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Maintaining the Bay's Treasure: Park Maintenance and Staffing on Treasure Island and Yerba Buena Island

A Study Conducted for the Treasure Island
Development Authority (TIDA) and San
Francisco Office of the Administrator

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THE AUTHOR CONDUCTED THIS STUDY AS PART OF THE PROGRAM OF PROFESSIONAL EDUCATION AT THE GOLDMAN SCHOOL OF PUBLIC POLICY, UNIVERSITY OF CALIFORNIA AT BERKELEY. THIS PAPER IS SUBMITTED IN PARTIAL FULFILLMENT OF THE COURSE REQUIREMENTS FOR THE MASTER OF PUBLIC POLICY DEGREE. THE JUDGEMENTS AND CONCLUSIONS ARE SOLELY THOSE OF THE AUTHOR, AND ARE NOT NECESSARILY ENDORSED BY THE GOLDMAN SCHOOL OF PUBLIC POLICY, BY THE UNIVERSITY OF CALIFORNIA, OR BY ANY OTHER AGENCY.

Executive Summary:

By 2032, the Treasure Island Development Authority (TIDA) will inherit 290 acres of various new parks and open spaces. This report outlines a literature review and regional practices review that sought to determine whether contracted or in-house workers could best maintain these spaces, what work they should perform on what schedule, and what standards the Authority could use to ensure its parks remained at a world-class level. An evaluation using four criteria (effectiveness, relative costliness, administrative feasibility, and political feasibility) of four alternative staffing models (continuing Rubicon Landscaping's current contract, seeking bids from other contracting firms, establishing a Treasure Island/Yerba Buena Island conservancy, and hiring in-house staff) concluded that a split maintenance system would be optimal due to the two general categories of future parks space. Namely, designed spaces maintenance, with their predefined set of assets and ability to schedule most work proactively, should be contracted out to a private firm through a public Request for Proposals (RFP), as TIDA can trust these firms to perform well without direct field supervision due to the size of the landscaping firm market (created due to the transferability of designed space maintenance tasks and lower entry costs) and the low cost to TIDA of finding a new firm and preparing a new contract if needed. Meanwhile natural spaces, defined by a reactive maintenance approach stemming from their roles in conservation and natural resource management, should be cared for by a conservancy in a long-term, trusting, and collaborative relationship with TIDA, a relationship which is more suitable for the more specialized work needed for the islands' natural resource management and the more hidden nature of that work's results. With this staffing recommendation in mind, the process to create a maintenance plan for each park and open space was provided, along with a recommendation to adopt a mobile app to schedule and report maintenance work. This report concludes with an explanation of the standards accompanying the maintenance plans and their source, and a push to encourage and solicit public feedback on the maintenance work.

1. Introduction

Over the next decade, a whole series of new parks and open spaces will be built on Treasure Island and Yerba Buena Island (TI/YBI) for public enjoyment and natural resource conservation. The 290 acres of new spaces are envisioned to be a world-class destination, both serving the growing population living on the islands in the newly- or soon-to-be developed housing and community spaces, and the various tourists attracted to the islands from both neighboring Bay Area communities and from around the world. These parks and open spaces will include a wide variety of spaces, allowing visitors and residents access to a multitude of potential activities. Notable spaces on Treasure Island (TI) include the Shoreline Parks that create an uninterrupted walking path around TI; the Urban Agricultural Garden in TI to allow for community growing and educational opportunities; a Sports Park around TI's existing gymnasium with general fields for a variety of sports programming; an area set to be known as the "Wilds," where native plants will be allowed to grow into and compliment the trails and other facilities being built in TI's largest conservation-centered space; and a set of developed spaces around TI's historic buildings and new visitors landing. On Yerba Buena Island (YBI), residents and visitors will be able to enjoy the designed Hilltop Park at the peak of the island, a renovated access to Clipper Cove Beach, gardens around the historical Senior Officers Quarters, and a series of trails to see the conservation work being done in YBI's Habitat Management Spaces. Following the guidance of the original development documents from 2011, TIDA plans to assume the responsibility for these spaces after the warranty period from Treasure Island Community Development (TICD) for each space expires (typically one year after the completion of the space), handling these parks independently of other City resources to both foster a sense of community within TI/YBI and to minimize risks of resource reallocation should the City experience budget constraints. Preventing the possible degradation of these spaces due to poor maintenance and protecting a world-class standard in these parks have been named as some of TIDA's priorities in the coming years, upholding both the public's trust and their investments onto TI/YBI. To accomplish this, TIDA and the San Francisco City Administrator's Office have commissioned this investigation into park maintenance practices, standards, and staffing.

This report therefore provides a recommendation on the source of maintenance and custodial staff, guidance on what maintenance activities should be performed across the islands, including the nature and frequency of the involved tasks, and a set of standards maintenance staff

should achieve in their maintenance tasks. It will also be organized in that order, with each topic receiving a major section. Section 1 will conclude with a description of the research techniques used in crafting this report. Section 2 will explore different potential staff models for park maintenance, evaluating the potential benefits and feasibility of each using a set of criteria that include the effectiveness, costliness, and implementation difficulty of each possibility. Section 3 will then explore the maintenance tasks that should be undertaken and considerations for scheduling, with an explanation of how those recommendations were reached. Section 4, finally, will explore the recommended standards TIDA should adopt for its maintenance staff to achieve, and a set of metrics it can use. This report's appendices will include templates and examples of maintenance task sheets and metric sheets that can be used as models for TIDA's future work.

Analytical and Research Techniques

Before moving forward with a discussion of potential staffing models, an explanation of the techniques and sources used for this report is due. Two primary techniques were employed: a literature review and a regional practices review. Both techniques contributed to the recommendations provided in Section 2 (Staffing) and Section 3 (Maintenance Tasks), while the literature review was primarily used in Section 4 (Maintenance Standards). The literature review included an examination of various maintenance plans from across the nation, including the San Francisco Recreation and Parks Department's (SFRPD) guidebook; maintenance review packets from the Presidio Trust; and a National Parks Service (NPS) report that had examined best practices across the world. These maintenance standards and models were compared to a draft maintenance plan that had been prepared by TICD, to further ensure that the general guidance being found across the literature was appropriate to the work being prepared and completed on TI/YBI. The literature review also included an exploration of different staffing modalities, ranging from theoretical works such as Lee Friedman's discussions on various forms of public and private provision of a service (and the merits of each) and Oliver Williamson's work on optimal contracting models in different types of situations, to more current studies of the efficacy of contracting out government services.

In conjunction with this literature review, a review of regional park and open space maintenance was also conducted. This was used to help localize the impressions formed during the literature review, and to see what agencies maintaining open spaces in the same climate and

similar ecologies were doing. Regional actors who were consulted included the SFRPD; the Port of San Francisco; the National Parks Service team in the Golden Gate National Recreation Area (GGNRA); the Presidio Trust; the California State Parks Department; the Golden Gate Conservancy; the San Bruno Mountain Watch; and the Mt. Sutro Stewards. These regional actors, and potential partners of TIDA, were invited to semi-structured interviews to discuss their teams' work, measures, and staffing. While all interviews touched on the staff size and structure of the organization, the general maintenance plan or guidance used by the team to determine its work, the reliance or leverage on volunteer forces, and challenges the team faced in achieving their maintenance objectives, questions were generally open and were changed to suit the particular skills and goals of each park or open space. These interviews were supplemented with email conversations, where documents or specific points of clarity were exchanged.

2. Staffing Model

A key question TIDA is facing for the future park maintenance plan is the staffing organization or structure would best perform the work needed now, as some of the new parks are opened while TI's current parks are phased out, and into the future when all of the forecasted parks are operational. There are multiple ways TIDA can bring in the landscaping and custodial personnel needed to effectively maintain its parks and open spaces, which will be laid out as a set of alternative models that TIDA can choose. Namely, the four alternatives that are currently being considered by TIDA, and which will be considered in this report, include:

- Extending and expanding the current partnership with Rubicon Landscaping (Rubicon): TIDA would simply expand its current contract with Rubicon to include each new park or space as it opens, and all the tasks within; Rubicon would be entrusted to perform these tasks without direct TIDA supervision.
- Issuing a Request for Proposals (RFP) for private landscaping contractors: TIDA would issue an RFP to compare bids across any firms interested in servicing TI/YBI spaces; the contractor would be entrusted to perform these tasks without direct TIDA supervision.
- Establishing a relationship with a TI/YBI Conservancy: TIDA would seek any private conservancy formed on TI/YBI that aims to conduct maintenance and conservation work across the islands, and would form a contract with that conservancy in the form of a lease.
- Hiring internal TIDA staff to perform these maintenance operations.

General Discussion

When considering which staff model might be best to perform the maintenance tasks TIDA is looking for, the nature of the work that needs to be done across the park system is a crucial factor in an evaluation. The wide variety of park and space types TIDA will be inheriting—from parks that fit a traditional idea of an open space with a manicured lawn and planting beds, to habitat management zones tailored for natural space management, to trails system in areas that strike a balance between those two types, and others—means the maintenance staff TIDA employs will need to be flexible in their training and skills. Among the many types of tasks include some that can be considered “transferable;” these could include tasks

such as mowing and edging turf, conducting basic tree trimming, and cleaning fixtures throughout restrooms and ensuring proper plumbing. The training and expertise needed to perform these tasks effectively are not specific to TI/YBI, and a worker performing these tasks could be given simple direction and perform the work (for example, a gardener asked to inspect turf for its health can use their knowledge of turfs from other park districts to accomplish this evaluation). In general, these tasks can also be done with only a few years of training with a qualified entity (training school, colleges, or apprenticeship programs, for example). This combination of the speedier training and the transferability of these tasks and skills between parks and departments can allow individuals seeking to start a landscaping firm to easily establish their businesses and begin seeking clients. The entry costs of landscaping firms that perform transferable tasks, therefore, can be estimated as low. And these low entry costs allow for many competing firms to exist within the market of contracted landscapers, or for new firms and businesses to be opened and effectively compete for clients. Each firm already competing for clients will understand the number of alternatives, or potential future alternatives, for the transferable and non-specific services they provide their clients, and therefore will strive to perform their landscaping and other maintenance tasks at the best quality and lowest cost combination they can achieve.

As Williamson (1979) points out, these circumstances can allow a government agency to comfortably use traditional contracting procedures (i.e., to issue a request for proposals on one or a set of tasks, compare bids, and then select an applicant to perform the task with little-to-no direct oversight) to accomplish its goals via a private-firm provider. The competitive market forces would help drive potential costs to the agency down, and firms would still be incentivized to perform their assigned task at an expected standard without constant and direct supervision and direction in an effort to maintain future contracts from the agency. Since these transferable tasks also have readily observable and measurable results—agency staff and the general public can tell if toilets are clogged, lawns have not mowed, or burned-out light bulbs have not been replaced—the contractors would be compelled to accomplish their tasks as agreed to in the contract. The agency could sign the contract with the firm, inspect assets and spaces when desired, and then either renew the contract for another term or seek another firm capable of performing these transferable tasks. Furthermore, Williamson writes that traditional contracting, with its arms-length approach to agency-firm interactions, might be the optimal means of

providing these transferable types of work. This additional insight is found through consideration of the transaction costs of, or frictions in, contracting; that is, how much time and effort must an agency put into the writing and negotiation of a contract. Because these transferable tasks are often predictable and well detailed, the contract can be written in a proactive fashion that outlines what tasks are to be performed and when, how emergency or ad hoc situations can be addressed, etc. This contract can be issued to any number of firms without many modifications, allowing the agency to swiftly change firms if needed. In the context of this report, this speaks to TIDA's ability to outline all of the transferable tasks it would seek a contractor to perform in a baseline contract and use that template to prepare an individual contract to be signed and executed. If the contracted firm does not perform to TIDA's standards and TIDA seeks a new landscaping provider, it can simply change the name of the contractor on the template and proceed from there—no major administrative burden would have to be taken to rewrite the contract, as the tasks and TIDA's desired standards are already written up, and the transferability of the tasks in question means a new firm can step into the role without additional training and minimal orientation from TIDA staff.

Not all of the work needed in the TI/YBI open spaces fit this description of transferable tasks, though. Some of the tasks are site-specific, or may require a greater deal of education or training to be done correctly. Examples of the latter category include invasive species identification and removal planning (at what stage of growth it is appropriate to remove French broom, for example, or Canary Island marguerite) and large-scale tree pruning. Site-specific tasks and knowledge might include planning native species reintroduction or permitted growth to balance TIDA's mission in native habitat restoration versus public use goals, and what species should be seen growing across the two islands. These more complex or site-specific tasks would require a private firm to invest more time and effort into training their workforce and acquiring any tools needed to perform these tasks, raising the cost of a potential firm to enter the competitive bidding market for related contracts. This higher entry cost thereby reduces the number of private firms that might be competing for those contracts. Moreover, any firm that would pursue these contracts would also seek a longer term for the contract, a higher compensation rate, or other factors that would justify their own investment in preparing for these site-specific activities (indeed, a longer contract period might be needed for the firms to fully understand what activities they are asked to perform). Once a private firm would have secured

the contract, their team would develop the specific knowledge to perform the task well—that firm builds the human capital needed in that space. Because fewer firms will be trying to compete for contracts, those contracts will often have longer time periods, and specific knowledge and human capital will need to be developed for a private firm to perform these tasks correctly, the competitive forces that normally keep bids low and performance high are weaker and agencies can have fewer viable alternatives to pursue. In addition, as Williamson points out, agencies can face higher administrative burdens—larger transaction costs—in trying to prepare new contracts for these tasks, as a lot of work must be done to predict events and situations that are often unpredictable if the agency’s staff aims to maintain an arm’s-length approach to contracting.

Williamson offers that creating a tighter relationship between the contractor and the agency can serve as an effective solution to this dilemma of higher transaction costs and lower market competition. Creating a contracting relationship that could be resolved through arbitration instead of litigation, or a bi-governance structure where the agency and the private firm can come together to plan out solutions and next steps, are both effective ways to create a long-term contract that both sides can be comfortable with. The difference between pursuing a contract-with-arbitration or a bi-governance structure is based on the frequency of the tasks that need to be performed—the more frequently the work needs to be done, the closer the agency and its contractor should interact, and therefore the contract should look to a bi-governance system with agency and contractor personnel exchanging ideas and jointly making decisions on how to proceed. Indeed, recent studies have suggested that this system works effectively in practice. In Illinois, the state has contracted out some of its prisons’ rehabilitation programs to a firm trained and specialized in prisoner rehabilitation, education, and training, namely Safer Foundation. The contracts the state formed with Safer Foundation, while as thorough as possible, nonetheless gave Safer Foundation the leeway needed to take action when unexpected situations arose, recognized the firm’s competence in the services it was providing, and offered the state’s support to a trusted partner when needed. A study of these trusted firms’ outcomes show that they are able to achieve larger rates of success in rehabilitating convicts (seen through higher employment outcomes) than state personnel attempting a similar curriculum in different prisons (Jung et al. 2018).

When tasks are site-specific or technically complicated, these weaker market forces are not the only concern agencies would need to keep in mind. The results or outcomes of the contractor's actions can also be hard to directly observe, at least immediately, and an agency can have difficulties in verifying that its contractors have performed the tasks assigned to the agency's standards. TIDA could easily face this predicament in some of the tasks it will assign maintenance crews: for example, would the team assigned to proper removal of a particular weed in the YBI Habitat Management Area have adequately removed all necessary parts of the weed (stem and root, or just stem) without overly disturbing neighboring desired plants, and then properly applied the correct herbicides or other measures to not hamper future conservation efforts. A crew's mistakes in performing these types of tasks could be hard to immediately identify, potentially causing TIDA to miss an appropriate opportunity to correct mistakes and reprimand any malicious parties. Notably, a recent study suggested that contractors might not be the optimal providers of hard-to-measure tasks as related to an agency's democratic, as opposed to managerial, mission (i.e., achieving goals related to the public's trust and implicit mission for an agency, as opposed to the mission given to an agency by statute) (Choi 2020). The question of how to address these uncertain circumstances was raised and explored by Friedman in his work (2002), to determine which entity might actually be most proficient at providing difficult-to-measure services. Comparing for-profit, non-profit, and government providers against each other, he concluded that a non-profit entity would be the best vehicle to provide these types of services or perform these hard-to-measure tasks. The for-profit provider would be hard to trust in these situations, as their underlying profit-seeking motives could lead them to lower the quality of the service they provide if they (the for-profit staff) felt confident that their clients would be unable to discover the lower quality. A non-profit, being explicitly driven not by profit-seeking but by its core mission, would not face the same question of trust. A government agency directly providing this type of service, meanwhile, would be relatively unresponsive, or at least slow to respond, to changes in public preferences, while the potential for a new non-profit to take over the service would keep a non-profit provider flexible in meeting the public's potentially changing goals. Weaving these theories from Williamson and Friedman together, it appears that an agency creating a long-term contract in the structure of joint governance—where the agency trusts its contractor to perform its role, offers resources, and also collaborates with the contractor to make long-term decisions—and specifically entering this relationship with a non-profit entity

can both alleviate the agency's concerns over high transaction costs in contracting and allow it to trust its contractor to perform the tasks it has been given.

Locally, this trend can actually be seen directly in some of TIDA's neighbors. Numerous successful parks programs have utilized conservancies or non-profit partners to achieve the highly rated results in their jurisdictions. The Mt. Sutro Stewards, the San Bruno Mountain Watch, and the Golden Gate Conservancy all serve as agencies' partners on the ground to oversee standard trails maintenance and natural resource conservation work, the latter of which involves a high degree of specialization and knowledge. The overseeing agencies (UCSF, San Mateo County, and the National Parks Service, respectively) have been able to successfully leverage these conservancies to perform the highly skilled work needed by having a close-knit relationship to the groups. Other agencies and groups I spoke with who did not have these types of relationships (i.e., a conservancy or other non-profit group to organize and implement natural resource management work) often saw their workforces spread thin, and were rather reactive due to this limitation. The notable exception to this was the Presidio Trust, who maintained a robust naturalist staff and oversaw many of the day-to-day tasks of natural resource management on its own (it contracts out more routine landscape tasks, such as ornamental and designed space management).

Division of Spaces into Two Categories

With this analytical framework in mind, it becomes clear that TIDA's spaces should be divided into two categories for further consideration. Namely, different staffing considerations should be made for the "designed spaces" opening across TI/YBI than for the "natural spaces" being created or preserved. The latter category, the natural spaces, includes the YBI Trails and Habitat Management Areas and Clipper Cove Beach, along with the TI Wilds. All other parks, including the Hilltop Park on YBI and the Shoreline Parks around TI, the Sports Park, the Urban Agricultural Park, and the landscaping around TIDA's various facilities, constitute the designed spaces. This dichotomy represents the differences in job complexity and the ability of TIDA's team (and the public) to easily evaluate the quality of the work being done. Because the designed spaces will have predefined assets within the park, TIDA can more easily forecast what work needs to be done and when. It can therefore be specific when writing and defining a contract with a private firm, and can more easily inspect those areas to ensure work is being done to TIDA's

standards. In the natural spaces, though, the conservation efforts constituting most of those sites' work is more nuanced, and is often responsive to what flora are already growing in the area. Further, those natural areas often require a higher degree of training or education for staff to adequately determine which plants should be allowed to continue growing, which should be removed (and when), and what new plant life should be introduced.

Evaluation Criteria

This theoretical framework lays important principles to consider the four alternatives facing TIDA. In order to determine which model, or combination of models, would best serve TIDA's interests, though, a more thorough comparison of the alternatives themselves is needed, where the merits and demerits of each are considered. To accomplish this task, this report will evaluate each alternative staffing model along four criteria:

- Effectiveness: the ability of the entity or model being analyzed to perform the work recommended in this report;
- Economy, or costliness; in reference to the other alternatives being analyzed, how much more or less could TIDA expect to spend on the alternative being evaluated;
- Popular support: whether the public might become especially mobilized in favor of the alternative; and
- Administrative ease: how much effort would TIDA staff need to contribute to establish the staffing model and maintain it.

Of these criteria, effectiveness will be given the most weight in the analysis, as it is central to TIDA's mission of preserving the quality of the parks and open spaces being built. The next important criterion would be the costliness of the alternative, but still secondary to effectiveness since the least costly option would not be preferred if it entailed a noticeable degradation in park quality. The following subsections will examine each alternative within the context of a particular type of space, first looking at them within the context of TIDA's designed spaces, and then looking at them within the natural spaces.

Evaluation 1: Within Designed Spaces

As stated above, the designed spaces TIDA will be receiving have more routine and predictable tasks than those in the other category. These tasks, moreover, are fairly standard

across parks in different cities and districts, allowing for maintenance workers to take the skills and tools they use in another jurisdiction's parks to those TIDA oversees. Looking at the potential effectiveness of each alternative to maintain the parks to TIDA's world-class standards, each staffing model being considered could achieve a moderate to high level of success. TIDA-employed gardeners could be expected to achieve these results, as they would be fully incentivized by their employer to adequately maintain these spaces. Applying Williamson's concepts of task complexity and frequency to the work to be done in these designed spaces, it appears that the other three alternatives (Rubicon, other contractors, or a conservancy) could perform the tasks within these spaces well due to the transferable nature of these tasks.

It should be noted, though, that there are a few variables to consider regarding Rubicon's capacity to maintain all of these designed spaces at TIDA's standards. Rubicon's primary mission is to train historically economically disadvantaged individuals with skills they can use to gain more sustainable employment, bringing on new recruits as staff members transition out of the company after receiving adequate training. This hiring practice could mean that the gardening and landscaping teams sent to TI/YBI would be unable to achieve the expertise needed to effectively reach TIDA's maintenance standards. The standards that will be proposed in the following sections of this report were designed for, and are currently used by, teams that had received at least two years of training and education in gardening, horticulture, landscaping, or a similar field (such as an associate's degree, certificate from a qualifying college program, or apprenticeship program with more senior agency staff). Even if the initial crews sent to TI/YBI eventually gained the knowledge needed to effectively maintain these parks, the gardeners and landscapers that would be provided by Rubicon would turnover as their employees gain skills and move onto different firms, being replaced by new workers. While a consistency in supervisors could ameliorate this problem, the open spaces could nonetheless experience degradation during the field crews' training period. Moreover, supervisors might end up being rotated or replaced, which presents new questions as supervisors might not be fully knowledgeable on public parks and open space maintenance. Many of Rubicon's current clients appear to be corporate parks and homeowners' associations—the types of spaces these clients hold, while in some ways similar, do not necessarily endure the same levels of visitor traffic or rough types of use that TIDA's park system will face. This higher and rougher traffic would entail more work for any crews working in the space—for example, turf will inevitably be torn

up by athletes using cleats, forcing maintenance crews to patch the turf and potentially resod sections frequently; children (and even adults) could trample through planting beds and destroy plants, prompting maintenance crews to salvage what they can and replace what is fully destroyed. Extrapolating from Rubicon's current work on the islands is also difficult. At this time, Rubicon's teams tackle TI's smaller designed spaces. While they receive positive reviews for their work in those spaces, it is unclear if their team could fully expand to meet the higher demand in the future park spaces. Taking on responsibility for all of the new spaces across TI/YBI could therefore be a learning period for Rubicon management and staff, as they come to understand the needed work at public facilities simultaneously with TIDA's staff. Due to these variables, this report can only give Rubicon a moderate effectiveness prediction at this time.

Moving on to the potential costliness of each alternative, two alternatives stand out as particularly costly compared to the others. Namely, in-house employees and a conservatory would incur higher costs for TIDA than another private contracting firm. Looking first at the employee alternative, TIDA would likely want to hire a team of ten workers, likely split evenly between gardeners and custodians due to the nature of the designed spaces' assets, to work on these spaces, based on the staffing levels used by parks and recreation departments handling a similar number of park acres (in this case, less than 250 acres) (NRPA 2022). If TIDA pursued this option, with four gardeners, a gardening supervisor, four custodians, and a custodial supervisor, it could anticipate at least \$1 million in payroll expenses alone (using the highest rates found in the San Francisco Department of Human Resources' database on compensation rates to prepare a conservative estimate). A conservancy would likely cost TIDA a similar amount, at least for the first years after its establishment, as the conservancy either diverts funding from TI/YBI's community development funding or receives direct subsidies from TIDA as it establishes its own, independent source of funding to perform the work.

Meanwhile, a private firm can be estimated to incur less cost for TIDA using Rubicon's current contract and other contracts issued by the City for landscaping work. Rubicon, or other private contractors, might charge up to \$700,000. This estimate for any outside contractor is extrapolated from the City's current contract for landscaping around the Islais Creek Muni Maintenance Facility—a contract which includes the same gardening tasks that TIDA would expect in its designed spaces. That contract is for \$28,000 per year to cover 8.3 acres, or about \$3,400 per acre per year; applying this estimate to the approximately 120 acres within the

designed space category, a private firm could be expected to cost around \$410,000. There are a few factors that distinguish work at the Islais Creek facility from the work on TI/YBI; notably, contractors might incur longer travel costs and transportation expenses to get to the islands, and the nature of the parks' use combined with TIDA's standards would entail more work on TI/YBI than is needed the Islais Creek facility. For these reasons, the estimated cost of a private firm contracted to perform these maintenance tasks must be inflated, leading to the conservative estimate of \$700,000 in this report. Given this disparity between this estimate and a TIDA-employed landscaping team or conservatory, those two alternatives will be excluded for the remainder of the designed spaces analysis. Since private firms (either Rubicon or another contractor) can provide a decent quality of parks maintenance at a noticeably lower cost than the other staffing models, we will focus on those two alternatives from here.

Comparing the potential popular support for the two remaining alternatives is a bit murky; it is unclear whether the public would actively track or vocalize support for an RFP process. However, an extension of Rubicon's contract seems more likely to garner some public support than a simple RFP. This is due to the nature of Rubicon's hiring practices and workforce; because Rubicon hires those who are historically unemployed or otherwise economically disadvantaged, members of the public who are supportive of that cause might also vocalize their support of this alternative if TIDA decides to pursue it. How probable that vocal support might be, though, is still low given the highly bureaucratic nature of this decision-making process.

Administratively, simply extending and expanding Rubicon's contract would entail little additional burden for TIDA staff. There would be no competing proposals or contracts to assess and manage; rather, this alternative would simply entail a continuation of TIDA's current interactions with Rubicon, increasing as the number of Rubicon's tasks increase. Issuing an RFP to compare multiple potential contractors, though, would force TIDA staff to dedicate more time around the close date of the announcement as it analyzes and evaluates the proposals it receives. An additional consideration is around the length of the contract: if the contract were for more than ten years, or more than \$10 million, then TIDA would also need to prepare to seek approval of the contract from the San Francisco Board of Supervisors. While that process would not likely present an overly large amount of additional work, it would nonetheless present an additional series of administrative tasks that can be avoided if TIDA opts for shorter contract terms. Those shorter terms have the added benefit of giving TIDA more opportunities to seek new contractors,

either to see if there are more proficient landscaping firms interested in TI/YBI, less expensive landscaping firms, or both. For these reasons, this report recommends TIDA keep any contract term with a firm to three years, unless and until it finds a contractor with a competence and cost that it is fully willing to commit the extra effort to forego the benefits of market competition for landscaping services and prepare the proper arguments for the Board of Supervisors. The choice of three years is somewhat arbitrary, and was chosen to strike a balance between the benefits of a frequent bidding process (which could help TIDA more easily change contractors if desired) and the benefits of longer contract durations (which could give contractors a better sense of being trusted to perform their role, and allowing teams more time to become acquainted with any idiosyncratic processes on TI/YBI, both of which could increase the quality of the provided service).

Recommendation for Designed Spaces Maintenance Staffing

After looking at these evaluations, this report recommends that TIDA seek a private firm to contract the landscape maintenance work for TI/YBI's designed spaces. Specifically, TIDA should pursue Alternative 2 and issue an RFP, seeking bids and proposals from various firms to find one that can successfully maintain the spaces to TIDA's world-class standards at the best cost over a three-year period. As noted above, the tasks within these designed spaces are routine enough that the appropriately contracted team would need simple on-the-ground training to perform them to TIDA's standards. While this process would not preclude Rubicon from being awarded the contract, it does provide TIDA an opportunity to compare the teams presented by Rubicon, their qualifications, and their past performances against other firms that might be interested in TI/YBI work and have more experience managing spaces heavily trod and used by the public. Seeking a private firm to perform the maintenance tasks in these designed spaces will also be less expensive than TIDA employing its own teams in these spaces or relegating this work to a new conservancy. In addition, TIDA would not have to worry about the large administrative burden of hiring a full team of landscapers, or the process of detailing the responsibilities of a conservancy. Staying within a three-year period, or any other length shorter than ten years that TIDA might prefer, will also allow TIDA to avoid the extra administrative tasks of presenting to the Board of Supervisors to seek its approval of the contract.

Evaluation 2: Natural Spaces

With the designed spaces being managed by a private contractor, this report now looks to evaluate which of the alternatives would best maintain the natural spaces on TI/YBI. First considering the potential effectiveness of any staffing model within these spaces, it is important to remember that the main evaluative feature that defines these spaces against the designed spaces that were just considered is the complexity of the maintenance work within them. The work generally entails a higher level of training or education than work in designed spaces, as it involves an understanding of the flora and fauna in an area and what ecosystem would achieve conservation goals for the space. It is unclear if Rubicon, or any other similar private landscaping firm, could provide a staff with proficient enough expertise to be entrusted by TIDA with this work without heavy direction and supervision by TIDA staff. This level of direct supervision is something TIDA staff has expressly sought to avoid. Most contractors, including Rubicon, could be expected to have a low effectiveness rating under these circumstances. There are some private firms known to perform the type of natural resource work needed in these spaces well, including some that have recently done work on YBI; however, the ability of these firms to form the long-term and larger commitment TIDA is seeking under this plan is unclear, though. Due to this low predicted effectiveness, an extension of Rubicon's contract and an RFP seeking any contractor for work in the natural spaces (Alternatives 1 and 2) will not continue to be considered in this report.

The effectiveness of either TIDA staff or a conservancy in maintaining TI/YBI's natural spaces can be expected to be comparable, especially if the conservancy has TIDA representatives on its own directing board. The first option, TIDA staff, can be expected to effectively maintain the natural spaces as long as TIDA hires properly qualified individuals (natural resource managers, hereafter referred to as naturalists, arborists, and other personnel knowledgeable about natural resource conservation), as the staff members will be directly tied into TIDA's decision making process and will be directly accountable to TIDA management for their actions. A conservancy, meanwhile, can be expected to effectively maintain these natural spaces due to the long-term and closely collaborative nature of the relationship that will have to have been formed during the conservancy's creation. This long-term relationship can be formed, for example, by structuring the agreement as a lease from TIDA to the conservancy: similar to the Yerba Buena Gardens Conservancy, a TI/YBI conservancy can lease the natural spaces from TIDA with the

rental agreement specifying the work the conservancy needs perform and the standards it is expected to meet for the agreement to continue. This form of agreement, combined with one or more members of the conservancy's directing board being appointed by TIDA, gives the conservancy a degree of trust to perform its potential maintenance role effectively. Even if a conservancy performs the maintenance work, TIDA would still want to maintain a naturalist or other conservation expert on its team to serve as a primary liaison between TIDA and the conservancy and ensure the two work together in close collaboration. A tightknit relationship is essential to the conservancy model being considered, and is crucial to the potential success of a conservancy in this role.

When considering the potential costs of either alternative, an important note must be made about the nature of work within these natural spaces. Namely, the natural resource management required in these areas will often be labor or capital intensive upfront, but require less labor after the work is done. For example, the removal of a eucalyptus tree requires planning beforehand, a large crew and set of machinery to fell the tree, and teams present to clean up the debris; after this, though, maintenance teams would merely have to inspect the remaining stump (if one is left) and cut off any new growth. Similarly, clearing a thicket of French broom might require a full day of hands-on work, but once cleared a worker could periodically check the area to confirm that no new growth is occurring, and if a small weed is found can swiftly remove it. This type of work is not wholly representative of what will be needed in the natural spaces across both islands—indeed, the creation of trails will mean TIDA must look towards trail maintenance goals, and the potential native plant nursery in TI's Wilds creates a set of maintenance tasks of itself—but nevertheless represent a separate set of expenses that could decrease as YBI's environment is restored to a desired space. TI will likely not need a large investment in this type of work, since its natural space is being created during the development process, meaning there should be fewer unwanted flora populations established in the Wilds.

Either of these alternatives would present similar costs to TIDA, at least in the short-term. As explained in the preceding subsection, TIDA would almost certainly have to provide much of the conservancy's funding as it establishes its own funding streams (both through federal and state grant acquisition, and through fundraising efforts). If TIDA were to hire its own staff, which should likely consist of two naturalists and three gardeners in order to properly cover the 170 acres within this category and the various activities within them (such as a native plant

nursery), it could anticipate around \$600,000 in payroll expenses alone. These naturalists would likely not perform all of the necessary work, as described above, and so the costs of this alternative would be higher in the next few years due to the one-time or otherwise short-term contracts involved to accomplish the capita or labor-heavy tasks of reestablishing YBI's ecosystems. Even with this team, though, TIDA would likely need some additional hands for activities like trail maintenance and invasive species identification, but those types of activities can be accomplished through the organization of outside volunteers (as is done across almost every park agency spoken with during this report's regional practices review). These volunteers could incur marginal costs for TIDA if it sought to compensate the volunteers through snacks, organized transportation, or small appreciation tokens (pins, T-shirts, canvass bags, etc.). Again, a conservancy would likely cost TIDA a similar amount per year for the first few years after its establishment and the start of TIDA's relationship with the conservancy if TIDA is needed to prop up the conservancy's infancy; in fact, TIDA might need to contribute additional funds for the contracts the conservancy might issue for its early work. The total amount TIDA would allocate towards the conservancy could be anticipated to decrease over time as the conservancy secures its own funding sources.

Moving now to the potential popular support for either model, the conservancy would be more likely to muster advocates and supporters. Since a conservancy represents a way for members of the public to actively participate in conservation and land management efforts, some will be attracted to the potential input and hands-on work a conservancy provides, especially given the Bay Area's widespread environmental conscientiousness. A conservancy could stimulate not just vocal political support from members of the public—indeed, it could serve as a vehicle for more philanthropic commitment to TI/YBI, since members of the public are generally more comfortable donating to a non-profit than a government entity. This type of support would not be expected to form if TIDA were to hire its own set of employees to manage these spaces.

Finally, examining the potential administrative burden of either alternative being considered for this natural space maintenance, TIDA could expect both to present large administrative loads at the beginning of the staffing model's adoption. For a conservancy, TIDA staff would need to negotiate with the conservancy to clearly define roles of the conservancy and TIDA in the maintenance tasks, funding and revenue sharing options, and the governing structure of the conservancy. As mentioned before, this report recommends that any conservancy

entrusted with these natural spaces have at least one TIDA-appointed member on its directing board. This report also recommends that the agreement be framed as a lease, as it would give the conservancy clear governance guidelines and a stronger sense of trust by TIDA. Trust and close collaboration between an agency and a partner organization has been shown by the research above to be vital to the provision of a complicated, specific type of work. If TIDA were to hire its own team of naturalists, meanwhile, it would face an upfront administrative burden in recruiting, interviewing, and then onboarding those new employees. This task, while potentially time consuming, could be less cumbersome than the work establishing a relationship with a conservancy. However, a team of TIDA-employed naturalists would cause an increase in TIDA's long-term administrative capabilities as it manages these personnel.

Recommendation for Natural Space Maintenance Staffing

With all of these factors under consideration, TIDA's long-term goal for a maintenance work provider in these natural spaces should be a conservancy. A conservancy would not only provide this stability and long-term expertise, but also provide TIDA an additional avenue to draw donations and volunteers while not becoming burdened by a large staff of its own. A closely collaborative arrangement between TIDA and a potential conservancy would need to be maintained, though, if this option is adopted and meant to succeed—indeed, this could be accomplished if TIDA still hires a naturalist of its own to serve as a primary liaison between TIDA and a conservancy. This ensures TIDA has the in-house expertise needed to effectively collaborate with the experts who would hopefully staff the conservancy. The conservancy could be left to fundraise, apply for governmental and other grants, recruit and organize volunteers from across the area, and facilitate contracts with private firms for one-time or other short-term tasks that require heavy machinery or other capital TIDA cannot easily procure on its own. A key example of contracts that might need to be procured would be arborist services, for example. The cost of maintaining an arborist team of three personnel on staff would approach \$400,000 per year, using compensation and expense examples from current City employees and equipment contracts; the work these staff would perform, though, would likely not entail a whole year of effort, especially as many of the particularly burdensome eucalyptus trees on YBI can be cleared during the current development process. Even in the designed spaces, the new trees being planted on TI/YBI will only begin to mature, and therefore will only require simple pruning and

trimming that can be performed by trained gardeners. On the other hand, contracts with arborists are substantially lower in price (City contracts for a complete tree removal, for example, is often only \$12,000 per day, and is a task that maintenance crews should not be performing with any regularity for decades if current maintenance plans are followed) for tasks that are transferable in nature (TIDA or a conservancy would be able to provide guidance within the contract of exactly what tree work would need to be performed). While these types of arborist contracts are one example of tasks a conservancy would contract out, there are other tasks requiring a combination of labor and heavy machinery it could contract out as needed that might appear in the future.

If TIDA decides to establish a relationship with a burgeoning conservancy, it should begin the process needed to establish it as soon as possible. Using the Yerba Buena Gardens Conservancy as an example (chosen due to its recent establishment, smaller acreage compared to the Golden Gate Conservancy, and establishment by the City government), the process of establishing a government-sponsored conservancy through San Francisco governance could take two-to-five years. With TIDA inheriting YBI's natural spaces soon, and with TI's Wilds set to open around 2030, it is therefore imperative that TIDA begin the process to ensure the conservancy is established and fully operational as quickly as possible.

Due to this multi-year establishment process, TIDA will still need a team to manage the natural spaces on YBI in the short-term. TIDA should therefore hire a naturalist and two properly trained (either having apprenticed, or completed two years of training or certification) gardeners to perform the essential duties these natural spaces entail. These employees can be hired as temporary staff, to allow a simple phase-out of TIDA staff as a conservancy becomes established and takes over the maintenance tasks, if TIDA is confident the conservancy agreement would be ready within three years. This TIDA team would likely still need to organize volunteers to help with some of the more time-consuming activities involved in invasive species identification and removal and trails maintenance, and hire contractors to aid with capital-intense projects like tree removal; it should be noted that these types of outside provision would occur under any of the alternative staffing models considered in this report due to the specificity and one-time nature of many of those tasks.

Summary of Recommendations

After dividing TI/YBI’s spaces into two general categories based on the nature of the tasks their maintenance requires—designed spaces with frequent, easily predictable tasks that are not specific to TI/YBI, and natural spaces with more unpredictable tasks that are specific to TI/YBI’s ecosystem and its natural resources management plan—this report concluded that two separate maintenance staff systems be established. For the designed spaces, TIDA should issue an RFP and seek a private contractor to perform the maintenance tasks in those spaces. A private firm can be expected to perform these tasks well, and will incur fewer costs and administrative hurdles for TIDA. For the natural spaces, meanwhile, TIDA should prepare to enter into a cooperative arrangement with a conservancy, which can take on the maintenance tasks and any contracting required for the natural spaces’ sometimes capital or labor-intensive projects. A conservancy can also rally greater popular support for TI/YBI than other alternatives, and offers an additional funding avenue for conservation efforts across the islands. Below is a summary table listing the four alternatives and their evaluation across the criteria used in this report:

Table 1: Evaluation of Each Alternative under Criteria

Alternative:	Effectiveness	Economy	Administrative Ease	Vocal Popular Support
1.Extending/Expanding Rubicon’s Contract	Medium/Low	High	High	Medium
2.Opening Public Contract Bidding	High/Medium	Medium	Medium	Low
3.Establishing a Conservancy	High	Low	Medium	High
4.Hiring TIDA Staff	High	Low	Low	Low

Section 3: Maintenance Plan

Once a maintenance staff has been hired or contracted, they should be issued a thorough and simple maintenance plan or handbook before they undertake their work. This handbook can include both general practices and goals, but should also have park-specific guidance as often as possible. This can help ensure that each park's assets (the plants and other features specific to that site) receive the care and attention they require. Fortunately for TIDA, TICD and its teams are already preparing draft maintenance handbooks for the sites it is preparing; this allows TIDA to build off a template and adjust for its own preferences at each site. Below, this report will outline general practices and guidance for creating a handbook; a general, exemplary guide will be included in the appendix. It should be noted, though, that TIDA staff should utilize these resources to prepare specific handbooks based on the assets and assessments for each park upon their completion; since conditions might change between the issuing of this report and the opening of many of TI/YBI's parks, this report will not detail each of the future parks.

As is already being done in TICD's drafts, tasks in the handbooks should be broken down between daily, weekly, biweekly, monthly, seasonal, and annual tasks. This is in line with practices from across the nation. Almost every type of space TIDA will inherit will have tasks that can fall into each of these time-based categories; notable exceptions might include the natural spaces on YBI, for example, where tasks might start at weekly and lengthen in period from there. As noted by TICD's teams, the assignment of tasks into each of these time periods should be done based on their estimated public use, with sites that will be heavily used (such as the ferry terminal, or the sports park) receiving due attention potentially via work repeated throughout each day. Work crews should be aware, though, that not all work can be planned out precisely. Various events might cause teams to perform tasks not already on their work order or within their site-specific handbook; there should be a process (and a budget) for as-needed and spontaneous work to be arranged between field crews who observe a condition, like a large fallen tree branch, and TIDA.

To facilitate work scheduling, and even the spontaneous work-orders just described, TIDA should adopt a mobile app that it can utilize as quickly as possible. A mobile application could allow teams to easily access the handbook for the site(s) they are assigned to, any schedule for work that will be performed, and should allow them to submit records of the work they have performed at the site or work that still needs to be done. The ability of workers to see beyond

their own work schedule, and see what tasks might be done within a site or across the system within a particular day might be beneficial if crews can then adjust the order of their tasks to better fit the work being done around them. TIDA should adopt this app soon to ensure the staff or contractors it brings on will begin using the app right away, and can become comfortable with it early in their work. Those agencies that were interviewed for this report who use apps for this purpose report that, once the system has been set up and workers are familiar with it, use of a planning app is beneficial to their teams' productivities, but that finding a reliable app and setting it up for use took far longer than anticipated. Even when the app was ready for its workers' use, though, the agency faced push-back from its workers who frowned on using an app to receive work schedules and report back the results of their work. When work crews became accustomed to the app, though, the agency saw an overall improvement in the timeliness and the quality of the work being done.

Section 4: Standards and Metrics

With all of the work detailed in the general handbook below, and regardless of the staffing model adopted, TIDA should utilize a clear set of standards for its work to ensure the public resources and investments being placed in its care do not unnecessarily deteriorate. While the metrics regarding natural spaces might be harder to measure due to the nature of the work done there (as discussed above in Section 2), a relational agreement with a conservancy can ameliorate concerns of poor performance. In the designed spaces TIDA would contract out to private firms, though, these metrics will prove important and useful in helping ensure TI/YBI's open spaces are being maintained properly. These standards can also be woven into the maintenance schedules themselves so that workers can easily assess if they are achieving them in the field. This report utilizes the standards issued by the SFRPD and the City's Office of the Controller as the baseline for TIDA's consideration. Not only do these standards reflect a similar biome and types of work TIDA's teams will be performing, but they have also been used as reference and best practices by the NPS in some of its own evaluations (NPS 2007).

These standards should receive attention, and the field work be measured, at least twice. The first inspection of field work should be done by the team supervisor in the field the day the work has been performed, and the result reported to TIDA. In addition to these inspections by field supervisors upon completion of the work, TIDA should also send one or two of its own staff members to perform site inspections at least once per week. Given the scale of TIDA's assets, these inspections will likely only cover some of the parks and spaces that have received work; therefore, TIDA should prepare a list of sites they will inspect, rotating between various sites each week. Rather than definitively schedule when each park or space will be visited, TIDA might opt to decide which spaces are visited during an inspection day by lottery. While this would provide TIDA with the best opportunity to ensure work is consistently being done to standard, and not just before a site is inspected by TIDA, a few precautions need to be considered. First, a pure lottery might end up giving some sites more attention than others, and some might be consistently passed over by chance. This can be mitigated by assigning each space a random number (a task that can be accomplished in Microsoft Excel, for example), and proceeding down that list until all spaces have been visited; each park and open space would then be assigned a new random number, and the process repeats. The second concern to keep in mind is that moving through inspections in an unpredictable manner might foster distrust in workers,

who feel that TIDA and its management team does not trust the workers to perform their jobs consistently. And third, TIDA staff might inherently see some sites more frequently by nature of the spaces' position (for example, staff who commute to TI by the new ferry service will see the terminal near daily, while the Wilds and trails along the northeast shore might receive fewer unplanned visits by TIDA staff). To balance these concerns, this report recommends that an inspection schedule be generated, with half of the sites to be visited to be chosen and planned in advance (these could be planned out across the entire year, for example) and the other half chosen at random shortly (a day or two) before the inspection day.

In addition to this inspection by TIDA staff and the field supervisors, TIDA should also seek public feedback on its maintenance crews' performance and other impressions of the spaces. This expands TIDA's effective oversight of the parks, and can boost planning measures if the public can report an event at the time of occurrence. This public feedback can be similar to, and in addition to, reporting the public may do in natural areas concerning discovery of new plant growth (either alerts of an invasive species outgrowth, or news of a native plant sprouting). Expanding options for public comment to include a section on TIDA's webpage, a designated public-comment phone number, and a designated email address can encourage the public to engage with TIDA and its open spaces, and foster a sense of mutual responsibility for the open spaces. TIDA should also include the maintenance standards and metrics it chooses (such as those listed in this report's appendix) on its webpage, so that the public can easily access it to confirm what and when they should report their opinions on the parks.

5. Conclusion

This report set out to review regional park maintenance and natural resource management practices and existing literature on park maintenance and staffing, to craft a recommendation for TIDA to prepare for the 290 acres of new parks and open spaces it will be inheriting over the next decade. Considering the successes seen in neighboring conservancies and non-profits at the complex task of natural resource management, and the literature's explanation of contracting's efficiency at simple tasks, TIDA should work to create a conservancy to manage the natural spaces on TI/YBI and issue an RFP for contractors to manage the designed spaces across the two islands. TIDA should prepare a series of site-specific handbooks that maintenance crews can use to guide their work in keeping TI/YBI's parks in the world-class condition they open with. And embedded into those handbooks should also be the standards TIDA expects crews to achieve while performing their duties, and the metrics TIDA will use to ensure the work is being done. In the immediate future, TIDA should begin work to foster a conservancy's establishment, and should find a landscaping maintenance app that it can adopt for its future work.

A few additional considerations should be kept in mind as TIDA begins its new role in parks maintenance. First, it is crucial that current residents on TI not be negatively impacted by any potential staffing changes and alterations to TIDA's parks maintenance plans as the new spaces are opened to the public in the coming years. The maintenance plans and standards listed in this report will hopefully allow current residents to continue enjoying quality parks as the islands transition to their new phase of development. Any staffing decision TIDA makes, though, must ensure that TI's current parks are fully covered; this can be through including these parks in any RFP or contract TIDA pursues, or by continuing Rubicon's services to those parks while another contractor assumes the new parks, or some other means dependent on TIDA's staffing decision.

Another key consideration involves this report's outlook on a potential TI/YBI conservancy. The staffing recommendation made in this report presumed that a conservancy would be formed by members of the public within a few years; this is reasonable given both the general enthusiasm felt by Bay Area residents for conservation and the growing population on TI/YBI as the first phases of the development project are completed. If the idea of a conservancy does not gain traction among the public within a few years, though, TIDA should be prepared to bring on permanent staff to cover its work in its natural spaces, or to enter a long-term

relationship with a contractor that specializes in conservation work until a conservancy is formed. Any contract should involve TIDA staff being in the field with contractors to ensure work is being done correctly—for the same reasons, as discussed in Section 2, why this report could not give any contractors a high effectiveness rating—though it should be noted that the pressures that can normally help an agency ensure it contracts at a fair price would likely not be present in negotiating this type of contract, due to the scarcity of conservation-centered firms.

Finally, this report will provide a brief note on concerns of equity. Equity has not been brought up as a primary criterion from this analysis due to its complex application to the alternatives in question, and to the underlying question of this report. On the latter point, this report seeks to help establish a part of a system already being built—it is a maintenance plan for a redevelopment project that have already been designed and are now being constructed. The goal, then, is to maintain these public resources and investments as highly as possible. That is not to say concerns over equity cannot be address—on the contrary, many of these alternatives will actually address inequity in varying ways. For example, Rubicon’s hiring practices targets the economically disadvantaged; meanwhile, the hiring standards TIDA would follow if hiring its own staff would be governed by those of the City and County of San Francisco, which prevent discrimination in the hiring process. These are multiple avenues within the larger category of equity, and balancing between them is outside the scope of this report.

This report should be used as another stepping stone in TIDA’s progress towards independent parks management. As new spaces are opened and the nature of their assets confirmed, and as best practices and regional examples evolve, so too should the maintenance plans and metrics laid out here. As TIDA starts to expand its park maintenance role, it can continue to revisit the question over staffing, as well, to evaluate the performance of the current maintenance actors, and even consider alternative sources of workers not detailed in this report. Even by just focusing on the actions covered within this report, though, TIDA should be well prepared to maintain its new parks and open spaces at the world-class standards it aims for.

Works Cited

- Haeil Jung, Deanna Malatesta, and Robert J. LaLonde, “Should Government Go It Alone or With a Partner? A Comparison of Outcomes from a Work Release Program Using Different Policy Tools,” *Public Administration Review* 78, issue 4 (July/August 2018): 545-555.
- Iseul Choi, “Does Contracting Achieve Better Performance for Democratic-Constitutional, Procedural Tasks? Evidence From the EEO Discrimination Complaint Process,” *The American Review of Public Administration* 50, issue 8 (2020).
- Lee S. Friedman, *The Microeconomics of Public Policy Analysis*, Princeton University Press, May 2002.
- National Recreation and Park Association, “NRPA Agency Performance Review,” April 2022. <https://www.nrpa.org/publications-research/research-papers/agency-performance-review/>.
- Oliver E. Williamson, “Transaction-Cost Economics: The Governance of Contractual Relations,” *Journal of Law & Economics* 22, no. 2 (October 1979): 233-262.
- San Francisco Department of Human Resources, “Classification & Compensation Database,” 2002. <https://sfdhr.org/classification-compensation-database>.
- San Francisco Office of Contract Administration, “OCA TC Log 4-1-2022.” April 2022.
- San Francisco Office of the Controller, “San Francisco Park Maintenance Standards: The Manual,” 2005. <https://www.sfcontroller.org/ftp/uploadedfiles/controller/csa/ParkStd012005.pdf>.

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Appendix 1: Draft Maintenance Handbook

Below is a draft set of maintenance tasks organized by asset type for designed spaces, compiled from TICD’s current maintenance documents and drafts and evaluated against guidance seen in other parks districts. TIDA should feel free to copy relevant lines from below to create handbooks for individual parks or spaces, as applicable, to be given to landscaping and custodial staff. Note, there might be other maintenance tasks outlined by TICD or TIDA not included here, as they are not directly applicable to field staff (examples include maintaining supply stocks and tracking expenses). The natural spaces should follow the procedures already outlined in the YBI Habitat Management Plan (2011).

<u>Asset Type</u>	<u>Frequency of Task</u>	<u>Description of Tasks</u>
Art Exhibits	Daily	Inspect for damage or vandalism, and report as needed (avoid repairing unless given guidance by the artist or art restoration specialists)
Athletic Courts	Daily	Inspect for vandalism or damage; repair or remove as able
		Remove trash or debris
		Empty trash bins and replace liners
		Inspect painted lines and other markers, and report any fading or other wear
		Inspect for major cracks, holes, or other damage to play surfaces

<u>Asset Type</u>	<u>Frequency of Task</u>	<u>Description of Tasks</u>
Benches	Weekly	Inspect for vandalism or damage; repair or remove as able, otherwise report it
		Check for cracking or splintering, and report for repair or replacement
Bike Racks	Weekly	Inspect for vandalism or damage; repair or remove as able, otherwise report it
Children's Play Areas	Daily	Remove trash and debris, using hoses as needed clear mats and other equipment
		Remove any chalk, graffiti, or other vandalism
		Wipe down all equipment, and neighboring benches and tables, to sanitize
		Inspect paint and report any peeling, chipping, or major fading
		Empty trash bins and replace liners
		Sweep and rake sand as needed
	Monthly (during spring and summer)	Pressure wash and detail play structures and areas under picnic benches
Dog Parks/Play Areas	Daily	Restock dog bags and empty waste bins

<u>Asset Type</u>	<u>Frequency of Task</u>	<u>Description of Tasks</u>
		Clear areas of any leftover dog waste
		Spray gravel with Consume, and turf areas with Simple Green
		Clean areas around waste bins, benches, fire hydrants, and other fixtures with a hose or other needed equipment
	Seasonally (twice per year)	Redistribute and grade gravel
Drinking Fountains	Daily	Clear trap of any debris, sand, hair, or food
	Monthly	Check for accurate water flow, repair as able
Irrigation	Weekly	Inspect for broken or damaged sprinklers or irrigation equipment; repair as able, and within 24 hours
		Check soil and plant health to ensure adequate watering; report if the soil is overly dry or wet
	Annually	Flush the system to clear any sand or other built-up debris
	Seasonally (spring, or whenever rainy season ends and irrigation is needed)	Run a system-wide start up and check for any leaks or other needed repairs
Lawn/Turf	Weekly	Mow to 2-3.5" in height, depending on season and water needs (longer during summer and dry seasons)

<u>Asset Type</u>	<u>Frequency of Task</u>	<u>Description of Tasks</u>
		Edge lawns away from planting areas and paved areas, careful to not damage neighboring plants
		In general, blow scraps back into turf
		Remove trash and debris
		Report any brown or dry patches and any holes
	Seasonally (summer)	Fertilize with $\frac{1}{4}$ of total nitrogen fertilizer (~1lb. per 1000 ft. ²) or organic fertilizer using a rotary spreader
	Seasonally (fall)	Overseed tall fescue lawns to maintain lawn thickness, using ~4lbs. of seed per 1000 ft. ² and lightly raking soil over the seed
		Fertilize with $\frac{3}{4}$ of total nitrogen (~3lbs. per 1000 ft. ²) using rotary spreader
Lighting	Weekly	Check for burned-out light bulbs, replace as able
		Inspect poles for stickers and graffiti, and remove as able
Office Space	Daily	Vacuum carpets and mop other floors
		Dust desks and other furniture

<u>Asset Type</u>	<u>Frequency of Task</u>	<u>Description of Tasks</u>
		Remove any trash or other debris
		Wipe and clean doors, door frames, glass, switches, and walls to remove smudges
		Clean, sanitize, and/or polish water dispensers
		Empty trash bins and replace liners as needed
	Monthly	Dust low- and high reach areas, such as door frames, window sills, wood paneling, partitions, picture frames, etc.
		Sanitize office phone receivers
	Seasonally (once each season)	Clean window coverings
Parking Areas	Daily	Remove trash or debris
		Empty trash bins and replace liners
		Inspect paint and report any major fading
		Remove any graffiti or other vandalism, as able
Pavement (asphalt or concrete)	Daily	Sweep or hose off any excess dirt or sand
		Identify and remove any graffiti or other vandalism

<u>Asset Type</u>	<u>Frequency of Task</u>	<u>Description of Tasks</u>
	Weekly	Inspect for tripping hazards and cracks; remove as able, otherwise report it
		Check for weeds, and remove or treat any and all as needed (in accordance with Integrated Pest Management procedures and guidelines)
		Inspect for any improper water flow or drainage off paved surfaces
	Monthly (concrete only)	Pressure wash and seal
Pavement (concrete pavers)	Weekly	Inspect for tripping hazards, cracks, or raised and buckled pavers; remove as able, otherwise cone off the area and report it
Picnic Tables	Weekly	Inspect for vandalism or damage; repair or remove as able, otherwise report it
Planting Areas	Weekly	Check for weeds, and remove or treat any and all as needed (in accordance with Integrated Pest Management procedures and guidelines)
		Remove any trash or debris
		Inspect for hard or boggy soil; aerate or incorporate new soil materials if needed in that planting area

<u>Asset Type</u>	<u>Frequency of Task</u>	<u>Description of Tasks</u>
		Trim and prune plants away from paved areas and to promote light penetration and airflow, but allow shrubs to grow into each other, or otherwise shape except as outlined in the space's handbook
	Monthly	Inspect mulch layer to ensure proper quantity (usually 2 -4" deep); replace as needed, keeping organic mulches at least 6" away from most small plants and California desert plants
		Ensure vines are properly tied or threaded to continue vertical growth
		Prune vines to remove tangled growth and dead flowers
	Annually	Cut perennial bunch grasses to 4"; dethatch and rake as needed
		Trim spent flowers and rank on evergreen perennials grasses
		Dead head deciduous perennials around early spring, as needed per species

<u>Asset Type</u>	<u>Frequency of Task</u>	<u>Description of Tasks</u>
	Annually (first three years)	Test soil for texture, pH, air/water content, etc. using procured kits testing the top 6-18" of soil
	*Annually, based on test results	Apply compost tea prepared for the specific area to correct any imbalances; do <u>not</u> use synthetic, quick-release fertilizer
	Every three years (after year three)	Test soil for texture, pH, air/water content, etc. using procured kits testing the top 6-18" of soil
Restrooms	Twice Daily (early in the morning, and again after lunch)	Ensure proper plumbing flow, removing clogs as needed and as able
		Inspect lights and replace burned-out bulbs as able
		Inspect other appliances, like hand dryers, and report any malfunctioning equipment
		Identify and remove graffiti and other vandalism
		Clean mirrors and sinks
		Polish stainless-steel surfaces and all partitions, doors, tile walls, and receptacles
		Sanitize toilets, toilet seats and handles, urinals, sinks and faucets, and showers
		Mop floors with disinfectant

<u>Asset Type</u>	<u>Frequency of Task</u>	<u>Description of Tasks</u>
		Restock supplies (bathroom tissue, hand soap, feminine bags, etc.)
		Empty trash bins and replace liners
	Weekly	Dust both low- and high-reach areas, such as the tops of partitions and mirrors
	Monthly	Wipe down all walls and partitions, leaving them streak-free
		Dust doors, door jambs, trim, and ventilation grills
	Seasonally (once each season)	Scrub all tile floors with approved sealers
Signage	Daily	Inspect for graffiti or other vandalism, and remove or report as able
		Clean any dirt or rust (ex. by using a brillo pad)
	Seasonally (once each season)	Polish signs and their support poles
Storm Drains	Seasonally (once during the summer)	Clear storm drains of any debris, through hand cleaning, snaking or jetting
	Seasonally (rainy season, often November through March), done weekly	Clear storm drains of any debris, through hand cleaning, snaking or jetting

<u>Asset Type</u>	<u>Frequency of Task</u>	<u>Description of Tasks</u>
Trash Bins	Daily	Empty bins and replace liners (as mentioned in other site- and asset-specific guidance)
Trees	Daily (first six months after planting)	Visually inspect to ensure proper watering
	Weekly	Do <u>not</u> remove leaf or other plant litter unless it clogs storm drains or paved surfaces, or covers up understory plant growth
		Inspect mulch layer, and replace with a wood chip, shredded bark, or similar mulch to maintain a 2-4” layer; keep mulch at least 6” away from tree trunk
	Monthly (until tree is established)	Perform arborist inspection of moisture and irrigation data
		Inspect stakes or guys for rubbing or bark wounds; replace any damaged stakes, ties, or guys; remove stakes as they become problematic to tree growth
	Annually (July through January, to be outside of bird breeding season as able)	Prune tree only as needed for fire abatement, path clearance (no branches lower than 4’ over a pathway), structural safety, lighting, or aesthetic clearance: do <u>not</u> top off or stub tree growth and spread

<u>Asset Type</u>	<u>Frequency of Task</u>	<u>Description of Tasks</u>
		arbitrarily, and do so in accordance with ANSI A300 Pruning Standards. Any pruning resulting in a cut 3” or larger must be preapproved by an arborist
		Inspect for possible circling or girdling roots, and report for root pruning or replacement as needed
Walls (including buildings)	Daily	Remove any posted materials
	Seasonally (once each season)	Clean glass walls, doors, and windows

Appendix 2: Draft Standards Manual

The following is pulled and recompiled from the San Francisco Office of the Controller's *Park Maintenance Standards*; for the full document, see here:

<https://www.sfcontroller.org/ftp/uploadedfiles/controller/csa/ParkStd012005.pdf>.

What is inspected: All planted areas, including ornamental gardens, perennial and annual beds, shrubs, and ground covers. **Ornamental gardens or planted areas located in children’s play areas or other areas of the park are covered here.** Cleanliness under trees that are part of ornamental gardens or shrubbery/planted areas is covered in standard 2.1.a. **But cleanliness under trees that are part of lawns area is covered in the lawns standard 1.1.a.**

Note: Community gardens, planted areas primarily maintained by the public and devoted to the community’s cooperative agricultural or horticultural practices, are not evaluated.

PF 2: Ornamental Gardens, Shrubs, and Ground Covers

(If this park feature is not applicable, mark here and go to the next one.)

No.	Measured element	Standard description with unit of measure (if applicable)	Meet standard? Yes/No/NA
2.1	Cleanliness	2.1.a Ornamental gardens, shrubs, and ground covers are free (see notes below) of litter. 2.1.b Ornamental gardens, shrubs, and ground covers are free (see notes below) of debris. Notes: <ul style="list-style-type: none"> • The standard is met if no more than 10 pieces of litter or debris, lightly scattered, are visible in a 25’ by 25’ planted area on along a 100’ line. • The standard 2.1.a is <u>not</u> met if needles, condoms, broken glass, and/or feces are present. <u>Examples of litter include</u> cigarette butts, tissue paper, food wrappings, newspapers, and larger items like abandoned appliances. <u>Examples of debris include</u> limbs and rocks. Leaves are excluded.	2.1.a 2.1.b
2.2	Plant health	90% or more of each ornamental gardens, shrubs, and ground covers shows no signs of death or damage (e.g., broken or uprooted shrubs and flowers).	
2.3	Pruned	100% of ornamental gardens, shrubs, and ground covers has appropriate size and shape for their location. Note: The size and shape should be common to species and should <u>not</u> impede pathway nor block sight lines and landmarks, unless they are deliberately designated barriers.	
2.4	Weediness	90% or more of each ornamental gardens, shrubs, and ground covers is free of weeds and 100% free of vines overtaking ornamental plantings.	
Comments:			

What is inspected: Trees surrounding paved paths, play areas, sitting areas, athletic fields, and open spaces –excluding natural areas. (See definition of natural areas in the open space feature, page 10.). Litter under trees is covered in standard 1.1.a (cleanliness-litter of lawns). Cleanliness of area under trees that are located in an ornamental garden or shrubbery area is covered in standard 2.1.

PF 3: Trees

(If this park feature is not applicable, mark here and go to the next one.)

No.	Measured element	Standard description with unit of measure (if applicable)	Meet standard? Yes/No/ NA
3.1	Limbs	No broken or hanging limbs greater than four (4) inches in diameter are visible or impede passage to pedestrians (see notes below). Notes: <ul style="list-style-type: none"> • For mini parks, neighborhood parks and civic plazas or squares, the standard is met if no broken or hanging limbs greater than four (4) inches in diameter are visible. • For regional parks, the standard is met if no more than five (5) broken or hanging limbs are visible. 	
3.2	Plant health	All trees are alive and 90% of trees are free of damage (e.g., dead limbs, brown foliage, damaged bark). Note: With the exception of open spaces including natural areas, the standard is not met if any tree is dead.	
3.3	Vines	Vines in trees do not exceed five (5) feet in height from the base of the tree and are not in the canopy of the tree.	
Comments: <div style="border: 1px solid black; height: 100px; width: 100%;"></div>			

What is inspected: Hardscapes such as paths, sidewalks and surfaces of plazas as well as non-paved surfaces such as trails. These standards cover the hardscaped areas between two park destinations (e.g., play area and picnic area), sidewalks surrounding parks, and yellow (i.e., caution tape) or red marked areas.

PF 4: Hardscapes and Trails

(If this park feature is not applicable, mark here and go to the next one.)

No.	Measured element	Standard description with unit of measure (if applicable)	Meet standard? Yes/No/NA
4.1	Cleanliness	<p>4.1.a Hardscapes are free of litter and debris (see notes below). The surface of circulation areas adjacent to play areas is free of playground sand, where applicable.</p> <p>4.1.b Trails are free of litter and debris (see notes below).</p> <p>Notes: The standards are met only if all of the following three conditions are met:</p> <ul style="list-style-type: none"> • No more than five (5) pieces of litter are lightly scattered in any 25' by 25' area or along a 100' line; • No debris obstructs passage; and • No needles, condoms, broken glass, and/or feces are present. <p><u>Examples of litter include</u> cigarette butts, tissue paper, food wrappings, newspapers, and larger items like abandoned appliances. <u>Examples of debris include</u> limbs and rocks that impede passage. Leaves are excluded.</p>	<p>4.1.a</p> <hr/> <p>4.1.b</p>
4.2	Drainage/ flooded area	<p>At least 95% of observed hardscape area is free of standing water two days after rain or two hours after irrigation.</p> <p>Note: Standard applies all year.</p>	
4.3	Graffiti	<p>Hardscape area is free of graffiti.</p> <p>Note: Recreation and Park Department's policy is no tolerance of graffiti. If graffiti is observed, it must be reported to the department to be abated within 48 hours.</p>	
4.4	Surface quality	<p>Paved surface is free of irregularities in grade greater than half an inch (0.5'') and is free of cracks and holes greater than two (2'') inches in diameter and depth.</p>	
4.5	Weediness	<p>At least 95% of paved surfaces are free of weeds.</p> <p>Note: This standard does <u>not</u> refer to edging or grass growth over adjoining hardscape. Edging is addressed under lawns (standard 1.5).</p>	
<p>Comments:</p>			

What is inspected: Any open space, which is an undeveloped park area that may have a planted area not actively maintained by the department. **Open space is neither an actively used park land nor a designated natural area, such as right of way patches or unimproved lots.**

Notes: This park feature excludes natural resource areas, which are areas deemed to contain remnants of San Francisco's historic landscape including a significant population of rare, endangered or native California flora and fauna. Open space-natural areas are not included in this standards manual, and therefore, are not inspected. Department management decided that natural areas are excluded from park evaluations at this time.

PF 5: Open Space

(If this park feature is not applicable, mark here and go to the next one.)

No.	Measured element	Standard description with unit of measure (if applicable)	Meet standard? Yes/No/ NA
5.1	Cleanliness	<p>From a 10 feet distance (i.e., from nearest path), open space is free of litter and debris (see notes below).</p> <p>Notes:</p> <ul style="list-style-type: none"> The standard is met if no more than 15 pieces of litter are visible in a 50' by 50' area or along a 200' line. The standard is <u>not</u> met if needles, condoms, broken glass, and/or feces are present. <p><u>Examples of litter include</u> cigarette butts, tissue paper, food wrappings, newspapers, and larger items like abandoned appliances.</p> <p><u>Examples of debris include</u> large limbs.</p>	
<p>Comments:</p>			

What is inspected: Natural or artificial turf areas used for sports, such as baseball diamonds and soccer pitches.

Standards 6.2 (color) and 6.7 (height/mowed) do not apply to artificial turf fields.

PF 6: Turf Athletic Fields

(If this park feature is not applicable, mark here and go to the next one.)

No.	Measured element	Standard description with unit of measure (if applicable)	Please, indicate number of athletic field and type. (Use map if available.)			
			#	#	#	#
			Meet standard? Yes/No/ NA			
6.1	Cleanliness	<p>Turf athletic fields are free of litter and debris (see notes below).</p> <p>Notes:</p> <ul style="list-style-type: none"> The standard is met if no more than 15 pieces of litter or debris, lightly scattered, are visible in a 100' by 100' area. The standard is <u>not</u> met if needles, condoms, broken glass, and/or feces are present. <p><u>Examples of litter include</u> cigarette butts, tissue paper, food wrappings, newspapers, and larger items like abandoned appliances that impede playing.</p> <p><u>Examples of debris include</u> limbs, rocks, and any other item that impedes playing.</p>				
6.2	Color	Turf athletic fields are uniformly green.				
6.3	Drainage/ flooded area	<p>Turf athletic field is free of standing water two days after rain or two hours after irrigation.</p> <p>Notes: Standard applies all year. Per department's Best Practice for Field Saturation, when field is saturated due to rain, field is to be closed.</p>				
6.4	Fencing	Fencing is functional, free of protrusions, and free of holes/passages along the base.				
6.5	Functionality of structures	<p>90% of available sport-related and support structures are operational for playing or observing sports.</p> <p>Notes: Examples of sport-related and support structures include backstops, goal posts, dugouts, team benches, spectator stands, and lighting system. This standard focuses on functionality, not attractiveness of structures.</p>				
6.6	Graffiti	<p>Turf athletic fields and their sport-related and support structures are free of graffiti.</p> <p>Note: Graffiti on benches are covered under benches, tables, and grills standards.</p>				
6.7	Height/ mowed	Turf is mowed and kept at a uniform height of less than ankle height.				
6.8	Holes	<p>Noticeable from a 10 feet distance, turf field is free of holes.</p> <p>Notes:</p> <ul style="list-style-type: none"> The standard is <u>not</u> met if there are multiple holes or mounds caused by any animal (e.g., gophers, moles), even if holes are less than six (6) inches in diameter and/or depth. <p>Holes greater than six (6) inches (in diameter and/or depth) that are observed during the inspection process should be reported so they can be filled.</p>				
Comments:						

What is inspected: Paved surfaces designed for playing sports including tennis, basketball, volleyball, and skateboarding.

PF 7: Outdoor Athletic Courts

(If this park feature is not applicable, mark here and go to the next one.)

No.	Measured element	Standard description with unit of measure (if applicable)	Please, indicate No. of court and type. (Use map if available.)				
			#	#	#	#	#
			Meet standard? Yes/No/NA				
7.1	Cleanliness	<p>Court surface is free (see notes below)of litter and debris.</p> <p>Notes:</p> <ul style="list-style-type: none"> At all parks, the standard is met if less than five (5) pieces of litter or debris, lightly scattered, are visible across a 25' by 25' area or along a 100' line. The standard is <u>not</u> met if needles, condoms, broken glass, and/or feces are present. <p><u>Examples of litter include</u> cigarette butts, tissue paper, food wrappings, newspapers, and larger items like abandoned appliances that impede playing.</p> <p><u>Examples of debris include</u> limbs, rocks, and any other item that impedes playing.</p>					
7.2	Drainage/ Flooded area	<p>At least 95% of observed court surface is free of standing water two days after rain or two hours after irrigation.</p> <p>Note: Standard applies all year.</p>					
7.3	Fencing	Fencing is functional, free of protrusions, and free of holes/passages along the base.					
7.4	Functionality of structures	<p>90% of available sport-related and support structures are operational for playing or observing sports.</p> <p>Notes: Standard is <u>not</u> met if nets of basketball or tennis courts are missing.</p> <p><u>Examples of sport-related and support structures include</u> backstops, goal posts, nets, basketball rims, dugouts, team benches, spectator stands, and lighting system.</p> <p>This standard focuses on functionality, not attractiveness of structures.</p>					
7.5	Graffiti	<p>Outdoor athletic courts and their sport-related and support structures are free of graffiti.</p> <p>Note: Graffiti on benches are covered under benches, tables, and grills standards.</p>					
7.6	Painting/ striping	Play lines are clearly visible and worn painted surfaces do not exceed 20% of total court surface.					
7.7	Surface quality	Noticeable from a 10 feet distance, play court surface is smooth, and free of irregularities in grade greater than half an inch (0.5") and is free of cracks and holes greater than one inch (1") in diameter and depth.					
Comments:							

What is inspected: Children’s play areas with play equipment. Play equipment includes independent play equipment (such as swings) and composite structures that may include slides, decks, ladders, bridges, etc. **Ornamental gardens, shrubs, and ground covers located in children’s play areas and other areas of the park are covered under ornamental garden standards. Hardscaped areas adjacent to children’s play areas are evaluated under hardscapes and trails.**

Notes: If any substandard conditions are observed, they should be reported to the department for abatement. This children’s play area evaluation is not a substitute for the safety inspection conducted by a certified playground safety inspector (CPSI). Facilities categorized as “playground” may contain children’s play areas.

PF 8: Children’s Play Areas

(If this park feature is not applicable, mark here and go to the next one.)

No.	Measured element	Standard description with unit of measure (if applicable)	Please, indicate No. of children’s play area. (Use map if available.)			
			#	#	#	#
			Meet standard? Yes/No/NA			
8.1	Cleanliness	<p>Children’s play area is free of litter, debris, and weeds (see notes below). Sandbox is free of all foreign debris. The rubber surface in children’s play areas is free of playground sand, where applicable.</p> <p>Notes:</p> <ul style="list-style-type: none"> At all parks, the standard is met if no more than 10 pieces of litter or debris, lightly scattered, are visible in a 25’ by 25’ area or along a 100’ line. The standard is <u>not</u> met if needles, condoms, broken glass, and/or feces are present. <p><u>Examples of litter include</u> cigarette butts, tissue paper, food wrappings, newspapers, and larger items like abandoned appliances. <u>Examples of debris include</u> limbs, rocks, and any other item that impedes use of a play area. Leaves are excluded.</p>				
8.2	Fencing	Where applicable, fencing is functional, free of protrusions, and free of holes/passages along the base.				
8.3	Functionality of equipment	At least 80% of intended play equipment is present and functional.				
8.4	Graffiti	<p>Play area and its equipment are free of graffiti.</p> <p>Note: Recreation and Park Department’s policy is no tolerance of graffiti. If graffiti is observed, it must be reported to the department to be abated within 48 hours.</p>				
8.5	Integrity of equipment	80% of play equipment is free of deterioration, such as rust, rot, splinters, dents, and 100% is free of sharp edges and protrusions. 100% of attachments (e.g., bolts and screws) are secure.				
8.6	Painting	Painted structures are free of peeling or chipped paint.				
8.7	Signage	<p>Signs are legible, free of graffiti, and properly installed in visible locations.</p> <p>Note: Existence, language, and purpose of signage are not evaluated.</p>				
8.8	Surface quality	8.8.a If applicable, sand is loose (not compacted) and the level is at least 12 inches in depth.	8.8.a			
		8.8.b If applicable, 100% of rubber surface around playground equipment is present and adjacent rubber surfaces do not exceed ¼ inch (0.25”) of vertical elevation difference.	8.8.b			
Comments:						

What is inspected: **Designated off-leash areas (Only)**

Note: Users of dog play areas are responsible for picking up and disposing of feces, supplying bags for dog waste bag dispensers, and filling holes dug by their dogs before leaving the dog play areas. (For more information, see the Recreation and Park Department’s Dog Policy - Resolution No. 0205-001 of May 8, 2002.)

PF 9: Dog Play Areas

(If this park feature is not applicable, mark here and go to the next one.)

No.	Measured element	Standard description with unit of measure (if applicable)	Meet standard? Yes/No/ NA
9.1	Bag dispenser	Bag dispensers are available, free of graffiti, and fully operational.	
9.2	Cleanliness	9.2.a Dog play area is free of litter and debris (see notes below).	9.2.a
		9.2.b Dog play area is free of feces. Notes: <ul style="list-style-type: none"> • The standard 9.2.a is met if no more than 15 pieces of litter or debris, lightly scattered, are visible in a 100’ by 100’ area or along a 200’ line. • The standard is <u>not</u> met if needles, condoms, and/or broken glass are present. <p><u>Examples of litter include</u> cigarette butts, tissue paper, food wrappings, newspapers, and larger items like abandoned appliances. <u>Examples of debris include</u> limbs, rocks, and other items that impede the use of the dog play area. Leaves are excluded.</p>	9.2.b
9.3	Drainage/ flooded area	80% of dog play area is free of standing water two days after rain or two hours after irrigation. Note: Standard applies all year.	
9.4	Height/ mowed	Where applicable, turf in dog play area is mowed and kept at a uniform height of less than ankle height.	
9.5	Signage	Park signs for designated off-leash areas are legible, free of graffiti, and properly installed in noticeable locations.	
9.6	Surface quality	Surface is smooth and free of holes greater than six (6) inches in diameter and/or depth.	
9.7	Waste receptacle	Waste receptacles are available and not overflowing.	
Comments:			

What is inspected: Entryway and interior of all restrooms, including standalone or part of buildings restrooms, with entrances from inside or outside of a building.

PF 10: Restrooms

(If this park feature is not applicable, mark here and go to the next one.)

No.	Measured element	Standard description with unit of measure (if applicable)	Male	Female	Male	Female	Unisex	
			Was the restroom open? (Yes/No)					
			Meet standard? Yes/No/ NA					
10.1	Cleanliness	10.1.a Entryway and interior of restrooms are free of litter, debris, and feces (see notes below).	10.1.a					
		10.1.b. Toilets, urinals, sinks, and diaper-changing stations are clean. Notes: <ul style="list-style-type: none"> The standard 10.1.a is met if no more than 3 pieces of litter or debris are visible on the floor, wall or ceiling of restroom. The standard 10.1.a is not met if feces, needles, condoms, or broken glass are present in the interior or entryway of restrooms within a 25' perimeter. 	10.1.b					
10.2	Graffiti	Restrooms are free of graffiti. Note: Recreation and Park Department's policy is no tolerance of graffiti. If graffiti is observed, it must be reported to the department to be abated within 48 hours						
10.3	Functionality of structures	All toilets, urinals, partitions, stall walls and doors, diaper-changing stations, water faucets, and sink drains are operational and free of leaks, where applicable.						
10.4	Lighting	90% of lights are operational, where applicable.						
10.5	Odor	Restroom is free of offensive odor.						
10.6	Painting	Painting has uniform coat and is not peeling.						
10.7	Signage	Restroom signs are legible, free of graffiti, and properly installed near entrances.						
10.8	Supply inventory	Restrooms are stocked with toilet paper, paper towel, and soap.						
10.9	Waste receptacles	Waste receptacles are clean and not overflowing.						
Comments:								

What is inspected: Parking lots and roads maintained by the Recreation and Park Department, such as those in Richmond Recreational Center, McLaren Lodge, and Golden Gate Park.

Note: Parking garages are excluded from standards.

PF 11: Parking Lots and Roads

(If this park feature is not applicable, mark here and go to the next one.)

No.	Measured element	Standard description with unit of measure (if applicable)	Meet standard? Yes/No/ NA
11.1	ADA parking spaces	ADA parking spaces are available.	
11.2	Cleanliness	<p>Parking lots and roads are free of litter and debris.</p> <p>Note: The standard is <u>not</u> met if feces, needles, condoms, or broken glass are present</p> <p><u>Examples of litter include</u> cigarette butts, tissue paper, food wrappings, newspapers, and larger items like abandoned appliances.</p> <p><u>Examples of debris include</u> limbs, rocks, and any other item that impedes the use of the parking lot or roads.</p>	
11.3	Curbs	<p>When present, 90% of curbs in parking lots and roads are intact.</p> <p>Notes: This standard mostly applies to asphalt curbs (a.k.a. berms) in regional parks, but if it is present in other parks, this element should be assessed.</p>	
11.4	Drainage/ flooded areas	<p>Parking lots and roads are free of standing water two days after rain or two hours after irrigation.</p> <p>Note: Standard applies all year.</p>	
11.5	Graffiti	<p>Parking lots and roads are free of graffiti.</p> <p>Note: Recreation and Park Department’s policy is no tolerance of graffiti. If graffiti is observed, it must be reported to the department to be abated within 48 hours</p>	
11.6	Painting/ stripping	75% of parking and road lines are visible.	
11.7	Signage	<p>Signs are legible, free of graffiti, and properly installed in noticeable locations.</p> <p>Note: Examples of signs include directional signs.</p>	
11.8	Surface quality	11.8.a Parking lots and roads are free of potholes greater than six (6) inches in diameter and/or depth.	11.8.a
		11.8.b Parking lots and roads are evenly surfaced.	11.8.b
Comments:			

What is inspected: Exterior of buildings, amenities, and structures that were not covered in other park features.

Note: Park sector supervisors are responsible for checking interior and exterior of facilities. However, reporting of interior conditions –with the exception of restrooms in the interior of buildings (i.e., recreational centers, clubhouses)- is excluded from this inspection process.

PF 14: Amenities and Structures

(If this park feature is not applicable, mark here and go to the next one.)

No.	Measured element	Standard description with unit of measure (if applicable)	Meet standard? Yes/No/ NA
14.1	Exterior of buildings	14.1.a Exterior of buildings is free of vandalism and graffiti.	14.1.a
		14.1.b 90% of painting of exterior of buildings is of uniform color and not peeling.	14.1.b
		Note: Recreation and Park Department’s policy is no tolerance of graffiti. If graffiti is observed, it must be reported to the department to be abated within 48 hours	
14.2	Drinking fountains	Drinking fountains are accessible, operational, and free of standing water and debris.	
14.3	Fencing	Fencing is functional, free of protrusions, and free of holes/passages along the base.	
14.4	Gates / locks	Existing gates, latches, and locks are operational.	
14.5	Retaining walls	14.5.a Retaining walls are structurally sound (see notes below).	14.5.a
		14.5.b Retaining walls are free of vandalism and graffiti.	14.5.b
		Note: Structurally sound implies, among other things, that the walls are not leaning and that they are free of large cracks. If graffiti is observed, it has to be reported to the department to be abated within 48 hours.	
14.6	Signage	Signs are legible, free of graffiti, and properly installed in noticeable locations.	
		Note: Availability, language, and purpose of signage are not assessed.	
14.7	Stairways	14.7.a Stairways are free of litter and debris.	14.7.a
		14.7.b Stairways are structurally sound (see note below).	14.7.b
		14.7.c 95% of stairways are free of weeds.	14.7.c
		Note: Structurally sound implies, among other things, that raisers and treads are consistent from top to bottom and that the stairways have handrails.	
Comments:			