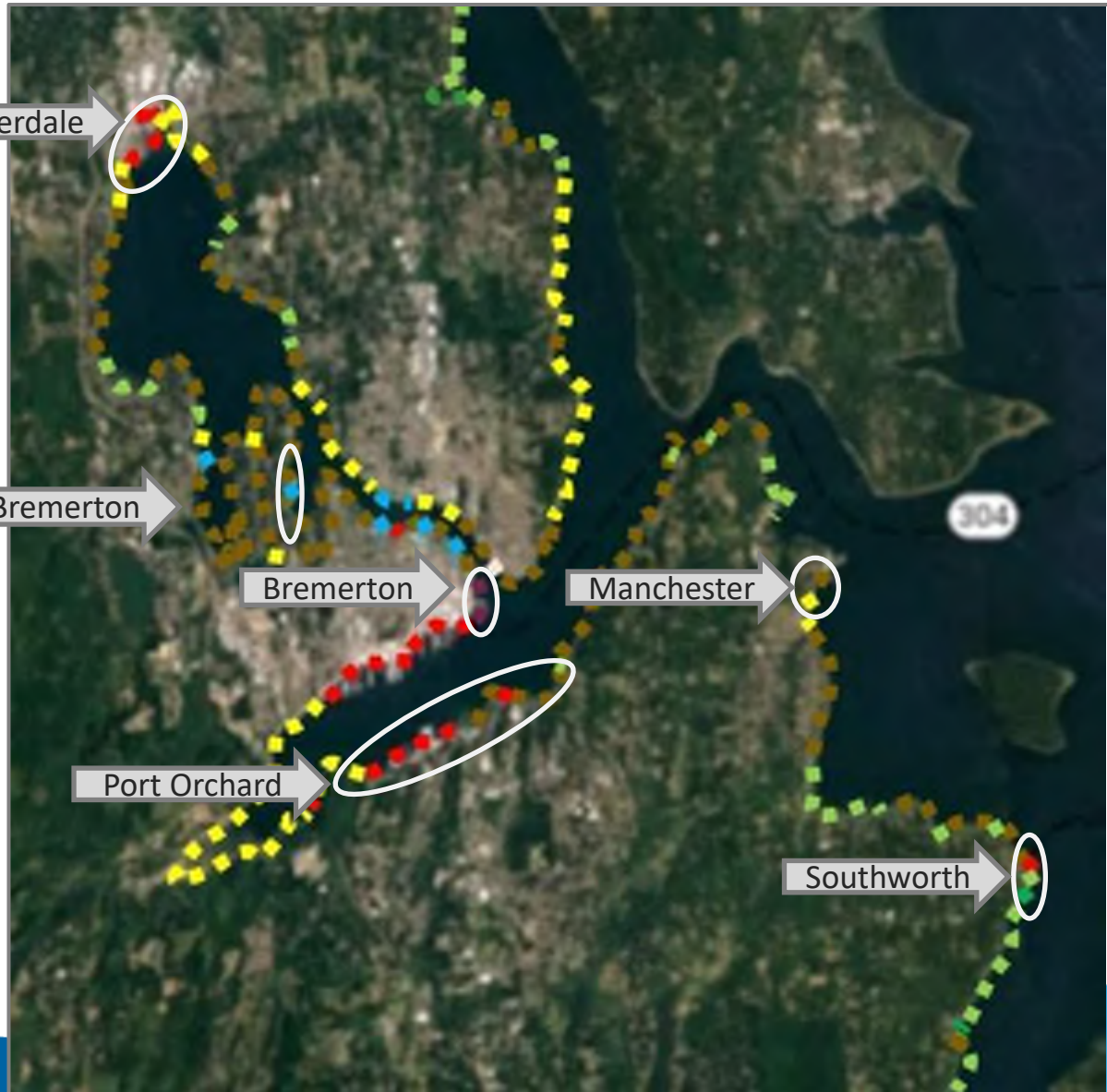
1. See slide 2 for SEDs where a maintenance facility could be permitted based on the Shoreline Master Program of each jurisdiction.
2. Circled shorelines are areas with established uses/context that would best support siting of a new maintenance facility and have regulatory feasibility relative to SEDs. These shorelines were reviewed very closely, at a parcel-level. The shorelines outside of the circles do not have similar established uses/context, which would make siting of a new maintenance facility difficult or infeasible.
3. A consistent color-coding system has been developed for and applied to all SEDs across the four municipalities that are represented on the set of maps in this presentation. This avoids the need to show unique SED color-coding for Kitsap County, Poulsbo, Bremerton and Port Orchard, and instead, allows the information in this presentation to be displayed consistently. These maps are a graphical representation of shoreline data from the four municipalities; the GIS and mapping from each should be referred to for precise details where/if needed. The maps are also intended to provide a visual summary of a more intensive shoreline and parcel review that was conducted for this initial siting and regulatory feasibility evaluation.



Shorelines Evaluated In Desktop Review – Central & South Kitsap

- Silverdale Waterfront
- Bremerton Waterfront
- Port Orchard Waterfront
- Near Manchester Fuel Field
- Southworth Ferry

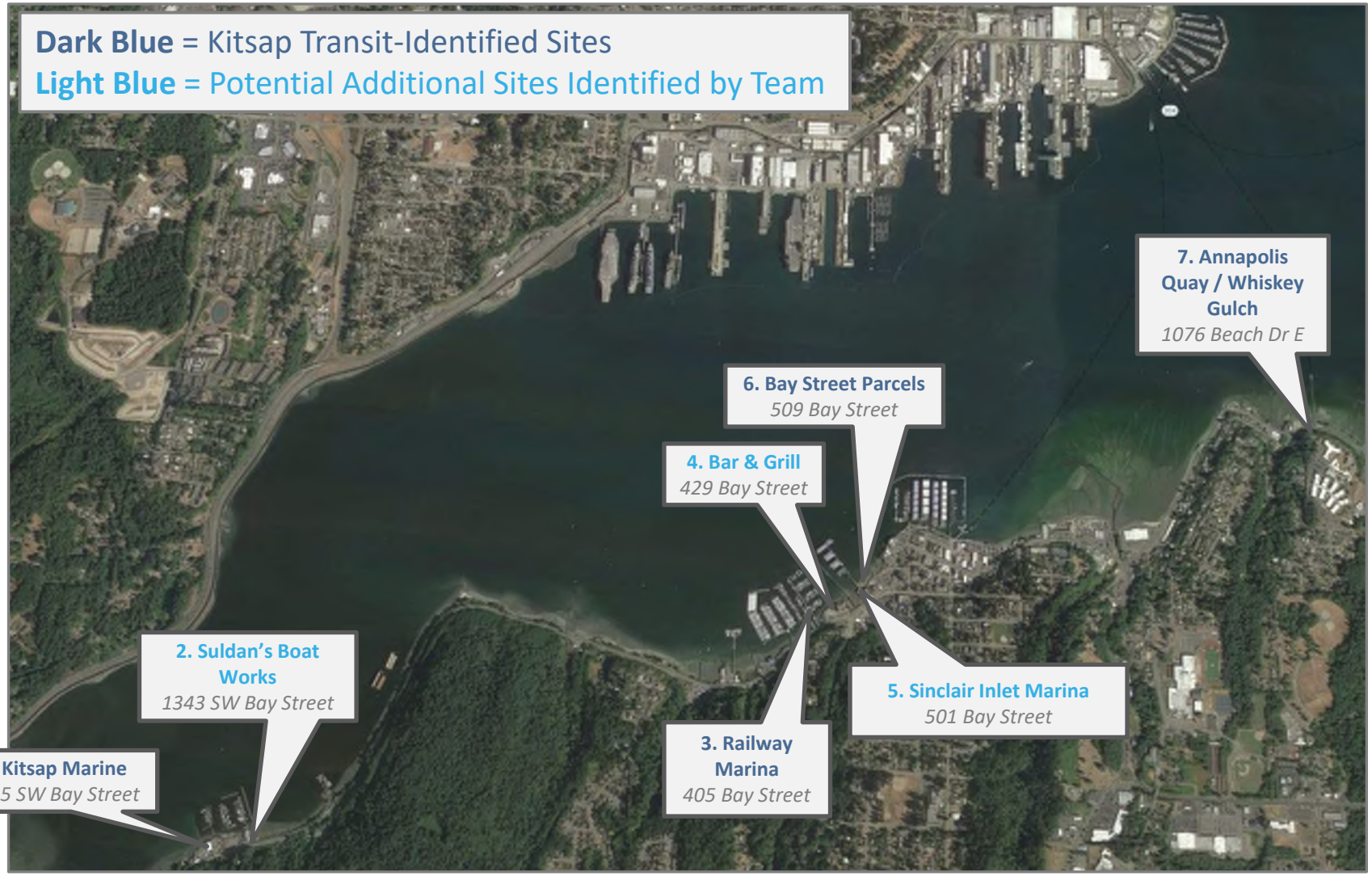




See mapping notes from previous slide

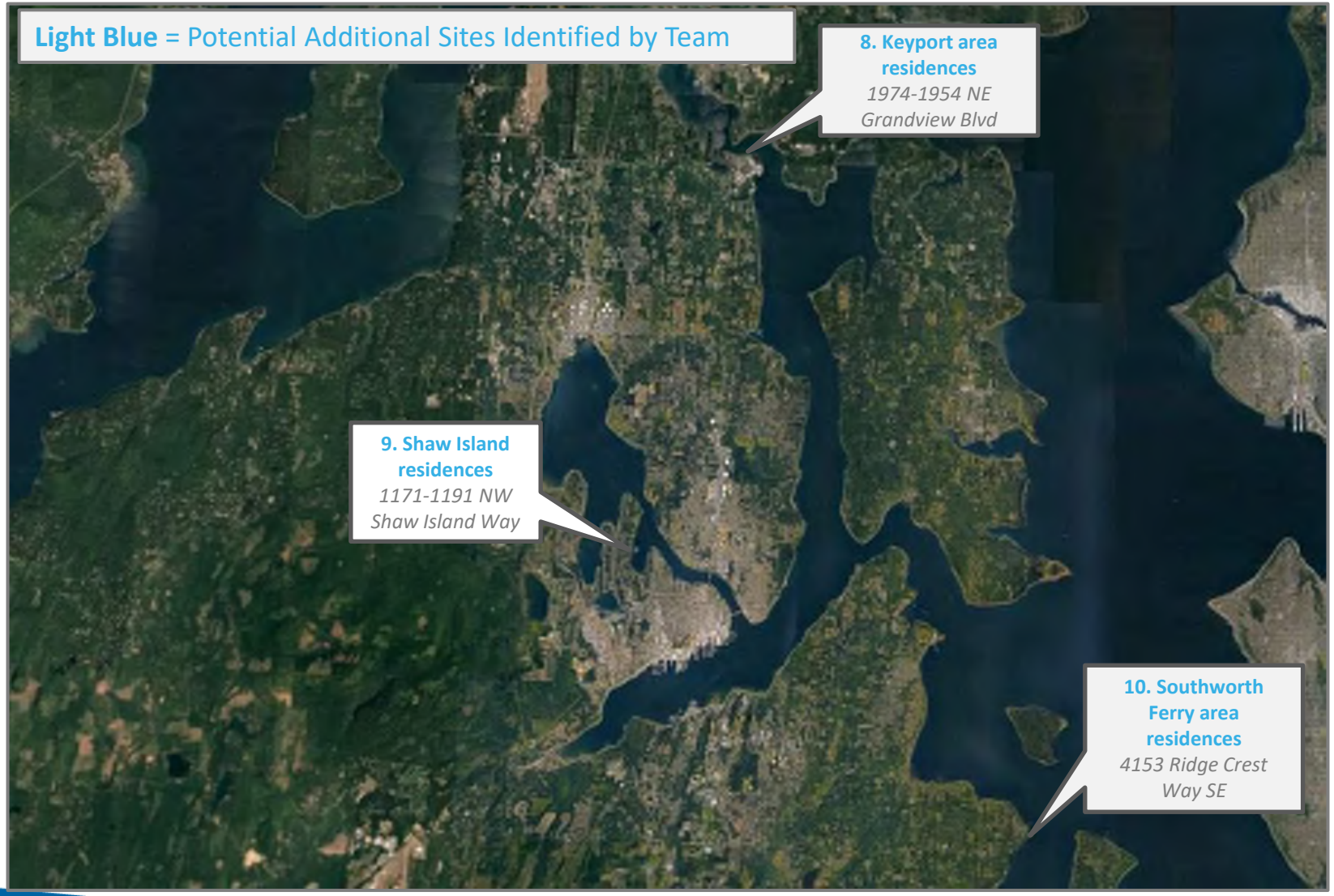
kpff

Potential Port Orchard Waterfront (Sinclair Inlet) Sites

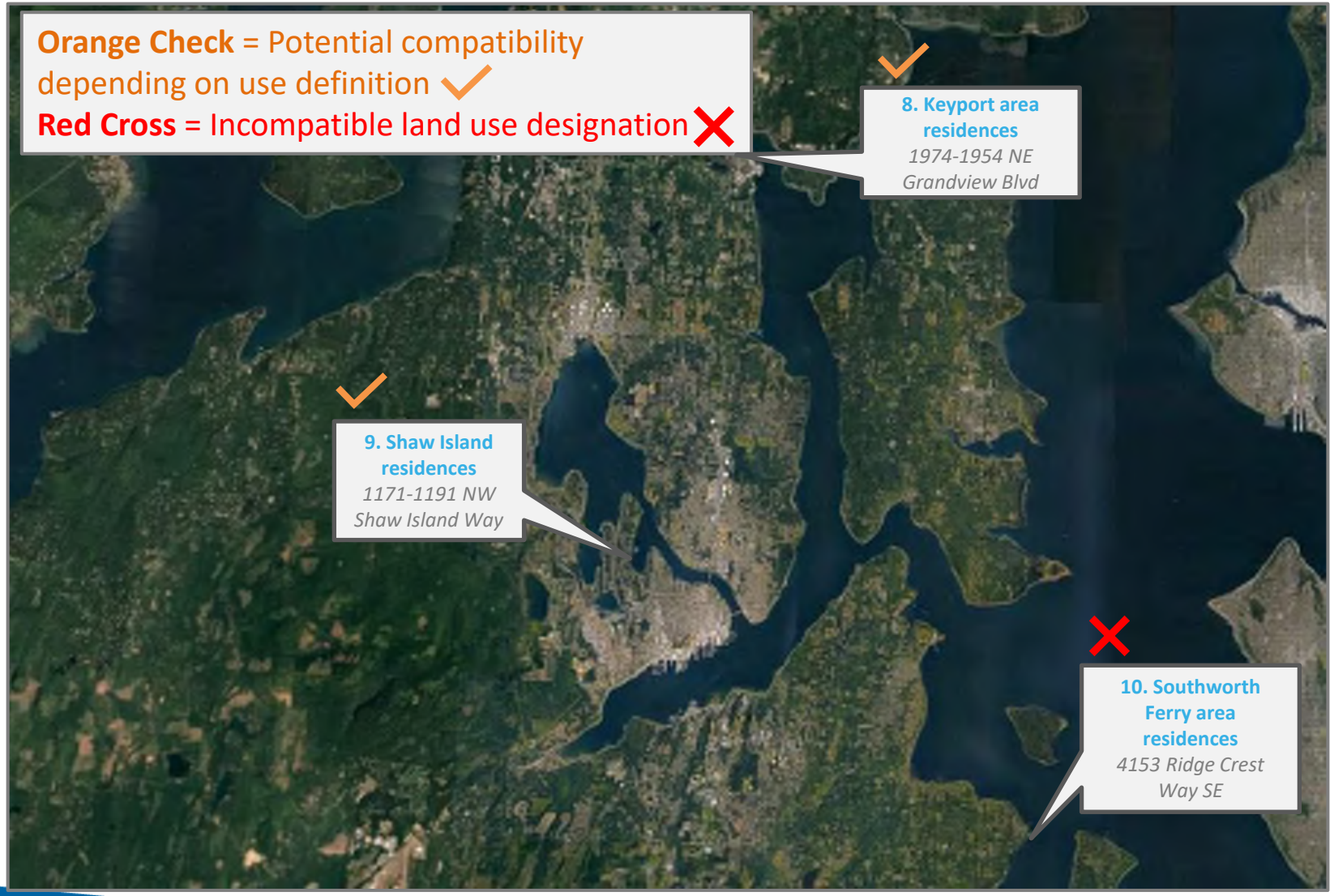


Potential Sinclair Inlet Sites – Regulatory Feasibility Overview

Potential Additional Sites Outside of Sinclair Inlet



Potential Additional Sites – Regulatory Feasibility Overview



Kitsap Marine & Annapolis Quay Properties – Regulatory Feasibility

	Shoreline	Land Use	Land Use Alt
Use	Boating Facility	Marina	Light Manufacturing
Designation/Zone	High Intensity	Public Facility (Annapolis Quay) Light Industrial (Kitsap Marine Properties)	
Finding	Permitted Outright ✓	Conditional Use ✓	Permitted Outright ✓

A water-dependent maintenance facility can be permitted at these locations

Marina = A facility that provides launching, storage, supplies, moorage, and other accessory services for six or more pleasure and/or commercial watercraft.

Light Manufacturing = A facility conducting light manufacturing operations within a fully enclosed building. Light manufacturing includes the following:… sheet metal, welding, machine shop, tool repair

Kitsap Marine Properties ✓

Other Env. Considerations	Notes/Impact to Env. Process
Existing Uses	Very viable marine business – unlikely seller Potential significant displacement of commercial business with economic impact

Annapolis Quay / Whiskey Gulch ✓

Other Env. Considerations	Other Considerations/Notes	Impact to Env. Process
Shallow Conditions	Would require dredging and long-term maintenance	Dredging increases environmental complexity (and process-related costs)
	Shoreline fill to reach adequate depths is an alternate approach to dredging	Significant regulatory hurdles and mitigation associated with the extent of fill that would be needed
Existing Uses	Maintenance facility would be consistent with existing industrial/transit uses	Positive impact to city review

Other Potential Sinclair Inlet Sites – Regulatory Feasibility

	Shoreline	Land Use	Land Use Alt
Use	Boating Facility	Marina	Light Manufacturing
Designation/Zone	High Intensity	Gateway Mixed Use (GMU) w/ Downtown Height District Commercial Corridor (Suldan's Boat Works only)	
Finding	Permitted Outright ✓	Conditional Use ✓	Not Permitted ✗

A water-dependent maintenance facility could potentially be permitted at this location, only if the City agrees with the use definition of marina

This applies to:

Suldan's Boat Works

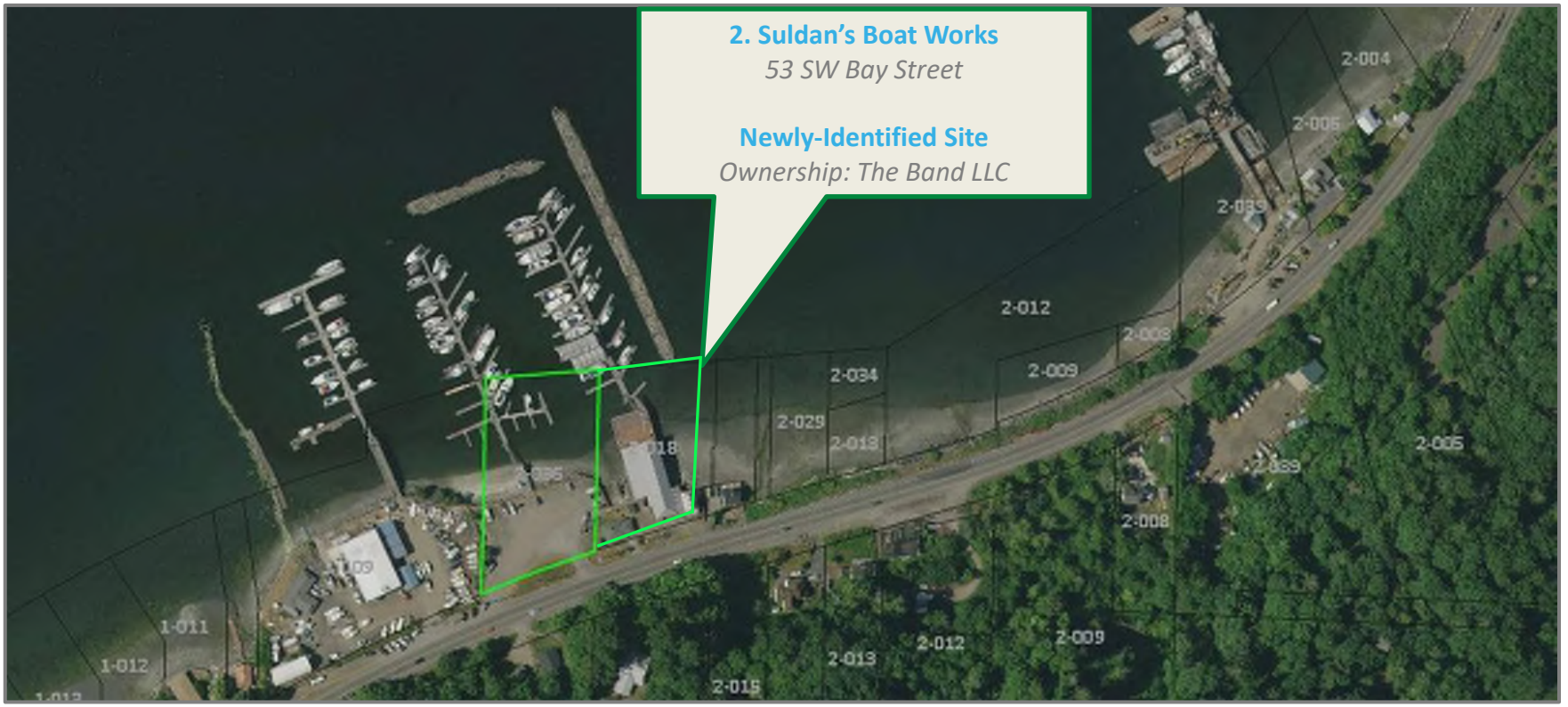
Port Orchard Railway Marina Parcels

Former Bar & Grill

Sinclair Inlet Marina

Bay Street Parcels

Suldan's Boat Works ✓+



Other Env. Considerations	Notes	Impact to Environmental Process
Existing Use	Small recreational marina with ample parking Former but closed commercial space upland	Relocation of existing vessels would be an adverse impact Alternatively, integration with existing uses and water-dependent use of upland site could be a beneficial effect
Env Context	Existing overwater coverage and in-water structure could be adapted or converted	Reduces or avoids requirement for compensatory mitigation

Suldan's Boat Works – Potential Unique Opportunity

Large in-water and waterfront site with parking lot and vacant upland buildings
But, adjacent to single family residence

Port Orchard Railway Marina Parcels ✓

Other Env. Considerations	Notes	Impact to Environmental Process
Existing Use	Active and mid-sized recreational marina Would require vessel relocation OR maintenance facility integration with existing use Currently-available office space upland	Relocation of existing vessels would be an adverse impact Alternatively, integration with existing uses and water-dependent use of upland site could be a beneficial effect
Env Context	Existing overwater coverage and in-water structure could be adapted or converted	Reduces or avoids requirement for compensatory mitigation

Former Bar & Grill ✓+

Other Env. Considerations	Notes	Impact to Environmental Process
Existing Use	Former restaurant that is closed and gated; would not require displacement of an operating business	Would restore active use and introduce water-dependent use to the site
Env Context	No existing overwater coverage	Would require compensatory mitigation to offset new impact

Former Bar & Grill – Potential Unique Opportunity

Large waterfront site that is currently vacant and adjacent to other marine uses

Sinclair Inlet Marina ✓+

Other Env. Considerations	Notes	Impact to Environmental Process
Existing Use	Relatively small marina that would require vessel relocation OR maintenance facility integration with existing use	Integration with water-dependent uses could positively impact city review
Env Context	Existing overwater coverage and in-water structure could be adapted or converted	Reduces or avoids requirement for compensatory mitigation

Sinclair Inlet Marina – Potential Unique Opportunity

Sinclair Inlet Marina is For Sale

Bay Street Parcels ✓

Other Env. Considerations	Notes	Impact to Environmental Process
Existing Use	Maintenance facility would be consistent with adjacent boating and sheet metal uses	Positive impact to city review
Env Context	No existing overwater coverage	Would require compensatory mitigation to offset new impact

Keyport & Bremerton Sites – Regulatory Feasibility

	Shoreline	Land Use	Land Use Alt
Use	Boating Facility	Transportation terminals, marine	Marina
Designation/Zone	Shoreline Residential	Keyport Village Commercial (Keyport) Urban Low Residential (Shaw Island)	
Finding	Permitted outright (less than 10 vessels) ✓	Conditional Use ✓	Conditional Use (Admin CUP on Shaw Island) ✓

A water-dependent maintenance facility could potentially be permitted at this location, pending Hearing Examiner findings as part of the Conditional Use process.

This applies to:

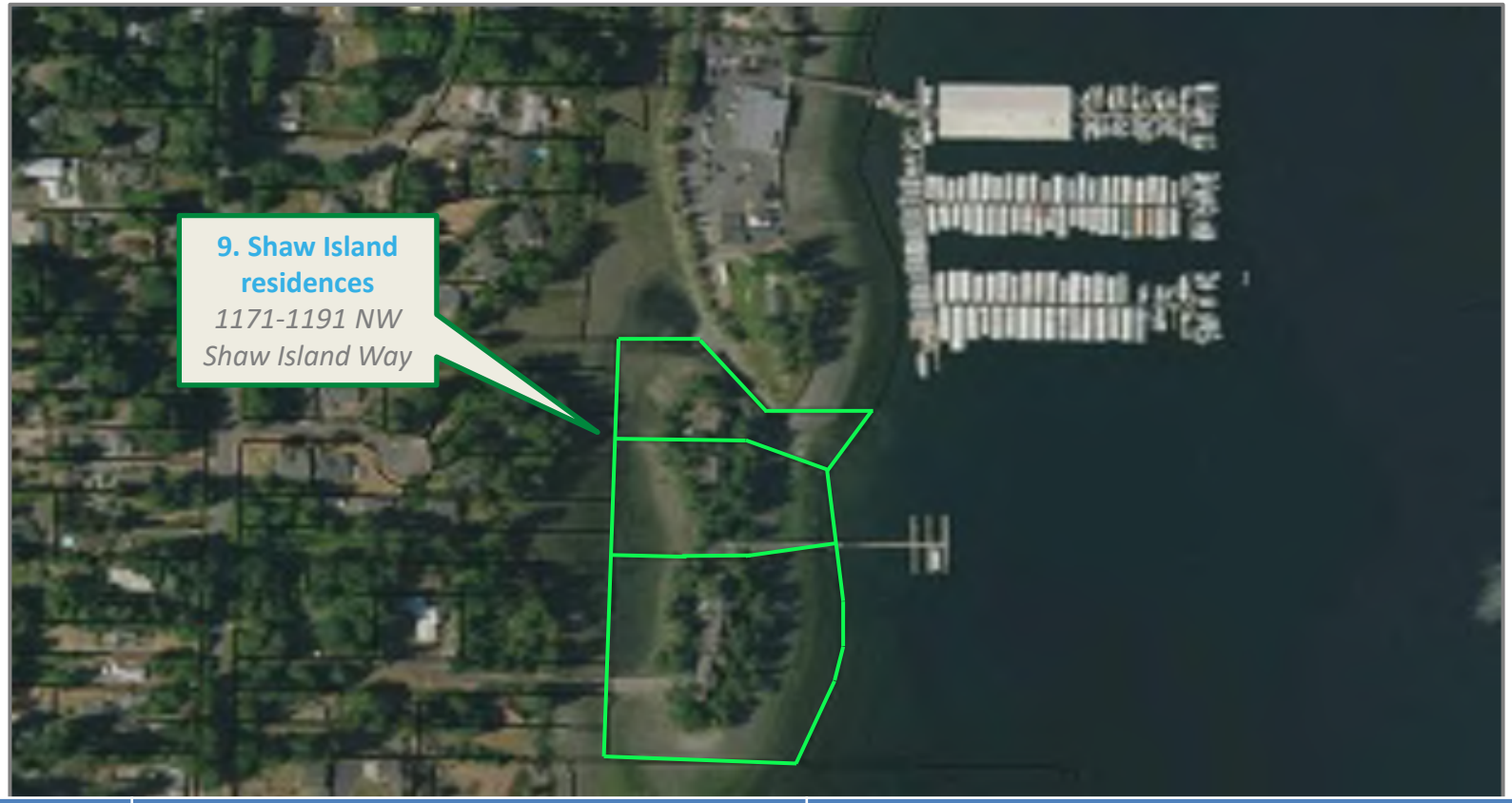
Keyport area residences adjacent to Keyport Naval Base

Shaw Island parcels adjacent to Bremerton Yacht Club

Keyport Area residences ✓

Other Env. Considerations	Notes	Impact to Environmental Process
Existing Use	Single-family residences on tidelands	Displacement would be an adverse impact
Env Context	Existing overwater coverage and in-water structure would need to be expanded Near a mix of maritime & high intensity uses, but would introduce fast ferry to new area, and adjacent parcel has unsupportive zoning	Reduces requirement for compensatory mitigation Discretionary conditional use process would be encumbered by conflict with isolated residence

Shaw Island resident ✓



Other Env. Considerations	Notes	Impact to Environmental Process
Existing Use	Single-family residences (under one owner)	Displacement would be an adverse impact
Env Context	Existing overwater coverage and in-water structure could be adapted or converted Adjacent to established maritime use	Reduces or avoids requirement for compensatory mitigation Positive impact to City review

Southworth Site – Regulatory Feasibility

	Shoreline	Land Use	Land Use Alt
Use	Boating Facility	Transportation terminals, marine	Marina
Designation/Zone	Rural Conservancy	Rural Residential	
Finding	Permitted outright (less than 10 vessels) ✓	Not allowed ✗	Not allowed ✗

There is no regulatory feasibility to permit a water-dependent maintenance facility under these conditions.

This applies to:

Southworth Ferry area residences

Southworth Ferry Area ✕

Other Env. Considerations	Notes	Impact to Environmental Process
Existing Use	Single-family residences	Displacement would be an adverse impact
Env Context	No existing overwater coverage Land use unsupported in zone designations	Would require compensatory mitigation to offset new impact Infeasible and/or unlikely regulatory permission

Notes – Noise, Light and Glare

Noise

- Allowable daytime noise at all identified potential sites ranges from 57-60 dBA. Noise would be restricted at night at sites adjacent to residential properties. It is reasonable to assume that noise generated from the facility would not exceed statutory thresholds – most receiving properties would be further than 30’ from the facility (adequate noise attenuation buffer).
- This should largely remove noise as a decision-making factor for site selection.

Light and Glare

- Port Orchard
  - In general, lighting is to be directed away from water bodies or adjacent parcels, where practicable.
- Kitsap County
  - Exterior lighting shall be designed to shield surrounding streets and land uses from nuisance and glare.
  - Lighting is to be directed away from adjoining properties. Not more than one foot candle of illumination may leave the property boundaries.

Appendix C

Initial Site Screening Criteria and Findings Memo

Date:	December 20, 2022
To:	Kitsap Transit
From:	KPFF Consulting Engineers
Subject:	Kitsap Transit Ferry Maintenance Facility Site Alternatives Analysis **Task 2: Initial Site Evaluation Criteria**

Introduction

Kitsap Transit (KT), supported by the KPFF consulting team, is conducting a Ferry Maintenance Facility Planning Study to locate a future ferry maintenance facility in Kitsap County. The study will identify, document and evaluate site attributes, and assess the overall viability of site alternatives. The goal of the study is to support the recommendation of a well-informed preferred site alternative, or alternatives.

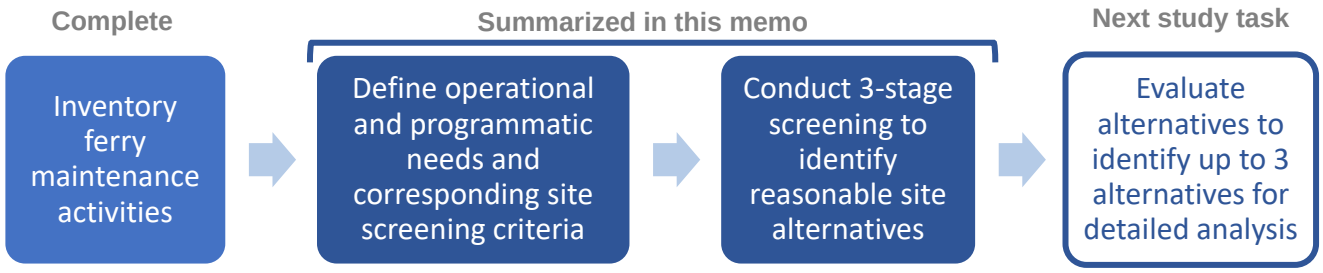
Purpose

This memo summarizes the process used to identify potential sites within Kitsap County, explains the initial site screening criteria used to determine if potential locations can feasibly support the programmatic and operational needs of a KT ferry maintenance facility as established in *Task 1 Establish Programmatic and Operational Needs*, and describes the resulting list of site alternatives that move forward from the initial screening.

In addition, the memo describes potential evaluation criteria for evaluation of the suitability of the sites identified for further comprehensive site analysis.

Approach

The overall Maintenance Facility site alternatives development process is outlined in the figure below, calling out the criteria development and application of those initial criteria to identify sites for further analysis.



Inventory ferry maintenance activities: The first task of the site alternatives analysis established an understanding of KT's vessel maintenance needs, including current vessel preventative maintenance and repair practices, as well as the desired maintenance and repair capabilities to be provided at a dedicated KT ferry maintenance facility (presented in the *Establish Facility Programmatic and Operational Needs* memo).

Define site screening criteria based on facility needs: The list of planned maintenance activities defines KT's needs for a maintenance facility, including those related to the location and size needed to support KT's ferry program, the number of maintenance crew, the number and types of facility spaces, and the equipment required. Maintenance facility needs will be further refined in subsequent phases of the study based on conceptual site design.

The preliminary operational and programmatic needs informed the development of site screening criteria used to determine if the location and characteristics of a potential site can support KT's needs for a dedicated maintenance facility.

Initial site identification and screening: The initial site criteria, focused on operational considerations, environmental concerns, and minimum space requirements for the facility, were used to screen shoreline areas within Kitsap County for review and identify site alternatives for further assessment.

Select alternatives for detailed evaluation: The proposed site evaluation criteria outlined in Table 5 will be used to evaluate and rank site alternatives to select up to three sites for detailed evaluation, including conceptual design development.

Site Screening Criteria and Three-Stage Screening Results

Site alternatives were developed by applying initial site screening criteria focused on identifying sites that meet KT's minimum needs for a ferry maintenance facility.

Site screening criteria were applied in a three-stage process to determine the Kitsap County shoreline areas to be considered in the initial review, identify the list of viable site alternatives, and establish which site alternatives could reasonably support a ferry maintenance facility, as summarized in the sections below.

Stage 1: Establish Areas within Kitsap County for Consideration

Goal: Exclude locations which do not meet the operational needs of a KT ferry maintenance facility

The first stage of initial site screening defined the area to be reviewed by applying criteria focused on the operational needs of a maintenance facility related to its location. Specific needs considered in the first stage include:

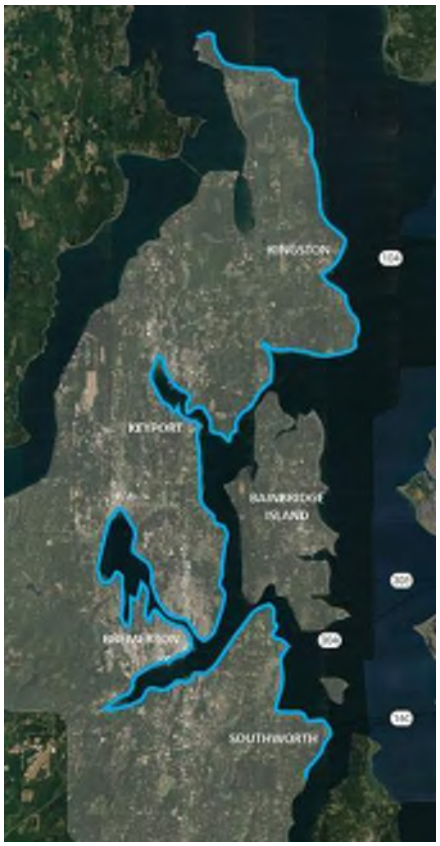
- Range of alternatives: KT established the goal for construction and operation of the new facility to occur within Kitsap County.
- Waterside access: To best serve the needs of the KT ferry system, the maintenance facility must be located within reasonable distance of existing Kitsap Transit ferry routes and terminals so that vessels can travel to and from the facility without excessive time and costs.
- Landside access: The location of the facility must also consider the ease of access for maintenance staff and crew. This criteria eliminated all Bainbridge Island locations from further consideration because access to the island is constrained to State Route 305, which is subject to traffic conditions and closures.

Table 1 below describes the maintenance facility needs and corresponding criteria used for initial screening. Figure 1 highlights the resulting area of Kitsap County that was carried forward to Stage 2.

Table 1. Stage 1 Criteria

Focus Area	Need	Criteria
Geographic boundaries, or range of alternatives	Provide jobs, tax revenue, etc. within Kitsap County	Sites limited to locations in Kitsap County
Waterside access	Minimize labor and fuel costs of vessel transits to/from maintenance facility, and costs/time of staff/crew commute to/from facility	Site to be located on eastern side of Kitsap Peninsula
Landside access	Location that provides multiple points of access for staff commuting in (i.e., not reliant on single bridge or roadway subject to traffic or closures)	Site located in areas with more than one point of roadway access

Figure 1. Result of Stage 1 Criteria: Area for Review of Shorelines



Stage 2: Preliminary Environmental Review

Goal: Identify sites where a ferry maintenance facility fits within existing zoning and land use policies and is compatible with the local land use vision

The second stage of initial site screening focused on identifying site alternatives that provide opportunity for development and long-term use as a ferry maintenance facility under current land use regulations and existing uses.

Table 2 summarizes the environmental criteria used to identify locations where a maintenance facility could be sited under current land use regulations. Additional detail on the initial environmental review is included in the 1/6/23 draft memo *Desktop Siting Survey and Initial Regulatory Review for Kitsap Transit Maintenance Facility in Kitsap County.*

Table 2. Stage 2 Criteria

Focus Area	Need	Criteria
Shoreline environmental designation	Shoreline area allows construction and long-term operation of a ferry maintenance facility	Ferry maintenance facility is an allowed use
Shoreline context / existing uses	Shoreline context is conducive to establishment of a maintenance facility (consideration for environmental review and public, stakeholder, and tribal outreach)	Shoreline stretch has some established high-intensity uses
Site zoning	Site reasonably supports construction and long-term operation of a ferry maintenance facility	Ferry maintenance facility is an allowed use

Criteria application included review of shoreline environmental designations to identify shoreline areas where a ferry maintenance facility would be an allowable use, including areas designated as High Intensity and Shoreline Residential (where a maintenance facility may be conditionally approved). Review of potential shoreline areas also looked for stretches of shoreline with some level of existing high-intensity use where the shoreline context would be conducive to the establishment of a ferry maintenance facility.

Figure 2a highlights the Kitsap County shoreline areas identified for review of sites, which include areas with a supportive shoreline environmental designation and established high-intensity uses.

While eight areas of shoreline were reviewed initially for regulatory compatibility, further review of land use and property size compatibility revealed only 10 sites for consideration, as shown in Figure 2. This more detailed compatibility review did not identify sites in the areas of Kingston, Poulsbo or Silverdale.

Figure 2. Results of Criteria Application: Shoreline Stretches for Review

Site specific evaluation focused on the review of land use zoning and environmental considerations, resulting in the identification of 10 sites for further review. Figure 3 shows the 10 sites identified for further review (also listed in Table 4).

Figure 3. Results of Criteria Application: 10 Identified Sites

Stage 3: Site Size and Dimensions

Goal: Identify sites that meet minimum requirements for site size and dimensions

Criteria applied in Stage 3 focused on efficiently screening sites do not have minimum space requirements to meet KT's vessel maintenance needs. While the total space required to meet KT's vessel maintenance needs will consist of several elements including vessel moorage, shop and storage buildings, parking, and crew spaces, many of these elements have some flexibility in how they could be configured to fit on a specific site. The area required to allow Kitsap Transit to lift two vessels out of the water for repair work (vessel laydown area) was identified as the most restrictive site space need and was used to inform the Stage 3 screening criteria.

Because of the limited amount of uplands space on many waterfront sites, initial screening considered two options to meet the identified need:

1. **Uplands**: Vessel yard with space for two KT vessels to be hauled out of the water, including uplands maneuvering space for a boat lift, approximately 300 by 150 feet (either parallel or perpendicular to the shoreline)
2. **In-water:** If a site does not meet the minimum criteria for uplands space, potential application of a barge equipped with a boat lift with space to accommodate two vessels (one hauled with full access to the entire hull, and one on the boat lift with access to the propulsion gear), approximately 320 by 60 feet in water depths of at least 10 feet

Screening criteria considered the vessel laydown space for two vessels together, either both uplands or both overwater. An alternate configuration, with space for one vessel uplands and an overwater barge with space for a second vessel was not considered due to the higher capital cost requirements to install two boat lifts. Table 3 summarizes the initial size criteria used to screen locations that do not meet minimum space needs for a KT ferry maintenance facility.

Table 3: Stage 3 Criteria

Focus Area	Need	Criteria
Vessel laydown area (uplands)	Minimum space for the two largest Kitsap Transit vessels to be hauled out uplands, including boat lift maneuvering	Uplands: 300'x150'
Vessel laydown area (over-water space)	*(If uplands space criteria is not met)* Minimum space for the two largest Kitsap Transit vessels to be hauled out over water	In-water: 320'x60'

The ten sites identified in Stage 2 were reviewed for uplands and in-water space, with consideration of existing water depths. In cases where multiple sites are located adjacent to each other, parcels were reviewed for their individual sizes as well as combined sizes.

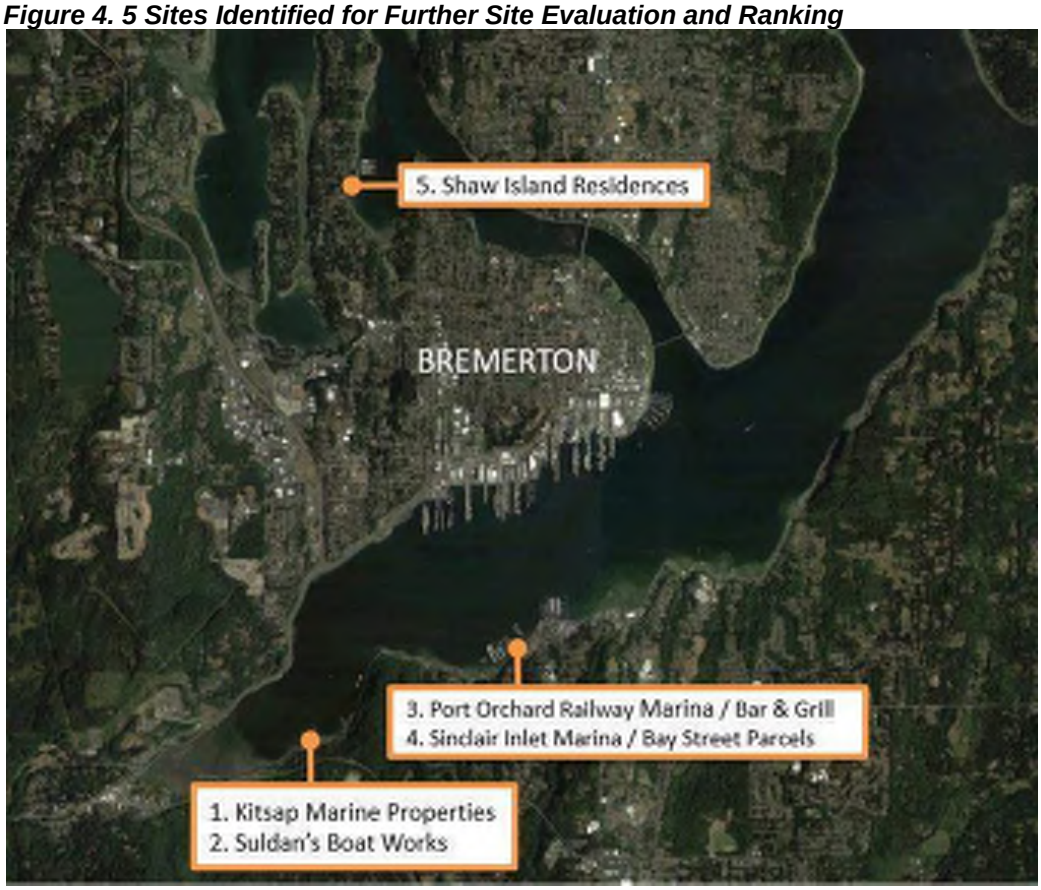
The results of the Stage 3 screening criteria application identified 5 sites for further review, as shown in Table 4 below. Two of the sites, both located in the Sinclair Inlet, meet the criteria for a future maintenance facility only if their property size is in combination with an adjacent property.

Table 4. Sites Meeting Initial Site Screening Criteria

Site No.	Site Name	Meets min. uplands space	If insufficient uplands space, meets min. in-water space	Site carried forward
1	Kitsap Marine Properties	☑	☑ *(would require buildout beyond current marina infrastructure)*	**Yes**
2	Suldan's Boat Works	No	☑ *(would require buildout beyond current marina infrastructure)*	**Yes**
3	Port Orchard Railway Marina	No	☑	**Yes** *(2 parcels)*
4	Bar & Grill	☑	No	
5	Sinclair Inlet Marina	No	☑	**Yes** *(2 parcels)*
6	Bay Street Parcels	No	☑ *(assumes Sinclair Inlet Marina or adjacent in-water space)*	
7	Annapolis Quay / Whiskey Gulch	No	No *(based on existing water depths)*	No
8	Keyport Area Residences	No	No	No
9	Shaw Island Residences	No	☑	**Yes**
10	Southworth Ferry Area Residences	No	No	No

Five sites met initial site screening criteria and were selected to be carried forward for further site evaluation and ranking, shown below in Figure 4. Four of the sites are located in the Sinclair Inlet along the Port Orchard waterfront, while the Shaw Island Residences site is located near Rocky Point north of Bremerton. Two of the ten sites reviewed only met the Stage 3 criteria when combined with an adjacent parcel.

Figure 4. 5 Sites Identified for Further Site Evaluation and Ranking



Criteria for Further Site Evaluation and Ranking

The next phase of site alternatives assessment will use additional criteria to evaluate and rank site alternatives in order to select up to three sites for further detailed assessment.

The five sites carried forward from Stage 3 of initial site screening will be further evaluated and compared against each other based on each site's ability to support KT's ferry maintenance program needs. The top sites (up to three) will be carried forward for comprehensive site analysis and identification of a locally-preferred alternative.

Proposed factors to be used for further site evaluation and ranking are summarized below in Table 5. In Task 4, Citeria will be defined and weighted to measure how well a site meets KT's ferry maintenance facility needs.

Table 5: Proposed Criteria for Further Site Evaluation and Ranking

Focus Area	Need	Criteria for Evaluation and Site Ranking
Site Access	Facility location that supports the operational and service needs of the KT ferry system	• Distance from KT terminals/routes • Distance from KT Bremerton administrative offices • Distance/access for maintenance contractors & equipment vendors • Ease of landside waterfront access • Water depths / waterside access
Environmental Considerations	Site that provides a viable opportunity for permitting and construction of a maintenance facility; minimize environmental impacts	• Proximity/impacts to residents or businesses • Permitting complexity (overwater coverage, neighboring uses, etc.) • Potential impacts to low-income and minority populations
Site Space and Constructability	Facility with space and flexibility to meet KT's current and future ferry maintenance needs; consider facility construction costs and timeline	• In-water space: ease of vessel navigation and access, space for additional berths, space for truck access to berths • Uplands space: total square footage to support maintenance shops, office space, and other facility programming • Site construction considerations / cost impacts (site grade, access, etc.) • Availability of utilities • Space for future needs (flexibility/expansion)

APPENDIX D

ALTERNATIVES EVALUATION MEMO

Date:	May 15, 2024
To:	Kitsap Transit
From:	KPFF Consulting Engineers
Subject:	Kitsap Transit Ferry Maintenance Facility Site Alternatives Analysis **Task 4: Alternatives Evaluation**

Introduction

Kitsap Transit (KT), supported by the KPFF consulting team, is conducting a Ferry Maintenance Facility Planning Study to locate a future ferry maintenance facility in Kitsap County. Overall, the study will identify, document and evaluate site attributes, and assess the overall viability of site alternatives. The goal of the study is to support the recommendation of a well-informed preferred site alternative, or alternatives.

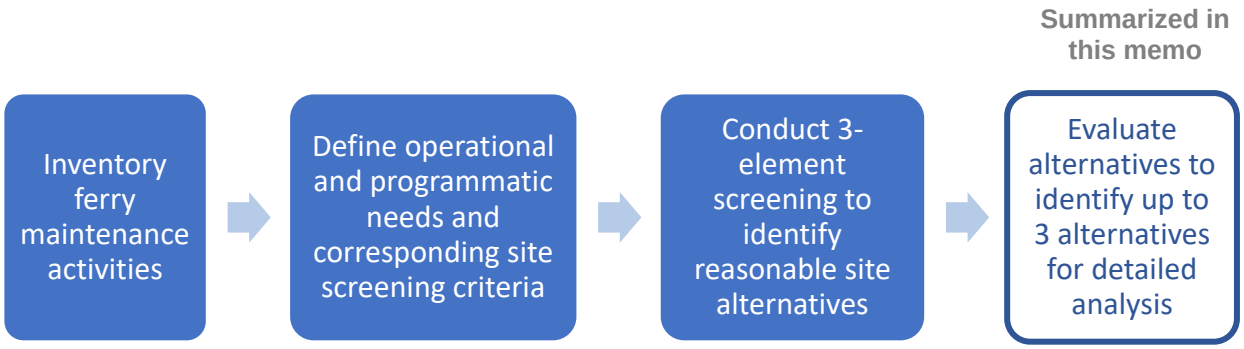
Purpose

This memo is one step in the overall site alternatives analysis. It summarizes the process used to build upon work previously completed to: (1) identify the site alternatives or parcel combinations to be reviewed, (2) explain the criteria used to conduct the relative site evaluation, and (3) share the resulting three sites selected for detailed analysis.

Approach

The overall Maintenance Facility site alternatives development process is outlined in the figure below, followed by a brief description of each element in the process.

Figure 1: Site Development and Evaluation Process



Inventory ferry maintenance activities: The first task of the site alternatives analysis established an understanding of KT's vessel maintenance needs, including current vessel preventative maintenance and repair practices, as well as the desired maintenance and repair capabilities to be provided at a dedicated KT ferry maintenance facility (presented in the *Establish Facility Programmatic and Operational Needs* memo).

Define site screening criteria based on facility needs: The identification of preliminary operational and programmatic needs informed the development of initial site screening criteria used to determine if the location and characteristics of potential sites could support KT's basic needs for a dedicated maintenance facility.

Conduct three-element screening to identify reasonable site alternatives: The initial site screening criteria focused on three elements; operational considerations, environmental criteria, and minimum space requirements for the facility, which were used to narrow the shoreline areas within Kitsap County to those feasible for further review and to identify the site alternatives to undergo further assessment. Site screening criteria and initial site screening findings are summarized in the *Initial Site Evaluation Criteria* memo.

Evaluate site alternatives and select those for detailed evaluation: As presented in this memo, the identified site alternatives were evaluated using a suite of evaluation criteria and relative scoring measures. Based on this evaluation, the sites were ranked in relative order of suitability, and the top three sites were selected for detailed evaluation, including conceptual design development.

Site Alternatives Development

From the previous work completed, five sites were identified that met the initial site screening criteria and were selected to be carried forward for further site evaluation and ranking. These sites are shown in Figure 2. Four of the sites are located on the southern shore of Sinclair Inlet along the Port Orchard waterfront. The fifth site is the Shaw Island Residences site located in Phinney Bay near Rocky Point north of Bremerton.

Figure 2: 5 Sites Identified for Further Site Evaluation and Ranking

Preliminary review of available shoreside constructable space at these five site alternatives, when taken in concert with estimated requisite operational space demands, found that site space constraints would likely introduce limitations to the preferred facility design, layout, and associated capabilities. Accordingly, the project team felt it was appropriate to explore additional parcel combinations and look for opportunities to maximize site space.

Preliminary site layouts are included in Attachment 2 to illustrate available space at each site.

The discussion that follows lays out the elements considered, and the process used to arrive at the resulting site alternatives carried forward in the relative evaluation process.

Parcel combinations: The original site alternatives identified are comprised of one or more property parcels, with Kitsap Marine Properties comprised of a single parcel, Suldan's Boat Works, Port Orchard Railway Marina & Bar & Grill, and the Sinclair Inlet Marina each comprised of two adjacent parcels, and Shaw Island comprised of three parcels. Because of the identified space constraints, the team felt that additional parcel combinations should be explored.

The Kitsap Marine Properties and Suldan's Boat Works alternatives are directly adjacent to one another (as shown in Figure 3), so a combined three-parcel alternative was added to the list of sites to be evaluated. The project team also reviewed a four-parcel option that included the addition of the residential site adjacent to Suldan's Boat Works.

Looking at combinations of other neighboring parcels was not viable because none of the other sites had adjacent parcels that could feasibly be added to the site to increase the site shoreside footprint.

Figure 3: Kitsap Marine & Suldan's Boat Works Parcel Layouts

Potential use of uplands parcels or upland portions of parcels:

Privately-owned residential uplands

While the addition of non-waterfront parcels would be considered less than optimum, the project team also reviewed options for incorporating undeveloped uplands parcels (south of SW Bay Street) to provide additional space for maintenance facilities or parking and keep waterfront property dedicated to maintenance functions that rely on waterfront access.

Two of the parcels (nos. 34240120152006 & -2105, highlighted in Figure 4) are currently undeveloped and were reviewed for zoning and land use considerations, with the following findings:

- Zoning: R1 (Residential 1)
  - Incompatible (both Marina and Light Industrial uses not allowed. Standalone parking is also not allowed in R1. Would require zone change and comprehensive plan designation change).
- Shoreline Designation: High Intensity
  - Compatible (Boating Facility use allowed)

Figure 4: Uplands Parcels Reviewed

Based on the parcel's zoning, there are some compatibility issues with these parcels being used for KT's maintenance facility. While there are processes in place that can amend a parcel to a zone that is compatible with the proposed use (zone change and comprehensive plan designation change), that process is lengthy and requires a decision on a discretionary application made by City Council. Because City Council considers input received from the community and other stakeholders, this decision process carries more risk than permitting a site with compatible zoning. Consequently, these parcels were not added as viable additions to any of the site alternatives.

Kitsap Marine Properties Uplands

While not directly adjacent to or on the same side of Bay Street, the uplands portion of the Kitsap Marine parcel (shown in Figure 3) was considered in combination with the Suldan's Boat Works parcels as one of the site alternatives.

The upland portion of parcel 33240110092007 was reviewed for zoning compatibility, with the following findings:

- Zoning: Light industrial
  - Compatible
- Shoreline Designation:
  - Not applicable; uplands at Kitsap Marine Properties are not within the regulated shoreline.

The parcel's upland zoning and land use is compatible with the maintenance facility, so these alternatives were included in site evaluation and ranking. It is acknowledged that this alternative would present some operational challenges that may make the alternative notably less desirable.

Location of vessel laydown space: Because of the limited amount of uplands space on many waterfront sites, initial evaluation considered two options for vessel laydown area, summarized as follows:

1. **Uplands**: An open vessel yard with space for two KT vessels to be hauled out of the water, including uplands maneuvering space for a boat lift, represented by a rectangular footprint of approximately 300 by 150 feet (either parallel or perpendicular to the shoreline).
2. **In-water:** If a site does not meet the minimum uplands laydown space criteria, the alternatives included the potential application of a barge equipped with a boat lift with space to accommodate two vessels (one hauled with full access to the entire hull, and one on the boat lift with access to the propulsion gear), of approximately 320 by 60 feet, and in-water depths of at least 10 feet.

Sites with potential space to accommodate either vessel laydown option were reviewed for both options, while sites with insufficient uplands space were only reviewed for the second option (in-water barge). For those site alternatives with space for both potential laydown options that are carried forward to the next project phase, both options will be reviewed in more detail during conceptual design.

Review of site alternatives, potential use of upland parcels, and options for vessel laydown space resulted in 12 distinct alternatives. The following table summarizes the 12 site alternatives considered in the evaluation process:

Table 1: Site Summary List

Number	Description
A1.1	Kitsap Marine Properties *(uplands vessel laydown)*
A1.2	Kitsap Marine Properties *(in-water barge vessel laydown)*
B1.2	Suldan's Properties *(in-water barge vessel laydown)*
A/B1.1	Kitsap Marine & Suldan's Combined Properties *(uplands vessel laydown)*
A/B1.2	Kitsap Marine & Suldan's Combined Properties *(in-water barge vessel laydown)*
A/B2.1	Kitsap Marine & Suldan's Combined Properties with adjacent residential property *(uplands vessel laydown)*
A/B2.2	Kitsap Marine & Suldan's Combined Properties with adjacent residential property *(in-water barge vessel laydown)*
A/B3.2	Kitsap Marine Uplands Only & Suldan's Combined Properties *(in-water barge vessel laydown)*
C1.1	Port Orchard Railway Marina & Bar & Grill Properties *(uplands vessel laydown)*
C1.2	Port Orchard Railway Marina & Bar & Grill Properties *(in-water barge vessel laydown)*
C2.2	Sinclair Inlet Marina Properties *(in-water barge vessel laydown)*
D1.2	Shaw Island Properties *(in-water barge vessel laydown)*

These 12 site alternatives involve ten different parcels (4 around the Kitsap Marine/Suldan's sites in lower Sinclair Inlet; 3 near downtown Port Orchard in central Sinclair Inlet, and 3 on Shaw Island.)

Site Evaluation and Ranking

The site alternatives that made it through the initial screening process to confirm their ability to support operational and programming needs are listed in Table 1. They were evaluated and ranked using a relative scoring process in order to select up to the top three sites for further detailed assessment and conceptual design. The evaluation criteria were focused on assessing the relative ability of each site to support the KT ferry maintenance program's short and long-term programming and operational needs.

Accordingly, the evaluation criteria used to narrow the alternative sites down to those that will undergo detailed site analysis and conceptual design focused on three broad areas:

(1) Space availability

(2) Site access, and

(3) Site environmental and permitting feasibility.

Each of these broad areas was broken into a series of specific criteria used to rank the sites relative to one another. Within each of the three areas, key criteria that best support KT's planned maintenance facility program and environmental review and permitting process were identified; these criteria are shown in Table 2, with secondary criteria listed below. These key criteria are emphasized because they may be more influential in the decision-making process compared to the other criteria that are important to consider but should not be weighted the same.

All criteria measures are scored using a three-tier scale of **low**, **medium**, and **high**, which compare the sites relative to each other (acceptable, better, and best). None of the measures reflect a fatal flaw. Whenever possible, quantitative measures were employed to minimize subjectivity in the evaluation process. However, some of the measures were qualitative in nature.

A description of the individual evaluation criteria, a definition and/or applicable notes for each, and the criteria measures employed during the evaluation process are presented in Attachment1.

All 12 site alternatives were evaluated against each of these criteria, with the relative ranking of each alternative established. Detailed findings by criteria for each site alternative are included in Attachment 1. A summary of the evaluation results, using the color-coding described earlier, is displayed in Table 2 below.

Table 2: Summary of Site Evaluation

Criteria	A – Kitsap Marine	B- Suldan's Boat	AB - Kitsap Marine / Suldan's Boat Works			C - Downtown Port Orchard		D - Shaw Island
	A1.1/A1.2 Kitsap Marine	B1.2 Suldan's	AB1.1/AB1.2 Kitsap Mar./ Suldan's	AB2.1/AB2.2 Kitsap Mar./ Suldan's	AB3.2 ½ Kitsap M/Suldan's	C1.1/C1.2 Railway Mar./ Bar and Grill	C2.2 Sinclair Inlet Marina	D1.2 Shaw Island
Site Space								
Sufficient uplands space for vessel laydown area	🟢	🟤	🟢	🟢	🟤	🟢	🟤	🟤
Constructable space for shop, storage & office buildings	🟡	🟡	🟢	🟢	🟡	🟡	🟡	🟡
Site Access								
Navigability & Vessel Traffic Conflicts	🟢	🟢	🟢	🟢	🟢	🟡	🟡	🟤
Water Depth Sufficiency	🟡	🟡	🟡	🟡	🟡	🟢	🟤	🟡
Existing surface street network	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟤
Environmental Criteria								
Proximity/Impact to Private Businesses	🟤	🟡	🟤	🟤	🟡	🟡	🟡	🟢
Ability of Existing In-Water Structures to Reduce Compensatory Mitigation	🟡	🟡	🟡	🟡	🟡	🟢	🟢	🟡
Compatibility with Existing Visual Aesthetics	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡
Other Secondary Criteria Considered								
Shoreline Sufficiency for waterside access	🟢	🟢	🟢	🟢	🟢	🟢	🟡	🟢
Landside Ease of Access	🟢	🟢	🟢	🟢	🟢	🟡	🟡	🟤
Proximity/Impact to Private Residences	🟢	🟢	🟢	🟤	🟢	🟢	🟢	🟤
Consistency with local zoning & "use" definitions	🟢	🟡	🟢	🟡	🟡	🟡	🟡	🟡
Known presence of unique habitat	🟡	🟡	🟡	🟡	🟡	🟡	🟡	🟢
Suitable shoreline armoring	🟢	🟢	🟢	🟢	🟢	🟡	🟢	🟡
Subject to lease provisions & annual fee under AUA	All site alternatives would be subject to lease provisions and annual fee under AUA.							
Proximity to minority or disadvantaged populations	No site alternatives were found to be in proximity to minority or disadvantaged populations.							
Federal, state, and local permitting	All site alternatives are expected to be permittable & require the same federal, state & local permits.							

Each site alternative has criteria that rank high, medium, and low on the established scale, indicative of the diversity of sites and the fact that none of the sites are a perfect fit, with each possessing their own unique advantages and disadvantages.

The evaluation focused on identifying the relative opportunities and challenges at each site. Based on the results of evaluation, site alternatives with four or more green scores in key criteria were recommended for further analysis. The top three sites would all support the haul out and onshore laydown of two vessels or could use a barge for this purpose. Results are shown in Table 3.

Table 3: Results of Initial Site Evaluations

No.	Description	Recommended for Further Analysis
A1.1	Kitsap Marine Properties 2-Parcel Option 1	✓
A1.2	Kitsap Marine Properties 2-Parcel Option 2	
B1.2	Suldan's Properties 2-Parcel Option 2	
AB1.1	Kitsap Marine & Suldan's Combined Properties 4-Parcel Option 1	✓
AB1.2	Kitsap Marine & Suldan's Combined Properties 4-Parcel Option 2	
AB2.1	Kitsap Marine & Suldan's Combined Properties 5-Parcel Option 1	
AB2.2	Kitsap Marine & Suldan's Combined Properties 5-Parcel Option 2	
AB3.2	Kitsap Marine Uplands & Suldan's Combined Properties 4-Parcel Option 2	
C1.1	Port Orchard Railway Marina & Bar & Grill Properties 2-Parcel Option 1	✓
C1.2	Port Orchard Railway Marina & Bar & Grill Properties 2-Parcel Option 2	
C2.2	Sinclair Inlet Marina Properties 1-Parcel Option 2	
D1.2	Shaw Island Properties 3-Parcels Option 2	

Based on the results of the evaluation, the three site alternatives identified above are recommended to be carried forward for more detailed analysis, including facility conceptual layout, costing, and detailed site assessment.

Criteria Description	Criteria Definition & Notes	Criteria Measurement	Sites, Site/Criteria Particulars & Site Measures							
			A - Kitsap Marine	B - Suldan's Boat Works	A/B - Kitsap Marine / Suldan's Boat Works			C - Downtown Port Orchard		D - Shaw Island
			A1.1/A1.2 Kitsap Marine	B1.2 Suldan's Boat Works	AB1.1/AB1.2 Kitsap Mar./ Suldan's	AB2.1/AB2.2 Kitsap Mar./ Suldan's	AB3.2 1/2 Kitsap M/ Suldan's	C1.1/C1.2 Railway Marina/ Bar & Grill	C2.2 Sinclair Inlet Marina	D1.2 Shaw Island
Site Space Criteria										
Sufficient uplands space for vessel laydown area	Relative area available to place vessels ashore or retain vessels on a barge. (The more uplands space available at the site to allow vessel laydown, the more favorable the site.)	**Vessels can be placed ashore with sufficient space to support vehicles around vessels (available footprint of 150' x 300'=~45K SQFT)** **Vessels can be placed ashore but with limited maneuverability around the vessel(s) (available footprint of ~35K SQFT)** **Insufficient area ashore (<35K SQFT)-Vessels hauled out on barge, with limited access and ability to move large equipment to/from vessel(s)**	~52K SF available shore space, with room to accommodate vessels ashore	Only ~25K SF available shore space; insufficient room to haul out vessels ashore, needs to be on barge with limited access from shore	~69K SF available shore space; room to accommodate vessels ashore	~80K SF available shore space; room to accommodate vessels ashore	Only ~25K SF available shore space; insufficient room to haul out vessels ashore, needs to be on barge with limited access from shore	~59K SF available shore space, with room to accommodate vessels ashore	While there is ~33K SF of available shore space, most is over water; insufficient to haul out vessels ashore, needs to be on barge with limited access from shore	While ~65K SF available space ashore, the shape of the island is such that vessel haul out on shore is not possible; therefore on barge with limited access from shore
Constructable space for shop, storage & office buildings	Relative amount of uplands space: total square footage to support maintenance shops, storage, office space, and other facility programming (including setbacks, building height restrictions, etc.) (The more uplands space available to place buildings at the site, the more favorable the site.)	**Sufficient space available on site to place desired shop/storage spaces with vessels shore laydown (>20K SQFT)** **Limited space available to place desired shop/storage spaces with vessel shore laydown (>10 SQFT) or sufficient space with barge (>20K SQFT)** **Insufficient space available on site to place desired shop/storage spaces even with vessel laydown (<10KT) or with barge (<20K SQFT)**	~12K SF available shore space available for shops, after vessels placed ashore with minimal clearance	~25K SF available shore space available for shop space with barge haul outs	~29K SF available shore space for shops, after vessels placed ashore	~39K SF available shore space for shops, after vessels placed ashore	~25K SF available shore space available for shop space with barge haul outs	~19K SF available shore space for shops, after vessels placed ashore with minimal clearance	~33K SF shore space available for shop space with barge haul outs	~65K SF available shore space for shops, but with barge haul out

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Site Access Criteria										
Navigability & Vessel Traffic Conflicts	Relative ease of KT vessels to navigate to/from, and in proximity to, the site, including waterside access to general vicinity of site, level of vessel traffic and final approach to/away from the site. (The less challenging the route to the site and less amount of vessel traffic during transit, the more favorable, as safety of KT vessel access is facilitated/enhanced and there will be less impact on KT vessel arrivals/departures, as well as less impact to other vessel traffic.)	**Navigable route to the site is direct and straightforward, with limited vessel traffic and navigational challenges** **Navigable route to site has the potential to be challenging depending upon factors outside of KT control and has potential for vessel traffic during select periods** **Navigable route to site is circuitous or challenging, with built in navigating challenges and has significant potential to conflict with other vessel traffic**	Sites are located near the southwestern end of Sinclair Inlet, which ~800 yards wide, with water depths throughout approach adequate to support safe vessel navigation. There are no navigational restrictions thru Sinclair Inlet on KT vessels. Given location at end of Inlet, there are no transiting commercial vessels and limited transiting recreational vessel traffic. The marina at this/adjacent site/s reflects some level of recreational boating activity in this area.					Sites are located on southern shore of Sinclair Inlet near city of Port Orchard, close to geographic center of the inlet, and possesses no navigational restrictions. Waterway is slightly > 1NM wide with >0.5NM of open water between existing facilities and naval restricted area directly across inlet. Water depths are adequate to support safe vessel navigation. There are not any waterfront industries supported by commercial vessel traffic in Sinclair Inlet, with large commercial vessel traffic prohibited by restricted areas. Number/capacity of marinas located in vicinity and further up inlet reflects healthy recreational boating activity in this area and normal navigational precautions will be necessary.		Site is located east side of Shaw Island in Phinney Bay, north of Bremerton. Vessels can safely navigate Narrows into Phinney Bay without restriction, but extra caution is required due to narrow, circuitous route and possible tidal currents. Narrows is ~1,000 FT wide at narrowest and is crossed by 2 bridges, with minimum width/height clearance of 220 / 74 FT. Phinney Bay is ~400 YD across at site, with sufficient water depth, but limited open water to maneuver. A sizable marina is located just to the north of the site, reflective of very healthy recreational boating activity in this area. No significant commercial vessel traffic in this area.

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Water Depth Sufficiency	Relative proximity of minimal water depths to the waterside of the site to support moorage and/or lifting of KT vessels from water. (The shorter the distance from the minimum water depths to the shoreline, the more favorable, as pier lengths can be shortened, overwater coverage minimized, and overall impact on waterway reduced.)	**Water depths of 10 FT or greater within 150 FT from shoreline at MHHW** **Water depths of 10 FT or greater between 150 and 350 FT from shoreline at MHHW** **Water depths of 10 FT or greater beyond 350 FT from shoreline at MHHW**	The 10 FT contour line ranges from 200-250 FT off shoreline	The 10 FT contour line ranges from 275-300 FT off shoreline	The 10 FT contour line ranges from 200-300 FT off shoreline	The 10 FT contour line ranges from 200-300 FT off shoreline	The 10 FT contour line ranges from 275-300 FT off shoreline	The 10 FT contour line ranges from 100-275 FT off shoreline	The 10 FT contour line is approximately 445 FT offshore	The 10 FT contour line is approximately 325 FT off shoreline
Existing surface street network	Relative use and functionality of landside access to the site, including nature and sufficiency of road network. Given that the maintenance facility will require access by trucks and other heavy equipment, this criteria evaluates compatibility with existing surface street infrastructure and whether improvements (costs) would be needed for immediate and long-term access. (The more able the roadway is to support heavy vehicular traffic, the more preferred the site.)	**Site is located in similar high-use areas, on arterial most supportive of truck and delivery vehicles access and maneuvering** **Site roadway access is on collector, has potential to need upgrades or is in residential area** **Site access will not support heavy vehicular traffic without upgrade and requires transit through residential area**	Located directly off state owned and maintained Hwy 166 (SW Bay St)					Located directly off state owned and maintained Hwy 166 (Bay St), Port Orchard Blvd.		Access to site on NW Shaw Island Way - a small private 2-lane road, with a narrow bridge to the island

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Environmental Criteria										
Proximity/ Impact to Private Businesses	Relative impact on the existing site businesses, functions, and/or the public. (The less impact on existing businesses or the public, the more favorable the site.) Of the environmental criteria evaluated, this may be the criteria where potential significant impacts are identified in a NEPA/SEPA process.	**Constructing a maintenance facility at this site will have no or-minor impact on existing private business or the public** **Constructing a maintenance facility at this site will have some impact on existing business or the public; may also involve acquisition of business listed for sale** **Constructing a maintenance facility at this site will impact existing business with a unique/meaningful contribution to local community and economy or the public**	Acquisition of this site would displace, likely eliminate, Kitsap Marine - an active private boatyard and marina that serves the local population and maritime community.	Acquisition of this site would not displace an active business, but would likely require the elimination or relocation of existing pier/wharf structures that support the adjacent marina.	Acquisition of this site would displace, likely eliminate, Kitsap Marine - an active private boatyard and marina that serves the local population and maritime community.	Acquisition of this site would displace, likely eliminate, Kitsap Marine - an active private boatyard and marina that serves the local population and maritime community.	Acquisition of this site would not displace an active business, but would likely require the elimination or relocation of existing pier/wharf structures that support the adjacent marina and would likely separate KT parking from facility.	While acquisition of this site would not displace an active business uplands, it would likely require the elimination or relocation of existing pier/wharf structures that support the Port Orchard Railway marina. Would also take over existing approved proposal for development at the Bar and Grill property.	Marina is up for sale, though moorage is still being provided. Acquisition of this site would displace the business and moorage that serves the local population and maritime community. This assumes that there is no acquisition during the planning phase of this project.	Site located in a residential area, with limited impact on businesses or the public. Only public impact might be associated with need to share waterway in proximity to adjacent marina.
Ability of Existing In-Water Structures to Reduce Compensatory Mitigation	Compensatory mitigation is a significant cost factor and an area of significant and evolving regulatory complexity.	**Opportunity to reconfigure or use existing overwater coverage to fully offset project impacts** **Onsite mitigation opportunities that reduce the cost/burden of additional mitigation credit purchase** **Mitigation requirement likely to be satisfied through purchase of mitigation credits only**	Likely increase to overwater coverage (with barge alternative creating more nearshore impact than travel lift). Potential opportunity for shoreline enhancements given the extent of the site.	Assumes that net overwater coverage removed/added is substantively similar, but that some on-site mitigation may be required to fully offset impacts. It is noteworthy that developed overwater coverage will extend further into the Deeper Shore Zone.	Likely increase to overwater coverage (with barge alternative creating more nearshore impact than travel lift). Potential opportunity for shoreline enhancements given the extent of the site.	Likely increase to overwater coverage (with barge alternative creating more nearshore impact than travel lift). Potential opportunity for shoreline enhancements given the extent of the site.	Assumes that net overwater coverage removed/added is substantively similar, but that some on-site mitigation may be required to fully offset impacts. It is noteworthy that developed overwater coverage will extend further into the Deeper Shore Zone.	Assumes overwater coverage from moorage is used to offset impacts of new development.	Assumes overwater coverage from moorage is used to offset impacts of new development.	Compared to other sites considered for the project, there is likely more opportunity for on-site mitigation here than elsewhere. Likely, both on- and off-site mitigation would be required.

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Compatibility with Existing Visual Aesthetics	The maintenance facility will introduce a significant feature to the viewshed; relevant shoreline context is important to support community acceptance and minimize perceived impact.	**Consistent with existing viewshed** **Some similar shoreline context** **Inconsistent with existing viewshed**								Existing marina adjacent to site provides context; however, the introduction of ferries/large vessels to an otherwise residential shoreline would be a significant change to the viewshed.
Other Secondary Criteria Considered										
Proximity/Impact to Private Residences	Relative impact on the existing residential neighborhoods. (The less impact on existing residential neighborhoods, the more favorable the site.) It is assumed that acquisition of private residences would occur using fair market value and would be in accordance with Washington's Relocation Assistance law (RCW 8.26), but this impact would still be considered in an environmental review, and therefore has been considered as part of these environmental criteria.	**Constructing a maintenance facility at this site will have no or minimal impact on existing residential neighborhoods** **Constructing a maintenance facility at this site will have some marginal/ indirect impact on existing residential neighborhoods (e.g., light, noise)** **Constructing a maintenance facility at this site will have a major impact on existing residential neighborhoods, including acquisition of private residence(s)**	Acquisition of this site would not displace any residents nor require access through residential neighborhoods.	Acquisition of this site would not displace any residents nor require access through residential neighborhoods.	Acquisition of this site would not displace any residents nor require access through residential neighborhoods.	Acquisition of this site would displace a single private residence.	Acquisition of this site would not displace any residents nor require access through residential neighborhoods.	Acquisition of this site would not displace any residents nor require access through residential neighborhoods but would be in close proximity to the town of Port Orchard.	Acquisition of this site may not displace residents and would not require access through residential neighborhoods. There may be fulltime residents in house boats under covered moorage slips - note that this site is listed for sale, as of August 2022 according to a Google Streets image of the site.	Acquisition of this site would displace several existing residences on Shaw Island and convert a residential area to a commercial site, with access through adjacent residential neighborhoods.

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Waterside Access - Shoreline Sufficiency	Relative sufficiency of shoreline to accommodate in-water infrastructure to support maintenance and moorage activities for KT vessels at facility. (The more accessible shoreline, the more favorable the site, as it provides flexibility for accommodate moorage and hoist structures.)	**Shoreline access provides options for location of a boat lift pier (more than 160 FT)** **Shoreline access provides a single location for a boat lift pier (at least 85 FT)** **Shoreline access is only sufficient to support access to a maintenance barge via a vehicle-capable gangway (at least 20 FT)**	Approximately 410 FT of shoreline, allowing for siting of requisite in-water structures and coordination with shoreside infrastructure	Approximately 400 FT of shoreline, allowing for siting of requisite in-water structures and coordination with shoreside infrastructure	Approximately 810 FT of shoreline, allowing for siting of requisite in-water structures and coordination with shoreside infrastructure	Approximately 885 FT of shoreline, allowing for siting of requisite in-water structures and coordination with shoreside infrastructure	Approximately 400 FT of shoreline, allowing for siting of requisite in-water structures and coordination with shoreside infrastructure	Approximately 390 FT of shoreline, allowing for siting of requisite in-water structures and coordination with shoreside infrastructure	Approximately 150 FT of shoreline, greatly restricting the water-side structure siting & coordination with shoreside infrastructure	Approximately 525 FT of shoreline, allowing for siting of requisite in-water structures and coordination with shoreside infrastructure
Landside Ease of Access	Relative ease of landside access to the site, including proximity of access to supporting KT personnel, vendors, and services. (The more avenues of approach and the closer the proximity to KT services, personnel, and potential vendors, the more preferrable the site.)	**Site has multiple approaches, provides direct easy transit to KT and supporting services** **Site has multiple approaches, but is located in congested area** **Site has single access and is inconvenient for KT and supporting services**	Access available from either east or west off SW Bay St, with direct roadway access to major thoroughfares leading to KT office, facilities, services and supporting personnel.					Access available from either east or west of Port Orchard Blvd, with direct, slightly longer, roadway access to major thoroughfares leading to KT office, facilities, services and supporting personnel.		Access is through residential areas, through single bridge to site.
Consistency with local zoning and "use" definitions	The outcome of discretionary permitting cannot be reasonably forecasted, but there is a known regulatory pathway to propose a maintenance facility at these sites.	**Yes, consistent** **Requires discretionary permitting** **No, inconsistency identified**								

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Known presence of unique habitat *Mapped eelgrass* *Known spawning bed for priority species* *Adjacent to creeks with anadromous fish passage* *Bald eagle or other ESA-protected upland species*	The maintenance facility requires development in the nearshore environment, regardless of which site is selected. Critical habitats will be impacted, despite the expected inclusion of avoidance and minimization measures. Although there is some site-specific variation in the extent of impact, impacts to sensitive habitats are not altogether avoided.	**Critical habitat impacts (other than those to nearshore environment) avoided** **Impact to some mapped critical habitat** **Significant critical habitat impact as a result of the project**	No mapped eel grass at Kitsap Marine or Suldan's (or any site) Smelt spawning exists (all sites except Shaw Island) There is a culvert on the Kitsap Marine site that is mapped as a fish passage barrier and could be critical habitat after future correction There are no known eagle nests in the site vicinity	Same as Kitsap Marine, except that this site would avoid the current culvert that could be corrected to allow fish passage in the future. Potential fish-bearing creek adjacent to residential property east of Suldan's.	No mapped eel grass at Kitsap Marine or Suldan's (or any site) Smelt spawning exists (all sites except Shaw Island) There is a culvert on the Kitsap Marine site that is mapped as a fish passage barrier and could be critical habitat after future correction There are no known eagle nests in the site vicinity			No mapped eel grass at Bar & Grill/Railway Marina site (or any site) Smelt spawning exists (all sites except Shaw Island) There is a fish bearing stream directly adjacent to site There are no known eagle nests in the site vicinity		No mapped eel grass at the Shaw Island site No smelt spawning mapped No adjacent fish bearing streams There are no known eagle nests in the site vicinity
Suitable shoreline armoring	Shoreline armoring is considered at federal, state, and local levels of permitting. Proposals to replace or introduce vertical or hardened shorelines is discouraged. Ranking considers the potential need for stability improvements based on reasoned potential increases to upland use of the site and its charge on existing armoring.	**No anticipated need for new or changed shoreline armoring** **Need for repaired shoreline armoring/hardening or replaced shoreline armoring/hardening** **Need for new shoreline armoring in area where it did not previously exist, new bulkhead, or waterward extension of built site**						Designed use of uplands for vessel maintenance reasonably exceeds the current use of the uplands (parking/restaurant) and may necessitate strength/stability improvements to existing armoring - to be verified during engineered design.		Preliminary designed near/overwater structures of existing armoring appears similar, although a reasonably expected increase in use of the structure may necessitate stability improvements to armoring.

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Subject to lease provisions & annual fee under AUA	It is assumed that an Aquatic Use Authorization (AUA) can be obtained at each site; however, the annual cost associated with an AUA is calculated using the extent of overwater coverage. Sites with less overwater coverage are favored in this criteria, for their AUA cost savings.	**No, development is on private parcel** **Yes, development is on state-owned aquatic land**							Overwater structure primarily constructed on privately-owned parcel; finger floats are the only structure designed to extend onto state-owned aquatic land. Therefore, this state lease may be considerably less on an annual basis than other sites considered.	
Proximity to minority or disadvantaged populations	All sites were compared against the socioeconomic index mapped by the Environmental Protection Agency's EJScreen tool (https://ejscreen.epa.gov/mapper/), whose demographic values indicate that each potential project site reports fewer low-income earners and people of color as compared to state and federal averages.	**None immediately adjacent to, or within line of sight or sound** **Immediately adjacent to, or within line of sight or sound**								
Federal, state, and local permitting	All sites are expected to be permittable and require the same level of permitting complexity.	**Suitable for exemptions or streamlined permitting** **Triggers all permitting**								

Attachment 2 – Preliminary Site Layouts for Evaluation of Available Space

LEGEND

- Fencing
- Site Gate
- (E) Building & Pier
- New Building
- High Tide Line
- Property Boundary
- Bathymetry
- Parcel Boundaries
- Vessel Turning Rad
- Max Hard Surface Area
- Setback zone
- Habitat zone
- Feasible Development Area (steep slopes)
- Landing & Ramp

Shoreline Parcels:
Hard Surface Area @70% = **52,166.4** S.F.
Uplands Parcels:
Total potential per land use
Hard Surface Area @70% = **97,850.40** S.F.
Likely feasible (steep slopes):
Hard Surface Area @70% = **36,525** S.F.

Land Use

Setbacks
- 0 @ WATER-DEPENDENT USES (SMP)
- 20' from Bay Street
- 10' @ Rear & Side setbacks

Hard Surfaces
70% Maximum Site Coverage

Building Heights
35' maximum

Mooring Option Key

Option 1 = Two Vessel lay-down areas ashore

Option 2 = One Vessel lay-down area on barge w/ ability for 2nd vessle in barge slot

Ferry Maintenance Facility Planning Study | KITSAP TRANSIT | Kitsap Marine Properties 2-Parcel Option 1

TCF Architecture | Kitsap Transit Connecting Communities | kpff

Port Orchard, WA

A1.1

August 1, 2023

Attachment 2 – Preliminary Site Layouts for Evaluation of Available Space

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Shoreline Parcels:
Hard Surface Area @70% = **52,166.4** S.F.
Uplands Parcels:
Total potential per land use
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Likely feasible (steep slopes):
Hard Surface Area @70% = **36,525** S.F.

Land Use

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- 20' from Bay Street
- 10' @ Rear & Side setbacks

Hard Surfaces
70% Maximum Site Coverage

Building Heights
35' maximum

Mooring Option Key

Option 1 = Two Vessel lay-down areas ashore

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Ferry Maintenance Facility Planning Study

KITSAP TRANSIT

Kitsap Marine Properties 2-Parcel Option 2

TCF Architecture

Kitsap Transit Connecting Communities

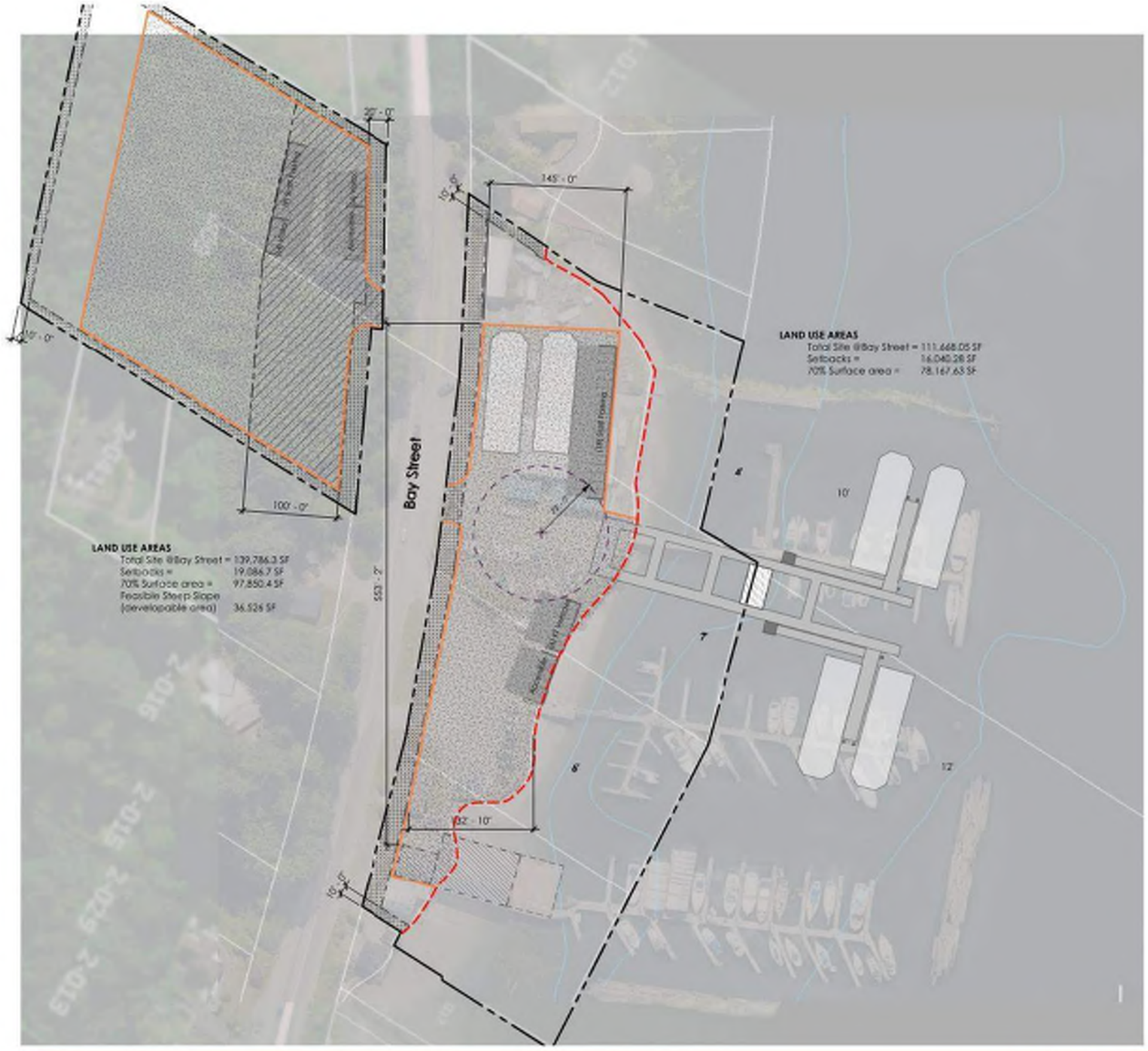
kpff

Port Orchard, WA

A1.2

August 1, 2023

Attachment 2 – Preliminary Site Layouts for Evaluation of Available Space



LEGEND

- Fencing
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Shoreline Parcels:
Hard Surface Area @70% = **78,167.63** S.F.
Uplands Parcels:
Total potential per land use
Hard Surface Area @70% = **97,850.40** S.F.
Likely feasible (steep slopes):
Hard Surface Area @70% = **36,525** S.F.

Land Use

Setbacks
* 0 @ WATER-DEPENDENT USES (SMP)
* 20' FROM BAY STREET
* 10' REAR & SIDES

Hard Surfaces
70% Maximum Site Coverage

Building Heights
35'-0" Maximum

Mooring Option Key

Option 1 = Two Vessel lay-down areas ashore

Option 2 = One Vessel lay-down area on barge w/ ability for 2nd vessle in barge slot

Ferry Maintenance Facility Planning Study

KITSAP TRANSIT — Kitsap Marine & Suldan's Combined Properties

4-Parcel Option 1

AB1.1

Port Orchard, WA

August 1, 2023

TCF Architecture

Kitsap Transit Connecting Communities

kpff

Attachment 2 – Preliminary Site Layouts for Evaluation of Available Space

LEGEND

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- New Building
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- Bathymetry
- Parcel Boundaries
- Vessel Turning Rad
- Max Hard Surface Area
- Setback zone
- Habitat zone
- Feasible Development Area (steep slopes)
- Landing & Ramp

Shoreline Parcels:
Hard Surface Area @70% = **78,167.63** S.F.
Uplands Parcels:
Total potential per land use
Hard Surface Area @70% = **97,850.40** S.F.
Likely feasible (steep slopes):
Hard Surface Area @70% = **36,525** S.F.

Mooring Option Key

Option 1 = Two Vessel lay-down areas ashore

Option 2 = One Vessel lay-down area on barge w/ ability for 2nd vessle in barge slot

Land Use

Setbacks
* 0 @ WATER-DEPENDENT USES (SMP)
* 20' FROM BAY STREET
* 10' REAR & SIDES

Hard Surfaces
70% Maximum Site Coverage

Building Heights
35'-0" Maximum

Ferry Maintenance Facility Planning Study

KITSAP TRANSIT — Kitsap Marine & Suldan's Combined Properties

4-Parcel Option 2

AB1.2

Port Orchard, WA

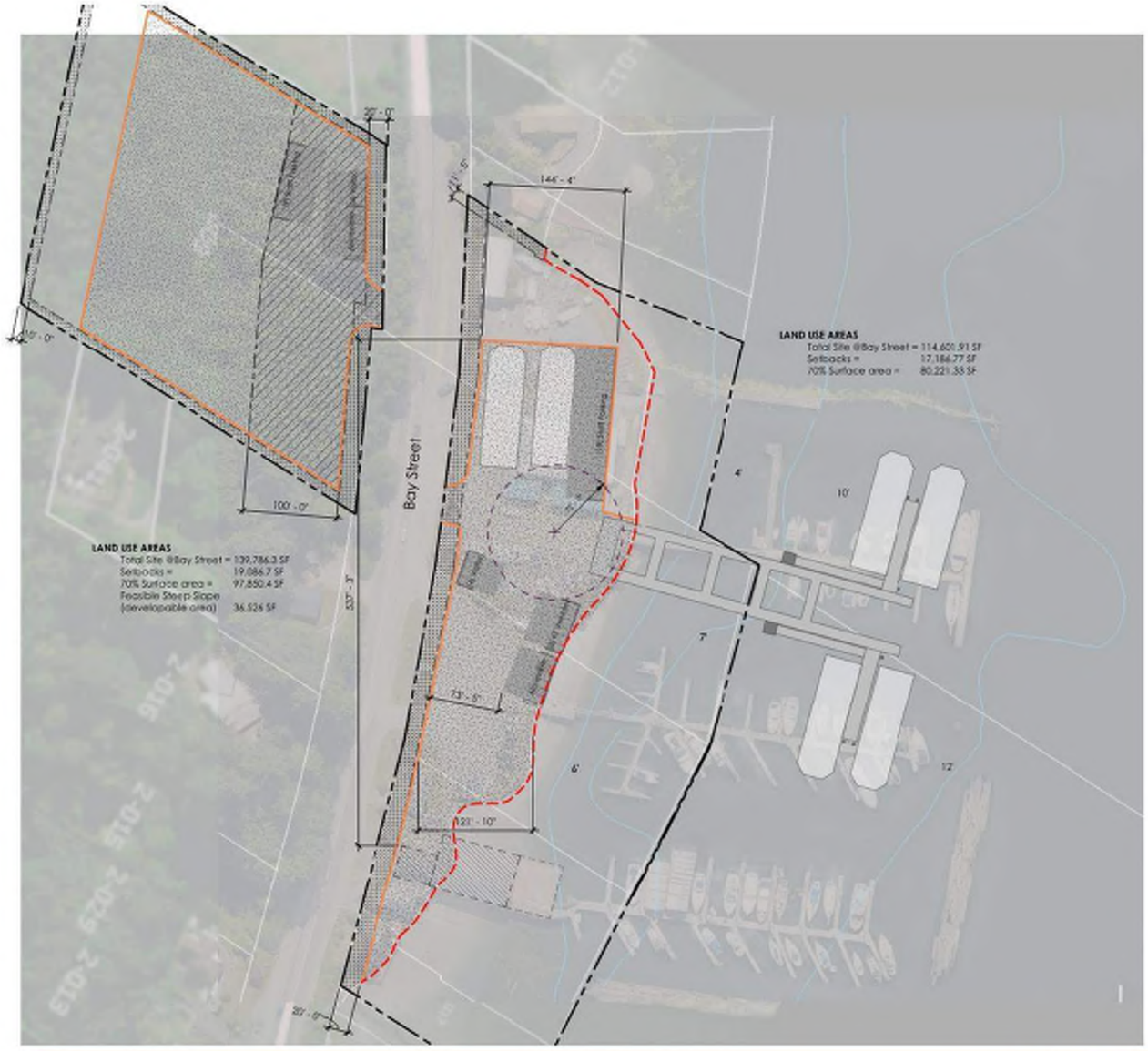
August 1, 2023

TCF Architecture

Kitsap Transit Connecting Communities

kpff

Attachment 2 – Preliminary Site Layouts for Evaluation of Available Space



LEGEND

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- Vessel Turning Rad
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Shoreline Parcels:
Hard Surface Area @70% = **80,221.33** S.F.
Uplands Parcels:
Total potential per land use
Hard Surface Area @70% = **97,850.40** S.F.
Likely feasible (steep slopes):
Hard Surface Area @70% = **36,525** S.F.

Land Use

Setbacks
* 0 @ WATER-DEPENDENT USES (SMP)
* 20' FROM BAY STREET
* 10' REAR & SIDES

Hard Surfaces
70% Maximum Site Coverage

Building Heights
35'-0" Maximum

Mooring Option Key

Option 1 = Two Vessel lay-down areas ashore

Option 2 = One Vessel lay-down area on barge w/ ability for 2nd vessle in barge slot

0 30' 60' 120'

Ferry Maintenance Facility Planning Study

KITSAP TRANSIT — Kitsap Marine & Suldan's Combined Properties

5-Parcel Option 1

AB2.1

Port Orchard, WA

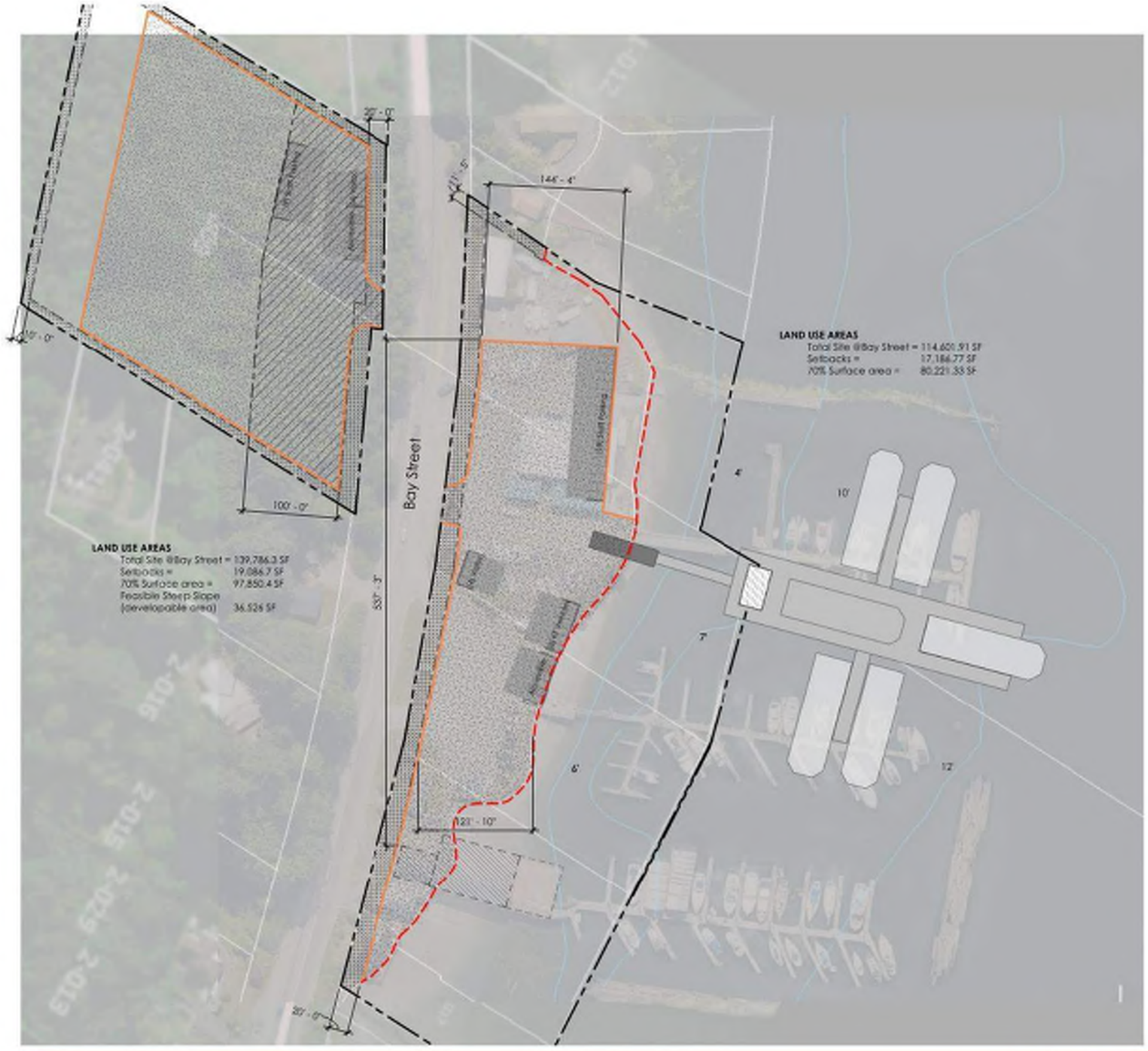
August 1, 2023

TCF Architecture

Kitsap Transit Connecting Communities

kpff

Attachment 2 – Preliminary Site Layouts for Evaluation of Available Space



LEGEND

- Fencing
- Site Gate
- (E) Building & Pier
- New Building
- High Tide Line
- Property Boundary
- Bathymetry
- Parcel Boundaries
- Vessel Turning Rad
- Max Hard Surface Area
- Setback zone
- Habitat zone
- Feasible Development Area (steep slopes)
- Landing & Ramp

Shoreline Parcels:
Hard Surface Area @70% = **80,221.33** S.F.
Uplands Parcels:
Total potential per land use
Hard Surface Area @70% = **97,850.40** S.F.
Likely feasible (steep slopes):
Hard Surface Area @70% = **36,525** S.F.

Land Use

Setbacks
* 0 @ WATER-DEPENDENT USES (SMP)
* 20' FROM BAY STREET
* 10' REAR & SIDES

Hard Surfaces
70% Maximum Site Coverage

Building Heights
35'-0" Maximum

Mooring Option Key

Option 1 = Two Vessel lay-down areas ashore

Option 2 = One Vessel lay-down area on barge w/ ability for 2nd vessle in barge slot

Ferry Maintenance Facility Planning Study

KITSAP TRANSIT — Kitsap Marine & Suldan's Combined Properties

5-Parcel Option 2

AB2.2

Port Orchard, WA

August 1, 2023

TCF Architecture

Kitsap Transit Connecting Communities

kpff

Attachment 2 – Preliminary Site Layouts for Evaluation of Available Space

LEGEND

- Fencing
- Site Gate
- (E) Building & Pier
- New Building
- High Tide Line
- Property Boundary
- Bathymetry
- Parcel Boundaries
- Vessel Turning Rad
- Max Hard Surface Area
- Setback zone
- Habitat zone
- Feasible Development Area (steep slopes)
- Landing & Ramp

Shoreline Parcels:
Hard Surface Area @70% = **27,518.67** S.F.
Uplands Parcels:
Total potential per land use
Hard Surface Area @70% = **97,850.40** S.F.
Likely feasible (steep slopes):
Hard Surface Area @70% = **36,526** S.F.

Land Use

Setbacks
* 0 @ WATER-DEPENDENT USES (SMP)
* 20' FROM BAY STREET
* 10' REAR & SIDES

Hard Surfaces
70% Maximum Site Coverage

Building Heights
35'-0" Maximum

Mooring Option Key

Option 1 = Two Vessel lay-down areas ashore

Option 2 = One Vessel lay-down area on barge w/ ability for 2nd vessle in barge slot

Ferry Maintenance Facility Planning Study

KITSAP TRANSIT

Kitsap Marine Uplands & Suldan's Combined Properties 4-Parcel Option 2

AB3.2

Port Orchard, WA

August 1, 2023

TCF Architecture

Kitsap Transit Connecting Communities

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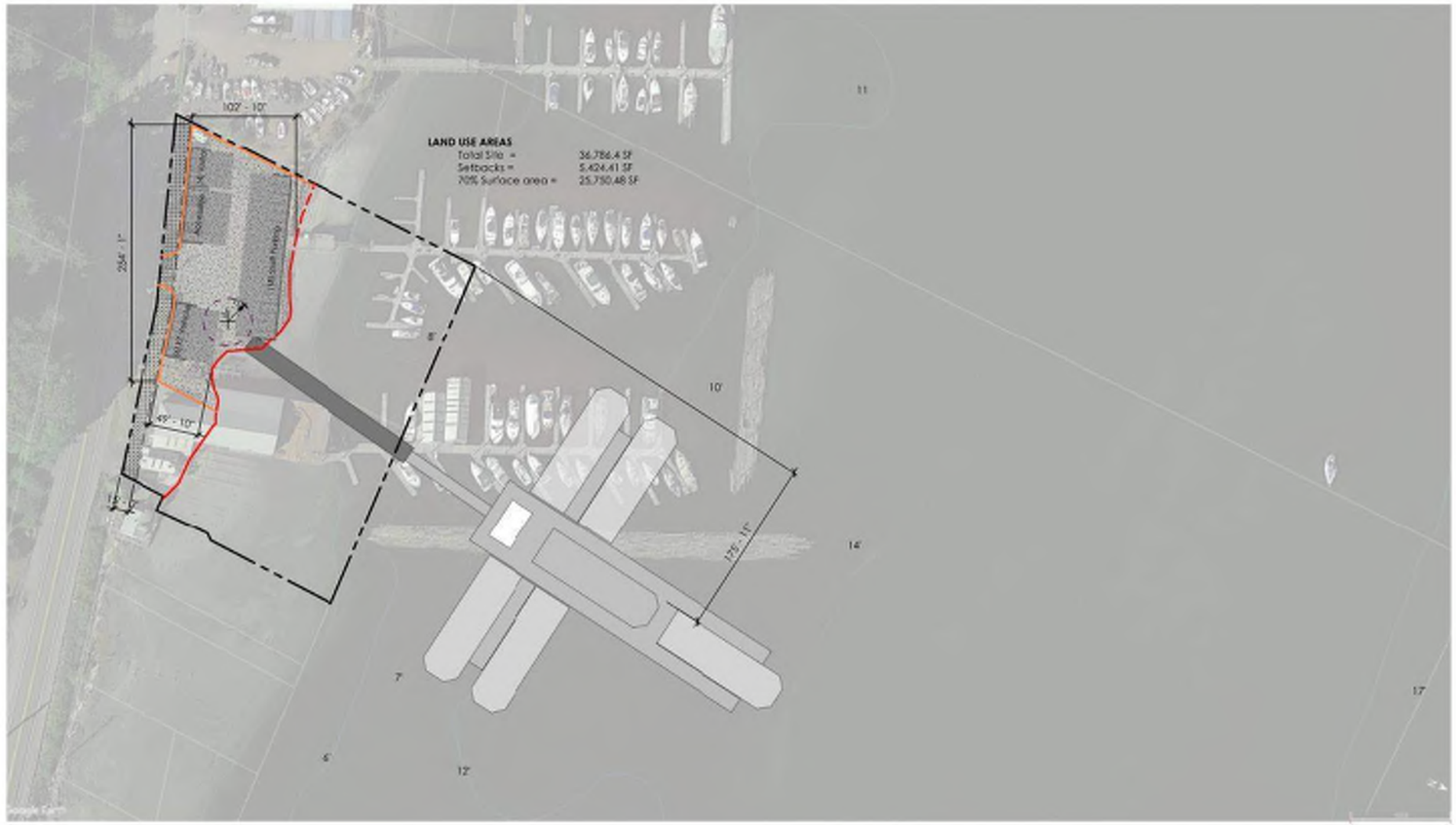
Attachment 2 – Preliminary Site Layouts for Evaluation of Available Space



LEGEND

- Fencing
- Site Gate
- (E) Building & Pier
- New Building
- High Tide Line
- Property Boundary
- Bathymetry
- Parcel Boundaries
- Vessel Turning Rad
- Max Hard Surface Area
- Setback zone
- Habitat zone
- Feasible Development Area (steep slopes)
- Landing & Ramp

Hard Surface Area @70% = **25,750.48** S.F.

Land Use

Setbacks
- 0 @ WATER-DEPENDENT USES (SMP)
- 15' from Bay Street (60' maximum)
- 0 @ Sides
- 10' @ Rear

Hard Surfaces
70% Maximum Site Coverage

Building Heights
3 stories or 35' maximum, 48'

Mooring Option Key

Option 1 = Two Vessel lay-down areas ashore

Option 2 = One Vessel lay-down area on barge w/ ability for 2nd vessle in barge slot

0 30' 60' 120'

Ferry Maintenance Facility Planning Study | KITSAP TRANSIT | Suldan's Properties - 2-Parcel Option 2

TCF Architecture | Kitsap Transit Connecting Communities | kpff

Port Orchard, WA

B1.2

August 1, 2023

Attachment 2 – Preliminary Site Layouts for Evaluation of Available Space

LEGEND

- Fencing
- Site Gate
- (E) Building & Pier
- New Building
- High Tide Line
- Property Boundary
- Bathymetry
- Parcel Boundaries
- Vessel Turning Rad
- Max Hard Surface Area
- Setback zone
- Habitat zone
- Feasible Development Area (steep slopes)
- Landing & Ramp

Hard Surface Area @90%
= **59,328.04 S.F.**

Land Use

Setbacks
* 0 @ WATER-DEPENDENT USES (SMP)
(no other requirements)

Hard Surfaces
90% Maximum Site Coverage

Building Heights
3 stories maximum

Note: Parking is only allowed on sides and rear of buildings

Mooring Option Key

Option 1 = Two Vessel lay-down areas ashore

Option 2 = One Vessel lay-down area on barge w/ ability for 2nd vessle in barge slot

Ferry Maintenance Facility Planning Study

KITSAP TRANSIT

Port Orchard Railway Marina & Bar & Grille
Properties 2-Parcel Option 1

C1.1

August 1, 2023

Port Orchard, WA

TCF Architecture

Kitsap Transit
Connecting Communities

kpff

Attachment 2 – Preliminary Site Layouts for Evaluation of Available Space

LEGEND

- Fencing
- Site Gate
- (E) Building & Pier
- New Building
- High Tide Line
- Property Boundary
- Bathymetry
- Parcel Boundaries
- Vessel Turning Rad
- Max Hard Surface Area
- Setback zone
- Habitat zone
- Feasible Development Area (steep slopes)
- Landing & Ramp

Hard Surface Area @90%
= **59,328.04 S.F.**

Land Use

Setbacks
* 0 @ WATER-DEPENDENT USES (SMP)
(no other requirements)

Hard Surfaces
90% Maximum Site Coverage

Building Heights
3 stories maximum

Note: Parking is only allowed on sides and rear of buildings

Mooring Option Key

Option 1 = Two Vessel lay-down areas ashore

Option 2 = One Vessel lay-down area on barge w/ ability for 2nd vessle in barge slot

Ferry Maintenance Facility Planning Study

KITSAP TRANSIT

Port Orchard Railway Marina & Bar & Grille
Properties 2-Parcel Option 2

TCF Architecture

Kitsap Transit
Connecting Communities

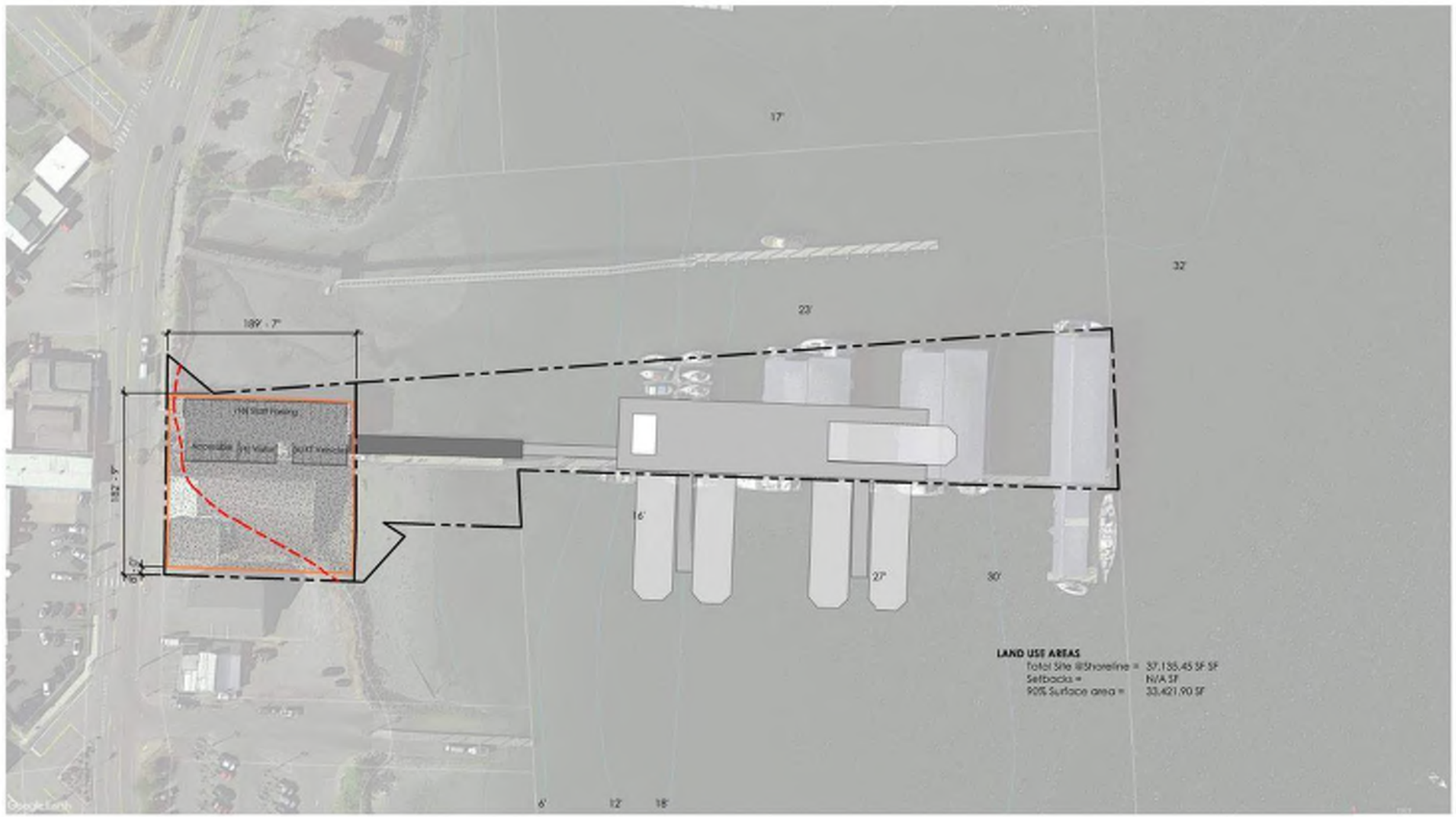
kpff

Port Orchard, WA

C1.2

August 1, 2023

Attachment 2 – Preliminary Site Layouts for Evaluation of Available Space



Hard Surface Area @90%
= **33,421.90 S.F.**

Land Use

Setbacks
* 0 @ WATER-DEPENDENT USES (SMP)
(no other requirements)

Hard Surfaces
90% Maximum Site Coverage

Building Heights
3 stories maximum

Note: N/A

Mooring Option Key

Option 1 = Two Vessel lay-down areas ashore

Option 2 = One Vessel lay-down area on barge w/ ability for 2nd vessle in barge slot

Ferry Maintenance Facility Planning Study | KITSAP TRANSIT | Sinclair Inlet Marina Properties 1- Parcel Option 2 (only)

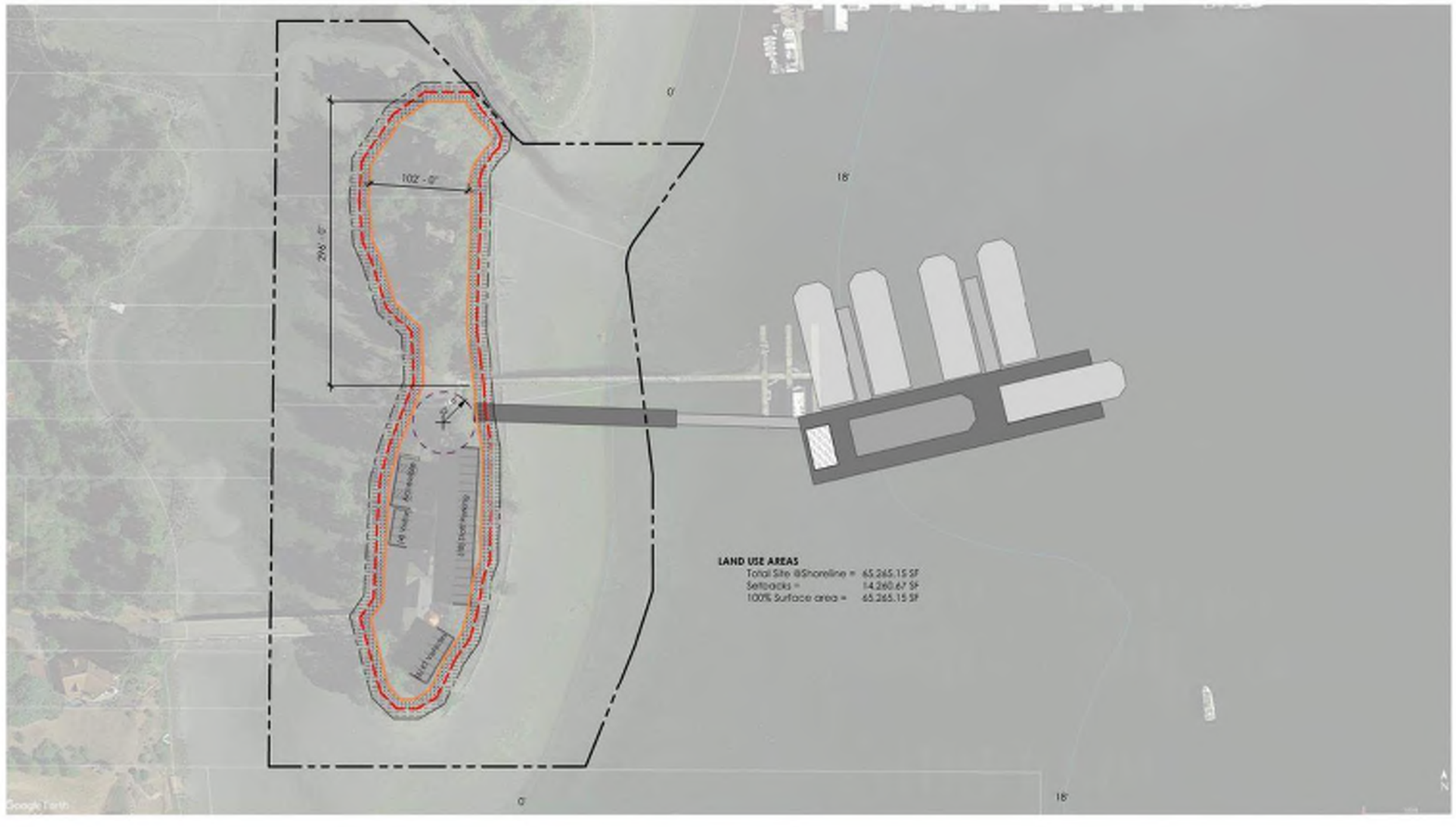
TCF Architecture | Kitsap Transit Connecting Communities | kpff

Port Orchard, WA

C2.2

August 1, 2023

Attachment 2 – Preliminary Site Layouts for Evaluation of Available Space



LEGEND

- Fencing
- Site Gate
- (E) Building & Pier
- New Building
- High Tide Line
- Property Boundary
- Bathymetry
- Parcel Boundaries
- Vessel Turning Rad
- Max Hard Surface Area
- Setback zone
- Habitat zone
- Feasible Development Area (steep slopes)
- Landing & Ramp

Hard Surface Area @100%
= **65,265.15 S.F.**

Land Use

Setbacks
* 10' frontage for habitable areas
* 5' @ Side setbacks
* 10' @ Rear (10' on Alleys)
* 20' @ Rear for garage/carport opening directly to alley

Hard Surfaces
N/A maximum

Building Heights
35' maximum

Mooring Option Key

Option 1 = Two Vessel lay-down areas ashore

Option 2 = One Vessel lay-down area on barge w/ ability for 2nd vessle in barge slot

ENGINEERING DRAWING DIMENSIONS
0 30' 60' 120'

Ferry Maintenance Facility Planning Study

KITSAP TRANSIT Shaw Island Properties - 3-Parcels Option 2 (only)

TCF Architecture

Kitsap Transit Connecting Communities

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Port Orchard, WA

D1.2

August 1, 2023

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APPENDIX E

CONCEPTUAL SITE LAYOUT OPTIONS

NOTES:

1. CONCEPTUAL LAYOUTS REPRESENT GENERAL CONFIGURATIONS OF MAINTENANCE PIER, VESSELS, FLOATS, AND GANGWAYS. SIZES SHOWN ON DRAWINGS ARE BASED ON INITIAL ASSUMPTIONS AND ARE PROJECTED TO CHANGE AS DESIGN PROGRESSES.

ASSUMPTIONS:

1. VESSEL WITH LARGEST GEOMETRY THAT THE MAINTENANCE FACILITY WILL ACCOMODATE IS SHOWN. THE WIDEST VESSEL IS 40' IN WIDTH AND THE LONGEST VESSEL IS 140' IN LENGTH.
2. ALL EXISTING IN WATER STRUCTURES WILL BE DEMOLISHED.
3. GANGWAY WIDTH IS 6' AND MINIMUM GANGWAY LENGTH IS 80'.
4. JIB CRANE IS SHOWN AT THE EDGE OF THE MAINTENANCE PIER FOR LOADING AND UNLOADING PURPOSES.
5. TRAVEL LIFT IS SHOWN ON THE MAINTENANCE PIER FOR BOAT LIFTING PURPOSES.
6. EACH SITE INCORPORATES SUFFICEINT LAYDOWN TO ACCOMMODATE TWO VESSELS FOR MAINTENANCE.
7. A 13' CLEAR PERIMETER AROUND LAID DOWN VESSELS HAS BEEN ASSUMED TO ACCOMMODATE SAFE MOVEMENT OF THE HOIST AND MAINTENANCE VEHICLES
   (SEE WHITE CROSS-HATCH ZONES @ PERIMETER OF EACH VESSEL)

S1 PLANNING OBSERVATIONS:

- 2 VESSELS ASHORE
- VESSELS HAULED & LAUNCHED INDEPENDENTLY
- ALL PIER OPEN, WITH NO OFFSHORE PIER VESSEL LAYDOWN AREA
- FULL SIZE MULTI-LEVEL STORAGE WATERSIDE OF BAY ST.
- FULL-SIZE HEATED SHOPS WATERSIDE OF BAY ST.
- ADMIN/STAFF FACILITIES ON SECOND LEVEL OF STORAGE WATERSIDE OF BAY ST.
- PROGRAM ASPHALT PARKING ALL ON WATERSIDE OF BAY ST. AUXILARY GRAVEL PARKING ACROSS BAY STREET.
- STORAGE CONNEX BOXES & SMALL SHEDS ACROSS BAY ST.
- SEPTIC DRAIN FIELD & RESERVE FIELD ACROSS BAY ST.
- NO PERMANENT FACILITIES ON UPLANDS SIDE OF BAY ST.
- REASONABLE SITE CIRCULATION AREA
- FULL CODE COMPLIANCE

CONCLUSION:
MEETS ALL PROGRAMMATIC NEEDS

LEGENDS

Land & Water

- DEMOLITION OF (E) BUILDING & PIER
- HIGH TIDE LINE
- PROPERTY BOUNDARY
- BATHYMETRY
- PARCEL BOUNDARIES
- MAX ALLOWED HARD SURFACE AREA
- REQUIRED SETBACK ZONE
- HABITAT ZONE
- FEASIBLE DEVELOPMENT AREA (STEEP SLOPES)
- SITE RETAINING WALL (POTENTIAL)
- SITE STORAGE - MOBILE

Water Side Equipment & Glossary

- MHHW — MEAN HIGHER HIGH WATER (TIDAL)
- MLLW — MEAN LOWER LOW WATER (TIDAL)
- CONCRETE FLOAT
- FIXED PIER & GANGWAY ACCESS
- TRAVEL LIFT
- FENDER PILE W/ DONUT PILE
- FENDER PILE
- JIB CRANE W/ 20'R

Facilities

- ADMINISTRATIVE FUNCTIONS (2nd Floor when dashed lines)
- STAFF FUNCTIONS (2nd Floor when dashed lines)
- ENCLOSED & HEATED SHOPS
- HEATED STORAGE
- COVERED CANOPY
- MISC — FUTURE EXPANSION POTENTIAL
- A G — UNCOVERED PARKING ASPHALT/GRAVEL

PARCEL DATA

SHORELINE PARCELS:
HARD SURFACE AREA @70% = **78,928** S.F.
SETBACKS = 16,118 S.F.
TOTAL SITE AREA = 112,755 S.F.

UPLANDS PARCELS:
HARD SURFACE AREA @70% = **97,850.40** S.F.
TOTAL SITE @BAY STREET = 139,786.3 SF
SETBACKS = 19,086.7 SF
70% SURFACE AREA = 97,850.4 SF

FEASIBLE TO DEVELOP
(STEEP SLOPES W/ RETAINING WALLS)
= **39,501** S.F.

LIKELY AREA DEVELOPED
= **21,900** S.F.

PARKING REQUIRED

EMPLOYEES	19
VISITORS	4
ACCESSIBLE	4
KT VEHICLES	6
TOTAL	33

LAND USE

SETBACKS
* 0 @ WATER-DEPENDENT USES (SMP)
* 20' FROM BAY STREET
* 10' REAR & SIDES

HARD SURFACES
70% MAXIMUM SITE COVERAGE

BUILDING HEIGHTS
35'-0" MAXIMUM

NOTE: DRAWING MAY BE REDUCED
0 30' 60' 120'

Ferry Maintenance Facility Planning Study

KITSAP TRANSIT

Kitsap Marina & Suldan's Combined Properties

4-Parcel

S1

Port Orchard, WA

April 15, 2024

TCF Architecture
Project No. 2022-023

Kitsap Transit
Connecting Communities

kpff
Project No.
2200685

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NOTES:

1. CONCEPTUAL LAYOUTS REPRESENT GENERAL CONFIGURATIONS OF MAINTENANCE PIER, VESSELS, FLOATS, AND GANGWAYS. SIZES SHOWN ON DRAWINGS ARE BASED ON INITIAL ASSUMPTIONS AND ARE PROJECTED TO CHANGE AS DESIGN PROGRESSES.

ASSUMPTIONS:

1. VESSEL WITH LARGEST GEOMETRY THAT THE MAINTENANCE FACILITY WILL ACCOMODATE IS SHOWN. THE WIDEST VESSEL IS 40' IN WIDTH AND THE LONGEST VESSEL IS 140' IN LENGTH.
2. ALL EXISTING IN WATER STRUCTURES WILL BE DEMOLISHED.
3. GANGWAY WIDTH IS 6' AND MINIMUM GANGWAY LENGTH IS 80'.
4. JIB CRANE IS SHOWN AT THE EDGE OF THE MAINTENANCE PIER FOR LOADING AND UNLOADING PURPOSES.
5. TRAVEL LIFT IS SHOWN ON THE MAINTENANCE PIER FOR BOAT LIFTING PURPOSES.
6. EACH SITE INCORPORATES SUFFICEINT LAYDOWN TO ACCOMMODATE TWO VESSELS FOR MAINTENANCE.
7. A 13' CLEAR PERIMETER AROUND LAID DOWN VESSELS HAS BEEN ASSUMED TO ACCOMMODATE SAFE MOVEMENT OF THE HOIST AND MAINTENANCE VEHICLES
(SEE WHITE CROSS-HATCH ZONES @ PERIMETER OF EACH VESSEL)

S2 PLANNING OBSERVATIONS:

- 2 VESSELS ASHORE
- VESSELS HAULED & LAUNCHED INDEPENDENTLY
- ALL PIER OPEN, WITH NO OFFSHORE PIER VESSEL LAYDOWN AREA
- FULL SIZE MULTI-LEVEL STORAGE WATERSIDE OF BAY ST.
- FULL-SIZE HEATED SHOPS WATERSIDE OF BAY ST. (NEARER TO VESSELS)
- ADMIN/STAFF FACILITIES ON SECOND LEVEL OF STORAGE WATERSIDE OF BAY ST.
- PROGRAM ASPHALT PARKING ALL ON WATERSIDE OF BAY ST. AUXILARY GRAVEL PARKING ACROSS BAY STREET.
- STORAGE CONNEX BOXES & SMALL SHEDS ACROSS BAY ST.
- SEPTIC DRAIN FIELD & RESERVE FIELD ACROSS BAY ST.
- NO PERMANENT FACILITIES ON UPLANDS SIDE OF BAY ST.
- REASONABLE SITE CIRCULATION AREA
- FULL CODE COMPLIANCE

CONCLUSION:
MEETS ALL PROGRAMMATIC NEEDS

LEGENDS

Land & Water

- DEMOLITION OF (E) BUILDING & PIER
- HIGH TIDE LINE
- PROPERTY BOUNDARY
- BATHYMETRY
- PARCEL BOUNDARIES
- MAX ALLOWED HARD SURFACE AREA
- REQUIRED SETBACK ZONE
- HABITAT ZONE
- FEASIBLE DEVELOPMENT AREA (STEEP SLOPES)
- SITE RETAINING WALL (POTENTIAL)
- SITE STORAGE - MOBILE

Water Side Equipment & Glossary

- MHHW — MEAN HIGHER HIGH WATER (TIDAL)
- MLLW — MEAN LOWER LOW WATER (TIDAL)
- CONCRETE FLOAT
- FIXED PIER & GANGWAY ACCESS
- TRAVEL LIFT
- FENDER PILE W/ DONUT PILE
- FENDER PILE
- JIB CRANE W/ 20'R

Facilities

- ADMINISTRATIVE FUNCTIONS (2nd Floor when dashed lines)
- STAFF FUNCTIONS (2nd Floor when dashed lines)
- ENCLOSED & HEATED SHOPS
- HEATED STORAGE
- COVERED CANOPY
- MISC — FUTURE EXPANSION POTENTIAL
- A G — UNCOVERED PARKING ASPHALT/GRAVEL

PARCEL DATA

SHORELINE PARCELS:
HARD SURFACE AREA @70% = **81,129.12** S.F.
SETBACKS = 17,390.11 S.F.
TOTAL SITE = 115,898.75 S.F.

UPLANDS PARCELS:
HARD SURFACE AREA @70% = **97,850.40** S.F.
TOTAL SITE @BAY STREET = 139,786.3 SF
SETBACKS = 19,086.7 SF
70% SURFACE AREA = 97,850.4 SF

FEASIBLE TO DEVELOP
(STEEP SLOPES W/ RETAINING WALLS)
= **39,501** S.F.

LIKELY AREA DEVELOPED
= **21,900** S.F.

PARKING REQUIRED

EMPLOYEES	19
VISITORS	4
ACCESSIBLE	4
KT VEHICLES	6
TOTAL	33

LAND USE

SETBACKS
* 0 @ WATER-DEPENDENT USES (SMP)
* 20' FROM BAY STREET
* 10' REAR & SIDES

HARD SURFACES
70% MAXIMUM SITE COVERAGE

BUILDING HEIGHTS
35'-0" MAXIMUM

NOTE: DRAWING MAY BE REDUCED
0 30' 60' 120'

Ferry Maintenance Facility Planning Study

KITSAP TRANSIT

Kitsap Marina, Suldan's, Residence Combined Properties, 5-Parcel

S2

Port Orchard, WA

April 15, 2024

TCF Architecture
Project No. 2022-023

Kitsap Transit
Connecting Communities

kpff
Project No.
2200685

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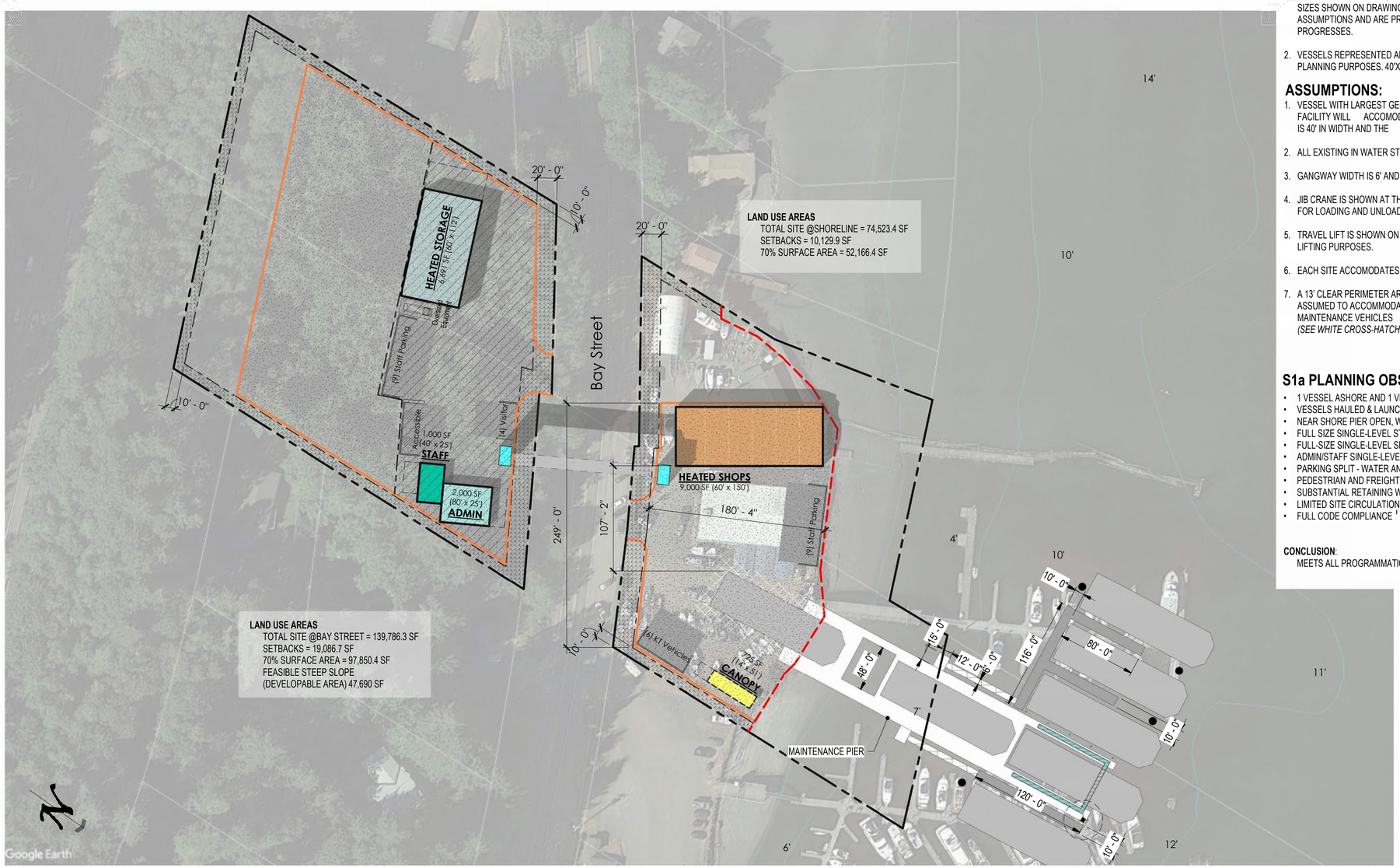

NOTES:

1. CONCEPTUAL LAYOUTS REPRESENT GENERAL CONFIGURATIONS OF MAINTENANCE PIER, VESSELS, FLOATS, AND GANGWAYS. SIZES SHOWN ON DRAWINGS ARE BASED ON INITIAL ASSUMPTIONS AND ARE PROJECTED TO CHANGE AS DESIGN PROGRESSES.
2. VESSELS REPRESENTED ARE THE LARGEST POTENTIAL SIZE FOR PLANNING PURPOSES. 40'X140' VESSEL.

ASSUMPTIONS:

1. VESSEL WITH LARGEST GEOMETRY THAT THE MAINTENANCE FACILITY WILL ACCOMODATE IS SHOWN. THE WIDEST VESSEL IS 40' IN WIDTH AND THE LONGEST VESSEL IS 140' IN LENGTH.
2. ALL EXISTING IN WATER STRUCTURES WILL BE DEMOLISHED.
3. GANGWAY WIDTH IS 6' AND MINIMUM GANGWAY LENGTH IS 80'.
4. JIB CRANE IS SHOWN AT THE EDGE OF THE MAINTENANCE PIER FOR LOADING AND UNLOADING PURPOSES.
5. TRAVEL LIFT IS SHOWN ON THE MAINTENANCE PIER FOR BOAT LIFTING PURPOSES.
6. EACH SITE ACCOMODATES TWO VESSELS FOR MAINTENANCE.
7. A 13' CLEAR PERIMETER AROUND LAID DOWN VESSELS HAS BEEN ASSUMED TO ACCOMMODATE SAFE MOVEMENT OF THE HOIST AND MAINTENANCE VEHICLES
(SEE WHITE CROSS-HATCHING @ PERIMETER OF EACH VESSEL)

S1a PLANNING OBSERVATIONS:

- 1 VESSEL ASHORE AND 1 VESSEL ON PIER
- VESSELS HAULED & LAUNCHED SEQUENTIALLY
- NEAR SHORE PIER OPEN, WITH OFFSHORE PIER VESSEL LAYDOWN AREA
- FULL SIZE SINGLE-LEVEL STORAGE UPLANDS SIDE OF BAY ST.
- FULL-SIZE SINGLE-LEVEL SHOP WATERSIDE OF BAY ST.
- ADMIN/STAFF SINGLE-LEVEL FACILITIES UPLANDS SIDE OF BAY ST.
- PARKING SPLIT - WATER AND UPLAND SIDES OF BAY ST.
- PEDESTRIAN AND FREIGHT BRIDGING STRUCTURE OVER BAY ST.
- SUBSTANTIAL RETAINING WALL UPLANDS SIDE OF BAY ST.
- LIMITED SITE CIRCULATION AREA
- FULL CODE COMPLIANCE [1]

CONCLUSION:
MEETS ALL PROGRAMMATIC NEEDS .

LEGENDS

- DEMOLITION OF (E) BUILDING & PIER
- HIGH TIDE LINE
- PROPERTY BOUNDARY
- BATHYMETRY
- PARCEL BOUNDARIES
- MAX ALLOWED HARD SURFACE AREA
- REQUIRED SETBACK ZONE
- HABITAT ZONE
- FEASIBLE DEVELOPMENT AREA (STEEP SLOPES)
- BRIDGE / TUNNEL W/ VERTICAL CIRCULATION TOWER

Water Side Equipment & Glossary

MHHW	MEAN HIGHER HIGH WATER (TIDAL)
MLLW	MEAN LOWER LOW WATER (TIDAL)

- CONCRETE FLOAT
- FIXED PIER & GANGWAY ACCESS
- TRAVEL LIFT
- FENDER PILE W/ DONUT PILE
- FENDER PILE
- JIB CRANE W/ 20'R

Facilities

- ADMINISTRATIVE FUNCTIONS (2nd Floor when dashed lines)
- STAFF FUNCTIONS (2nd Floor when dashed lines)
- ENCLOSED & HEATED SHOPS
- HEATED STORAGE
- COVERED CANOPY
- REDUCED PROGRAM AREA
- MISC — FUTURE EXPANSION POTENTIAL
- UNCOVERED PARKING

PARCEL DATA

SHORELINE PARCELS:
HARD SURFACE AREA @70% = **52,166.4** S.F.

UPLANDS PARCELS:
TOTAL POTENTIAL PER LAND USE
HARD SURFACE AREA @70% = **97,850.40** S.F.
LIKELY FEASIBLE (STEEP SLOPES):
HARD SURFACE AREA @70% = **36,525** S.F.

PARKING REQUIRED

EMPLOYEES	19
VISITORS	4
ACCESSIBLE	4
KT VEHICLES	6
TOTAL	33

MOORING OPTION KEY

OPTION 1 = TWO VESSEL LAY-DOWN AREA ASHORE W/ PIER OPTIONS

OPTION 2 = ONE VESSEL LAY-DOWN AREA ASHORE W/ OPTION FOR 2ND VESSLE IN PIER WATER SLOT OR ON PIER

LAND USE

SETBACKS
* 0 @ WATER-DEPENDENT USES (SMP)
* 20' FROM BAY STREET
* 10' @ REAR & SIDE SETBACKS

HARD SURFACES
70% MAXIMUM SITE COVERAGE

BUILDING HEIGHTS
35' MAXIMUM

NOTE: DRAWING MAY BE REDUCED
0 30' 60' 120'

Ferry Maintenance Facility Planning Study

KITSAP TRANSIT

Kitsap Marine Properties 2-Parcels Option 2

Single-Stories ALTERNATIVE A

S1.a

Port Orchard, WA

January 24, 2024

TCF Architecture
Project No. 2022-023

Kitsap Transit
Connecting Communities

kpff
Project No. 2200685

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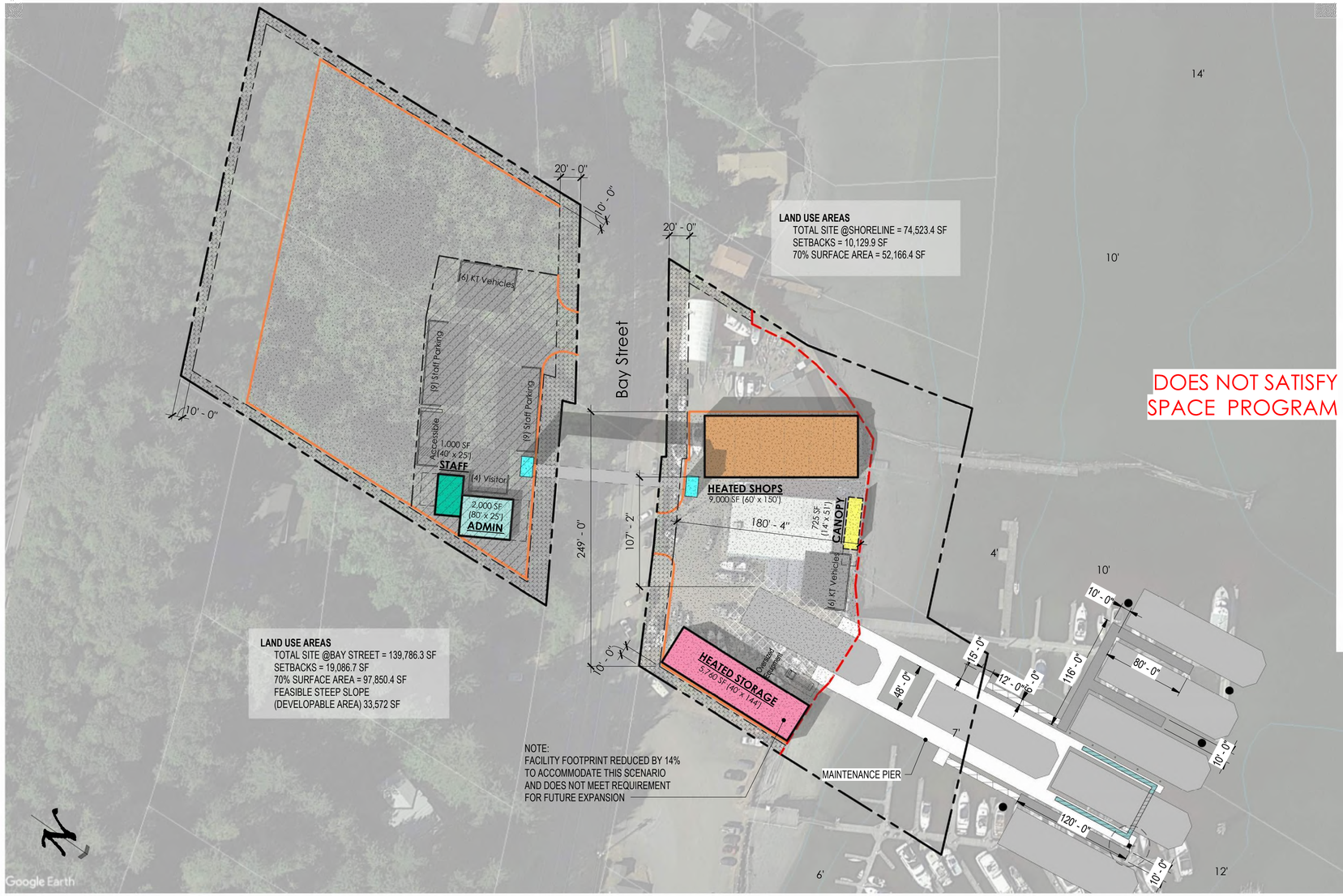

DOES NOT SATISFY SPACE PROGRAM

NOTES:

1. CONCEPTUAL LAYOUTS REPRESENT GENERAL CONFIGURATIONS OF MAINTENANCE PIER, VESSELS, FLOATS, AND GANGWAYS. SIZES SHOWN ON DRAWINGS ARE BASED ON INITIAL ASSUMPTIONS AND ARE PROJECTED TO CHANGE AS DESIGN PROGRESSES.
2. VESSELS REPRESENTED ARE THE LARGEST POTENTIAL SIZE FOR PLANNING PURPOSES. 40'X140' VESSEL.

ASSUMPTIONS:

1. VESSEL WITH LARGEST GEOMETRY THAT THE MAINTENANCE FACILITY WILL ACCOMODATE IS SHOWN. THE WIDEST VESSEL IS 40' IN WIDTH AND THE LONGEST VESSEL IS 140' IN LENGTH.
2. ALL EXISTING IN WATER STRUCTURES WILL BE DEMOLISHED.
3. GANGWAY WIDTH IS 6' AND MINIMUM GANGWAY LENGTH IS 80'.
4. JIB CRANE IS SHOWN AT THE EDGE OF THE MAINTENANCE PIER FOR LOADING AND UNLOADING PURPOSES.
5. TRAVEL LIFT IS SHOWN ON THE MAINTENANCE PIER FOR BOAT LIFTING PURPOSES.
6. EACH SITE ACCOMODATES TWO VESSELS FOR MAINTENANCE.
7. A 13' CLEAR PERIMETER AROUND LAID DOWN VESSELS HAS BEEN ASSUMED TO ACCOMMODATE SAFE MOVEMENT OF THE HOIST AND MAINTENANCE VEHICLES
(SEE WHITE CROSS-HATCHING @ PERIMETER OF EACH VESSEL)

S1b PLANNING OBSERVATIONS:

- 1 VESSEL ASHORE AND 1 VESSEL ON PIER
- VESSELS HAULED & LAUNCHED SEQUENTIALLY
- NEAR SHORE PIER OPEN, WITH OFFSHORE PIER VESSEL LAYDOWN AREA
- REDUCED SIZE SINGLE-LEVEL STORAGE WATERSIDE OF BAY ST.
- FULL-SIZE SINGLE-LEVEL SHOP WATERSIDE OF BAY ST.
- ADMIN/STAFF FACILITIES SINGLE-LEVEL UPLANDS SIDE OF BAY ST.
- PARKING SPLIT - WATER AND UPLAND SIDES OF BAY ST.
- (INCREASED UPLANDS)
- PEDESTRIAN ONLY BRIDGING STRUCTURE OVER BAY ST.
- REDUCED RETAINING WALL UPLANDS SIDE OF BAY ST.
- LIMITED SITE CIRCULATION AREA
- FULL CODE COMPLIANCE

CONCLUSION:
FALLS SHORT OF MEETING ALL PROGRAMMATIC NEEDS (14% SHORTFALL) .

PARCEL DATA

SHORELINE PARCELS:
HARD SURFACE AREA @70% = **52,166.4** S.F.

UPLANDS PARCELS:
TOTAL POTENTIAL PER LAND USE
HARD SURFACE AREA @70% = **97,850.40** S.F.
LIKELY FEASIBLE (STEEP SLOPES):
HARD SURFACE AREA @70% = **33,572** S.F.

PARKING REQUIRED

EMPLOYEES	19
VISITORS	4
ACCESSIBLE	4
KT VEHICLES	6
TOTAL	33

MOORING OPTION KEY

OPTION 1 = TWO VESSEL LAY-DOWN AREA ASHORE W/ PIER OPTIONS

OPTION 2 = ONE VESSEL LAY-DOWN AREA ASHORE W/ OPTION FOR 2ND VESSLE IN PIER WATER SLOT OR ON PIER

LEGENDS

- DEMOLITION OF (E) BUILDING & PIER
- HIGH TIDE LINE
- PROPERTY BOUNDARY
- BATHYMETRY
- PARCEL BOUNDARIES
- MAX ALLOWED HARD SURFACE AREA
- REQUIRED SETBACK ZONE
- HABITAT ZONE
- FEASIBLE DEVELOPMENT AREA (STEEP SLOPES)
- BRIDGE / TUNNEL W/ VERTICAL CIRCULATION TOWER

Water Side Equipment & Glossary

MHHW	MEAN HIGHER HIGH WATER (TIDAL)
MLLW	MEAN LOWER LOW WATER (TIDAL)

- CONCRETE FLOAT
- FIXED PIER & GANGWAY ACCESS
- TRAVEL LIFT
- FENDER PILE W/ DONUT PILE
- FENDER PILE
- JIB CRANE W/ 20'R

Facilities

- ADMINISTRATIVE FUNCTIONS (2nd Floor when dashed lines)
- STAFF FUNCTIONS (2nd Floor when dashed lines)
- ENCLOSED & HEATED SHOPS
- HEATED STORAGE
- COVERED CANOPY
- REDUCED PROGRAM AREA
- MISC — FUTURE EXPANSION POTENTIAL
- UNCOVERED PARKING

LAND USE

SETBACKS
* 0 @ WATER-DEPENDENT USES (SMP)
* 20' FROM BAY STREET
* 10' @ REAR & SIDE SETBACKS

HARD SURFACES
70% MAXIMUM SITE COVERAGE

BUILDING HEIGHTS
35' MAXIMUM

NOTE: DRAWING MAY BE REDUCED
0 30' 60' 120'

Ferry Maintenance Facility Planning Study

KITSAP TRANSIT

Kitsap Marine Properties 2-Parcels Single-Stories

Option 2 ALTERNATIVE B

S1.b

Port Orchard, WA

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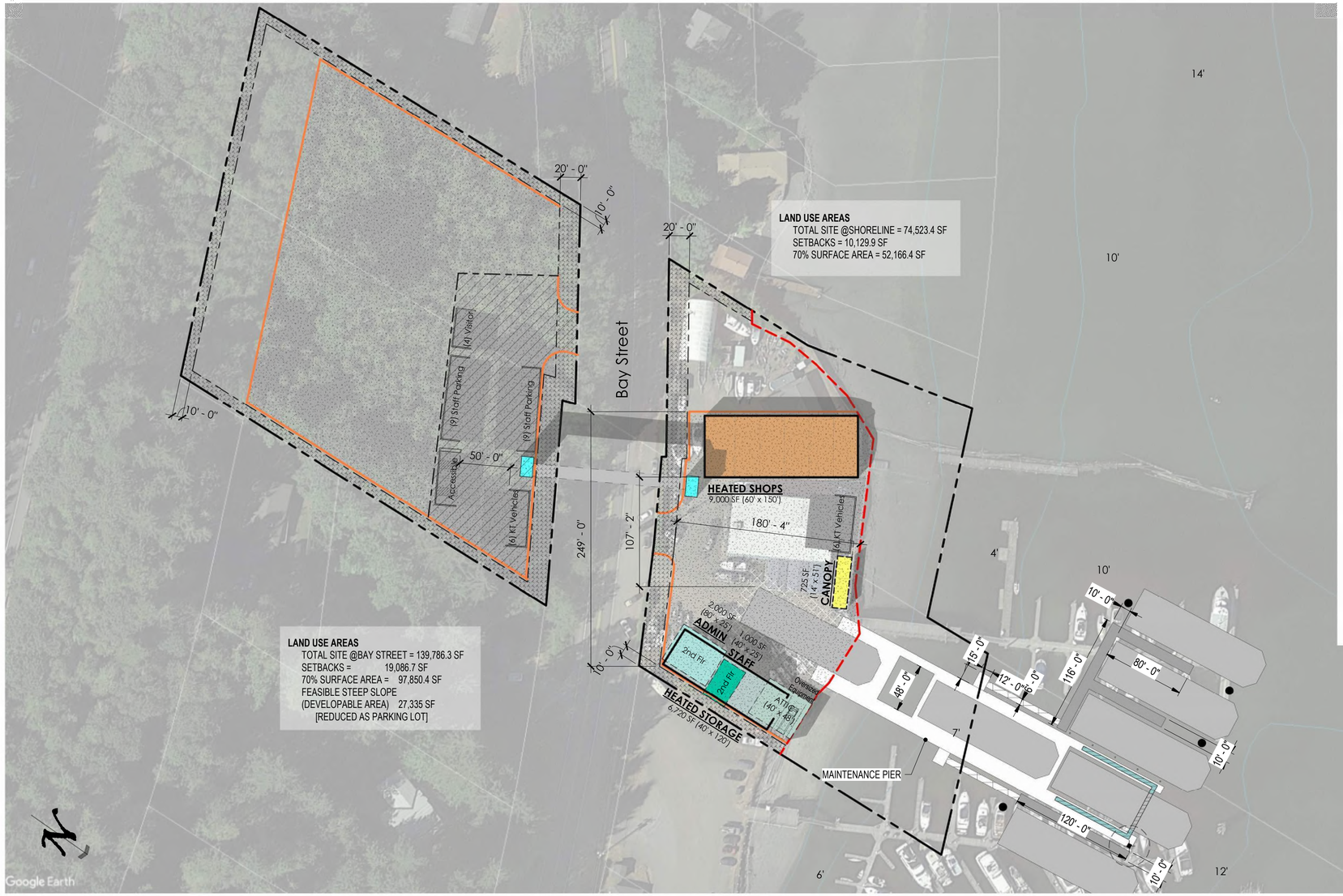

NOTES:

1. CONCEPTUAL LAYOUTS REPRESENT GENERAL CONFIGURATIONS OF MAINTENANCE PIER, VESSELS, FLOATS, AND GANGWAYS. SIZES SHOWN ON DRAWINGS ARE BASED ON INITIAL ASSUMPTIONS AND ARE PROJECTED TO CHANGE AS DESIGN PROGRESSES.
2. VESSELS REPRESENTED ARE THE LARGEST POTENTIAL SIZE FOR PLANNING PURPOSES. 40'X140' VESSEL.

ASSUMPTIONS:

1. VESSEL WITH LARGEST GEOMETRY THAT THE MAINTENANCE FACILITY WILL ACCOMODATE IS SHOWN. THE WIDEST VESSEL IS 40' IN WIDTH AND THE LONGEST VESSEL IS 140' IN LENGTH.
2. ALL EXISTING IN WATER STRUCTURES WILL BE DEMOLISHED.
3. GANGWAY WIDTH IS 6' AND MINIMUM GANGWAY LENGTH IS 80'.
4. JIB CRANE IS SHOWN AT THE EDGE OF THE MAINTENANCE PIER FOR LOADING AND UNLOADING PURPOSES.
5. TRAVEL LIFT IS SHOWN ON THE MAINTENANCE PIER FOR BOAT LIFTING PURPOSES.
6. EACH SITE ACCOMODATES TWO VESSELS FOR MAINTENANCE.
7. A 13' CLEAR PERIMETER AROUND LAID DOWN VESSELS HAS BEEN ASSUMED TO ACCOMMODATE SAFE MOVEMENT OF THE HOIST AND MAINTENANCE VEHICLES
(SEE WHITE CROSS-HATCHING @ PERIMETER OF EACH VESSEL)

S1c PLANNING OBSERVATIONS:

- 1 VESSEL ASHORE AND 1 VESSEL ON PIER
- VESSELS HAULED & LAUNCHED SEQUENTIALLY
- NEAR SHORE PIER OPEN, WITH OFFSHORE PIER VESSEL LAYDOWN AREA
- FULL SIZE MULTI-LEVEL STORAGE WATERSIDE OF BAY ST.
- FULL-SIZE SINGLE-LEVEL SHOP WATERSIDE OF BAY ST.
- ADMIN/STAFF FACILITIES ON SECOND LEVEL OF STORAGE WATERSIDE OF BAY ST.
- PARKING PREDOMINANTLY ON UPLAND SIDES OF BAY ST (KT VEHICLES AT WATERSIDE).
- PEDESTRIAN ONLY BRIDGING STRUCTURE OVER BAY ST.
- FURTHER REDUCED RETAINING WALL & DEVELOPED LAND COSTS AT UPLANDS SIDE OF BAY ST.
- LIMITED SITE CIRCULATION AREA
- FULL CODE COMPLIANCE

CONCLUSION:
MEETS ALL PROGRAMMATIC NEEDS.

PARCEL DATA

SHORELINE PARCELS:
HARD SURFACE AREA @70% = **52,166.4** S.F.

UPLANDS PARCELS:
TOTAL POTENTIAL PER LAND USE
HARD SURFACE AREA @70% = **97,850.40** S.F.
LIKELY FEASIBLE (STEEP SLOPES):
HARD SURFACE PARKING AREA = **27,335** S.F.

PARKING REQUIRED

EMPLOYEES	19
VISITORS	4
ACCESSIBLE	4
KT VEHICLES	6
TOTAL	33

MOORING OPTION KEY

OPTION 1 = TWO VESSEL LAY-DOWN AREA ASHORE W/ PIER OPTIONS

OPTION 2 = ONE VESSEL LAY-DOWN AREA ASHORE W/ OPTION FOR 2ND VESSLE IN PIER WATER SLOT OR ON PIER

LEGENDS

- DEMOLITION OF (E) BUILDING & PIER
- HIGH TIDE LINE
- PROPERTY BOUNDARY
- BATHYMETRY
- PARCEL BOUNDARIES
- MAX ALLOWED HARD SURFACE AREA
- REQUIRED SETBACK ZONE
- HABITAT ZONE
- FEASIBLE DEVELOPMENT AREA (STEEP SLOPES)
- BRIDGE / TUNNEL W/ VERTICAL CIRCULATION TOWER

Water Side Equipment & Glossary

MHHW	MEAN HIGHER HIGH WATER (TIDAL)
MLLW	MEAN LOWER LOW WATER (TIDAL)

- CONCRETE FLOAT
- FIXED PIER & GANGWAY ACCESS
- TRAVEL LIFT
- FENDER PILE W/ DONUT PILE
- FENDER PILE
- JIB CRANE W/ 20'R

Facilities

- ADMINISTRATIVE FUNCTIONS (2nd Floor when dashed lines)
- STAFF FUNCTIONS (2nd Floor when dashed lines)
- ENCLOSED & HEATED SHOPS
- HEATED STORAGE
- COVERED CANOPY
- REDUCED PROGRAM AREA
- MISC — FUTURE EXPANSION POTENTIAL
- UNCOVERED PARKING

SETBACKS| ISF
* 0 @ WATER-DEPENDENT USES (SMP)
* 20' FROM BAY STREET
* 10' @ REAR & SIDE SETBACKS

HARD SURFACES
70% MAXIMUM SITE COVERAGE

BUILDING HEIGHTS
35' MAXIMUM

NOTE: DRAWING MAY BE REDUCED
0 30' 60' 120'

Ferry Maintenance Facility Planning Study

KITSAP TRANSIT

Kitsap Marine Properties 2-Parcels Option 2
Second-Stories ALTERNATIVE C

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NOTES:

1. CONCEPTUAL LAYOUTS REPRESENT GENERAL CONFIGURATIONS OF MAINTENANCE PIER, VESSELS, FLOATS, AND GANGWAYS. SIZES SHOWN ON DRAWINGS ARE BASED ON INITIAL ASSUMPTIONS AND ARE PROJECTED TO CHANGE AS DESIGN PROGRESSES.
2. VESSELS REPRESENTED ARE THE LARGEST POTENTIAL SIZE FOR PLANNING PURPOSES. 40'X140' VESSEL.

ASSUMPTIONS:

1. VESSEL WITH LARGEST GEOMETRY THAT THE MAINTENANCE FACILITY WILL ACCOMODATE IS SHOWN. THE WIDEST VESSEL IS 40' IN WIDTH AND THE LONGEST VESSEL IS 140' IN LENGTH.
2. ALL EXISTING IN WATER STRUCTURES WILL BE DEMOLISHED.
3. GANGWAY WIDTH IS 6' AND MINIMUM GANGWAY LENGTH IS 80'.
4. JIB CRANE IS SHOWN AT THE EDGE OF THE MAINTENANCE PIER FOR LOADING AND UNLOADING PURPOSES.
5. TRAVEL LIFT IS SHOWN ON THE MAINTENANCE PIER FOR BOAT LIFTING PURPOSES.
6. EACH SITE ACCOMODATES TWO VESSELS FOR MAINTENANCE.
7. A 13' CLEAR PERIMETER AROUND LAID DOWN VESSELS HAS BEEN ASSUMED TO ACCOMMODATE SAFE MOVEMENT OF THE HOIST AND MAINTENANCE VEHICLES
(SEE WHITE CROSS-HATCHING @ PERIMETER OF EACH VESSEL)

Land Use Code Variance Required

Does not Satisfy Parking Program

S1d PLANNING OBSERVATIONS:

- 1 VESSEL ASHORE AND 1 VESSEL ON PIER
- VESSELS HAULED & LAUNCHED SEQUENTIALLY
- NEAR SHORE PIER OPEN, WITH OFFSHORE PIER VESSEL LAYDOWN AREA
- FULL SIZE TWO-LEVEL STORAGE WATERSIDE OF BAY ST.
- FULL-SIZE SINGLE-LEVEL SHOP WATERSIDE OF BAY ST.
- ADMIN/STAFF FACILITIES ON SECOND LEVEL OF STORAGE WATERSIDE OF BAY ST.
- NO PARKING ON UPLAND SIDES OF BAY ST.
- NO BRIDGING STRUCTURE OVER BAY ST.
- ALL OPERATIONS MOVED TO WATERSIDE OF BAY ST. WITH NO RETAINING WALL UPLANDS SIDE OF BAY ST.
- LIMITED SITE CIRCULATION AREA
- VARIANCE FROM LAND USE CODE IS REQUIRED
- FALLS SHORT OF MEETING ALL PROGRAMMATIC NEEDS (INSUFFICIENT PARKING - NO ACCESSIBLE BAYS)

CONCLUSION:
FALLS SHORT OF MEETING ALL PROGRAMMATIC NEEDS (INSUFFICIENT PARKING)

LEGENDS

- DEMOLITION OF (E) BUILDING & PIER
- HIGH TIDE LINE
- PROPERTY BOUNDARY
- BATHYMETRY
- PARCEL BOUNDARIES
- MAX ALLOWED HARD SURFACE AREA
- REQUIRED SETBACK ZONE
- HABITAT ZONE
- FEASIBLE DEVELOPMENT AREA (STEEP SLOPES)
- BRIDGE / TUNNEL W/ VERTICAL CIRCULATION TOWER

Water Side Equipment & Glossary

MHHW	MEAN HIGHER HIGH WATER (TIDAL)
MLLW	MEAN LOWER LOW WATER (TIDAL)

- CONCRETE FLOAT
- FIXED PIER & GANGWAY ACCESS
- TRAVEL LIFT
- FENDER PILE W/ DONUT PILE
- FENDER PILE
- JIB CRANE W/ 20'R

Facilities

- ADMINISTRATIVE FUNCTIONS (2nd Floor when dashed lines)
- STAFF FUNCTIONS (2nd Floor when dashed lines)
- ENCLOSED & HEATED SHOPS
- HEATED STORAGE
- COVERED CANOPY
- REDUCED PROGRAM AREA
- MISC — FUTURE EXPANSION POTENTIAL
- UNCOVERED PARKING

PARCEL DATA

SHORELINE PARCELS:
HARD SURFACE AREA @70% = **52,166.4** S.F.

LAND USE ADDED PARCEL AREA:
HARD SURFACE AREA = **22,432** S.F.
TOTAL @100% = **74,598** S.F.

PARKING REQUIRED

EMPLOYEES	19
VISITORS	4
ACCESSIBLE	4
KT VEHICLES	6
TOTAL	33

MOORING OPTION KEY

OPTION 1 = TWO VESSEL LAY-DOWN AREA ASHORE W/ PIER OPTIONS

OPTION 2 = ONE VESSEL LAY-DOWN AREA ASHORE W/ OPTION FOR 2ND VESSLE IN PIER WATER SLOT OR ON PIER

LAND USE

SETBACKS
* 0 @ WATER-DEPENDENT USES (SMP)
* 20' FROM BAY STREET
* 10' @ REAR & SIDE SETBACKS

HARD SURFACES
70% MAXIMUM SITE COVERAGE

BUILDING HEIGHTS
35' MAXIMUM

NOTE: DRAWING MAY BE REDUCED
0 30' 60' 120'

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Ferry Maintenance Facility Planning Study

KITSAP TRANSIT

Kitsap Marine Properties 2-Parcels Option 2

Second-Stories

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January 24, 2024

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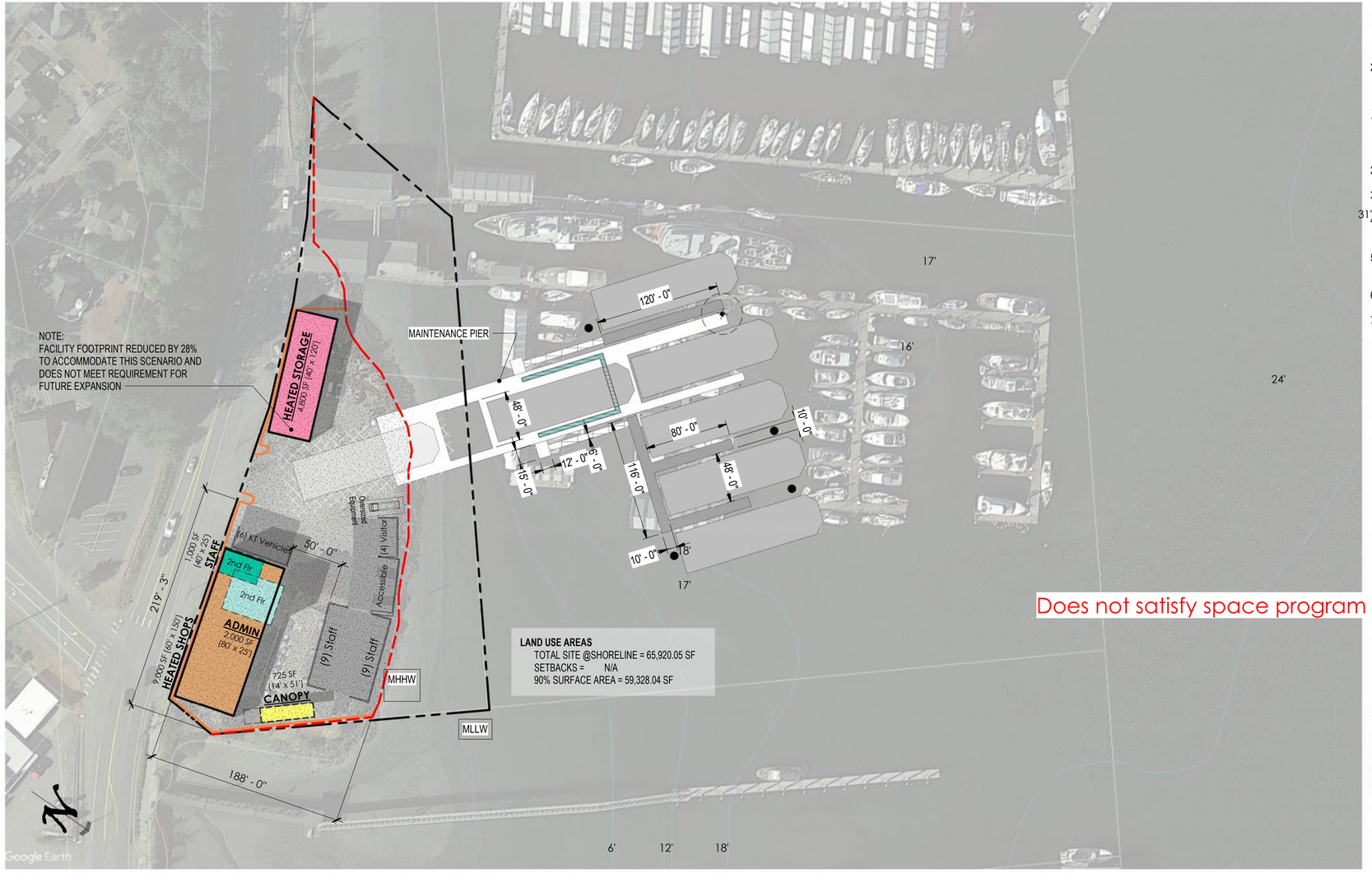

Does not satisfy space program

NOTES:

1. CONCEPTUAL LAYOUTS REPRESENT GENERAL CONFIGURATIONS OF MAINTENANCE PIER, VESSELS, FLOATS, AND GANGWAYS. SIZES SHOWN ON DRAWINGS ARE BASED ON INITIAL ASSUMPTIONS AND ARE PROJECTED TO CHANGE AS DESIGN PROGRESSES.
2. VESSELS REPRESENTED ARE THE LARGEST POTENTIAL SIZE FOR PLANNING PURPOSES. 40'X140' VESSEL.

ASSUMPTIONS:

1. VESSEL WITH LARGEST GEOMETRY THAT THE MAINTENANCE FACILITY WILL ACCOMODATE IS SHOWN. THE WIDEST VESSEL IS 40' IN WIDTH AND THE LONGEST VESSEL IS 140' IN LENGTH.
2. ALL EXISTING IN WATER STRUCTURES WILL BE DEMOLISHED.
3. GANGWAY WIDTH IS 6' AND MINIMUM GANGWAY LENGTH IS 80'.
4. JIB CRANE IS SHOWN AT THE EDGE OF THE MAINTENANCE PIER FOR LOADING AND UNLOADING PURPOSES.
5. TRAVEL LIFT IS SHOWN ON THE MAINTENANCE PIER FOR BOAT LIFTING PURPOSES.
6. EACH SITE ACCOMODATES TWO VESSELS FOR MAINTENANCE.
7. A 13' CLEAR PERIMETER AROUND LAID DOWN VESSELS HAS BEEN ASSUMED TO ACCOMMODATE SAFE MOVEMENT OF THE HOIST AND MAINTENANCE VEHICLES
(SEE WHITE CROSS-HATCHING @ PERIMETER OF EACH VESSEL)

S3a PLANNING OBSERVATIONS:

- 1 VESSEL ASHORE AND 1 VESSEL ON PIER
- VESSELS HAULED & LAUNCHED SEQUENTIALLY
- NEAR SHORE PIER PARTIALLY OPEN, WITH OFFSHORE PIER VESSEL LAYDOWN AREA
- REDUCED SIZE SINGLE-LEVEL STORAGE WATERSIDE OF BAY ST. (28% SHORTFALL)
- FULL-SIZE MULTI-LEVEL SHOP WATERSIDE OF BAY ST.
- ADMIN/STAFF FACILITIES ON SECOND LEVEL OF SHOP WATERSIDE OF BAY ST.
- PARKING ALL ON WATERSIDE OF BAY ST.
- NO BRIDGING STRUCTURE OVER BAY ST.
- LIMITED SITE CIRCULATION AREA
- FULL CODE COMPLIANCE

CONCLUSION:
FALLS SHORT OF MEETING ALL PROGRAMMATIC NEEDS

LEGENDS

- DEMOLITION OF (E) BUILDING & PIER
- HIGH TIDE LINE
- PROPERTY BOUNDARY
- BATHYMETRY
- PARCEL BOUNDARIES
- MAX ALLOWED HARD SURFACE AREA
- REQUIRED SETBACK ZONE
- HABITAT ZONE
- FEASIBLE DEVELOPMENT AREA (STEEP SLOPES)
- BRIDGE / TUNNEL W/ VERTICAL CIRCULATION TOWER

Water Side Equipment & Glossary

- MHHW — MEAN HIGHER HIGH WATER (TIDAL)
- MLLW — MEAN LOWER LOW WATER (TIDAL)
- CONCRETE FLOAT
- FIXED PIER & GANGWAY ACCESS
- TRAVEL LIFT
- FENDER PILE W/ DONUT PILE
- FENDER PILE
- JIB CRANE W/ 20'R

Facilities

- ADMINISTRATIVE FUNCTIONS (2nd Floor when dashed lines)
- STAFF FUNCTIONS (2nd Floor when dashed lines)
- ENCLOSED & HEATED SHOPS
- HEATED STORAGE
- COVERED CANOPY
- REDUCED PROGRAM AREA
- MISC — FUTURE EXPANSION POTENTIAL
- UNCOVERED PARKING

PARCEL DATA

HARD SURFACE AREA @90%
= 59,328.04 S.F.

PARKING REQUIRED

EMPLOYEES	19
VISITORS	4
ACCESSIBLE	4
KT VEHICLES	6
TOTAL	33

MOORING OPTION KEY

OPTION 1 = TWO VESSEL LAY-DOWN AREA ASHORE W/ PIER OPTIONS

OPTION 2 = ONE VESSEL LAY-DOWN AREA ASHORE W/ OPTION FOR 2ND VESSLE IN PIER WATER SLOT OR ON PIER

LAND USE

SETBACKS
* 0 @ WATER-DEPENDENT USES (SMP)
(NO OTHER REQUIREMENTS)

HARD SURFACES
90% MAXIMUM SITE COVERAGE

BUILDING HEIGHTS
3 STORIES MAXIMUM

NOTE:
PARKING IS ONLY ALLOWED ON SIDES AND REAR OF BUILDINGS

NOTE: DRAWING MAY BE REDUCED
0 30' 60' 120'

Ferry Maintenance Facility Planning Study

KITSAP TRANSIT

Port Orchard Railway Marina & Bar & Grille
Properties 2-Parcels Second-Stories ALTERNATIVE A

S3.a

Port Orchard, WA

January 24, 2024

TCF Architecture
Project No. 2022-023

Kitsap Transit
Connecting Communities

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Project No.
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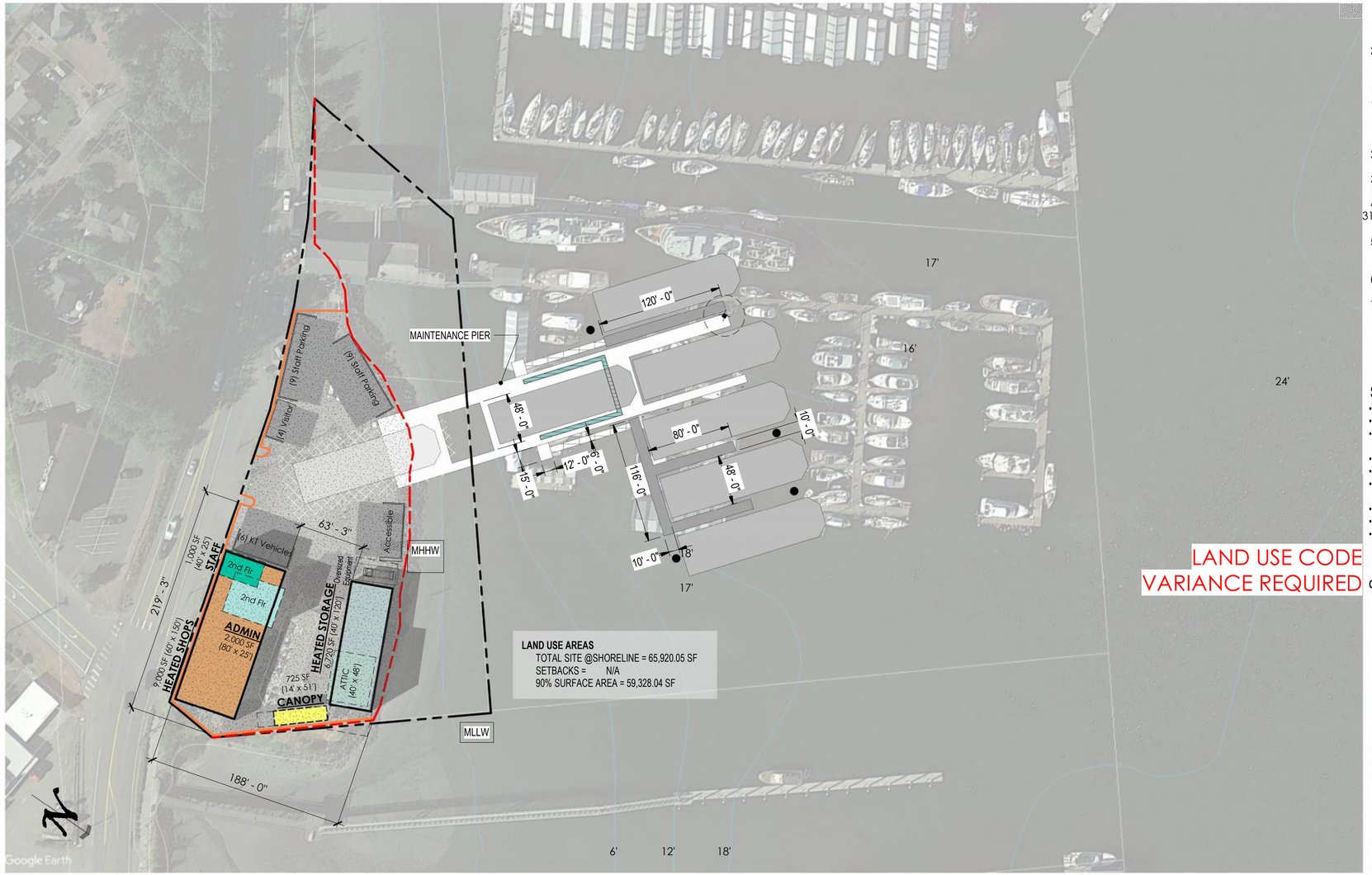

NOTES:

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ASSUMPTIONS:

1. VESSEL WITH LARGEST GEOMETRY THAT THE MAINTENANCE FACILITY WILL ACCOMODATE IS SHOWN. THE WIDEST VESSEL IS 40' IN WIDTH AND THE LONGEST VESSEL IS 140' IN LENGTH.
2. ALL EXISTING IN WATER STRUCTURES WILL BE DEMOLISHED.
3. GANGWAY WIDTH IS 6' AND MINIMUM GANGWAY LENGTH IS 80'.
4. JIB CRANE IS SHOWN AT THE EDGE OF THE MAINTENANCE PIER FOR LOADING AND UNLOADING PURPOSES.
5. TRAVEL LIFT IS SHOWN ON THE MAINTENANCE PIER FOR BOAT LIFTING PURPOSES.
6. EACH SITE ACCOMODATES TWO VESSELS FOR MAINTENANCE.
7. A 13' CLEAR PERIMETER AROUND LAID DOWN VESSELS HAS BEEN ASSUMED TO ACCOMMODATE SAFE MOVEMENT OF THE HOIST AND MAINTENANCE VEHICLES
   (SEE WHITE CROSS-HATCHING @ PERIMETER OF EACH VESSEL)

S3.b PLANNING OBSERVATIONS:

- 1 VESSEL ASHORE AND 1 VESSEL ON PIER
- VESSELS HAULED & LAUNCHED SEQUENTIALLY
- NEAR SHORE PIER PARTIALLY OPEN, WITH OFFSHORE PIER VESSEL LAYDOWN AREA
- FULL SIZE MULTI-LEVEL STORAGE WATERSIDE OF BAY ST.
- FULL-SIZE SINGLE-LEVEL SHOP WATERSIDE OF BAY ST.
- ADMIN/STAFF FACILITIES ON SECOND LEVEL OF SHOP WATERSIDE OF BAY ST.
- PARKING ALL ON WATERSIDE OF BAY ST.
- LIMITED SITE CIRCULATION AREA
- VARIANCE FROM LAND USE CODE IS REQUIRED REQUIRED (PARKING ALONG BAY ST.)

CONCLUSION:
MEETS ALL PROGRAMMATIC NEEDS

LEGENDS

- DEMOLITION OF (E) BUILDING & PIER
- HIGH TIDE LINE
- PROPERTY BOUNDARY
- BATHYMETRY
- PARCEL BOUNDARIES
- MAX ALLOWED HARD SURFACE AREA
- REQUIRED SETBACK ZONE
- HABITAT ZONE
- FEASIBLE DEVELOPMENT AREA (STEEP SLOPES)
- BRIDGE / TUNNEL W/ VERTICAL CIRCULATION TOWER

Water Side Equipment & Glossary

MHHW	MEAN HIGHER HIGH WATER (TIDAL)
MLLW	MEAN LOWER LOW WATER (TIDAL)

- CONCRETE FLOAT
- FIXED PIER & GANGWAY ACCESS
- TRAVEL LIFT
- FENDER PILE W/ DONUT PILE
- FENDER PILE
- JIB CRANE W/ 20'R

Facilities

- ADMINISTRATIVE FUNCTIONS (2nd Floor when dashed lines)
- STAFF FUNCTIONS (2nd Floor when dashed lines)
- ENCLOSED & HEATED SHOPS
- HEATED STORAGE
- COVERED CANOPY
- REDUCED PROGRAM AREA
- MISC — FUTURE EXPANSION POTENTIAL
- UNCOVERED PARKING

PARCEL DATA

HARD SURFACE AREA @90%
= **59,328.04 S.F.**

PARKING REQUIRED

EMPLOYEES	19
VISITORS	4
ACCESSIBLE	4
KT VEHICLES	6
TOTAL	33

MOORING OPTION KEY

OPTION 1 = TWO VESSEL LAY-DOWN AREA ASHORE W/ PIER OPTIONS

OPTION 2 = ONE VESSEL LAY-DOWN AREA ASHORE W/ OPTION FOR 2ND VESSLE IN PIER WATER SLOT OR ON PIER

SETBACKS | USE
0 @ WATER-DEPENDENT USES (SMP)
(NO OTHER REQUIREMENTS)

HARD SURFACES
90% MAXIMUM SITE COVERAGE

BUILDING HEIGHTS
3 STORIES MAXIMUM

NOTE:
PARKING IS ONLY ALLOWED ON SIDES AND REAR OF BUILDINGS

NOTE: DRAWING MAY BE REDUCED
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Ferry Maintenance Facility Planning Study

KITSAP TRANSIT

Port Orchard Railway Marina & Bar & Grille
Properties 2-Parcels Second-Stories ALTERNATIVE B

S3.b

Port Orchard, WA

January 24, 2024

TCF Architecture
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Kitsap Transit
Connecting Communities

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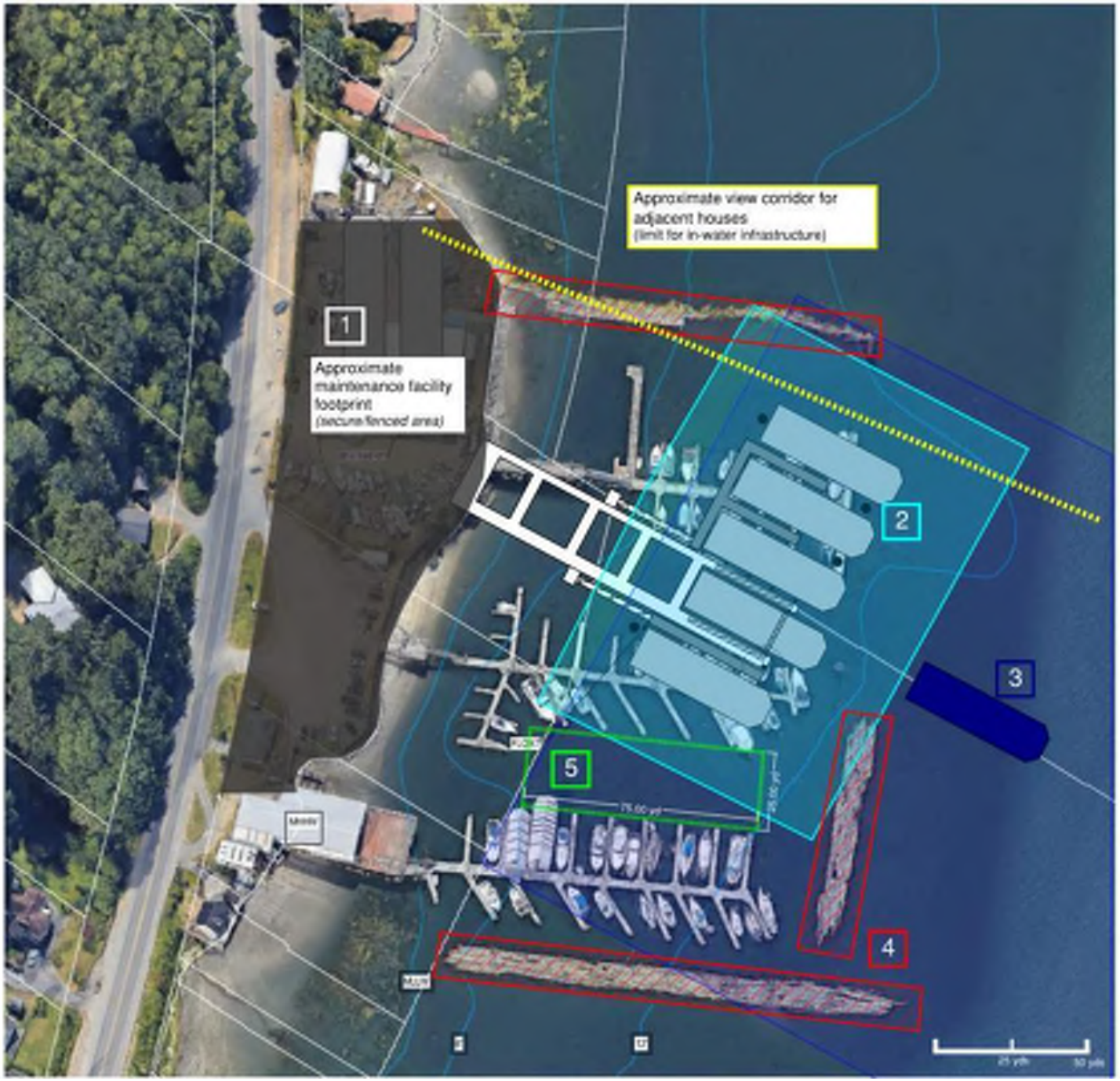
APPENDIX F

SUMMARY OF CHALLENGES OF CO-LOCATING MAINTENANCE FACILITY WITH PUBLIC MARINA OPERATIONS

Summary of Challenges of Co-Locating Public Marina Use with Ferry Maintenance Facility

Conceptual-level facility layout and approximate distances for demonstration of constraints and conflicts



1 With proposed layout of maintenance facility shown, remaining property would lack space on site or nearby to provide marina administration, parking, or boat ramp. *Estimated minimum parking of 100 spaces (1 per slip)*

2 Per 33 CFR 165.1317, No vessel or person is allowed within 25 yards of a large passenger vessel that is moored.

3 Additionally, no vessel or person is allowed within 100 yards of a large passenger vessel that is underway or at anchor, unless authorized by the on-scene official patrol or large passenger vessel master.

4 Breakwater removal required for ferry access, will create wave conditions for recreational vessels

5 Per Unified Facilities Criteria (UFC) *Design: Small Craft Berthing Facilities* Section 5-2.1 specifications for clear interior channels for recreational marinas/small craft berthing, minimum width should be whichever is greater of:

- 1.5 L , where L is the overall length of the longest boat using the channel or
- 75 ft. (23 m) (100 ft. preferred)

Additional Considerations to Note:

Pier placed based on water depths near shore to minimize over-water coverage, as well as provide uplands space needed for boat lift maneuvering.

Removal of existing recreational vessel moorage and breakwaters supports on-site mitigation to compensate for over-water coverage associated with maintenance pier.

APPENDIX G

STORYMAP & COMMUNITY SURVEY RESULTS

Ferry Maintenance Facility Project

Learn why Kitsap Transit needs a ferry maintenance facility and the process of identifying a suitable location.

January 23, 2024

If you need accessibility assistance with this StoryMap, please call Kitsap Transit customer service at (800) 501-7433

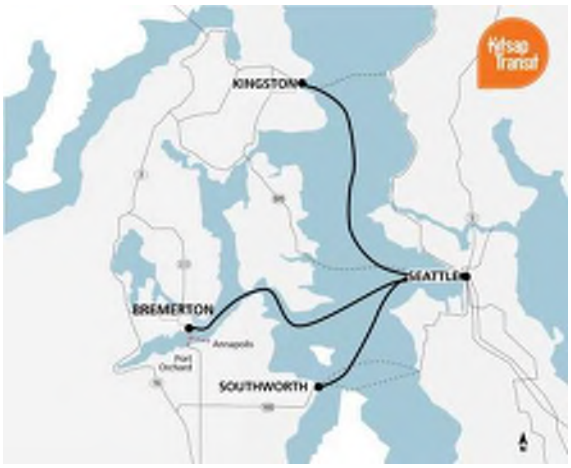
*Para la traducción de este documento al español, llame al **1-800-501-7433** o **(360) 377-2877** durante el horario regular de oficina. El personal de servicio al cliente lo contactará a un intérprete.*

Para sa pagsasalin ng dokumentong ito sa Tagalog, mangyaring tawagan ang 1-800-501-7433 o (360) 377-2877 sa normal na oras ng trabaho. Ikokonekta ka ng kawani ng customer service sa isang tagapagsalin.

This StoryMap is best experienced on a mobile device. If viewing on a desktop, click on images to expand.

Kitsap Ferries: A Growing Regional Service

Since launching Fast Ferry service in 2017, Kitsap Transit's ferry program has quickly grown to include 10 vessels, now Washington's second largest ferry fleet.



Kitsap ferries play an important role in the regional transportation system. In the first half of 2023, Kitsap ferries carried over 600,000 riders to their destinations.

Its high-speed ferries link Bremerton, Kingston, and Southworth with downtown Seattle. Local foot ferries shuttle Puget Sound Naval Shipyard employees and connect South Kitsap residents to Seattle through the Bremerton Fast Ferry service.

The Kitsap Ferries Fleet

The current Kitsap Transit fleet includes 10 vessels with unique moorage, maintenance, and repair needs—ranging from a 100-year-old wooden ferry to new vessels with state-of-the-art technology.

Rich Passage 1

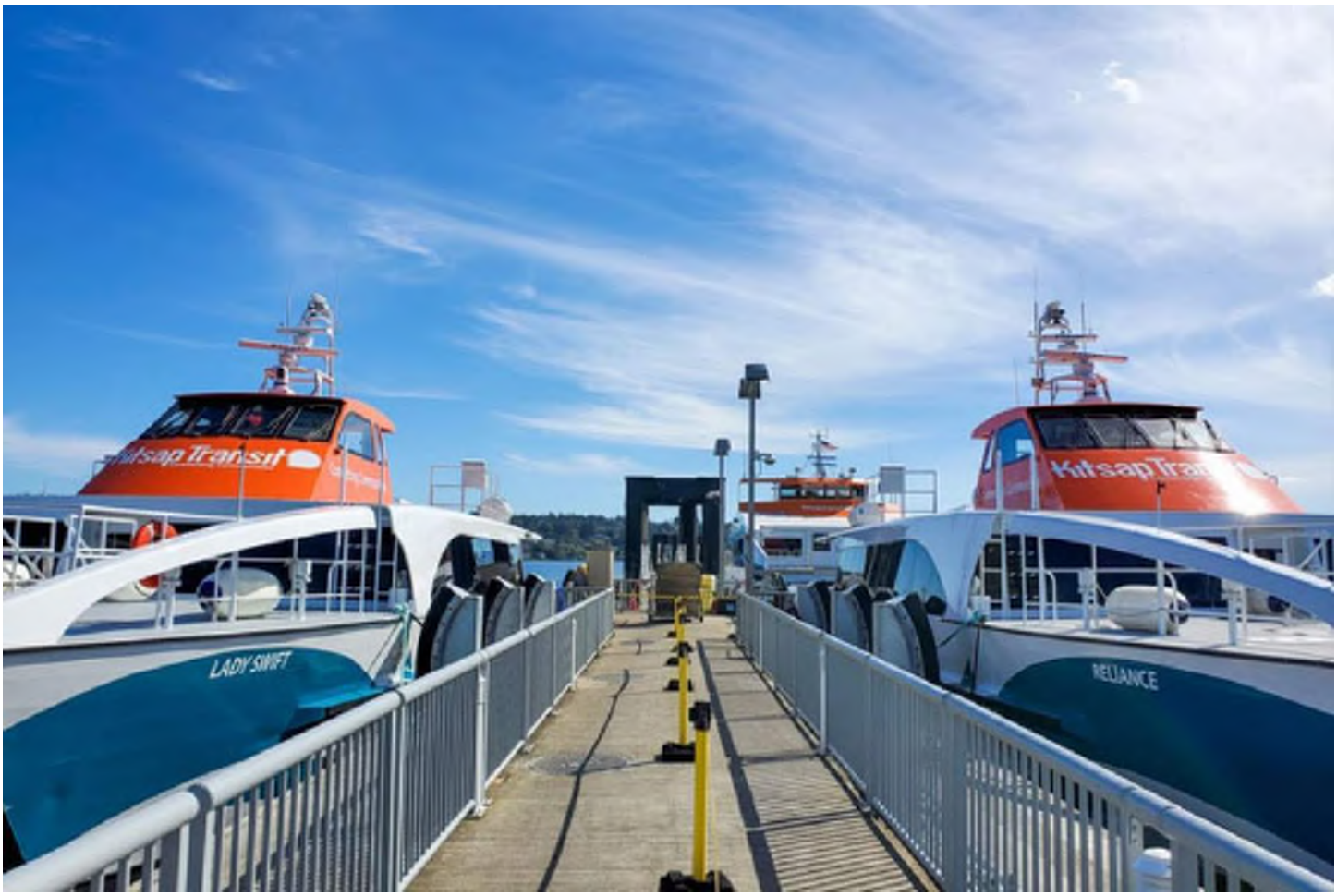
Ultra-low-wake fast ferry featuring a patented hydrofoil-assisted hull design

Year Built: 2010

Capacity: 118 passengers, 12 bicycles

Length: 72'

Engines: 4



Reliance & Lady Swift

Ultra-low-wake fast ferries featuring a patented hydrofoil-assisted hull design

Year Built: 2019

Capacity: 118 passengers, 12 bicycles

Length: 75'

Engines: 4

Finest

Aluminum-hulled catamaran fast ferry

Year Built/Refurbished: 1996/2018

Capacity: 349 passengers, 10 bicycles

Length: 114'

Engines: 2

Enetai and Commander

Bow- and side-loading fast ferries designed to be used in the WSF Southworth dock

Year Built: 2020/2021

Capacity: 250 passengers, 26 bicycles

Length: 128'

Engines: 2

Solano

Bow- and side-loading fast ferry

Year Built: 2004

Capacity: 350 passengers

Length: 126'

Engines: 2

Waterman

The first hybrid-electric ferry to operate in the Puget Sound

Year Built: 2019

Capacity: 150 passengers, 5 bicycles

Length: 70'

Engines: 2

Carlisle II

A century-old wood ferry—the oldest continuously operated ferry in the Puget Sound

Year Built/Refurbished: 1917/2021

Capacity: 140 passengers, 5 bicycles

Length: 60'

Engines: 1

Admiral Pete

Foot ferry with a long history serving the Puget Sound

Year Built/Refurbished: 1994/2012

Capacity: 120 passengers, 5 bicycles

Length: 65'

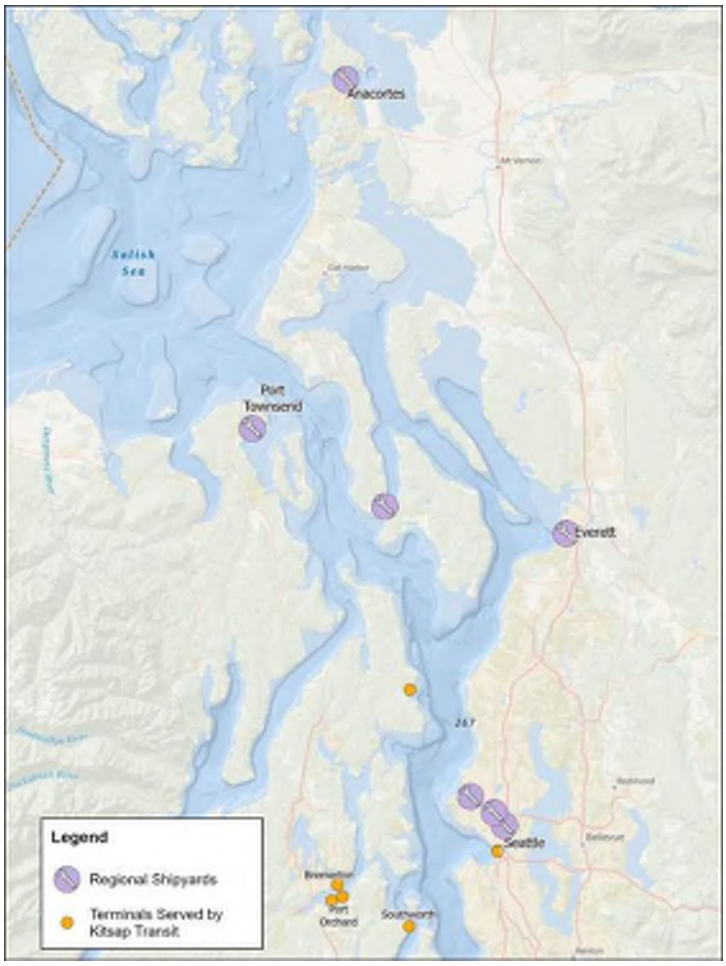
Engines: 2

RIDER ALERT RIDER ALERT RIDER ALERT RIDER ALERT

The Challenge of Vessel Maintenance

Without a dedicated maintenance facility, Kitsap Transit faces several challenges:

- Increased costs and time out of service to transport vessels and staff to area shipyards
- Inefficiencies from use of multiple storage locations for vessel equipment and inventory
- High cost of dive contract for underwater inspections
- Reliance on local shipyards' with limited availability



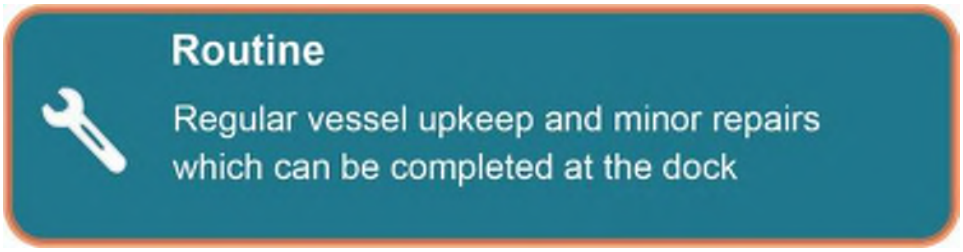
Vessels must be transported to one of these regional shipyards, and when Kitsap Transit is completing the repairs, maintenance staff must travel to and from the shipyard each day.

Planning for a Future Maintenance Facility

Facility Needs and Capabilities

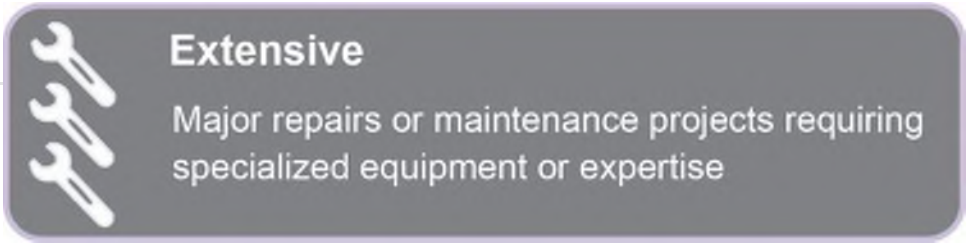
Future Ferry Maintenance Program

Kitsap Transit staff currently completes routine vessel maintenance at terminals. A dedicated Ferry Maintenance Facility would expand Kitsap Transit's capabilities to include intermediate maintenance that currently must be completed at a shipyard.



Routine maintenance would continue to be completed by Kitsap Transit.

Intermediate maintenance is currently conducted by regional shipyards. With its own maintenance facility, Kitsap Transit would complete this type of work.



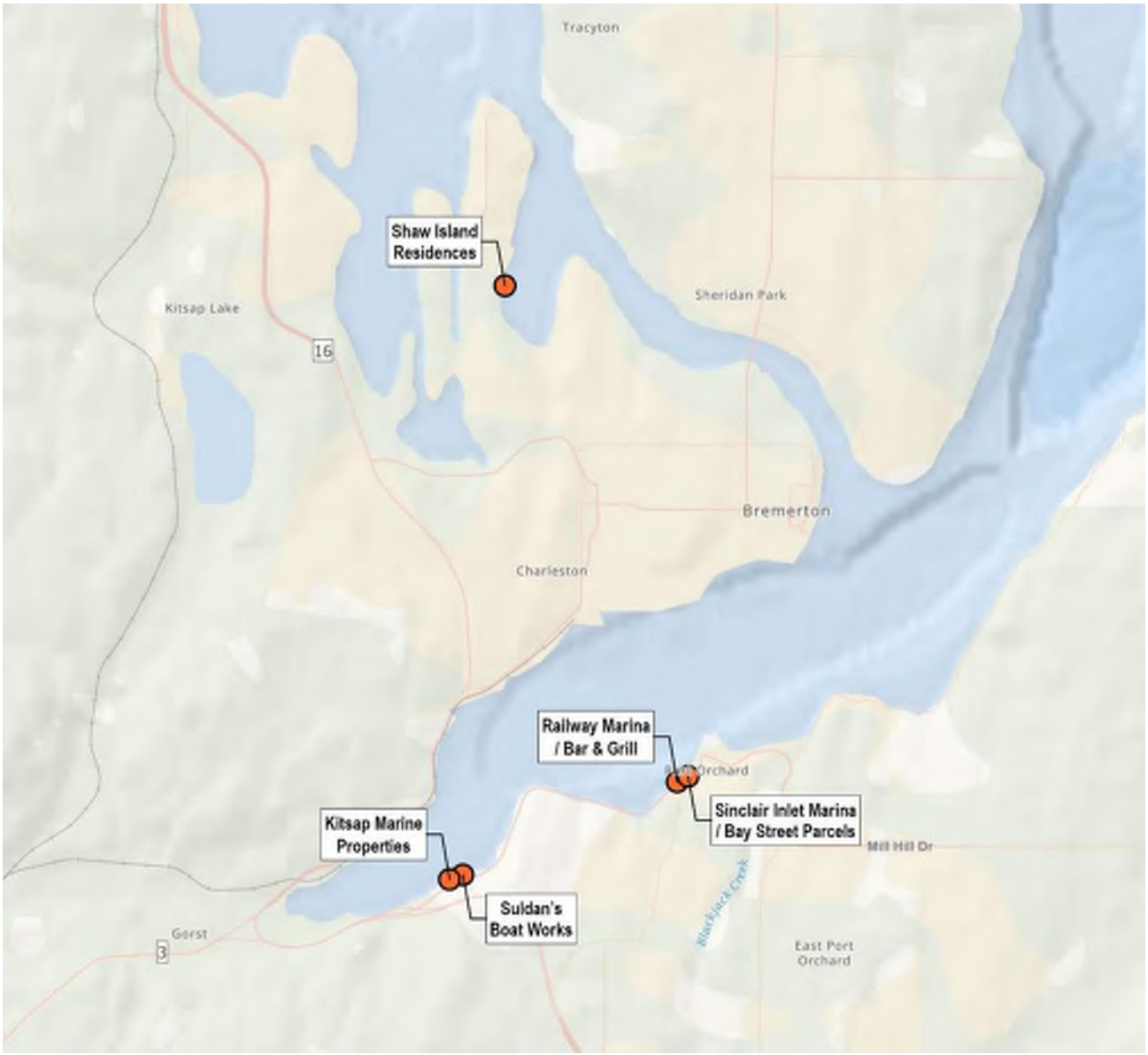
Extensive maintenance would continue to be completed at regional shipyards.

Initial Site Screening

Kitsap Transit has completed a comprehensive screening process to find suitable locations for a ferry maintenance facility.

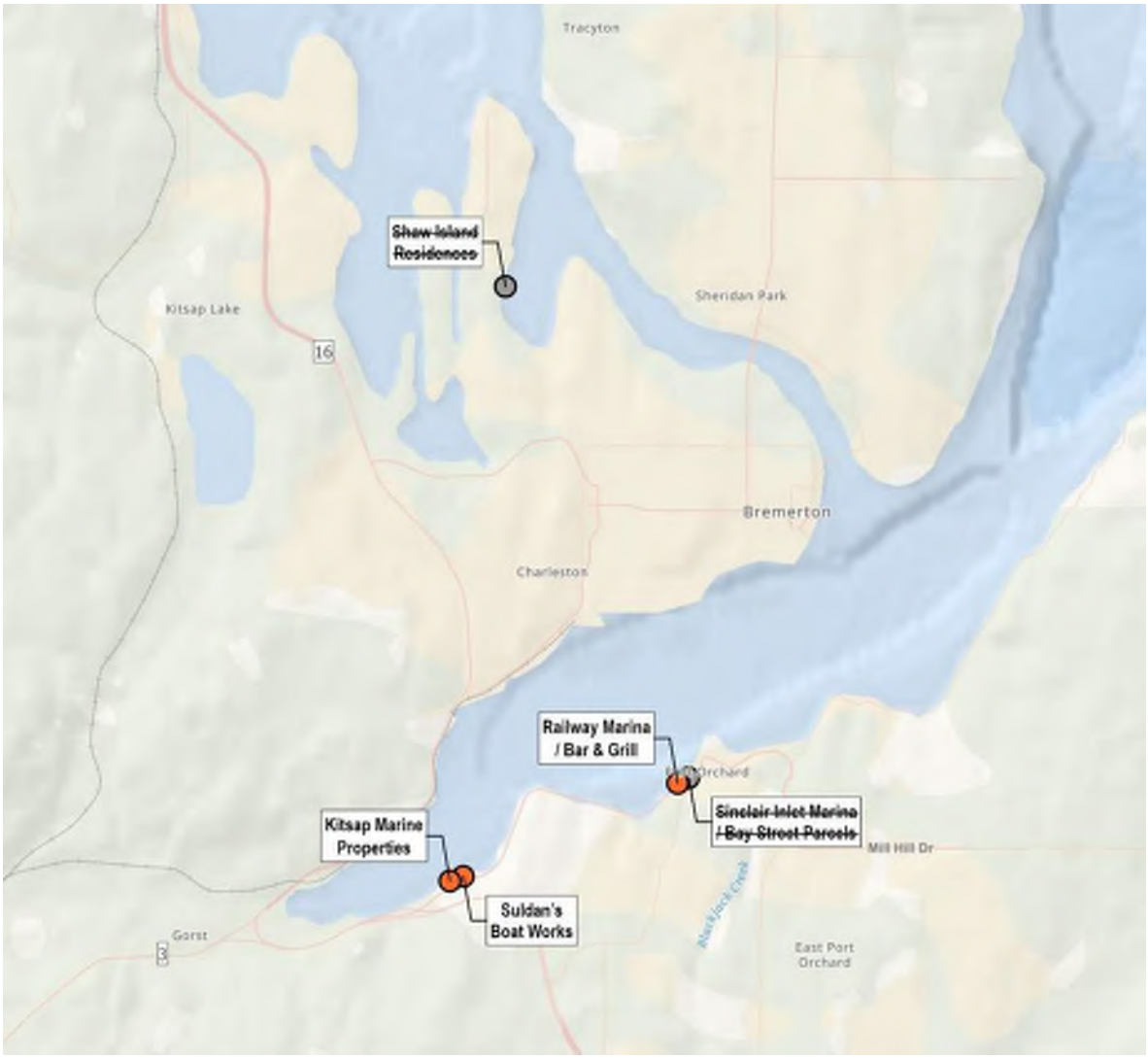
The initial screening criteria included the following:

- Must be on the east side of the Kitsap Peninsula to reduce travel time
- Must have zoning compatibility and established shoreline use or context
- Should be accessible by more than one roadway
- Must be large enough to accommodate a ferry maintenance facility



The screening process identified five potential alternatives that met necessary criteria:

- Kitsap Marine properties
- Suldan’s Boat Works
- Port Orchard Railway Marina and the Bar & Grill combined parcels
- Sinclair Inlet Marina and the Bay Street combined parcels
- Shaw Island Residences



Preliminary Site Evaluation

The sites were scored relative to each other with a ranking system of:

- **Acceptable**
- **Better**
- **Best**

Three sites were recommended for further analysis:

- Kitsap Marina properties
- Kitsap Marina and Suldan’s Boat Works combined properties
- Port Orchard Railway Marina and Bar & Grill combined properties

Kitsap Marine Properties

Owner: Private (single owner)

Site Uses: Private boatyard and marina

Site Space:

- Sufficient uplands space for vessel laydown area
- Approximately 52,000 square feet of usable shore space, with room to accommodate vessels ashore but with limited room to place maintenance facilities.

Site Access:

- Water depths are sufficient to support safe navigation. There is no commercial or recreational vessel traffic in close proximity.
- Sufficient depths to reasonably accommodate in-water components of a maintenance facility.
- Located off state-owned and maintained Hwy 166 (SW Bay St) in the city of Port Orchard, the site has good roadway access to major thoroughfares.

Kitsap Marine Properties

Built Environment:

- Major impact to active private boatyard and marina that serves the local population and maritime community.
- Facility would be consistent with existing viewshed.

Natural Environment:

- There is no mapped eel grass and no known eagle's nests at this site but smelt spawning does occur in this area of Sinclair Inlet. A culvert on site identified as a fish passage barrier could be improved and a critical habitat created after correction.

Kitsap Marine Properties and Suldan's Boat Works Combined Properties

Owner: Private (two owners)

Site Uses: Private boatyard and marina

Site Space:

- Approximately 69,000 square feet of usable shoreline with room to comfortably accommodate both vessels ashore and maintenance facilities.

Site Access:

- Water depths are sufficient to support safe navigation. There is no commercial or recreational vessel traffic in close proximity.
- Sufficient depths to reasonably accommodate in-water components of a maintenance facility.
- Located off state-owned and maintained Hwy 166 (SW Bay St) in the city of Port Orchard, the site has good roadway access to major thoroughfares.

Kitsap Marine Properties and Suldan's Boat Works

Combined Properties

Built Environment:

- Major impact to active private boatyard and marina that serves the local population and maritime community.
- Facility would be consistent with existing viewshed.

Natural Environment:

- There is no mapped eel grass and no known eagle's nests at this site but smelt spawning does occur in this area of Sinclair Inlet. A culvert on site identified as a fish passage barrier could be improved and a critical habitat created after correction.

Port Orchard Railway Marina and Bar & Grill Combined Properties

Owner: Private (two owners)

Site Uses: Private boatyard and marina

Site Space:

- Sufficient uplands space for vessel laydown area.
- Approximately 59,000 square feet of usable shore space, with room to accommodate vessels ashore but with limited room to place maintenance facilities.

Site Access:

- No navigational restrictions, with no commercial vessel traffic but moderate recreational vessel usage in close proximity.
- Sufficient waterfront and water depths to support the in-water components of a maintenance facility.
- Located off state-owned and maintained Hwy 166 (SW Bay St) in the city of Port Orchard, the site has good roadway access to major thoroughfares, although slightly more distant than other sites.

Port Orchard Railway Marina and Bar & Grill Combined Properties

Built Environment:

- Acquisition of this site would likely eliminate the Port Orchard Railway Marina that provides recreational vessel moorage. This site would also displace an existing approved proposal for development on the Bar and Grill property.
- Facility would be consistent with existing viewshed.

Natural Environment:

- There is no mapped eel grass and no known eagle's nests at this site but smelt spawning does occur in this area of Sinclair Inlet. There is a fish bearing stream directly adjacent to this site.

What's Next

Next on the horizon is a detailed design and environmental evaluation of the three site alternatives:

- Kitsap Marina properties
- Kitsap Marina and Suldan’s Boat Works combined properties
- Port Orchard Railway Marina and Bar & Grill combined properties

This phase will involve developing conceptual layouts for the facility at each site, developing detailed cost estimates and completing an environmental review. This supports the selection of a site that is operationally, financially, and environmentally feasible.

Evaluation will be informed by feedback from local and regional agencies and interested organizations, Kitsap Transit users, members of the public, and Tribes. Evaluation findings and identification of a proposed preferred alternative is anticipated in early 2024.

Keep Up To Date!

Stay in the Loop

Follow the **project website** for updates and we'll keep you informed every step of the way.

We Want Your Feedback!

Survey submissions are now closed, thank you for your participation and feedback as we move forward in this process.

*Para la traducción de este documento al español, llame al **1-800-501-7433** o **(360) 377-2877** durante el horario regular de oficina. El personal de servicio al cliente lo contactará a un intérprete.*

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LUND FAUCETT

Kitsap Transit | Maintenance Facility Survey Results | Summary

Purpose

Kitsap Transit surveyed Kitsap County residents, business owners, ferry riders and other interested parties to gather input on a proposal to site a vessel maintenance facility in Kitsap County to meet the ongoing needs of the Kitsap Transit ferry fleet.

This survey was part of Kitsap Transit's broader education and engagement about the project. The survey was released along with an interactive StoryMap that explained the necessity and objectives of a new maintenance facility, detailed the siting process undertaken by Kitsap Transit and presented three preferred site options under consideration. The survey provided StoryMap viewers and other interested parties the opportunity to provide feedback on the project, the sites under consideration and project criteria.

Methodology and Response

Feedback was solicited via a voluntary and anonymous online survey designed by Lund Faucett and the KPFF team in partnership with Kitsap Transit. The survey was intended to be completed following a review of the StoryMap detailing each of the three preferred site alternatives.

The survey consisted of nine questions and was fielded from December 11, 2023, to January 10, 2024, using the Survey Monkey platform.

Kitsap Transit promoted the survey through Kitsap Transit's website, rider alerts, social media channels, the Headways blog and a news release.

Response to the survey was strong–1,078 answered at least some of the survey questions and we received 972 open-ended responses about the proposed sites and project. This summary report highlights the findings.

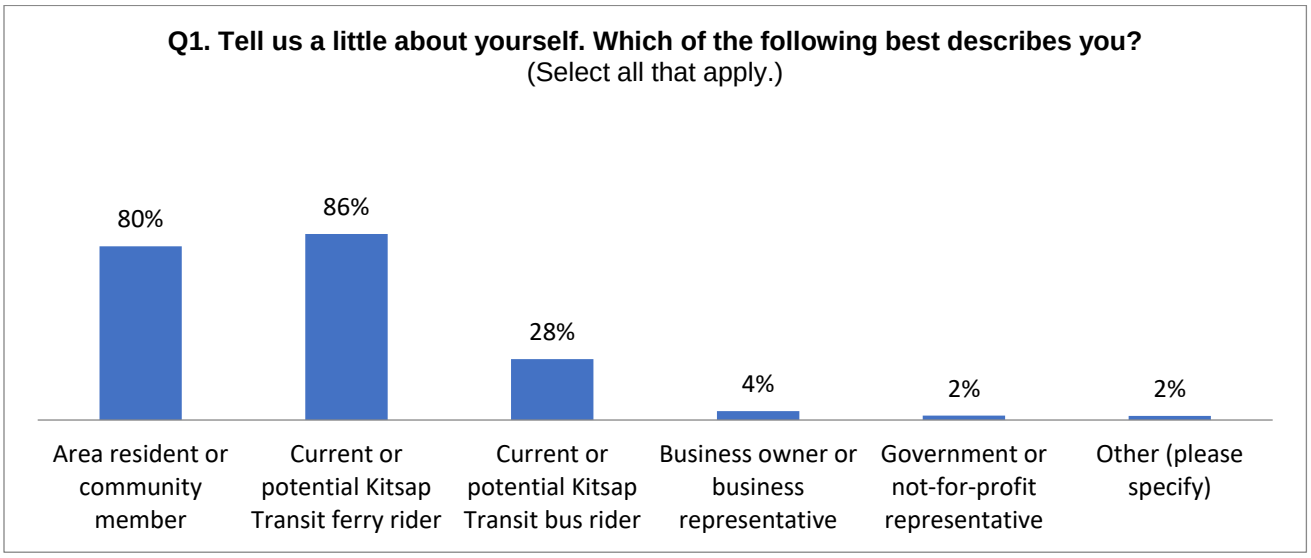
Key Findings

- The strong response to the survey (n=1,078) was encouraging and we received thoughtful and informed feedback to the open-ended questions.
- Respondents were vocal about the potential economic benefits and drawbacks of the facility, with interest in job creation and the avoidance of business disruption.
- Many comments emphasized the importance of considering environmental impacts, noise pollution, and effects on existing businesses and public moorage facilities.
- There was notable concern over property acquisition, specifically the use of eminent domain, and a clear preference for negotiations with willing sellers.
- Key criteria people would like to see included in additional analysis included accessibility, aesthetics, community engagement/education, costs, environmental impacts, community/economic impacts, reliability, traffic/parking, partnerships/business opportunities and timing.

Detailed Findings

Respondent Profile

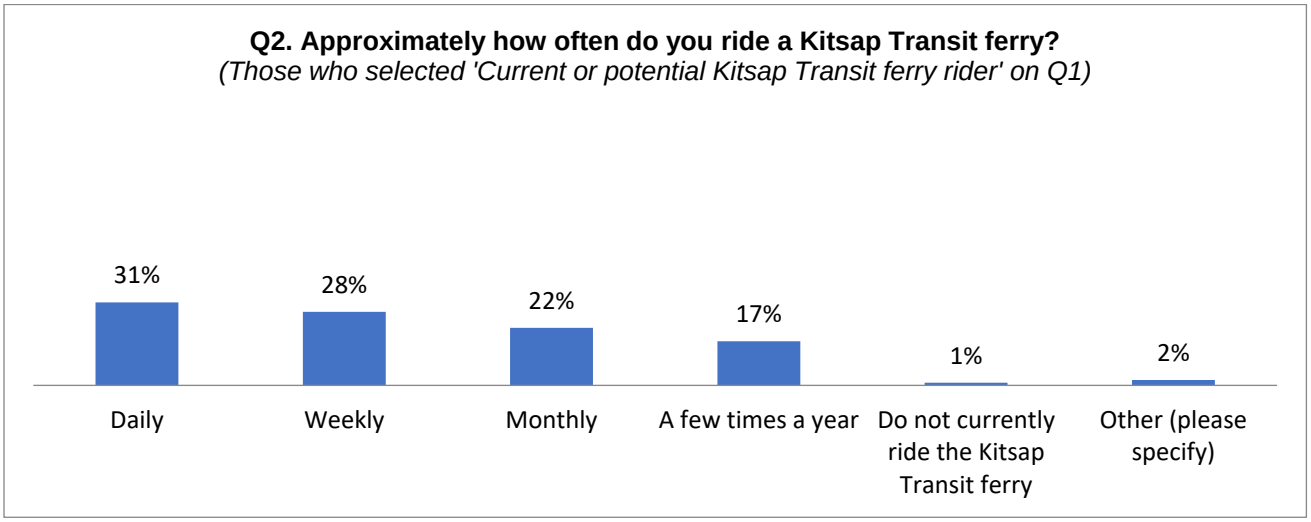
Survey respondents primarily consisted of area residents or community members (80%) and current or potential Kitsap Transit ferry riders (86%). Twenty-eight percent identified themselves as current and potential Kitsap Transit bus riders. A small proportion identified themselves as business owners/representatives (4%) or government or not-for-profit representatives (2%). 'Other' responses included a few former Kitsap Transit employees and a Washington State Ferries employee.



n=1,078

Ferry Use

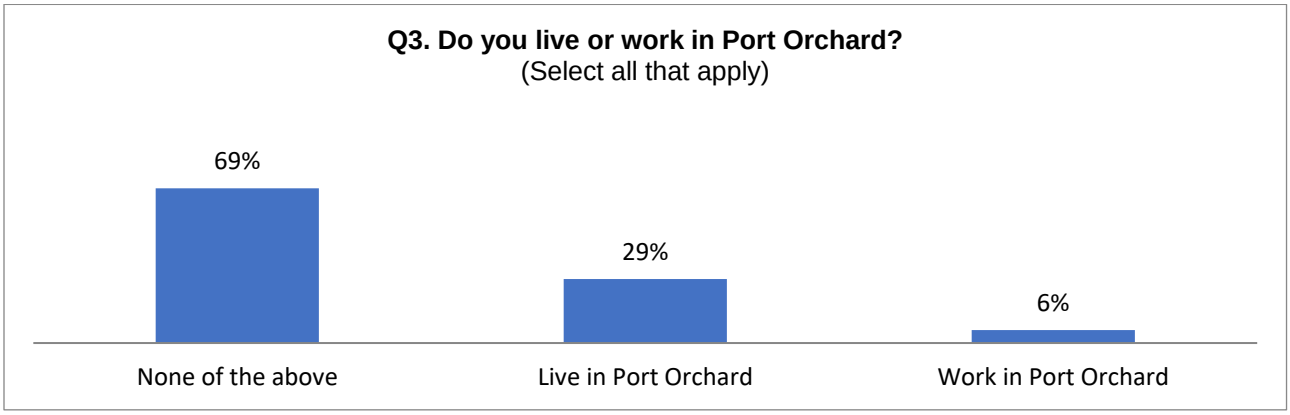
Current and potential Kitsap Transit ferry riders provided additional information about the frequency of their ferry use. More than half (59%) ride a Kitsap Transit ferry on a daily or weekly basis.



n=199

Geography (Port Orchard)

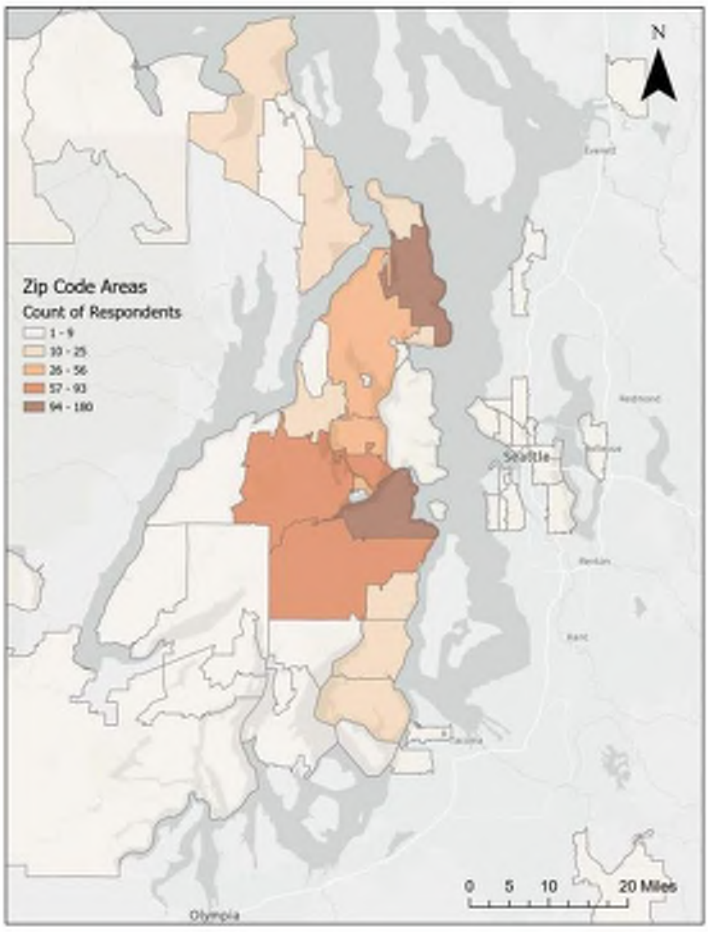
Survey respondents included people who live or work in Port Orchard – 29% indicated they live in the area and 6% said they work in the area. (362 respondents live and/or work in Port Orchard.)



n=1,054

Geography (Zipcode)

Respondents were primarily in Kitsap County. The top zip code responses were 98366 (Port Orchard area), 98346 (Kingston area), 98367 (Port Orchard area) and 98312 (Bremerton area).



n=972

Respondents were asked to react to the following information:

> *Based on Kitsap Transit's initial screening and preliminary site evaluations, three sites have been recommended for further analysis as potential locations for a Kitsap Transit maintenance facility:*
> - *Kitsap Marina*
> - *Kitsap Marina and Suldan's Boat Works*
> - *Port Orchard Railway Marina and the Bar & Grill*
>
> *Would you like Kitsap Transit to know anything about these three sites? (For example, are there specific opportunities or challenges they should be aware of?)*

Responses to each of the open-ended questions about the sites resulted in some generic responses (e.g., those who opted out saying 'don't know' or other neutral comments, and nonsubstantive positive or negative comments such as 'good' or 'no.') Substantive feedback has been organized by themes and issues raised, with illustrative verbatim quotes provided in italics. A full listing of all comments received is available as an attachment.

Words/letters in brackets indicate that we made an edit to improve readability. Proper nouns and location names have been capitalized. Four examples of positive and negative comments for each site are also presented randomly. Comments are presented in no particular order.

Q5. Kitsap Marina Feedback (open-ended responses)
Total responses: 151
Don't know or neutral: 47
Generally positive: 41
Generally negative: 5

Generally positive responses:

- *I strongly support Kitsap Marina, but am worried about traffic concerns leaving Port Orchard to Bremerton.*
- *Good location choice, out of greater Port Orchard and not a possible site for more inclusive community use.*
- *Seems like a smart option. I would hope you will address the needs of displaced private boat owners.*
- *Potentially good location but probably not enough space for present needs or future expansion.*

Generally negative responses:

- *I don't like this option because it creates the risk of the 1 private owner having more leverage than they should. We should proceed with either of the two other options that have at least 2 properties and owners.*
- *Would prefer Kitsap Transit maintenance in an industrial site rather than marina and/or public area.*
- *It's an active marine business on the water, which there aren't too many of in the area.*
- *Putting the maintenance facility in the marina will ruin the character of the waterfront area*

Issues/concerns raised and example comments:

- Property acquisition
    - *Are these sites for sale by owner, or will there be forced seizure of properties through Eminent Domain?*
    - *One owner so may be easier to negotiate sale of property.*

- Traffic and/or parking
    - *Only recommendation is keeping it close to vessels home ports to minimize engineer team travel, minimize traffic jams (Gorst).*
    - *Bay Street is already congested, particularly during commuting timeframes, will these 3 sites make it worse?*
- Economic impact
    - *Downtown jobs would help revive the PO downtown.*
    - *Go for it. Port Orchard's downtown needs lots of change and development. It would add more bustling to the staid area.*
    - *Support area work opportunities and Navy Shipyard hire and training for future Marina professionals.*
- Impact on boating community/impact on business community
    - *I hope this wouldn't shut down their existing sales and repair facilities.*
    - *Takes away a nice service for recreational boat owners.*
    - *Would remove a viable Port Orchard business with existing demands and service to the community. No similar business exists in Sinclair Inlet serving boaters.*
- Nearby homes
    - *My concern would be the same for all. What location impacts the general public (residential homes) the least while also allowing to maximize any logistics needed for vessel repair and maintenance. Also which sites tides are most conducive to maintenance operations. Will this site be ideal for future proposed vessels?*
- Environment and noise
    - *Some concern over potentially affecting wildlife habitat on the section further inland.*
    - *Looks like part of the property is treed. So land would need to be cleared? It seems to me there are enough open/underused areas that could be utilized so land would not have to be cleared. There is enough urbanization already.*
    - *Our feedback in general for all sites: currently the Bremerton-Seattle Fast Ferry is extremely noisy for BI residents as it Passes the south end of the island. If any of these locations increases fast ferry traffic through an already noisy route, it would be even more unbearable. The fast ferry noise is excessive to residents. Our hope was that the Bremerton-Seattle Fast Ferry was temporary while the [WSF] repairs/service restoration was underway but sadly it's delayed. The fast ferry noise must be [even] worse for sea life. We ask that you conduct an environmental and sound study!*
- Lot size, future expansion and scale
    - *Limited footprint means limited scalability. I hope the ferry service continues to expand, so planning here must include future growth.*
    - *Limited space. Doesn't address all requirements.*
    - *This makes sense as a fallback if negotiating with Suldan and [Kitsap Marina] becomes too hard--just using [Kitsap Marina].*
- Tribal considerations
    - *Located in the Suquamish Tribe's U&A. If an overwater structure is constructed, mitigation will be required. Additionally, if the construction falls within the Tribe's fishing season they may require additional logistics coordination and/or compensation for a boat/barge movement*.
    - *This site is closer than the Railway Marina to the Sinclair Inlet Olympia oyster restoration project, led by the Puget Sound Restoration Fund in partnership with USDA NRCS, Suquamish Tribe, Kitsap County, USDA NRCS, Suquamish Tribe, and Patagonia (see https://storymaps.arcgis.com/stories/3cc3dcfecf95412a8f4c1f9ec15a7e4d). Work at this site could jeopardize shellfish recovery.*
- Questions

- *Seems small, but good that is has the land across the highway. I wonder how this location will impact traffic on that road. It's not a huge road, and how will the boats cross the freeway to get to the upland part?*
- *[H]ow does this affect current plans for the area?*
- *Bay Street is already congested, particularly during commuting timeframes, will these 3 sites make it worse?*
- *Does someone live in boats parked there where will the go or park instead?*
- *How much money total do you need? Will you raise fares? Will use use taxpayers dollars?*
- *How will it affect the local residence?*

Q6. Kitsap Marina and Suldan's Boat Works Feedback (open-ended responses)
Total responses: 172
Don't know or neutral: 48
Generally positive: 77
Generally negative: 13

Generally positive responses:

- *This appears to be the best location due to the s.f. and accessibility to the inlet.*
- *This appears to have the largest footprint and already serves as a commercial business. This appears to be one of the best options based on size alone.*
- *Seems like a good spot, but bigger, obviously. I'll combine my comments here, since it's the same place as the first one. I assume that bigger would be better if the budget allows. As a non-boat owner, I know I won't be affected by the loss of the marina/boat works. This location is along a relatively quiet stretch of road, though it does get somewhat busy at commuter times. I don't know how much the new facility would add to the existing traffic, but I know that the goal was to have better access to the facility than just being on one road. Still, I think this is the best of the 3 options I see. It's [out] of the way of expanding commercial pedestrian heavy zones like downtown Port Orchard, but has easy access to the highway.*
- *Better choice but potentially needing vessels to cross road for maintenance or staff crossing road could cause severe safety issues on a highly traveled road.*

Generally negative responses:

- *You should choose a site closer to downtown Port Orchard. This property is a mess.*
- *Seems like a good spot, but bigger, obviously. I'll combine my comments here, since it's the same place as the first one. I assume that bigger would be better if the budget allows. As a non-boat owner, I know I won't be affected by the loss of the marina/boat works. This location is along a relatively quiet stretch of road, though it does get somewhat busy at commuter times. I don't know how much the new facility would add to the existing traffic, but I know that the goal was to have better access to the facility than just being on one road. Still, I think this is the best of the 3 options I see. It's [out] of the way of expanding commercial pedestrian heavy zones like downtown Port Orchard, but has easy access to the highway.*
- *Suldan's is popular with the boating community. I think many would be sad to lose their service for the sake of a ferry maintenance facility.*
- *Traffic for work commute*

Issues/concerns raised and example comments:

- Property acquisition
  - *Look into the risk of two separate owners/ higher risk of claims & possible legal action due to two owners?*
  - *Two owners to negotiate with.*

    - *Are these sites for sale by owner, or will there be forced seizure of properties through Eminent Domain?*
- Traffic and/or parking
    - *I strongly support Kitsap Marina and Suldan's Boat Works, but am worried about traffic concerns leaving Port Orchard to Bremerton.*
    - *Seems bigger, but good that [it] has the land across the highway. I wonder how this location will impact traffic on that road. It's not a huge road, and how will the boats cross the freeway to get to the upland part? I would love to hear about the traffic impact.*
    - *Road and timing access for workers driving to these facilities, especially with shipyard traffic during certain times of day and no alternate route from Bremerton to Port Orchard area*
    - *This is best option away from local traffic*
    - *These properties combined should be far enough down the road that you're not messing much with traffic patterns downtown, and that whole area's kind of- not dead, but certainly not active right now. Wouldn't be sad to see that marina get- well, upgraded? turned into something a bit more useful?*
- Economic impact
    - *I think Suldan's makes the most sense because it has been for sale for a long time. It probably isn't a viable business in the long term if nobody wants to purchase it. Also, it would be good to see boatwork being done there again.*
    - *I would thin[k] this property would be the least expensive to develop.*
    - *This option may provide work opportunities for local residents*
    - *This seems like the best option and although it would displace two active businesses the overall impact would be less than the railway and bar location. It seems like the best way to control the future maintenance costs and service reliability of the ferry system, which is a huge benefit to our community.*
- Impact on boating community
    - *My first thought is the needs of private boat owners- not a lot of other options locally for maintenance yards*
    - *Suldan's is popular with the boating community. I think many would be sad to lose their service for the sake of a ferry maintenance facility.*
    - *Marina impact for local boaters not favorable.*
- Environment and noise
    - *Best amount of space Potential for additional slide mitigation along route 166 benefiting regional transportation*
    - *I think this is the best option of the three, to be honest those properties are pretty ugly and I am willing to [bet] [it] contributes pretty heavily to polluting the bay.*
    - *[H]ave you accounted for the way the king tides impacts this area?*
    - *This is my #1 vote on where to put the maintenance area for fast ferries. There are already areas here where boats are being worked on and it makes sense to group them together and keep loud machinery and noise away from downtown.*
- Nearby homes
    - *How will it affect the local residence?*
- Lot size, future expansion and scale
    - *This appears to have the largest footprint and already serves as a commercial business. This appears to be one of the best options based on size alone.*
    - *Larger is probably better when planning for [the] future.*
    - *would seem to offer the most flexibility and space for future needs.*

  - *This is also site a good site, but it might be larger than Kitsap Transit needs. If it can be shared with other fast and foot ferry operators in the region (King County, Victoria Clipper, etc.), then the large size would make more sense.*
  - *I would say this is the best option for long term growth, it also has space to grow an even bigger facility with ease as it's on the outside of downtown Port Orchard*
- Distance from downtown
  - *Seems like a good location & outside the downtown, tourist area*
  - *Absolutely, already industrial and away from public and downtown Port Orchard.*
  - *Away from downtown is ideal. Ample potential parking options. Downside: dangerous street crosses between properties.*
  - *You should choose a site closer to downtown Port Orchard. This property is a mess.*
  - *Not occupied, but a little out of way, unless that is, a positive*

Q7. Port Orchard Railway Marina and the Bar & Grill Feedback (open-ended responses)
Total responses: 175
Don't know or neutral: 41
Generally positive: 29
Generally negative: 59

Generally positive responses:

- *Probably far enough from main Bay Street commercial district that it would not be disruptive*
- *I believe this site would be the best, open area that requires less initial construction setup*
- *It seems to be the best spot. Removal of marina is unfortunate, maybe there is a way to keep it next to the new ship yard*
- *I do know there are some major developments happening in Port Orchard in the near future. I don't think adding the maintenance facility would be a deterrent however. I know Port Orchard is building a community space soon downtown, and I'm all for new developments and more money flowing through the city, of course!*

Generally negative responses:

- *Too close to downtown PO area. That area is best suited for business & multi purpose residential development.*
- *The housing that has already been permitted for this site would help to revitalize that end of town and make the town dock more attractive to everyone. A maintenance yard with the necessary fencing or walls would make that area seem industrial and not as usable, especially at night when the maintenance facility is closed.*
- *Downtown Port Orchard needs to be developed with businesses that bring people downtown, not have a ferry maintenance facility at such a central location.*
- *Port Orchard has a charming downtown community. In my opinion, this is the least preferred location as it would negatively impact the community the most.*

Issues/concerns raised and example comments:

- Other development on the site
  - *What about the proposed use for the bar property already planned?*
  - *The housing that has already been permitted for this site would help to revitalize that end of town and make the town dock more attractive to everyone. A maintenance yard with the necessary fencing or walls would make that area seem industrial and not as usable, especially at night when the maintenance facility is closed.*

  - *It would be sad to lose the bar and grill property where there are proposed residences to the marine facility, UNLESS the living spaces can be built above.*
  - *If this can be used for commercial instead of government, please leave it alone.*
  - *Isn't this site being turned into a mixed use development? I could have sworn that it was being redeveloped.*
  - *Only concern here is the current proposal for the bar and grill expansion. Would they seriously object to Kitsap Transit moving in, which could potentially add more time to the project being completed due to appeals.*
- Impact on boating community
  - *Removing the recreational moorage site will not sit well [with the] Bremerton public. Many people are here because of the access to water in this way.*
  - *It seems to be the best spot. Removal of [the] marina is unfortunate, maybe there is a way to keep it next to the new ship yard*
  - *Would prefer Kitsap Transit maintenance in an industrial site rather than marina and/or public area.*
  - *The map looks like it requires the most disruption to existing boats in the marina. Is/are there plans to compensate for the disruption? be a good neighbor.*
  - *The negative impact to the local private boat community would be huge.*
- Proximity to downtown Port Orchard
  - *I would NOT want the ferry maintenance in this location. It's too close to town, the yacht club, and I feel would cause noise pollution and detract from the quant, authentic small-town look and feel of downtown Port Orchard. I highly suggest all boat yard and ferry repair areas are grouped together near/at Suldan's Boat Work[s]*
  - *Too close to downtown PO area. That area is best suited for business & multi purpose residential development.*
  - *Downtown Port Orchard needs to be developed with businesses that bring people downtown, not have a ferry maintenance facility at such a central location.*
  - *Probably far enough from main Bay Street commercial district that it would not be disruptive*
  - *Port Orchard has a charming downtown community. In my opinion, this is the least preferred location as it would negatively impact the community the most.*
  - *Port Orchard has struggled to maintain [a] restaurant presence here, but with downtown projects building up access, activities, and restoration of buildings, this would remove a valuable location for maintaining tourism and community support.*
  - *Awful!! A maintenance facility is not town-friendly and needs to be farther away from the heart of 'downtown' Port Orchard*
  - *Don't mess w Port O's great waterfront. Don't shut down a restaurant. You'd be inviting protest.*
- Economic impact
  - *[M]ay bring more work to Port Orchard*
  - *I do know there are some major developments happening in port orchard in the near future. I don't think adding the maintenance facility would be a deterrent however. I know Port Orchard is building a community space soon downtown, and I'm all for new developments and more money flowing through the city of course!*
  - *Perfect. This could help boost downtown's economy and infrastructure.*
  - *This would disrupt boat owners and many tourtist[s] the businesses rely on.*
  - *Love this; seems like a great location, and could add a few jobs in the Port Orchard area.*
- Traffic and/or parking
  - *Too busy of an intersection.*

  - *I don't like that this is closer to the downtown, but it seems good that everything is on one side of the road. Again, I wonder about traffic in that area as well, there are a lot of ways in, but that area is already pretty [wonky] with how the roads are laid out.*
  - *Bay Street is already congested, particularly during commuting timeframes, will these 3 sites make it worse?*
  - *Opportunity: Shipments & Delivery options work out great here along with quicker access to the Port Orchard dock and better options for traffic during working hours.*
  - *Traffic management considerations regarding the intersection of Bay St/Hwy 166 and Port Orchard Blvd.*
  - *This seems the most obstructive to current traffic and flow of Port Orchard. The other locations seem more out of the way and only one property rather than multiple*
- Environment and/or noise
  - *No this option is disruptive to the community and too close to a fish spawning site*
  - *Seems least plausible of the three. Fish stream more important.*
  - *Probably more restricted with current and future traffic growth at the intersection. Noise and light pollution in an area where apartment/residential growth is coming. Would expect more expense to prepare this site for operations. The other two options are more promising.*
- *Questions*
  - *[H]ow does this affect current plans for the area*
  - *Your (excellent) storymap claims conversion of this site would impact/eliminate the entire marina, even though the area indicated in orange only affects a portion of the upland footprint. Is it not possible to shift the upland marina access to preserve some of this community-serving facility?*
  - *Would there ever be interference getting boats back to Bremerton/Kingston/Southworth from ferry?*
  - *How much money total do you need? Will you raise fares? Will use use [taxpayers] dollars?*
  - *Wondering if Kitsap retail growth would be better suited for this area?*
  - *Would the Bar & Grill be included in the cost or would it be privately owned?*

Q8. As Kitsap Transit continues to evaluate sites for a maintenance facility by looking at factors such as space, access, and environmental considerations, are there any other criteria you'd like to see considered? If so, please describe (open-ended responses)
Total responses: 265
Don't know, none, no comment: 22

Criteria suggested:

- Accessible for ferries and staff
  - *Well-located to easily serve the northern Kingston run, the southern Southworth run, as well as the Bremerton-Seattle and Bremerton-Port Orchard ferries.*
  - *the location should be such that all Kitsap ferries, no matter what route, have easy access to ensure quick turnaround on minor repairs*
  - *Rail access*
  - *Ensure that anyone working at the facility has easy access to either use public transit to get to work, or enough parking.*
  - *I hope that the boring daily logistical stuff is factored into this decision—can the crew and employees get there? Is there a place to go get lunch? Can the electric infrastructure get upgraded? How far do you have to go for printer paper? More paint?*
  - *Transportation of needed parts, equipment, other personnel/experts. Ability to get through Gorst, frequent traffic issues*

- Aesthetics
    - *As stated above, please include public art as part of the plan. Art will help integrate the facility within the community so that it's not just another ugly parking lot/ industrial building.*
    - *Aesthetics!*
    - *I expect downtown Port Orchard will grow. I would like to see the maintenance site be in sync with aesthetics and uses is adjacent properties*
    - *Can you make a pier outside the facility so the boats are in some way visible for the nerds and looky-loos?*
    - *Would like it to be in a place people could walk by and see the boats being worked on in some capacity*
    - *Keeping the facility looking clean and orderly from the public view. The waterfront in Port Orchard has so much potential to look clean and quaint and the last thing I feel residents would want is our shoreline looking as mechanical and brightly illuminated as the Naval Shipyard across the water in Bremerton. Please keep Port Orchard quaint!*
- Community engagement and education
    - *Local Staff access. How does the community support operations? Also, student field trips to see the facility at work would be great to plan from the beginning! Make it a learning opportunity for future shipbuilders and good community support.*
    - *The public has very little understanding of the need. Continue public education.*
    - *anything with an educational component in mind to allow tours and teaching for the next generation of ferry operators*
    - *Consider making this a regional resource that provides training programs or other learning opportunities. Bolster public engagement through the facility's design and operation.*
    - *There's a technical HS in Bremerton. Maybe an apprentice program?*
- Cost/fiscal
    - *Obviously both initial and long term costs*
    - *Cost as always, but CONSISTANT maintenance is the priority, as we can see by the Wa. State Ferry system as a total collapse.*
    - *Ferry pricing to and from Seattle.*
    - *Pay for this out of existing revenues*
    - *Costs. I would hate for this to result in a large increase to ferry rates for consumers.*
    - *Facilities financial statements: Real Estate ad Site Operations Operating Profit Cost of Goods Sold Working Capital (to determine its resiliency in case of a recession or depression) State taxes paid (to determine how much of their income is reinvested in WA state vs elsewhere)*
    - *It seems cost prohibitive to develop a dedicated facility for Kitsap Transit. What are the alternatives? Port Townsend? Lake Union shipyards? These examples are within a [commutable] distance. I'd like to see cost comparisons looking at other existing options. What would Kitsap save if we continued to use available shipyards but provided temporary lodging for employees at the distant site?*
    - *Cost of maintaining vessels in [the] current method, construction cost of new maintenance facility, projected maintenance costs using new facility.*
    - *Consider whether having your own facility is really cost effective - the [capital] costs might be better spent on more boats if you can utilize existing shjpyards.*
- Environmental
    - *Protect the environment at all costs.*
    - *What [would] the environmental [effects] be? We already have enough coming from the shipyard, seems like we already have taken a hit from them.*
    - *Possible noise pollution to marine life.*
    - *Not disrupting what is still rural, such as Harper Dock and Southworth Dock or Annapolis.*

  - *[B]ay pollution could be an issue. Destruction of sea grasses*
  - *I'd love to avoid tree removal; the Railway Marina is the only option that is sited on already developed land.*
  - *I like the idea of a culvert for the spawning fish*
  - *If impacts to eelgrass or other marine or shoreline resources Kitsap Transit should offer maximal mitigation. Also since all options [are] in [a] Shoreline zone, subject to rising sea level and intensifying storm surge effects, the analysis of adaptation to changing shoreline conditions for the whole facility (existing facilities and future infrastructure) as well as adequate storage and potential upgrade(add [water quality] treatment) for adjacent Stormwater infrastructure*
- Community and economic impact
  - *As I mentioned in my comments, when looking in the Port Orchard area, please consider that Downtown Port Orchard has big plans for expanding and creating a more walkable, pedestrian friendly area that's more pleasant to be in. This is one of the things I'm most excited about seeing develop in this area, and I would hate to see that disrupted by the placement of an industrial facility too close. If Downtown Port Orchard does develop into the beautiful tree lined, pedestrian focused area they're planning, I can imagine a situation where there is some pressure to disguise, quiet, or otherwise conceal this maintenance facility if it is build too close to that center. By building this facility a little further out, it could avoid those messy meetings and potential added costs.*
  - *Will these sites have an adverse impact on trying to promote Port Orchard to tourists.*
  - *Impacts, positive or negative with locating downtown PO. Will there be a reduction in marina space due to the project, and if so, have you communicated that there will undoubtedly be price impacts to current marina users.*
  - *I live near the WSF maintenance facility on BI. It is an exceptional neighbor with regard to noise, work schedule, access, and employee parking. There is surely much to be learned from how that facility has been integrated into this area of BI.*
  - *What would provide overall benefit to the community- i.e. public access.*
- Impact on ferry reliability
  - *I would like very much to have a reliable transit to Seattle/Bremerton. It's very frustrating constantly being late for work because of mechanical problems.*
  - *Move quickly, this service is already unreliable.*
  - *What is going to ensure we maximize ferry uptime and availability.*
- Traffic and/or parking
  - *Ensure that anyone working at the facility has easy access to either use public transit to get to work, or enough parking.*
  - *Low impact to current road traffic, away from potential civilian waterfront developments.*
  - *Parking for employees and contractors/vendors.*
  - *Parking & facilities for staff needs to be considered. Safety for staff entering and leaving facilities and safety for vehicle traffic on a highway used extensively by vehicles of all kinds needs consideration. Turn lanes, expanded shoulders and knowing ahead of time how often staff would need to cross the road so not to affect traffic flow. Also knowledge on potential landslides as the area is known for shifting.*
- Construction timeline
  - *Timeliness to construct. Kitsap Transit has a real need for this facility so it seems like how long it would take to develop and the put facility into service on each respective site should be considered.*
  - *The design and permitting process for a marine repair facility in Kitsap County is onerous, time consuming and very expensive.*
  - *Quick to build/retrofit so maintenance can happen ASAP*

- Non-criteria-related feedback
    - *Kitsap County is a large county to traverse. I wonder if you've considered more than one location. North Kingston or South Southworth. There is a former lumberyard in Southworth that offers 8000sf laydown area. For Lease. Loopnet Listing #23750604 Gina Schulz-Broker*
    - *An alternate repair site for the Kingston Boats, not as extensive, but able to make quick fixes and keep them running without having to go all of the way to Port Orchard*
    - *Bremerton marina*
    - *Consider other location so you don't add traffic to Rich Passage. Kingston?*
    - *There is a giant shipyard in Bremerton, can't Kitsap Transit Authority negotiate usage of the shipyard territory to maintain ferries? It can be a fair contribution of the shipyard to the local community*
    - *Thank you for eliminating Harper Pier from the list of considerations. Southworth Drive would be unable to accommodate the additional traffic and as a resident - we need and love our community pier and local coffee shop.*
    - *You should look at the site by the Hansville Grocery! This was an old Norwegian Marina now abandoned with a bunch of outbuildings. Perfect location.*
    - *Have you thought of contracting a local tug and barge company until a new location is created? My hubby works for Centerline Logistics, basic maintenance could be contracted out.*
    - *Co-Lo with an existing commercial yard, whether their site or partnership that brings their skill/expertise to Kitsap with guaranteed access shares throughout [the] year with less risk/overhead to Kitsap Transit?*
    - *Why can't this work be done by a company rather than building yet more infrastructure? Why does Kitsap Transit think you can do it better and cheaper?*
    - *Partner with WSF repair facility on Bainbridge for colocation needs? Cost savings to [the] public might be substantial.*
- Other
    - *I know you eliminated other options outside of Kitsap County that did not meet the right criteria, but we should ultimately keep this work within Kitsap County for any additional future considerations.*
    - *Make sure that you have the required ferry boat engineers, mechanics and maintenance staff, to not fall again into poorly maintained ferrys spiral.*
    - *Private property rights. Nowhere in this otherwise well-produced rationale (this survey) was there a mention of the existing or potential issues in respect of acquisition of a chosen facility site. No mention was made, for example, of the status of talks with the bar & grill site's owner, and their willingness to sell if chosen. No mention was made of the possibility of the use of eminent domain if the owner might be unwilling to sell. And no mention was made of the potential costs and funding mechanism(s), including any likely bond measures which might likely (understandably) be heatedly opposed by voters.*
    - *If private vessels can use the same facilities there is always demand and it's another source of revenue.*

Q9. Do you have any other questions or comments about a potential Kitsap Transit maintenance facility? (open-ended responses)
Total responses: 221
None, no comment, etc.: 40

Themes

- Cost

  - *Considering the cost of the proposed properties and building a facility on them, and then the ongoing cost of staff and operations I am surprised that a cost analysis would favor having a dedicated Kitsap Transit facility rather than a long term contract for [maintenance] and repair. While I favor having a facility in Kitsap County, I also wonder if this can be justified based on cost analysis if there are existing opportunities in King or Pierce County but no [existing] opportunity in Kitsap County.*
  - *Will prices increase to accommodate these updates/new locations?*
  - *Sounds necessary but very expensive,! Best of luck, and thank you for asking for riders' opinions.*
  - *WA/Kitsap County should [not] go into debt to build these facilities. How is this being paid for? Will taxes just end up paying interest on an unmanageable loan?*
  - *What is the expected return on this investment? Odds are the facility would not have vessels being worked on 24/7 nor would a vessel even be there all the time. What will the facility be used for when no vessels are under maintenance? Will other uses be found like training facilities, storage, meeting rooms or other uses?*
- Site selection
  - *[Why] are all the proposed sites in Port Orchard?*
  - *What is the estimated timeline on site decision-making? What is the estimated capital cost and the projected M&O of a future maintenance facility? What are some estimated taxing proposals that we should anticipate needing to consider to pay for the facility and its services.*
  - *Will the evaluation of the the sites be posted for review and input publicly before a decision is made?*
  - *Find it interesting that the site way up ..the shaw site was already crossed off. It's not like we've ever been served well but now they want to disrupt our [ecosystem]. How about up at Bainbridge, they get the better service so let them hold the facility. We have a shipyard already in our neighborhood and even so we are always the run they take boats from or cancel. I've lived here and always supported using the Bremerton run but believe me they don't seem to value the people who use it.*
- Ferry reliability
  - *How soon can we start to expect improved service times? How will this allow us to grow our fleet?*
  - *Will this maintenance prevent fast boats constantly being canceled because of a mechanical issues/problem? Maybe have a reserved boat that will cover a broken one.*
  - *Wouldn't mind an increase to tickets to support the building of the facility as long as rides are available and reliable.*
  - *I think a maintenance facility is needed especially if it increases the reliability of the fast ferry service*
- Kitsap Transit appreciation
  - *Kitsap Transit ferry system is such a shining star at a time when WSDOT ferries are the worst they've ever been. The fast ferries are always on-time, are comfortable, always have capacity, and rarely have maintenance issues. I will support any proposal that ensures the longevity and reliability of this operation and will encourage my friends, family, and community members in the area to do the same.*
  - *I'm excited to see this happening and hope it goes as smoothly as possible for you and the community. Kitsap ferries are the greatest!*
  - *No questions or concerns. I understand the complexity of siting a maintenance facility and wanted to record my support for whatever option best meets the needs of the project and the agency. I appreciate the fast ferry service and all those who work hard to keep it functioning at full capacity. Thank you!*
  - *My spouse and I value the fast ferry service from Kingston and fully support your plans*

- Other
    - *Imagine the future in terms of growth and the changes to the infrastructure of the Transportation industry. Can technology keep up with transportation?*
    - *Maybe I'm overestimating how much noise and visual "ugliness" would be entailed in this facility, but I can't imagine that it would ever be something I would want to be standing next to when I'm walking around getting coffee and enjoying the waterfront.*
    - *Just hoping it creates good jobs*
    - *[Don't] do it, make a long-term deal with a private contractor*
    - *Depending on haul-out capacity (if, for example, there is a large Travelift) the idea of offering space and service to larger vessels (private or public) when dedicated KT service and repair time allows could help offset the cost for the project construction as well as operating expenses. The service and capacity of Yachtfish Marine is very limited and very expensive. A facility for larger vessels would be a benefit for the West Sound.*
    - *This could be a great opportunity for a job training program*

APPENDIX H

SUMMARY OF ENVIRONMENTAL MITIGATION CONSIDERATIONS

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Memorandum

To: Kitsap Transit

From: Tessa Gardner-Brown, Floyd|Snider

Date:

Project: Kitsap Transit Ferry Maintenance Facility

Re: **Mitigation Considerations for Ferry Maintenance Facility Impacts to the Natural and Built Environment**

This memorandum has been prepared to support the continued evaluation of sites for a Kitsap Transit Ferry Maintenance Facility. The selected site would be developed with new in-water, over-water, and shoreline infrastructure. This would result in impacts to the natural environment that must be offset in order to obtain the environmental permits and approvals that will be required prior to project construction. All potential sites are currently developed with recreational moorage, which would also be impacted by the new ferry maintenance facility. Refer to Figure 1 for a map of the potential sites for a new ferry maintenance facility. Displacement of the recreational moorage at these sites would be considered an unavoidable impact to the built environment and could be mitigated to reduce the severity of impact.

This memorandum provides an overview of the regulatory requirements to offset impacts to the natural environment and the process to evaluate opportunities to mitigate impacts to the built environment. It provides a high-level summary of the magnitude of potential project impact, the type of mitigation that may be considered to offset those impacts, and associated order of magnitude costs.

This memorandum has been prepared using conceptual design drawings. All information contained herein will be refined as design progresses; however, this should provide an overview of the mitigation considerations to support informed decision-making during site selection. Though, this memorandum will demonstrate that the natural and built environment impacts of the sites are very similar and mitigation requirements may not vary substantially enough to influence decision-making at this early stage.

Figure 1: Map of Potential Sites

REGULATORY REQUIREMENTS TO OFFSET IMPACTS TO THE NATURAL ENVIRONMENT

As part of the environmental permitting process, a series of federal consultations will be initiated, including consultation with NOAA National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (collectively referred to as "the Services") in accordance with Section 7 of the Endangered Species Act (ESA). In 2022, the Services began to review most projects that are proposed within the Salish Sea and with impacts to the nearshore environment using the recently completed Salish Sea Nearshore Programmatic (SSNP). A key component of the SSNP is a conservation calculator that assesses the impact of a project on the natural environment, and imposes a mitigation requirement for all projects that show a negative value after being input into the conservation calculator. The conservation calculator considers existing habitat values, existing site conditions, changes in development within the nearshore environment, impacts of the project and potential project benefits.

The ferry maintenance facility would be subject to SSNP, the conservation calculator, and the requirement to offset impacts such that the calculator output is zero (rather than negative). This process must be completed before ESA consultation is considered complete, and before the U.S. Army Corps of Engineers (the Corps) will issue the federal authorization for construction.

As part of the suite of federal consultations, the Corps will initiate consultation with local area tribes that have Usual and Accustomed fishing grounds and stations in Sinclair Inlet, where all sites are located. This consultation must also be complete before the Corps will issue the federal authorization. In recent years, the tribes have requested mitigation to offset impacts to tribal fishing that occur from barge movements during construction and from new overwater structures in fishable areas. The mitigation approach is then negotiated between the tribe and applicant.

It should be noted that the state, through authority provided to the Washington State Department of Fish and Wildlife, may also require mitigation to offset facility impacts to the natural environment. This can often be satisfied through the mitigation approach developed in coordination with the Services, but not always.

PROCESS TO EVALUATE OPPORTUNITIES TO MITIGATE FOR IMPACTS TO THE BUILT ENVIRONMENT

The ferry maintenance facility project will undergo environmental review, either in accordance with the State Environmental Policy Act (SEPA) or the National Environmental Policy Act (NEPA), depending on the lead agency and/or the type of funding leveraged for the project. In either case, this review process is intended to support agencies in considering the environmental impacts of a project, to consider public input on the proposal, and to evaluate opportunities to avoid, minimize or mitigate impacts that have been identified.

The environmental review process will highlight the unavoidable displacement of recreational moorage as a result of the project. It is reasonable to assume that the public will submit

comments regarding this impact given that recreational moorage is a predominant feature of the Port Orchard shoreline and contributes to its overall waterfront character. Port Orchard currently provides one of the highest density areas of recreational moorage in Kitsap County, where opportunities for recreational moorage across Kitsap County are more limited.

During the environmental review process, Kitsap Transit will evaluate opportunities to mitigate the impact to recreational moorage. Identifying reasonable mitigation will help to reduce the severity of impact; this reduces complexity of the environmental review process because projects with potential significant impacts are reviewed with a finer level of detail, through an Environmental Impact Statement; whereas, projects that include mitigation to reduce impacts to a less than significant threshold can complete a higher level of environmental review, through a NEPA Environmental Assessment or SEPA checklist. Reasonable mitigation will also certainly help to reduce potential public opposition to the project. Neither NEPA or SEPA will provide a prescriptive approach for offsetting impacts to the built environment; the outcome will be determined by Kitsap Transit through information obtained during the detailed impact and mitigation evaluations and through public comment.

In addition to impacts to the natural and built environment, existing private businesses would be displaced by development of a maintenance facility at any of the potential sites. This business displacement would also be highlighted in the environmental review process. These types of impacts would be mitigated through compliance with the Uniform Relocation Act, as amended. This is typically handled through real estate services and legal counsel and is generally not considered an environmental impact; therefore, it is not discussed further in this memorandum. These impacts would represent an additional, meaningful project cost.

OVERVIEW OF IMPACTS TO THE NATURAL ENVIRONMENT

Construction of a ferry maintenance facility would result in meaningful new development within the nearshore environment. In recognition of this, the KPFF engineering team has developed the conceptual site plans in a way that would minimize facility impacts to the natural environment. The table below provides an overview of the changes to total overwater coverage at each site, and within the different aquatic zones of the nearshore environment.

Table 1. Summary of Changes to Overwater Coverage Across the Potential Sites

	Changes Based on Conceptual Design (all values reported in square feet)				
Potential Site	Total **Existing** Overwater Coverage	Total **New** Overwater Coverage	**Net Change** in Overwater Coverage	Net Change in Overwater Coverage in **USZ and LSZ**	Net Change in Overwater Coverage in **DSZ**
Kitsap Marina	24,600	23,000	-1,600	-1,000	-600

Kitsap Marina & Suldan's	59,000	16,000	-43,000	-29,000	-14,000
Marina Bar & Grill	29,000	21,000	-8,000	-9,000	+1,000

USZ = Upper Shore Zone: Measured from the Highest Astronomical Tide to +5-feet Mean Lower Low Water (MLLW). This is an intertidal zone that often provides preferrable spawning substrate for forage fish.

LSZ = Lower Shore Zone: Measured from +5-feet MLLW to -10-feet MLLW, and/or to the outer limit of submerged aquatic vegetation (SAV).

DSZ = Deeper Shore Zone: Measured from -10-feet MLLW or from the outer limits of SAV, where SAV no longer grows.

As shown in Table 1, the ferry maintenance facility would reduce the amount of overwater coverage at each potential site. This would occur by removing the existing recreational moorage and replacing it with a ferry maintenance facility, which would represent a smaller footprint than the existing recreational moorage in each case. This change is considered a benefit because it reduces the overall amount of shoreline development. The greatest reduction in overwater coverage would occur at the Kitsap Marina & Suldan's site because this combined site has more existing overwater coverage and recreational moorage than the other two sites, and because a smaller overwater structure for the ferry maintenance facility could be constructed at this site given that there is more upland space to develop in support of facility operations. At this stage of conceptual design, the ferry maintenance facility proposed at the combined Kitsap Marina & Suldan's site has a smaller overwater footprint than the structures that would be required at the other potential sites.

At each potential site, the ferry maintenance facility would be extended into deeper water to accommodate Kitsap Transit vessels, away from the upper shore zone (USZ) and lower shore zone (LSZ). The movement into deeper water is considered favorably by the conservation calculator because the USZ and LSZ provide a greater habitat value than the deeper shore zone (DSZ). Minimizing overwater coverage in the shallower waters of the USZ and LSZ areas helps to support important habitat values, including growth of submerged aquatic vegetation and freer migration patterns for juvenile salmonids. Conceptual layouts for the ferry maintenance facility incorporated reduction of overwater coverage in the nearshore areas where possible.

The greatest change occurs at the Kitsap Marina & Suldan's site because of the removal of recreational moorage located in these shallow waters, and relatively limited infrastructure that would be needed in the USZ and LSZ for the ferry maintenance facility. The Kitsap Marina & Suldan's site would also have the greatest reduction of overwater structure in the DSZ, for the same reasons.

The conservation calculator would analyze these types of changes numerically. Given the reduction in overwater coverage and the movement into deeper water for all potential sites, the total debt generated by the project is expected to be relatively low. Though, some debt will be

accrued because project proposes to introduce and maintain new structure in the nearshore environment.

Potential Opportunities to Mitigate Impacts to the Natural Environment

The conservation calculator provides significant credit for removal of creosote-treated piling and other structures. This would be accomplished through removal of the existing recreational moorage at each site, which is expected to have creosote-treated piling and other creosote-treated elements. The conservation calculator also provides credit for shoreline softening and riparian planting, which could potentially be achieved at each site where ferry maintenance facility operations are not programmed. This appears to be feasible at the west side of the Kitsap Marina site, at the east side of the combined Kitsap Marina & Suldan's site, and at the west side of the Marina Bar & Grill Site. Providing shoreline enhancements at the sites, if feasible, would be a significant benefit that is highly valued in the conservation calculator and by the regulatory agencies and tribes.

The combination of reduced overwater coverage, removal of creosote-treated piling and other structures, movement into deeper water, and potential environmental improvements to the shoreline may potentially alleviate the need for compensatory mitigation. At this time, initial input of the conceptual designs into the conservation calculator would support that conclusion; though this review is cursory and is at very early stages of project design. If the key assumptions are maintained as design progresses, it could avoid the significant regulatory complexity associated with identifying and negotiating additional compensatory mitigation and would minimize the associated costs.

If these key assumptions cannot be maintained or the facility is expanded significantly, additional compensatory mitigation will likely be required. The mitigation requirement would need to be fulfilled through purchase of mitigation credits at a mitigation bank or through a fee in-lieu transaction. Or, Kitsap Transit could elect to purchase and restore a site at the scale needed to reach a neutral (rather than negative) calculator output. Both of these options are much more complex and typically much more expensive than integrating shoreline enhancements at the development site.

Separately, Kitsap Transit should assume that some type of mitigation will be needed to offset impacts to tribal fishing. This mitigation is negotiated on a project-specific basis, but is generally provided in four ways: 1) payment to the tribe to compensate for lost fishing access or impacted fishing time during facility construction; 2) agreement to purchase tribal fishing nets if they are damaged during construction as a result of barge traffic or other associated activities; 3) notifications to tribes during construction so tribal fisherman are aware of barge traffic or other associated activities; and 4) long-term opportunities to tie tribal fishing nets to the facility, if reasonable and feasible.

OVERVIEW OF IMPACTS TO THE BUILT ENVIRONMENT

Construction of the ferry maintenance facility would displace the existing recreational moorage (and existing private businesses) at each potential site. Based on facility size and intended operations, reconfiguration of the recreational moorage alongside the ferry maintenance facility is not feasible. As such, approximately 60 – 70 slips would be removed at the Kitsap Marina site. Approximately 100 total slips would be impacted from development at the combined Kitsap Marina & Suldan's site. Similarly, approximately 100 total slips would be impacted at the Marina Bar & Grill Site.

Potential Opportunities to Mitigate Impacts to the Built Environment

There is not a prescriptive approach to offsetting this impact to the built environment. Potential opportunities would certainly be evaluated during the future environmental review, and in coordination with the public as comments are submitted and impacted stakeholders are notified. At this early planning stage, Kitsap Transit may consider relocation of the displaced vessels as a likely request or outcome. It would be reasonable to assume that most boat owners would prefer relocation within Sinclair Inlet, with some preferring Port Orchard to Bremerton for consistency in the community and to avoid the faster currents on the other shoreline. This would require Kitsap Transit to identify and secure moorage for up to approximately 100 boats (assuming 100% moorage capacity at the selected site at the time the mitigation is determined).

The terms of relocation would be determined by Kitsap Transit in later phases of this project. Mitigation to offset displacement of the recreational moorage could begin with providing coverage for the security deposit that is required as moorage is established at a new marina. The agreement could be enhanced to include payment to cover increases in the monthly slip fee for a specified period, if the slip fee would increase as a result of the move. If there are not enough slips to rehome the displaced boats, Kitsap Transit could further investigate whether existing derelict vessels at the area marinas would be interested in a buy-out to free-up additional moorage across Sinclair Inlet. That moorage could then be reserved for impacted boat owners.

These are preliminary concepts only that would be evaluated further during the environmental review process for feasibility, cost, public interest, and other considerations.

ORDER OF MAGNITUDE COST FOR ENVIRONMENTAL MITIGATION

During the conceptual design phase, a placeholder is typically held for environmental mitigation at approximately 10% of the assumed construction cost. This order of magnitude is typically used when specific mitigation needs or opportunities have not yet been identified.

CONCLUSION

The Kitsap Transit Ferry Maintenance Facility Project will result in impacts to the natural environment, built environment, tribal fishing, and private businesses. The project team has

reviewed the conceptual layouts and has determined that the type of impact is similar at each potential site; this means that none of the sites avoid one or more of the impact types altogether. Additionally, the conceptual layouts have been reviewed for the potential severity of impact and the sites are relatively similar. Refer to the table below for an overview; please remember that this summary is based on existing available information at a conceptual level of design only.

Table 2. Summary of Impact Type and Severity Across the Potential Sites

Impact Type	Impact Severity		
	Kitsap Marina	**Kitsap Marina & Suldan's**	**Marina Bar & Grill**
Natural Environment	Least reduction in overwater coverage and movement to deeper water compared to existing conditions	Greatest reduction in overwater coverage and most movement to deeper water compared to existing conditions	Moderate reduction in overwater coverage and movement to deeper water compared to existing conditions
Tribal Fishing	Impacts to fishing access during construction		
Built Environment	Impacts to ~60-70 slips	Impacts to ~100 slips	Impacts to ~100 slips
Private Business	Displacement of 1 private business	Displacement of 2 private businesses	Emanant domain over mixed-used development under construction

The evaluation and identification of measures to avoid, minimize or mitigate these impacts will be a meaningful component of the environmental review process. It is likely that the approach to mitigation would be similar at each site; the approach or extent of mitigation should not vary widely enough that it would be a driving force in the decision-making process. The ability to identify and refine the likely mitigation measures and cost of mitigation will increase as design progresses; this type of planning typically runs concurrently to the 30- and 60-percent design processes.