The Cecil Group
Planning and Design

MEMORANDUM

Date: December 26, 2012

To: James Swindler
Deputy General Manager,
Ferry Division
Golden Gate Bridge, Highway and Transportation District

From: Steven G. Cecil AIA ASLA

RE: Methods and Scope for Professional Planning and Design of Landside Improvements at the Sausalito Ferry Terminal.

This memorandum has been prepared to provide an overview of methods and approaches that may be used to accomplish the effective redesign of landside operations, circulation and spaces at the Sausalito Ferry Terminal operated by the Golden Gate Ferry Division. It is intended to assist both the Ferry Division and the City of Sausalito as they engage in a joint planning and design process that will lead to significant improvements in the circulation patterns and quality of experience for the ferry passengers - and everyone who uses this portion of Sausalito's waterfront.

The methods and scope contained in this document have been prepared at the request of the Golden Gate Ferry Division and reflect a collaborative effort with the City of Sausalito, including a combination of City officials and staff in addition to Golden Gate Ferry staff. The observations and recommendations have been prepared by Steven Cecil AIA ASLA of The Cecil Group and are based on specialized professional expertise in planning, programming and design of ferry facilities and their landside interactions with the communities that they serve.

This document includes two major sections:

- Overview
  - Context for Planning and Design
  - Process
  - Terminology
  - General Observations
  - Related Information Resources
- Recommendations
  - Define Clear Goals
  - Define Area and Projects
  - Establish the Landside Scope and Methodology

An appendix to the memorandum includes a list of information resources available for use in the planning and design process. The appendix also includes a diagram that records some of the major circulation and staging patterns discussed in this memorandum.

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Overview

Context for Planning and Design

The operations of a busy ferry terminal along a compact waterfront are complex under the best of circumstances. The landside terminal operations in Sausalito are particularly challenging because of the limited land area available for staging and circulation of ferry passengers. The operations at the terminal must be integrated with vehicle circulation, bus and taxi staging, parking and pedestrian patterns that have links to the ferry, but also must compete for limited space.

The Golden Gate Ferry Division and the City have worked together and found incremental adjustments in the past that have been able to accommodate the typical flows of passengers, vehicles and other waterfront-bound transit, traffic, parking and pedestrian needs. However, the dramatic increase in bicycle passengers has significantly affected the ability to reasonably accommodate all of the users, placing increasing pressure on staff and volunteers to be able to keep the landside areas manageable. In particular, the terminal has seen an enormous increase in one-way travel by bicyclists, many of whom rent bicycles in San Francisco as part of a day-trip excursion that includes bicycling across the Golden Gate Bridge and then descending the steep slopes of the Marin headlands through the streets of Sausalito to arrive at the terminal, so that they can return by ferry. As a result of this emerging pattern which lasts many months of the year, the quality of the experience for the ferry passengers, visitors and users of this portion of the waterfront has declined considerably - and may continue to decline unless changes are made.

The conditions at the terminal and along the waterfront can be significantly improved through coordinated physical improvements and related changes in the operations in the area. This memorandum takes into account several key considerations:

- Availability of grant funding - Grant resources have been obtained that will provide an opportunity to accomplish significant landside improvements in the relatively short term that can address many existing spatial issues and create a better environment for operations and for the quality of the landside areas.

- Municipal land and roles - The landside operations and affected circulation and land use patterns occur largely within municipally-owned land and rights-of-way, or on land that is within the City's regulatory jurisdiction. This includes the circulation for all modes and stops or staging areas for pedestrians, bicyclists and vehicles (pick-up and drop-off), transit (public and tourist) and for taxis. The City owns and manages both vehicle and bicycle parking in the area. The City supports visitor information through a volunteer-staffed booth, is completing public restrooms in the area, and provides wayfinding and directional information. The City is a steward of the area's use by Sausalito citizens and of the area as an economic asset with its significant concentration of shops, restaurants, marine-dependent and hotel uses.

- Golden Gate Ferry facilities and roles – The Golden Gate Ferry Division owns and operates the terminal facilities, most of which occupy waterside improvements consisting of piers, walkways, and docking facilities. It serves the

terminal with multiple vessels that link Sausalito to the San Francisco Ferry Building. It provides use of its facilities to an independent ferry operator, the Blue & Gold Fleet, which operates a route between Sausalito and Fisherman's Wharf. The Golden Gate Ferry Division provides important landside operations and facilities including automatic ticketing and information and direct operational assistance at the landside/waterside interface in concert with the City. This includes a simple reservation system for embarking bicycle passengers. The Ferry Division is preparing to accomplish significant waterside improvements including re-alignment and expansion of the pier capacity that will improve circulation and expand patron staging, but will not extend to landside improvements.

- Pier expansion project - A significant expansion of the pier is being undertaken by the Golden Gate Ferry Division. This expansion will provide needed additional capacity for disembarking passengers, and expand the ability to queue pedestrian passengers and bicycle passengers, easing some landside issues.

- Need for strategic multi-modal solutions – Although the issues triggered by the increasing bicycle travel need to be addressed, there is no simple solution that can focus on this single mode. There are operational problems associated with every mode of transportation and associated circulation, staging and parking. Solutions must strategically consider all of the modes and their relationships. A strategic solution must also consider the potential for possible changes in demand or use patterns in the future, so that the area can continue to adapt.

- Scale and complexity – The scale and the complexity of the issues are significant. During peak operations that endure for many months of the year, the boats operating at this terminal must unload and then load hundreds of passengers and bicycles in a short time interval and in an area that also handles substantial tourism and public buses, hundreds of parking spaces essential to area businesses, and pedestrian patterns in a major shopping and tourism destination.

Process

The process used to assemble this memorandum consisted of a series of site observations, meetings and interviews, and review of relevant studies and data made available by the Golden Gate Ferry Division and the City of Sausalito. This included:

- Orientation – This included an initial visit to the terminal and review of the prominent issues and purposes of this effort.

- Site visits, observations and interviews - Two site visits were conducted at different times and included discussions with several Golden Gate Ferry staff who are responsible for managing various aspects of the landside and waterside operations, and elected officials and City staff involved in the operations and improvements on the landside. Additional observations of ferry operations were undertaken separately of off-loading and on-loading cycles for both Golden Gate ferries and Blue & Gold ferries on a Sunday and Monday in early December.

- Review of plans, studies and data – A review was conducted of a range of documents provided by both the Golden Gate Ferry Division and the City of Sausalito. A complete list of resource documents is contained as an Appendix to this memorandum.

Terminology

Certain terms are used in this memorandum that are helpful in communicating specific ferry terminal planning, design and operational concepts, tailored to some of the distinctive circumstances of this terminal and its operations.

- Cycle – This is the complete cycle of activity associated with a single ferry including both its debarkation and embarkation. A cycle begins with arrival of the first passengers to the ferry terminal landside area and ends with the departure of the last passenger that leaves the ferry terminal landside area.

- Debarkation – The process of unloading passengers and cargo from a boat to the shore.

- Embarkation – The process of loading passengers and cargo from the shore onto the boat.

- Headway – For ferry operations with multiple routes, this term normally means the time between departures for ferries on the same route, and the term is used in this manner for the Sausalito terminal in this memorandum. However, because some of the passengers at the Sausalito can substitute their destinations and take either a Golden Gate Ferry to the San Francisco Ferry Building or the Blue & Gold dock to Fisherman's Wharf, the effective headways for a portion of the passengers are more complex and need to be taken into account.

- Landside Area – For the purposes of this memorandum, the "landside area" is considered to be all locations that are associated with ferry terminal operations that are on land at Sausalito, rather than on a pier on associated with the boats. Landside areas are used today for significant queuing, staging, and for all ferry-related inter-modal transfers (connections to pick-up and drop-off, transit and tour buses, and cars parked by ferry passengers).

- Program – For planning and design projects, the "program" is the specific, detailed list of design characteristics that must be accommodated, including space requirements and components and associated operational requirements.

- Queue – A line or group of waiting individuals that will be subsequently processed or advanced sequentially through a checkpoint, onto a vessel or into a vehicle.

- Staging – This is the allocation of space or use of operational methods (including queuing, reservations, vehicle or bicycle holding areas) to organize passengers or transportation equipment prior to being loaded.

- Waterside Area – For the purposes of this memorandum, the "waterside area" are all the areas engaged in ferry operations that are not on land, including all piers and docking facilities.

Stakeholders

The planning and design process of the landside area must consider the interests and needs of multiple stakeholders. A preliminary list includes:

- Walk-on passengers
- Passengers with bicycles
- Commuter passengers (both walk-on and bicyclists)
- Passengers with disabilities
- Area users with disabilities
- Visitors to the waterfront and downtown Sausalito
- Motorists
- Non-passenger pedestrians
- Non-passenger bicyclists
- Adjacent and nearby businesses and establishments and their patrons
- Sausalito residents and taxpayers
- City departments and staff, including volunteer assistants
- City committees on relevant topics
- Civic advocacy groups
- Business and tourism promoters and supporters, including the Chamber of Commerce
- Ferry service providers including their staffs
- Parking lot patrons
- Taxi operators and passengers
- Tour bus and shuttle operators and passengers
- Public transit operator and passengers
- Bicycle advocates
- Bicycle rental companies

General Observations

The following observations summarize the prominent issues, constraints and opportunities that should be taken into account in the planning and design of landside improvements. The evaluation and design of ferry terminals typically begins with the consideration of the embarkation and disembarkation patterns, and considers how these are related to one another in terms of cycles of activity. The evaluation also considers the relationship to all other modes where transfers occur to and from ferries, and the sufficiency of space and operations for those modes. The overall characteristics of the area and its ability to support the needs of other stakeholders are also taken into account.

Embarkation

- Embarking passenger characteristics – Many of the embarking passengers are tourists for whom the trip is either a one-way excursion back to San Francisco, or a two-way excursion from San Francisco and back. A significant proportion of the passengers are foreign tourists with limited language skills. Unlike commuters or regular travelers, the tourist passengers do not have the benefit of becoming familiar with the layout and operations at the terminal, and are easily subject to confusion.

- Accumulations of passengers with bicycles – Highly problematic issues have been triggered by peak period accumulations of ferry bicycle passengers that substantially exceed the capacity of vessels to service them with existing vessel assignments, schedules and headways. This accumulation is directly associated with the pattern of rental bicycle use. Rental companies provide bicycles to visitors with a planned route that includes a ride from San Francisco, across the Golden Gate Bridge, and a descent through the intervening hills towards a return trip across the Bay by ferry to the trip's origin. This same pattern of travel is also used by other bicyclists, which compounds the peak demand. The trip demand substantially exceeds the capacity of the ferries to remove waiting bicyclists during periods extending from early afternoon to early evening, for many months of the year and throughout the week during high demand months. As a result, bicycling ferry passengers commonly experience several hours of unexpected delay. The accumulation of waiting passengers and bicycles frequently consists of hundreds of individuals and bikes for which there is insufficient space adjacent to the terminal.

- Pre-ferry embarkation activity – For most ferry systems, extended waiting times are very undesirable; this is not the case for many of the embarking ferry passengers in Sausalito, nor for many area businesses. In fact, a delay between the bicyclists' arrival in the landside area and their departure on a ferry is a desirable aspect of their overall trip. The time can be beneficially used for shopping, enjoying the eating and drinking establishments, or simply visiting the attractions and views along the waterfront. The challenge is to allow this delay to be appropriately long but predictable, so that ferry passengers can enjoy Sausalito but confidently plan their time and their return to San Francisco.

- Bicycle reservation method - A simple reservation method is used to assign bicyclists to sequential departures in a predictable manner when accumulations arise. This consists of a distribution of colored chips that indicate the vessel assignment, which is distributed to bicyclists as they arrive in the landside area, and then are collected prior to final queuing and vessel loading. However, the system is not easily understood without an explanation, and is separated from the ticketing locations and methods.

- Bicycle staging and multiple locations – A bicycle staging area at the edge of the parking lot and walkways leads towards the terminal and the pier; some staging occurs waterside on the pier. This staging arrangement appears to be generally adequate in size for the needs of the largest capacity vessels operating today - although the location, configuration and layout may benefit from improvements. However, during times when accumulations exceed the capacity of a single vessel, there is insufficient space for ferry passengers to secure their bikes while they wait. The City has responded by allocating a series of bicycle parking areas (designated A,B,C and D) for use by bicyclists who have reservations for pre-staging, each one increasingly distant from the terminal.

- Embarkation ticketing and schedule information – Deciphering the departure schedule and ensuring that tickets are available and acquired is part of the embarkation process. The choices for ferry service patrons at the Sausalito terminal can be confusing. The signage for the schedule and ticketing information for the two services is adjacent, but graphically different. The

typical ticketing methods are different for the two systems – the Golden Gate Ferry sells tickets in advance and collects the tickets upon boarding. The Blue & Gold sells tickets on board the vessels. Both systems honor each other's tickets. Some passengers have obtained tickets before arriving at the terminal, but may not understand that the tickets will be honored by both services, or that the destinations of the two services is not the same and how they should navigate between them. Many passengers rely on information from ferry personnel or volunteers assisting the City and the Chamber of Commerce information booth. They also seem to rely on information that they pass among themselves, as individuals who are familiar with the system or who believe they have deciphered the information instruct others on how to best proceed.

- Embarkation staging and queuing for pedestrian passengers – Unlike passengers with bicycles, the pedestrian passenger accumulations rarely exceed the capacity of the vessels, schedule and headways so that passenger can leave on the next ferry leaving to their preferred location. The staging areas include some space near the water's edge, and a queuing area on the pier. This queuing capacity will be significantly expanded with the pier expansion project.

- Drop-off operations and other modes – Curbside areas and lanes have been allocated to bus and shuttle operations along Anchor Street and Humboldt Avenue. At peak times, vehicles may be directed away from the area after unloading passengers, if the available space is filled by other buses and shuttles. The path for shuttle and tour bus patrons threads through the circulation aisles of the adjacent parking area. Taxi pick-up and drop-off occurs in several locations and includes opportunistic stopping by some taxis that have bicycle racks to attract bicycle passengers with long waits. Passenger vehicle pick-up and drop-off likely occurs in many locations where drivers can avoid congestion. The curb-side location within the existing parking lot adjacent to the terminal also serves as a circulation drive, and waiting vehicles apparently block this and other internal circulation drives as they wait for ferry arrivals.

- Embarkation for passengers with disabilities – An evaluation needs to be accomplished relative to the conformance with applicable standards and guidelines, but there does not appear to be a compliant pick-up and drop-off space adjacent to the terminal.

Debarkation

- Debarkation circulation patterns – Debarking passengers are directed to the south edge of the terminal pier; currently the width of the debarkation path is constrained, but this will be resolved with the planned pier expansion. At the foot of the pier, debarking passengers reach a decision point, and disperse in a variety of directions. Some of the debarking passengers use the available waterside sidewalks to reach the connecting sidewalks along El Portal Street and Tracy Way; all others must filter through the circulation lanes of the adjacent parking lot.

- Debarkation for passengers with disabilities – The same comments associated with the embarkation portion of the cycle apply to debarkation.

Debarkation/Embarkation Circulation Conflicts

- Major conflict area – The base of the pier has become a major circulation and activity conflict area. The basic circulation flow induces a crossing movement between many of the debarking passengers who continue straight into the parking lot and destinations to the north, across or along the parking lot. The queues and patterns for embarking passengers cross this path, creating the need for a managed checkpoint to allow debarking passengers to complete the unloading cycle. In effect, this is an intersection. This same, compact area is where the ticket kiosks are located and primary ferry schedule information is posted. This use is not controlled, so passengers seeking information or tickets collect in significant numbers, impeding both the embarkation and debarkation patterns.

Additional Topics

There are many general issues that can also be addressed in the process of planning and design for landside improvements, including:

- Improvement in the quality of experience for all visitors and service users
- Provision of designated and accessible pedestrian walkways and crossings for all pedestrian traffic.
- Provision of appropriate shared paths or marked routes for bicyclists for all principle directions.
- More clear and better located information regarding ferry schedules, ticketing, reservations and other key topics, including multi-lingual information for high frequency language groups.
- More clear and better located directions for debarking passengers before and at their major decision points regarding the location of information, directions, maps and destinations.
- Wayfinding systems for all landside users
- Consideration of the vehicle intersection and circulation patterns
- Potential for provision of adequate, consolidated bicycle staging areas on a seasonal basis through special measures along El Portal Street, Tracy Way or other areas
- Provision of service and customer access for businesses and establishments along El Portal Street
- Transportation demand management methods to limit extended waits and better distribute traffic
- Appropriate methods, if possible, to address the needs of regular commuters relative to tourism-related travel

Recommendations

The following recommendations describe a potential approach to organizing and then directing professional services to address the many related landside issues described in the memorandum and discussed during the preparatory meetings.

We have not prepared recommendations concerning the process for advancing plans and designs on the landside, but presume that a steering committee would be established by the City in collaboration with the Golden Gate Ferry Division and actively involve stakeholders and citizens in a process that will gather information, seek input, and result in projects that are understood and supported.

Define Clear Goals

The process will benefit from creating and documenting a clear set of shared goals among the City and the Golden Gate Ferry Division that will serve as the criteria for advancing designs, comparing alternatives, and making decisions. These goals should be adequately general to provide flexibility in the way that they are subsequently addressed, and also recognize that some trade-offs may need to occur. The list of goals should consider:

- Stakeholder needs – Establish basic goals for serving relevant needs of major stakeholders. For example, the goal for tour bus/shuttle passengers could be "Provide a safe, pedestrian-friendly, well-signed path to and from all pick-up and drop-off locations within designated sidewalks, shared paths or marked crosswalks." Or, for accessibility, "Design all improvements to enhance accessibility and meet all regulations and guidelines so that there is a complete, accessible path to and from the vessels for all users and their destinations near the terminal."

- Peak period operations – Characterize the goals for peak period operations. For example, this could include "Provide clear and convenient information and ticketing for all debarking passengers in locations that do not interfere with ferry operations and associated circulation during peak periods". Or, "ensure that arriving passenger and bicycle flows do not impede the operation of area intersections to the greatest degree practical.".

- Off-peak operations – During off-peak periods, the landside can operate quite differently from peak period operations; desirable differences should be addressed in the goals. So, for example, the parking area or pick-up and drop-off may operate differently at different times.

- Character and quality of the area and experience – The goals should consider the visual and design characteristics of the area and how it should fit within the overall appearance and experience of downtown Sausalito, its streetscape and landscape.

- Operational characteristics – The goals should consider the degree to which the landside area will or should require staffed operations and associated operational costs or volunteer efforts.

- Phasing – Basic goals related to phasing should be articulated, including any key relationships to existing or potential resources for physical or operational improvements.

Define the Projects

Because there are so many inter-related facets to landside ferry operations, it may be helpful to distinguish some basic definitions among a series of constituent projects that should be linked through a common strategy established as the master plan document for a sequence of improvements, over time. The projects may be aligned with various funding sources, phasing or other considerations, including advancing detailed planning and design sequentially, and over time. For example, the projects could include:

1. Strategic Landside Plan - This would be create the guiding document for phased and related projects in the landside area.

2. Baseline Landside Improvement Project – This project could be aligned with current available funding and would be designed to most effectively use the funds to accomplish key goals. This is assumed to consist of potential significant realignment and re-allocation of the pedestrian and bicycle circulation areas leading some distance from the terminal, at least to the bus/shuttle area, realignment of some portions of the existing adjacent parking areas, and improvements and operational methods to shift peak period operations and better accommodate the accumulations of bicycle passengers.

3. Short-term and Interim Improvement Projects – These would be projects that could be accomplished prior to, or in conjunction with, the baseline improvements to immediately improve existing conditions or to expand the effectiveness of the Baseline Improvement Projects. For example, such projects could include relocating ticketing, providing signage to inform passengers of expected wait times and choices, redistributing bicycle racks, or undertaking temporary street closures to test alternative staging methods for bicyclists. This project would include landscaping, streetscaping and other aesthetic enhancements to the area to improve the experience and visual quality.

4. Transportation Demand Management – This could be a coordinated effort to shift the pattern and timing of bicycle passenger demand including methods to reduce long waits and provide alternative transportation methods, shift or disperse arrival routes, and the like.

5. Parking Management – This could include methods to optimize various purposes of the parking areas including pricing, directions and information systems to reduce redundant circulation as patrons seek spaces.

6. Long Term Projects – Some projects may require raising additional grants and funds, or may be needed to provide improvements that adapt to changing travel and ferry service patterns.

Establish the Landside Scope and Methodology

The following discussion provides the elements for professional services that would accomplish the preparation of the first two projects listed above – the Strategic Landside Plan and the Baseline Landside Improvement Project.

Strategic Landside Plan

1. Evaluation of Existing Conditions

1.1 Base Map and Ownership Information

The overall planning area should be defined, in concert with the committee directing the projects.

A base map should then be prepared showing relevant property lines and rights-of-way for the area. The base map should include all of the areas subject to both planning and detailed design under these projects, and should incorporate all planned and designed waterside improvements that are scheduled for construction. The base map should indicate all buildings, uses, pavement areas, markings and permanent features or improvements, including arrangements of barriers and planters associated with non-peak operations.

A separate base map should indicate the current allocation and use of space for peak period operations.

1.2 Survey

A professional survey will be needed for the Baseline Landside Improvement Project. However, its preparation may be delayed until the extent of the area to be surveyed is defined during the preparation of the Strategic Landside Plan, so that it is cost-effective and portrays the areas likely to be within the limits of work.

1.3 Review of Plans, Studies and Regulations

A review of existing reports, plans, policies and recommendations should be conducted, and relevant aspects summarized to inform the specific landside planning and design efforts.

1.4 Ferry Traffic and Demand Evaluations

Demand

Evaluations should be undertaken of the characteristics of existing ferry travel and relevant trends in ridership. This evaluation should employ available data from the ferry operators that record passenger and bicycle counts by departure over a multiple-year period of five years if data is available, on a daily basis if possible. The evaluation should chart and analyze ridership patterns for various segments of the ridership that may be available, including bicycle and pedestrian passengers. The data should distinguish debarkation and embarkation counts and patterns.

The evaluation should identify trends in travel patterns, and indicate the extent and characteristics of peak, and average ridership levels during peak seasons, and peak and average ridership levels during off-peak seasons.

Ferry Capacity

The daily capacity of ferries arriving and departing the terminal needs to be charted based on the records of the ferry operators or posted schedules for the same time periods evaluated for demand characteristics.

Calculated Accumulations

Using available data from the current reservation system, observations or other sources, charts should be prepared to indicate maximum and typical peak accumulations of embarking passengers and their bicycles that are waiting for space on a departing vessel.

1.5 Vehicle Traffic Evaluations

Information should be assembled and characteristics identified regarding traffic patterns in the area and characteristics during peak traffic and ferry operation periods. This should include relevant traffic volumes and effective capacities, levels of service, and constraints on the area streets including information on observed or calculated delays that occur in peak periods.

1.6 Parking Evaluations

The characteristics of the layout and operations of the adjacent parking areas should be documented and evaluated relative to the potential relationship to landside planning for ferry terminal operations. This should include information on circulation, pricing, off-peak and peak patterns, leasing or other agreements. For the parking lot adjacent to the terminal, current peak and non-peak period use characteristics should be documented and evaluated in terms of utilization and characterization of use by relevant categories (ferry patrons, city residents, hotel lease, others) using existing studies, counts, and evaluation of records. The total revenue from this lot being generated should be calculated on an annual basis. The parking management methods, including enforcement, should be noted.

1.7 Landside Circulation and Operations Evaluation

Interviews

An organized series of interviews should be undertaken and relevant information summarized with key stakeholders in the landside area and the ferry operations.

Observations

On-site photographic and video observations of typical peak and non-peak operations should be undertaken for several typical ferry cycles including daily peak embarkation and debarkation patterns. These observations should be extended during periods of peak accumulation to observe the entire sequence of cycles beginning before any delays occur until the last effected departure occurs. The observations should be correlated with ridership counts by categories for all ferry arrivals and departures during the periods observed.

Circulation and Operations Mapping of Ferry-related Origins and Destinations

Using field and video observations, mapping should be undertaken to represent the circulation and operation patterns during each phase of a typical peak and non-peak cycle for embarkation and debarkation for both Golden Gate and Blue & Gold operations.

The same sources should be used in indicate typical and maximum accumulations of waiting passengers.

Using the field and video observations of multiple cycles, a map and statistical summaries should be prepared to indicate the origins and destinations within the overall planning area of both embarking and debarking passengers. Observations should consider the location and quantity of observed pick-up and drop-off activity by transit, buses, shuttles, taxis and passenger vehicles of ferry patrons.

Operational and Management Methods

Using interviews and observations, a summary of the existing circulation and landside management methods should be prepared.

2. Projections

Using available information and interviews with relevant stakeholders, projections should be prepared regarding potential changes in ferry traffic characteristics in the future. A five year horizon should be employed, and factors that could shift long-term travel characteristics should be noted.

The projections should consider prospective changes in the capacity of the ferry services by virtue of changes in vessels, vessel routes, configuration, and schedules for both peak and off peak period.

Within the prospective available capacities, the evaluation should consider recent trends and other resources to project potential changes in peak and off-peak patterns including the extent that peak-period patterns may become more extended, and potential maximum accumulations that are likely to occur as they relate to the effective delay and extended waits, and the tolerance of the passengers to these extended waits.

Similar projections should be estimated for other relevant modes, with particular attention to tourist bus and shuttle activity including the maximum demand patterns for both pick-up and drop-off, timing and duration of these services.

3. Technical Memorandum: Evaluation of Opportunities and Constraints

Based on the information that has been assembled, a technical memorandum and associated summary presentation including relevant graphics should be prepared in draft form for review and discussion, and finalized based on additional questions and comments. This evaluation should consider the conditions and projections of ferry service patterns and other modes examined in the preceding tasks, as well as the overall characteristics of the area relative to the goals and identified stakeholder interests. The memorandum and presentations should enumerate the specific issues associated with locations, configurations, information and operations that are susceptible to improvement through strategic actions.

4. Programming

The City and the Golden Gate Ferries should collaborate on the preparation of an overall strategic program that considers physical space needs as well as operational and management considerations. The programming should establish specific standards or assumptions, and include the following elements:

- Design vessels and headways – The critical capacity and timing of arrival and departures that will be the basis of design, including capacities for various user types.

- Staging and queuing requirements – The number and type of passengers and bicycles that will be accommodated relative to the design vessels and headways, and the spatial requirements associated with them.

- Pre-staging and information areas – The number, type and functions in gathering areas associated with the initial arrival to the terminal area of both embarking and disembarking passengers.

- Parking space requirements – The minimum number of parking space requirements for the adjacent lot, and any assumptions concerning the characteristics of parking made available for ferry patrons, if any.

- Staging and circulation requirements for other modes – Quantities of space and other considerations associated with tour buses and shuttles, taxi and passenger vehicles.

- Circulation standards, all modes – Circulation space and flow requirements for all modes, including all inter-modal exchanges.

- Accessibility program – Description of specific requirements and their relationship to applicable laws, regulations or guidelines.

- Landscape and streetscape characteristics – Visual and aesthetic design standards or goals.

- Environmental and sustainability program – Goals and requirements for environmental sustainability.

- Site design and utilities – Requirements associated with electrical, water, communications, storm water or other utilities and associate site design standards.

- Operations and management assumptions – The relevant assumptions concerning ticketing, reservation systems, staffing and information systems.

- Phasing and constructability – Relevant assumptions concerning the need to plan and design for phasing and relationship to ongoing operations, business and property access, and the like.

- Peak and non-peak program assumptions – Distinction between program elements that are associated with peak season operations and requirements, and non-peak conditions.

- Other requirements – Description of relevant requirements

5. Alternative Strategies

5.1 Preliminary Alternatives

The professional team preparing this plan should next be charged with preparing alternative strategies that meet the programmatic requirements using different approaches to layouts, phasing, management or other methods. Up to three alternatives should be prepared in a preliminary form for discussion with the steering committee.

5.2 Alternatives and Evaluation

Refined alternatives should then be prepared with relevant drawings, diagrams and information. Each alternative should include phasing considerations, and include diagrams and illustrations indicating the physical relationships and relative timing of each phase of debarkation and embarkation cycles. The alternatives should include concepts for efficient use of available space and potential use of technologies, equipment and operational management to accomplish the program requirements effectively. Comparative advantages and disadvantages of each alternative should be prepared relative to the list of goals. The alternatives should indicate how each alternative is distinguished relative to the variety of projects that it defines, including:

- Baseline Landside Improvement Project (including physical scope and concept level cost)

- Short-term and Interim Improvement Projects – (including physical scope and concept level costs)

- Transportation Demand Management methods that may be achievable

- Parking Management methods that may be helpful

- Potential Long Term Projects – Related projects or initiatives, including potential responsibilities, timing, resources or other considerations.

5.3 Preferred Strategic Plan

6. Strategic Landside Plan

Based on the review and direction of the City, the Strategic Landside Plan should be defined and documented in draft and final form, including all of the components and considerations noted above.

7. Baseline Landside Improvement Project

In concert with the advancement of the Strategic Landside Plan, the specific design process for funded improvements can be accomplished using standard processes. Among the typical relevant steps are the following:

7.1 Documentation of Existing Conditions:

To the extent that the geographic scope of the Baseline Improvement Project is defined early in the strategic process, current surveys and base maps can be assembled, along with relevant engineering and technical data. The applicable regulations and standards should be listed and the overall approval process defined and scheduled.

7.2 Refined Program

The program elements of the strategic plan applicable to this project should be reviewed and refined, and additional detail prepared. The project program should be reviewed and confirmed by the City and Golden Gate Ferry Division before detailed design proceeds.

7.3 Schematic Design

The design and cost estimates are advanced through conceptual design to confirm the direction.

7.4 Design Development

Design development provides dimensioned components from all participating disciplines, outline specifications and a more detailed cost estimate.

7.5 Construction Documents

This phase provides the construction drawings and bid specifications.

7.5 Bidding and Negotiations

The professional team assists in preparing the contracts for construction.

7.6 Construction Phase Services

Professional assistance is provided to ensure that the intent of the Construction Documents is met.

Appendix: Information Resources

The following list represents a selection of information sources reviewed during the preparation of this memorandum:

City of Sausalito Ferry Terminal to Gate 6 Road Path Feasibility Study, Alta Planning + Design, February, 2011.

City of Sausalito 1995 General Plan, Adopted September, 1995.

Ferry Landing to Downtown Sausalito Conceptual Master Plan, R/H/A/A, drawing dated 9/3/2009.

Final Report, Central and Southern Marin Transit Study, HDR, June 25, 2009.

Imagine Sausalito Final Report, City of Sausalito Harbor and Downtown Action Committee, April 24, 2009.

Imagine Sausalito Final Report, City of Sausalito Transportation Action Committee, April 24, 2009.

North-South Greenway Update, Summer 2009.

Pedestrian/Bicycle Facilities, Sausalito's Community Visioning Process, Business Advisory Committee, May 12, 2007.

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