

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Discussion of the North Maintenance Facility		
DEPARTMENT:	Public Works		
PRESENTED BY:	Randy Witt, Director of Public Works		
ACTION:	<input type="checkbox"/> Ordinance	<input type="checkbox"/> Resolution	<input type="checkbox"/> Motion
	<input checked="" type="checkbox"/> Discussion	<input type="checkbox"/> Public Hearing	

PROBLEM/ISSUE STATEMENT:

Development of the North Maintenance Facility (NMF) was started in October 2015. Programming and space requirements are complete and the alternative conceptual layouts and preliminary (budget level) cost estimates have been prepared. Staff seeks guidance on the alternative or alternatives to continue forward in the design process. Given that staff has recently received preliminary cost estimates this will be Council's first opportunity to have those estimates and begin a dialogue on funding of the project.

RESOURCE/FINANCIAL IMPACT:

The preliminary estimated cost of developing the NMF for the alternatives considered range from \$14 million to \$18 million (using the 5% design cost range, which is conservative and preliminary). Based on cost allocation assumptions, approximately half of the cost will be allocated to utility funds (Surface Water and Wastewater) and the remainder will be allocated to the City's Operating Funds (i.e. General and Street Funds).

In 2013 the City issued \$3,565,000 in councilmanic general obligation bonds for the acquisition of the property (\$2.9M) and funds to initiate preliminary design and preliminary improvements (\$600,000). There remains over \$3.3 million in outstanding debt from the initial issuance. The outstanding bonds would be refinanced into any newly issued debt that is issued to fund the construction of the project. Furthermore, each year the SWM Fund has contributed approximately \$120,000 in rent for the NMF, which must be repaid by the General Fund. This debt will also be refinanced into any newly issued bonds, and assumes a half-year of SWM rent in 2016. From the General Obligation bonds sold in 2013 to acquire the property, approximately \$320,400 remains available for this project.

The table on page 8 of this staff report summarizes the total estimated costs and estimated annual debt service (based on 30 years) associated with the NMF and the different site alternatives. The SWM repayment from the General Fund will be covered fully by the General Fund and cost approximately \$16,000 over 30 years. The estimated annual debt for the alternatives ranges from \$955,372 to \$1,134,845 over 30 years. Including the General Fund repayment to SWM, the total estimated annual debt

is \$971,872 to \$1,151,345 over 30 years depending on the alternative chosen. As mentioned previously, it is anticipated that approximately 50% of the debt service would be paid by general fund revenues and 50% from the surface water and wastewater utilities. The estimated annual debt services for the new facility were calculated using how each fund will use the facility by factoring the estimated FTES, vehicle storage, and building square footage usage.

The debt issuance and debt-service estimates do not take into account the proceeds from City surplus properties along Aurora that were targeted to be applied towards the cost of acquisition and development of the NMF. These properties include the corner of Aurora/185th (south-west corner) and Aurora/198th (north-east corner). These proceeds have long been intended to support the operating funds cost of the project. If at some point in the future, the Ronald Wastewater District (RWD) facilities were surplus, any proceeds from these facilities would be wastewater utility fund revenues and could be applied towards the wastewater utility share of the NFM.

This project is not funded for design or construction in the 2016-2021 Capital Improvement Program (CIP). The work performed on the NMF space requirements, conceptual layouts, and cost estimates provide an estimate of costs to construct a facility that meets the City's (including utilities) long-term needs. A review of this early cost estimate and the corresponding available revenue indicates that there is insufficient revenue to support the General Fund share of the debt service payment for the facility. As project development continues, a better understanding of the project estimate and opportunities to phase in the project improvements in order to defer project costs will be developed. This information can be used to inform the City's 10 Year Financial Sustainability Plan update, and develop funding mechanisms that can be included in future CIPs.

RECOMMENDATION

No action is required, as this item is for discussion purposes only. Staff is looking for Council direction on a design alternative(s) to move forward. Staff recommends that Alternative B.1 be moved into the design phase and that the cost be refined as the project moves forward with a commitment to make economical design decisions that bring value to the building and site design and that identify opportunities in the building and site design to reduce or defer project costs, as well as identify a funding mechanism for project design and construction within the context of the City's Ten Year Financial Sustainability Plan.

Approved By: City Manager **DT** City Attorney **MK**

INTRODUCTION

Development of the North Maintenance Facility (NMF) began in October 2015. Programming and space requirements are complete and conceptual site layouts and preliminary (budget level) cost estimates have been prepared. Staff seeks guidance on the conceptual site layout to continue forward in the design process and funding the project.

BACKGROUND

The City has used the Hamlin Maintenance Yard for Public Works and Parks maintenance operations since just after City incorporation. Over time, a series of modest improvements have been made to the property as the City has provided an increasing amount of Parks and Public Works services with in-house staff. This property is ageing, inefficient and has been at capacity for some time.

In 2002 the City and the RWD agreed to an assumption of RWD by the City in 2017. There is insufficient space at Hamlin Yard to absorb RWD Operations and Maintenance (O&M) staff and equipment. Staff will provide more detail about the size of the existing RWD and Hamlin maintenance facilities during the presentation tonight.

In planning for the assumption of RWD, the City looked for a new site to accommodate Public Works operations. In 2013 the City acquired the old County Road maintenance property near Ballenger Way and 25th Avenue NE as a future site for a new Public Works maintenance facility to support Public Works and Utility activities. The site is bounded by Brugger's Bog Park on the north, 25th Avenue NE on the east, multifamily residential on the south and Ballinger Way on the western edge (Attachment A).

The City retained TCF Architecture in October 2015 to prepare a master plan, design and provide construction assistance on a new maintenance facility on the old County Road property, now identified as the North Maintenance Facility (NMF) property. Work was authorized on Phase 1 of that contract which involves developing space requirements, preparation of conceptual layouts, preparing a facility master plan, managing a public input process, and completing preliminary design and cost estimates for the NMF.

The Staff Report from the October 19, 2015 Council meeting discussing the execution of a contract for professional services with TCF Architecture for planning, design and construction management services for the North Maintenance Facility can be found at the following link: <http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2015/staffreport101915-7c.pdf>.

Development of the property as a maintenance facility is challenging due to a variety of factors, notably the size and shape of the property, shallow ground water, a wetland setback, and soil and retaining wall conditions. In addition, the eastern edge of the NMF site, along 25th Avenue NE, floods during high rainfall events. The City is actively looking to correct this issue with the "25th Avenue NE Flood Reduction Project", which the Council discussed on February 8, 2016 as part of the McAleer Creek and Lyon Creek Basin Planning discussion. While the intent of this project is to correct the

flooding issue in the area including on the NMF site, the design strategy is yet to be determined. It is expected that the flood reduction project will be behind the NMF project schedule so strategies for the NMF project will need to be implemented to prevent flooding of the new structures until the flood reduction project is complete. Coordination between the two projects is expected throughout design and construction.

Programming

A Planning and Design Working Group was formed to assist the consultant in developing and reviewing programming requirements, conceptual layouts and preliminary and final designs. The group is made of staff from Public Works Streets, Surface Water Management (SWM), the RWD, Facilities, Traffic Engineering, Environmental Services, Parks, and Police.

Two workshops were held with the Working Group to develop the programmatic design criteria and develop initial conceptual site layouts. Several follow up meetings were held to address questions and refine layout possibilities. The Programmatic Design Criteria (Attachment B) provides an overview of the project, a summary of the personnel, vehicle and equipment requirements, and the program for administrative, crew, shop and storage facilities.

Personnel Summary

CURRENT STAFFING - 2015 (20 YEAR PROJECTIONS)						
	Crew	Sup.	Mgr.	Seasonal	Totals	Remarks
Streets	8 (10)	1 (1)	1 (1)	2 (4)	12 (16)	
Surface Water	3 (4)	1 (1)	-	2 (3)	6 (8)	
Waste Water	6 (6)	1 (1)	-	-	7 (7)	
Facilities	1 (2)	1 (1)	-	1 (1)	3 (4)	
Fleet	-	-	-	-	0	Possible future mobile mechanic
Traffic	-	-	-	-	0	Storage and shop space
Police	-	-	-	-	0	Storage of vehicles and pallets
Admin	-	-	-	-	0	
TOTALS	18 (22)	4 (4)	1 (1)	5 (8)	28 (35)	

Vehicles (All Rolling Stock including trailers and attachments) Summary

	Large	Medium	Small	X-Small	XX-Small	Totals	Remarks
Heated/Enclosed	1	1	-	-	-	2	
Covered	2	16	31*	9	21	79	*(2) Police impound
Uncovered	-	-	10*	-	-	10	*Police vehicles
TOTALS	3	17	41	9	21	91	

(*) Note: Not shown on site plan alternatives. These could be accommodated at the Hamlin property after Public Works vacates the site.

Space Program

The space program utilized the design criteria and developed the size and layout by program type. A summary of space program is shown below:

Program Type	Gross Area (SF)	Description
Administrative	1,664	Offices, Conference rooms, Lobby
Crew	4,711	Crew rooms, Mud room, Locker rooms, etc.
Support	959	IT, Electrical room, Toilet rooms, Custodial, etc.
Maintenance Shops	5,702	Carpentry, Fabrication, Facilities, Multiuse vehicle bays, etc.
Enclosed Equipment/ Materials Storage	4,055	Semi heated space for Hazmat storage, Tool storage, Working stock, etc.
Enclosed Vehicle Storage	1,008	Semi-Heated space for temperature sensitive vehicles
Covered Vehicle Storage	14,106	Covered storage for non-temperature sensitive vehicles
Covered Equipment/Material Storage	5,174	Covered storage for non-temperature sensitive equipment
Covered Fueling/Wash	1,760	Fuel and Wash facilities
	39,140	TOTAL MINIMUM PROGRAM AREA

The Space Program (Attachment C) and Vehicle List (Attachment D) are attached to this staff report.

Schedule

The NMF project is in the early design phase; the site and building plans are conceptual. Although a firm schedule has not been established, the design phase will continue through 2016, with construction starting towards the end of 2016 or beginning of 2017 and continuing into 2018. Occupancy of the buildings is expected in early 2018.

DISCUSSION AND ALTERNATIVES ANALYSIS

In the first round of NMF programming it was determined that the existing structures were not adequate to support the new program and functions. Therefore, all existing structures are proposed to be demolished and the site graded to accommodate new structures. The existing structures include a wood framed structure, two pre-engineered canopies, a truck scale, fuel dispensers and above ground fuel tanks

Four site alternatives were developed for consideration on the site:

- Alternative A - all buildings are one story; the administrative and crew facility (Building A) is separate from the shop and storage facilities (Building C). The

total building area is approximately 39,000 SF and all shops have interior and exterior access.

- Alternative B - utilizes a two story building for the administrative and crew facility (building A) and a separate single story shop and storage facilities (Building C). The total building area is approximately 45,000 SF. The second story is a high floor to accommodate the shop space below.
- Alternative B.1 - is the same as Alternative B with the additional site and storage space obtained through acquisition of a property to the south providing a total building area of approximately 48,000 sf.
- Alternative C - utilizes the buildings from Alternative B but connects Building A and Building C and moves the building toward N. 25th Avenue NE. This provides an approximate total building area of 49,000 sf.

All the site alternatives have the following considerations:

- Significant grading, retaining, and stormwater management costs
- Clear, efficient people circulation in building A and C and between buildings
- Require a variance for the secondary site access due to its adjacency to the existing driveway
- No building expansion capabilities
- Can achieve successful design outcomes to address neighborhood concerns
- Achieve functional circulation for large vehicles

A Conceptual Plan for each site alternative is attached to this staff report as Attachment E. As well, each alternative has opportunities and challenges in meeting the design criteria and programming within the site constraints. Attachment F provides an analysis of these opportunities and challenges in relation to the design criteria.

The estimated costs associated with each Alternative are shown below:

Site Alternative	A	B	B.1	C
Approx. Building Area	39,000 SF	45,000 SF	48,000 SF	49,000 SF
Site Costs (Phase 1 & Phase 2 Combined)	\$4,078,000	\$4,078,000	\$4,389,000	\$4,078,000
Buildings (Incl. generator, fuel & wash equip)	\$6,464,000	\$7,889,880	\$8,158,000	\$8,314,980
Soft Costs (Incl. Mgmt. Reserve Contingency)	\$3,628,800	\$4,142,117	\$4,336,950	\$4,295,153
FF&E (Furnishings, Fixtures & Equipment)	\$175,000	\$175,000	\$175,000	\$175,000
Land Acquisition (South Parcel)	0	0	\$550,000	0
Wetland Mitigation (Extent not known)	0	0	0	\$500,000
Escalation (Not included. Assume early 2017 Start)	0	0	0	0
Preliminary Cost Estimate Totals	\$14,345,800	\$16,284,997	\$17,608,950	\$17,363,133
Approximate Cost Range (5%)	\$14.0 - \$14.7M	\$15.9 – 16.7M	\$17.1 – 18.0M	\$16.9 – 17.8M

None of the alternatives provide a “perfect” fit for development of the NMF. A brief discussion of the consideration in selecting the alternative to continue into design follows:

- Alternative A - this alternative is not recommended to move forward as it does not meet the current or future storage requirements of the program; notably vehicle storage is not adequate.
- Alternative B – Although staff is recommending alternative B.1 to move forward, this alternative would be staff’s secondary recommendation to move forward. It should be noted that this alternative does not meet the current or future storage requirements of the program; notably vehicle storage is not adequate.
- Alternative B.1 - this alternative is recommended to move forward as it best meets the program needs. All programmed equipment is within the site and covered. There is a schedule risk with property acquisition.
- Alternative C - this alternative is not recommended to move forward. Connecting the buildings make the vehicle circulation less efficient. Moving the building toward 25th Avenue NE eliminates parking and has a large building close to the street, and encroaches into the wetland.

STAKEHOLDER OUTREACH

The neighborhood was introduced to the project at a meeting on January 28, 2014, and an informational meeting with Ballinger Neighborhood Association was held on February 1, 2016. Comments from those meeting have been incorporated into the Programmatic Design Criteria. Further public outreach will be conducted during the design phase as part of the permitting process.

COUNCIL GOAL(S) ADDRESSED

This project supports City Council Goal number 2: *“Improve Shoreline’s utility, transportation, and environmental infrastructure”*; Action Step number 9 – *“Redevelop City capital facilities (North Maintenance Facility and Shoreline Police Station at City Hall) to better meet community needs.”*

RESOURCE/FINANCIAL IMPACT

The preliminary estimated cost of developing the NMF for the alternatives considered range from \$14 million to \$18 million (using the 5% cost range, which is conservative and preliminary). Based on cost allocation assumptions, approximately half of the cost will be allocated to utility funds (Surface Water and Wastewater) and the remainder will be allocated to the City’s Operating Funds (i.e. General and Street Funds).

In 2013 the City issued \$3,565,000 in councilmanic general obligation bonds for the acquisition of the property (\$2.9M) and funds to initiate preliminary design and preliminary improvements (\$600,000). There remains over \$3.3 million in outstanding debt from the initial issuance. The outstanding bonds would be refinanced into any newly issued debt that is issued to fund the construction of the project. Furthermore, each year the SWM Fund has contributed approximately \$120,000 in rent for the North Maintenance Facility, which must be repaid by the General Fund. This debt will also be refinanced into any newly issued bonds, and assumes a half-year of SWM rent in 2016. From the General Obligation bonds sold in 2013 to acquire the property, approximately \$320,400 remains available for this project.

The table below summarizes the total estimated costs and estimated annual debt service (based on 30 years) associated with the NMF and the different site alternatives.

	Alternative A	Alternative B	Alternative B.1	Alternative C
Estimated Plan Cost	\$ 14,345,800	\$ 16,284,997	\$ 17,608,950	\$ 17,363,133
Remaining Initial Purchase Debt	\$ 3,345,000	\$ 3,345,000	\$ 3,345,000	\$ 3,345,000
Remaining fund from original 2013 GO Bond	\$ (320,400)	\$ (320,400)	\$ (320,400)	\$ (320,400)
TOTAL	\$ 17,370,400	\$ 19,309,597	\$ 20,633,550	\$ 20,387,733
Estimated Annual Debt Serv	\$ 955,372	\$ 1,062,028	\$ 1,134,845	\$ 1,121,325
Total General Fund Repayment Due to SWM Fund				
SWM Repayment 2014	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000
SWM Repayment 2015	\$ 120,000	\$ 120,000	\$ 120,000	\$ 120,000
SWM Repayment 2016 (1/2 Year)	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000
TOTAL	\$ 300,000	\$ 300,000	\$ 300,000	\$ 300,000
Estimated Annual General Fund Debt Serv	\$ 16,500	\$ 16,500	\$ 16,500	\$ 16,500
Total New Debt Service				
Annual Debt Serv	\$ 971,872	\$ 1,078,528	\$ 1,151,345	\$ 1,137,825
New Debt By Fund				
Operating Funds (General & Streets)	\$ 503,902	\$ 558,314	\$ 595,464	\$ 588,566
SWM	\$ 217,620	\$ 241,914	\$ 258,501	\$ 255,422
Waste Water	\$ 250,350	\$ 278,299	\$ 297,380	\$ 293,837
TOTAL*	\$ 971,872	\$ 1,078,528	\$ 1,151,345	\$ 1,137,825
<i>*Totals may not foot due to rounding</i>				

The SWM repayment from the General Fund will be covered fully by the General Fund and cost approximately \$16,000 over 30 years. The estimated annual debt for the alternatives ranges from \$955,372 to \$1,134,845 over 30 years. Including the General Fund repayment to SWM, the total estimated annual debt is \$971,872 to \$1,151,345 over 30 years depending on the alternative chosen. As mentioned previously, it is anticipated that approximately 50% of the debt service would be paid by general fund revenues and 50% from the surface water and wastewater utilities. The estimated

annual debt services for the new facility were calculated using how each fund will use the facility by factoring the estimated FTES, vehicle storage, and building square footage usage.

The debt issuance and debt-service estimates do not take into account the proceeds from City surplus properties along Aurora that were targeted to be applied towards the cost of acquisition and development of the NMF. These properties include the corner of Aurora/185th (south-west corner) and Aurora/198th (north-east corner). These proceeds have long been intended to support the operating funds cost of the project. If at some point in the future, the RWD facilities were surplus, any proceeds from these facilities would be wastewater utility fund revenues and could be applied towards the wastewater utility share of the NFM.

This project is not funded for design or construction in the 2016-2021 Capital Improvement Program (CIP). The work performed on the NMF space requirements, conceptual layouts, and cost estimates provide an estimate of costs to construct a facility that meets the City's long-term needs for utilities and public works maintenance. It does not address long-term needs for park maintenance facilities. A review of this early cost estimate and the corresponding available revenue indicates that there is insufficient revenue to support the General Fund share of the debt service payment for the facility. As project development continues a better understanding of the project estimate and opportunities to reduce or defer project costs will be developed. This information can be used to inform the City's Ten Year Financial Sustainability Plan update, and develop funding mechanisms that can be included in future CIPs.

RECOMMENDATION

No action is required, as this item is for discussion purposes only. Staff is looking for Council direction on a design alternative(s) to move forward. Staff recommends that Alternative B.1 be moved into the design phase and that the cost be refined as the project moves forward with a commitment to make economical design decisions that bring value to the building and site design and that identify opportunities in the building and site design to reduce or defer project costs, as well as identify a funding mechanism for project design and construction within the context of the City's Ten Year Financial Sustainability Plan.

ATTACHMENTS

- Attachment A – Location Map
- Attachment B – Programmatic Design Criteria
- Attachment C – Space Program
- Attachment D – Vehicle Parking List
- Attachment E – Site Alternative Drawings
- Attachment F – Site Alternative Design Criteria Analysis

CITY OF SHORELINE

NORTH MAINTENANCE FACILITY**PROGRAMMATIC DESIGN CRITERIA****WORKSHOP 1/2 – SUMMARY NOTES**Meeting Date: December 1, 2 and 16 2015Location: City of Shoreline City Hall**PROGRAMMING WORKSHOP ATTENDANCE**

Name	Title	Representing
Randy Witt	Public Works Director	City of Shoreline - PW
Kirk Petersen	Parks Sup.	City of Shoreline - Parks
David LaBelle	PW Maint. Sup.	City of Shoreline - Streets
Steven Smith	PW Maint. Lead	City of Shoreline - Streets
Eric Gilmore	Sr. Engineer Tech.	City of Shoreline - SWM
Uki Dele	SW Utility Manager	City of Shoreline - SWM
Tina Kendall	Env. Service Tech.	City of Shoreline - Environmental
Quang Nguyen	Traffic Engineer II	City of Shoreline - Planning
Allan Unger	WW Maintenance	City of Shoreline - WW
George Dicks	WW Maint. Manager	City of Shoreline - WW
Cheryl Ooka	ASD Manager	City of Shoreline - Facilities
Brian Straathof	Facilities	City of Shoreline - Facilities
Paul Kinney	Facilities	City of Shoreline - Facilities
Phil Ramon	Facilities	City of Shoreline - Facilities
Noel Hupprich	Capitol Project Mgr.	City of Shoreline
Randy Cook	Principal / Project Manager	TCF Architecture, pllc
Mark Hurley	Project Architect / Co-Manager	TCF Architecture, pllc
Darrell Smith	Civil Engineer	Perteet, Inc.
Dustin Dekoekkoek	Civil Engineer	Perteet, Inc.
Frank Coleman	Industrial Engineer	Pinnacle Consulting Group

1 - PROJECT OVERVIEW

OVERVIEW

The City of Shoreline purchased the former King County Maintenance yard located off of Ballinger Way and 25th Ave, adjacent to Bruggers Bog Park, to consolidate and expand the City's maintenance departments on one site. These departments include Public Works, Streets (ST) and Surface Water Management (SWM), Ronald Waste Water (WW) groups, with limited presence of Facilities, Traffic Engineering, and Environmental Services.

PROJECT VISION AND VALUES

The following is a list of general goals set forth by the group for the North Maintenance Facility project based on the City of Shoreline and Public Works mission, vision and values:

- "Working together, protecting our resources, making a difference"
- Excellent customer service
- Fiscal responsibility
- Long term protection of public assets
- Responsible environmental stewardship
- Efficient and safe work methods
- Progressive use and deployment of technology
- Active and long term planning
- Team of professionals
- Communicate effectively
- Create a work environment that is innovative, supportive and enjoyable

COMMUNITY COMMENTS

The City of Shoreline provided a high level overview of the project and how the City is trying to meet its current and future operational needs to the Ballinger Neighborhood Association on February 1st, 2016. Comments from the community are summarized below.

Aesthetic

- Desire to have the site developed and be seen as an asset in the neighborhood; i.e. attractive building facades, land and street scaping, etc.

Environmental

- Decant operations – Make sure to address odor control; especially if WW uses the decant site for its waste stream
- Lighting – Desire to have more information on the exterior lighting plan when available
- Noise – Audible vehicle backing alarms and after hour operations
- Vector control – Having a plan to address/prevent rodents from becoming a problem from the on-site spoils/waste products
- Vehicle idling – Emissions and noise
- Water quality –

Site Development

- Access – Consider providing vehicle access off of Ballinger Way to reduce vehicle traffic on 25th
- Parking – Make provision for electric vehicle charging station(s) and no on-street parking
- Fueling – Wanted more information on quantity of fuel to be stored on site and storage configuration (above or below ground)

Traffic

- Pedestrian Safety – Ensure pedestrian, especially children, needs (sidewalks) are addressed
- Traffic volume – Desire to have more information on the number of vehicle trips expected in and out of the site on a daily basis

Other

- Public meeting space – Desire expressed to provide public meeting space in admin building for community use
- Restrooms – Desire expressed to build public restrooms for use by Brugger’s Bog park users
- Communications – Interested in having an every six month or so check-in with the neighborhood as the project progresses

SUSTAINABILITY

The group discussed general sustainability goals for the project. The City has a sustainability goal of LEED Silver with the possibility of pursuing LEED Gold for the main building. No specific sustainability strategies were discussed at these workshops. Additional discussions will be held as part of the subsequent conceptual design and follow-up program criteria meetings.

EXISTING SITE

The City of Shoreline purchased the former King County Maintenance yard off of Ballinger Way and 25th Ave adjacent to Brugger’s Bog Park, to consolidate and expand the City’s maintenance departments on one site. The site presently contains existing structures including a one story wood framed building, a pre-engineered storage canopy and a covered fuel canopy with dispensers, and above ground fuel tanks. The site is mainly used for fueling by City and police vehicles and storage of miscellaneous items and material.

The NMF site is bounded by Brugger’s Park on the north, 25th Ave NE on the east, zoned multifamily residential R-24 on the south and Ballinger Way on the Western edge. The eastern edge of the NMF site, along 25 Ave NE, floods during high rainfall events. The City is actively looking to correct this issue with the “25th Ave NE Floor Reduction Project”. The intent of this project is to correct the flooding issue on the NMF site and street, the design strategy is yet to be determined. High ground water table and possible fish passage requirements could add complexity and cost to the site design. It is expected that the flood reduction project will be behind the NMF project schedule so strategies for the NMF project will need to be implemented to prevent flooding of the site and new structures until the flood reduction project is complete. Coordination between the two projects is expected throughout design and construction.

2 – PERSONNEL, VEHICLES AND EQUIPMENT

PERSONNEL

The North Maintenance Facility (NMF) will include Public Works, Streets and SWM, WW groups, and include Facilities, Traffic Engineering groups on a part time basis. For long term planning purposes the total will show current and future growth projections for a planning period of approximately 20 years.

CURRENT STAFFING - 2015 (20 YEAR PROJECTIONS)

	Crew	Sup.	Mgr.	Seasonal	Totals	Remarks
Streets	8 (10)	1 (1)	1 (1)	2 (4)	12 (16)	
Surface Water	3 (4)	1 (1)	-	2 (3)	6 (8)	
Waste Water	6 (6)	1 (1)	-		7 (7)	
Facilities	1 (2)	1 (1)	-	1 (1)	3 (4)	
Fleet	-	-	-	-	0	Possible future mobile mechanic
Traffic	-	-	-	-	0	Storage and shop space
Police	-	-	-	-	0	Storage of vehicles and pallets
Admin	-	-	-	-	0	
TOTALS	18 (22)	4 (4)	1 (1)	5 (8)	28 (35)	

VEHICLES (ALL ROLLING STOCK INCLUDING TRAILERS AND ATTACHMENTS)

Vehicles and rolling stock are categorized by Large, Medium, Small, X-Small and XX-Small. The City staff desire that all vehicles and rolling stock be canopy covered at a minimum, while vehicles with weather sensitivity be enclosed and heated. See below for an abbreviated list of vehicles that will be domiciled on the NMF site. In addition to the programmed parking for city-owned vehicles, 35-40 employee parking stalls plus 4 visitor stalls are included in the program. See detailed vehicle parking analysis document for a full break down of vehicles and rolling stock.

	Large	Medium	Small	X-Small	XX-Small	Totals	Remarks
Heated/Enclosed	1	1	-	-	-	2	
Covered	2	16	31*	9	21	79	*(2) Police impound, secured
Uncovered	-	-	10*	-	-	10	*Police vehicles
TOTALS	3	17	41	9	21	91	

(*) Note: Not shown on site plan alternatives. These could be accommodated at the Hamlin property after Public Works vacates the site.

EQUIPMENT AND STORAGE

A full equipment list will be provided as part of the final Predesign report

3 – PROGRAM – ADMIN AND CREW FACILITIES

LOBBY/WAITING AREA

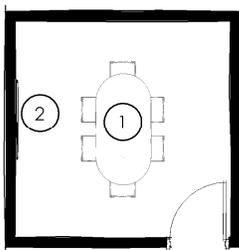
- Welcoming main entry for guests and “front door” control point for the building
- Assume the building will require occasional access by public visitors
- City staff from other departments may use the facility for meetings
- 2-3 chairs and a small table
- Posting area
- Exterior sign and/or bell to until the reception desk is staffed

RECEPTION/ADMIN ASST.

- Built-in reception counter and workstation (no position at this time)
- Provide line of sight from reception desk to lobby, entry area, parking and crew yard if possible
- Direct access/adjacency to lobby

SMALL CONFERENCE ROOM

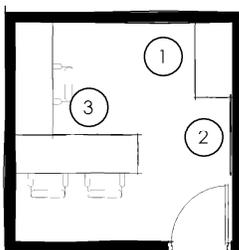
- Space for (4) people
- Table and chairs, white board
- Can function as a future office
- One adjacent to lobby



- ① CONFERENCE TABLE AND CHAIRS
- ② WHITE BOARD

ENCLOSED OFFICE

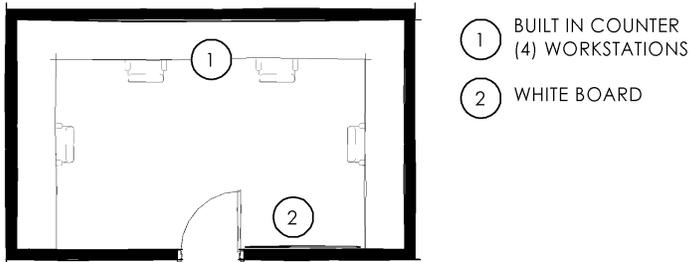
- For Operations and Utility Manager as well as Supervisors
- Workstation with 2 chairs, bookcase and white board



- ① STORAGE
- ② WHITE BOARD
- ③ DESK WITH (2) CONFERENCE CHAIRS

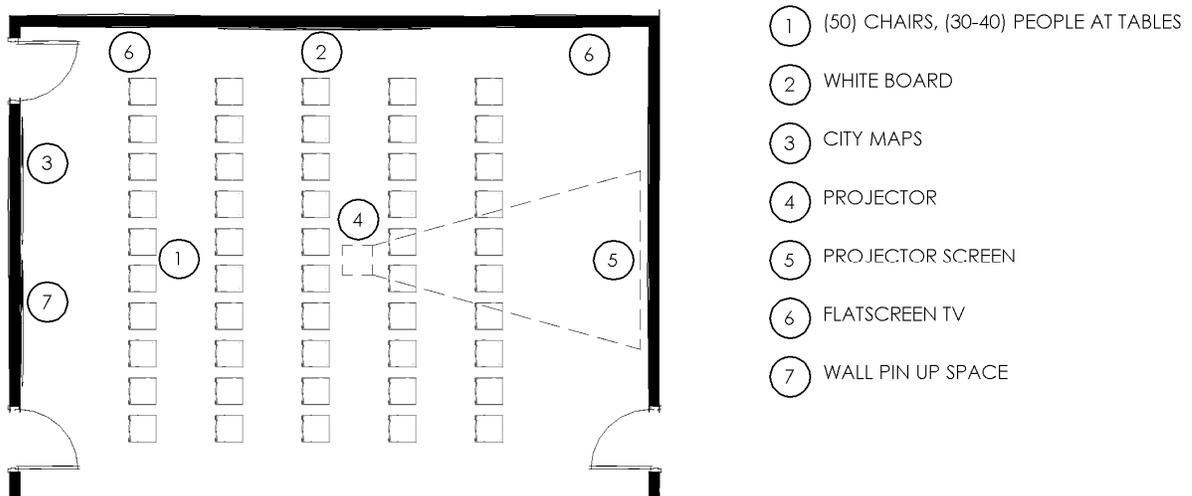
LEAD OFFICE

- Open office for Leads to share
- Modular or built-in wrap around counter
- 3-4 workstations
- White board



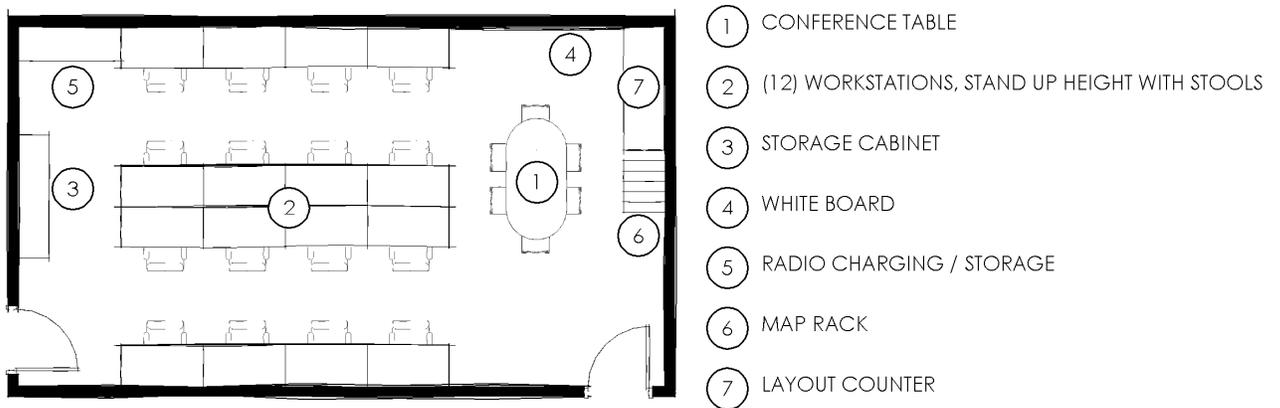
MULTI-PURPOSE ROOM

- Table seating for 40, (nesting tables for storage within the space)
- Chair seating for 50 people min
- To be used for dispatch, all hands meetings and training sessions, shared by all crew
- Available for use by other city departments
- Projector and projector screen (ceiling mounted), (2) flat screen TV's
- Minimum 10 lineal feet of white board
- Large city map, with additional maps in adjacent hallway
- Views to yard if feasible



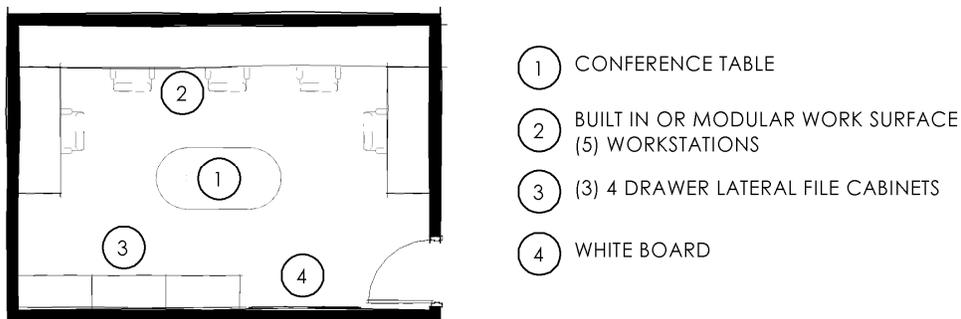
STREETS/WW CREW AND DISPATCH ROOM

- Shared space between Streets and WW for crew meetings and dispatching
- Adjacent to multi-purpose room
- (1) workstation per 2 people
- Stand up counter with stools
- Map/drawing storage with adjacent layout counter
- Conference table with chairs (6 people)
- Maximize white board space, add sliding white board if needed
- Radio charging location



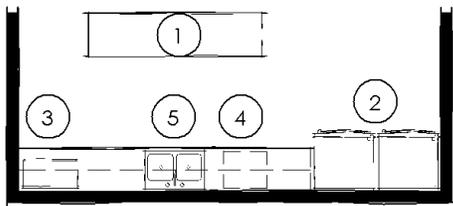
SWM CREW AND DISPATCH ROOM

- 5 workstations at built-in counter, desk height
- Conference table and chairs (4 people)
- (3) 4 drawer lateral file cabinets
- White board



KITCHENETTE

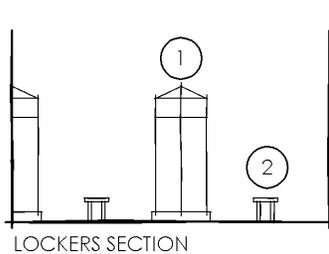
- Open to multi-purpose room
- Shared by all personnel
- (2) full size refrigerators, (2) microwaves, dishwasher, upper and lower cabinets, island dividing kitchen and multi-purpose if space allows
- Confirm if stovetop is required, additional ventilation will be required



- ① ISLAND WITH BASE CABINETS
- ② (2) REFRIGERATORS
- ③ (2) MICROWAVES STACKED
- ④ DISHWASHER
- ⑤ SINK WITH DISPOSAL

LOCKER ROOMS (MEN'S AND WOMEN'S)

- Sinks, toilets, urinals (min 2) to meet code minimum
- (30)-(35) 12" wide full height standard lockers in men's locker room away from toilets for personal belongings. Provide raised concrete base
- (6)-(10) 12" wide full height standard lockers in women's locker room away from toilets for personal belongings. Provide raised concrete base
- Benches
- Floor drains
- Tile floors and walls for durability



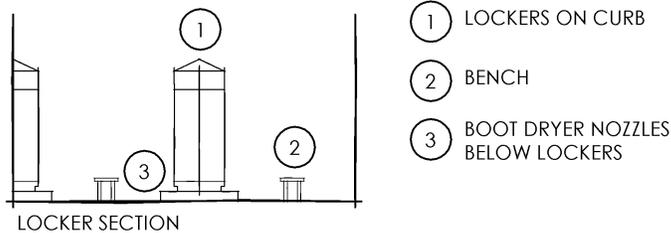
- ① LOCKERS ON CURB
- ② BENCH

SHOWER FACILITIES

- (2) Enclosed private ADA shower stalls with changing area
- Tile floors and walls for durability

MUD ROOM

- Unisex space for secure storage of field gear
- Provide up to 45 cage lockers, 24” wide by 18” deep
- Boot dryers integrated into mechanical system and concrete base
- Well ventilated space to prevent odor and allow gear drying
- Benches
- Floor drains

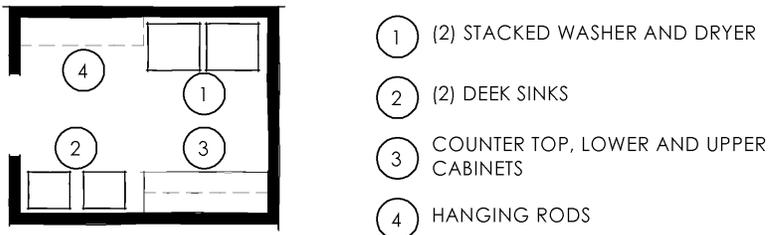


BOOT WASH

- Canopy covered
- Adjacent to main crew entry to mud room from yard
- Hose bib, sump with grating, boot scrubber
- Direct access to mud room

UTILITY ROOM

- (2) sets of stacking washer and dryer units
- (2) deep sinks with goose neck faucets
- Clothes hanging rod
- 6’-8’ counter top with upper and lower cabinets
- Floor drain
- Integral with or direct access to mud room



WELLNESS ROOM

- Space for exercise equipment shared by all facility personnel
- Can function as a future office

COPY/PRINT ALCOVE

- Copier/printer
- Upper and lower casework
- 6 - 8 linear feet of counter top
- Recycle and refuse bins
- Centrally located to offices

MAILBOX ALCOVE

- Centrally located to offices
- 1 mailbox for each crew member up to 40 slots

SERVER RM, ELECTRICAL RM, MECHANICAL RM

- Primary IT systems hub
- Location on mezzanine if space allows and building design

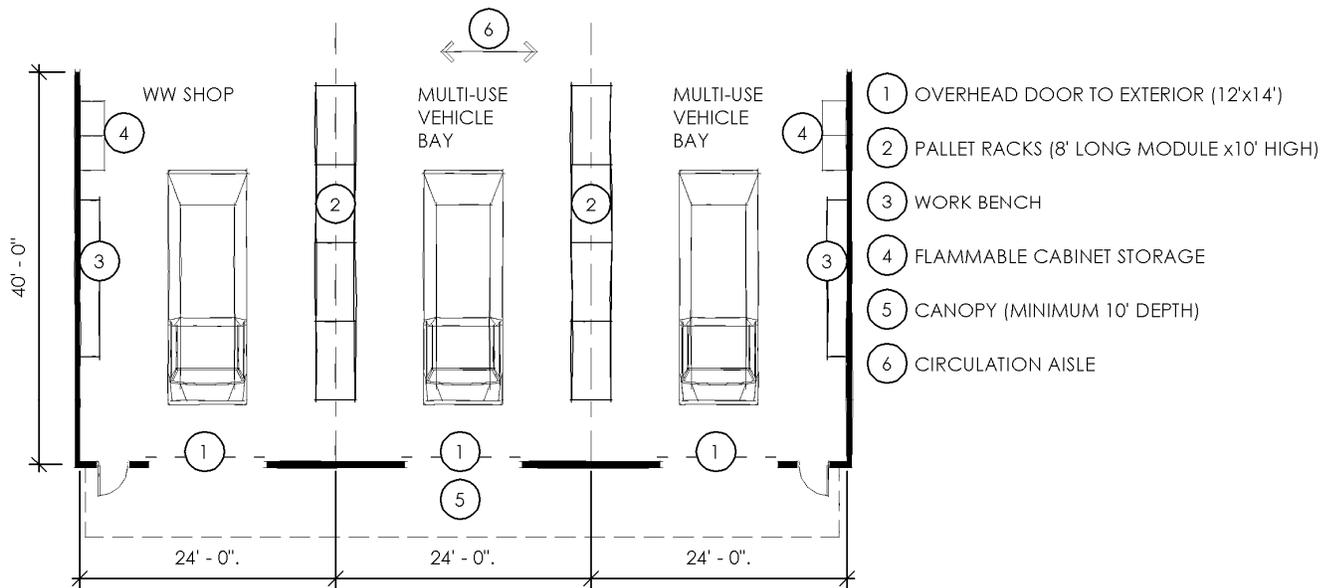
CUSTODIAL ROOM

- Mop sink /rack
- Storage space for janitorial items
- Centrally located, adjacent to mud and locker rooms

4 – PROGRAM – SHOP AND STORAGE FACILITIES (HEATED ENCLOSED)

WASTE WATER SHOP

- Main shop for Waste Water crew
- Work bench, with small tool storage above and below
- 12'x14' overhead door with direct access to exterior
- Canopy at exterior above overhead doors
- Flammable cabinets

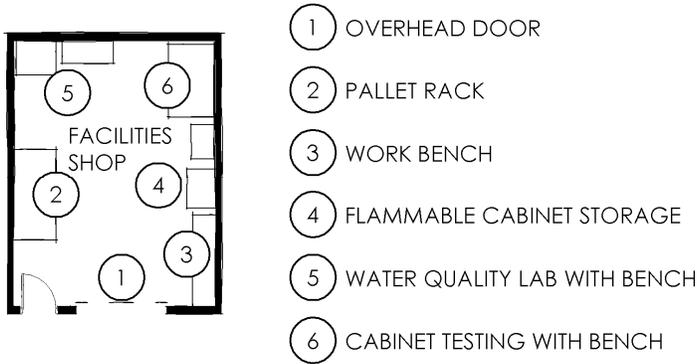


MULTI-USE VEHICLE BAYS (SEE PREVIOUS DIAGRAM)

- Vehicle parking and storage racks
- CRT events, City Hall temporary storage, mobile vehicle lifts
- Used by future city mobile mechanic while not in use by NMF crews
- Used by Police for light duty maintenance while not in use by NMF crews

FACILITIES SHOP

- Main shop for facilities staff
- Work bench, fuel reader station
- 8' x 8' overhead door with direct access to exterior if layout allows
- Flammable cabinets
- Include water quality lab with work bench and storage cabinet/rack
- 6'x4' cabinet testing and work bench and lap top for traffic engineer
- Variety of storage rack systems



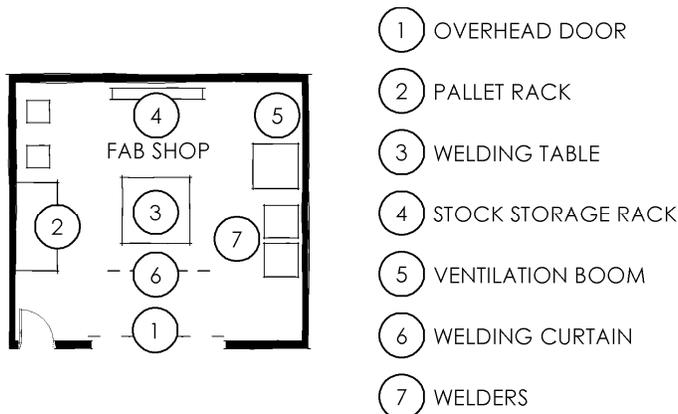
CARPENTRY SHOP

- Shared wood working shop
- Provide dust collection system, table saw, chop saw, sander, work bench and stock storage ½ sheets
- 10'x12' overhead door with direct access to exterior if layout allows, smaller overhead door if interior access only



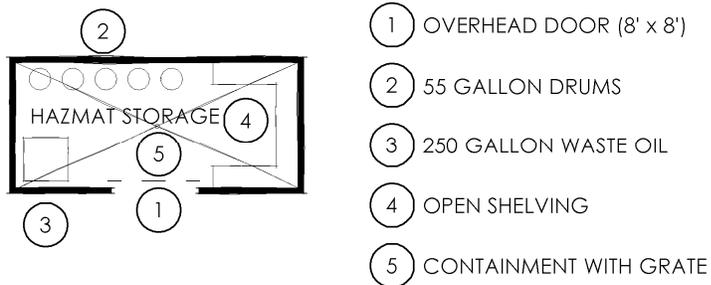
FAB SHOP / COMMON WORK

- Shared area for low volume steel fabrication and other general purpose work
- Welding table, welding / fab equipment, ventilation boom, welding curtain
- Work benches
- 10'x12' overhead door with direct access to exterior if layout allows, smaller overhead door if interior access only



HAZMAT STORAGE

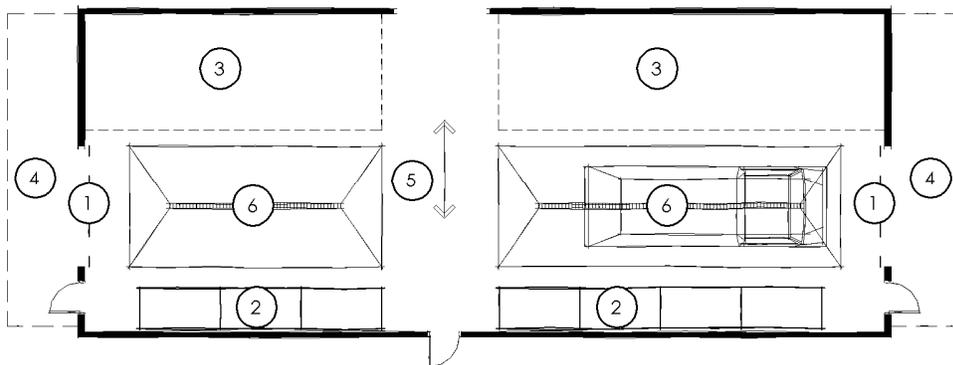
- Enclosed room for the storage of hazardous material
- Pesticides, (5) 55 Gal drums of release agent, 250 gal waste oil tank
- Provide containment system and ventilation
- 8' x 8' overhead door



- ① OVERHEAD DOOR (8' x 8')
- ② 55 GALLON DRUMS
- ③ 250 GALLON WASTE OIL
- ④ OPEN SHELVING
- ⑤ CONTAINMENT WITH GRATE

WORKING STOCK BAY

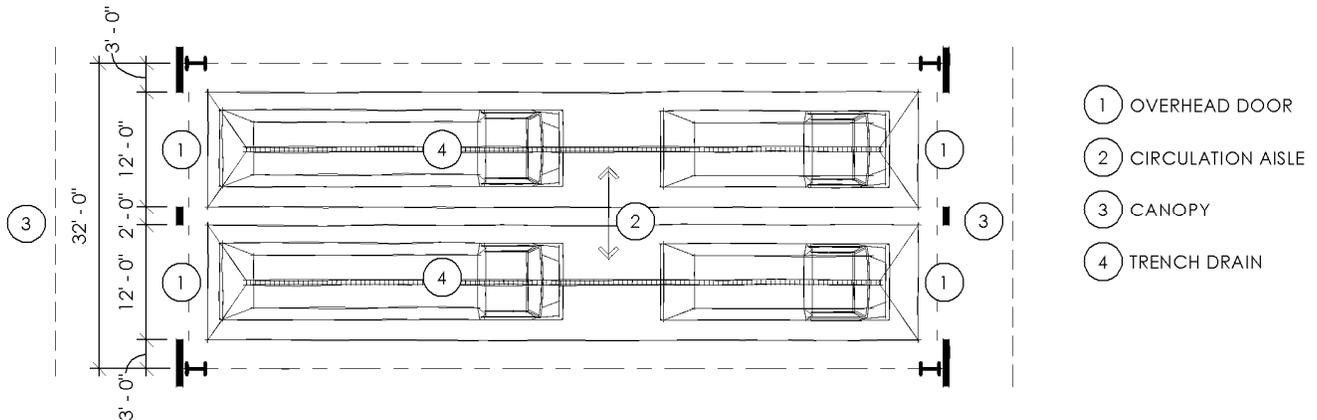
- Drive through bay
- Perimeter rack shelving for daily used items including pumps, man hole lids, concrete, other materials
- Locate police storage here, 2-3 pallets
- 12'w x 14'h overhead doors
- Storage for power tools, pressure washers and specialty tools, fenced areas
- Street sign storage, 24 lineal feet, some double stacked with sign rack system, on pallet racks
- Trench drains



- ① OVERHEAD DOOR
- ② PALLET RACKS
- ③ SECURE TOOL STORAGE
- ④ CANOPY
- ⑤ CIRCULATION AISLE
- ⑥ TRENCH DRAIN

ENCLOSED VEHICLE PARKING (SEE FULL VEHICLE AND EQUIPMENT INVENTORY)

- Large and medium vehicle sizes
- Temperature will be kept above freezing
- Trench drains, 1/8" slope per foot
- 12'w x 14'h overhead doors
- Trench drains



WASH BAY EQUIPMENT ROOM

- Wash bay water reclaim equipment
- Adjacent to wash bay

UNISEX TOILET ROOM

- Single toilet stall and sink
- For convenient access while in shop and vehicle storage areas
- Provide two rooms

CUSTODIAL ROOM

- Mop sink /rack
- Storage space for janitorial items
- Centrally located

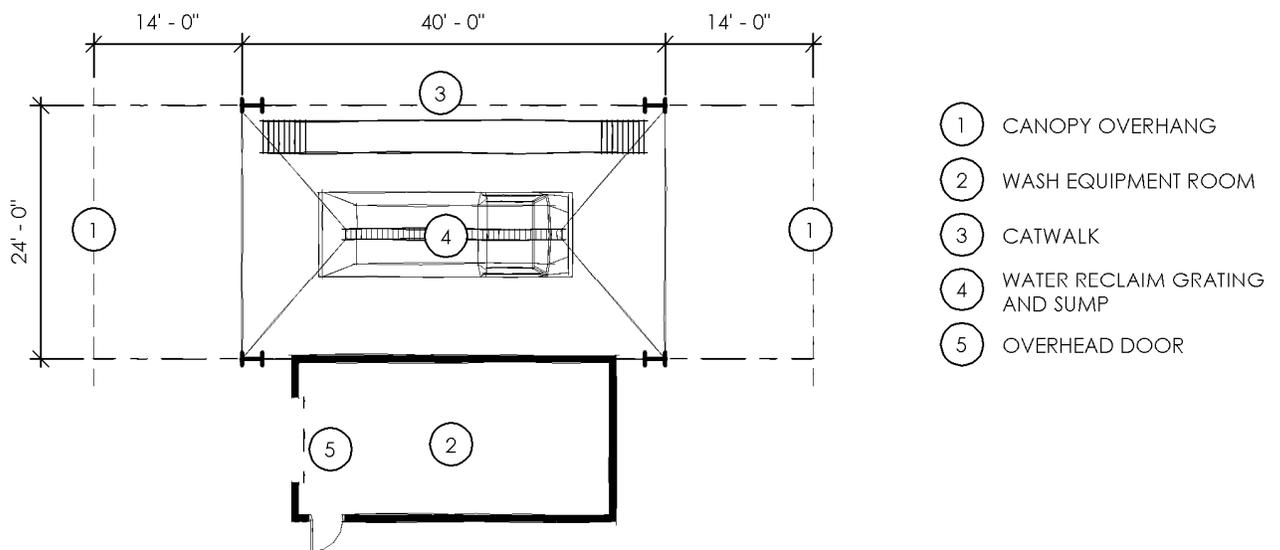
MEZZANINE

- Mechanical room, Electrical room, IT room, if layout allows

5 – PROGRAM – STORAGE FACILITIES (CANOPY COVERED)

WASH BAY

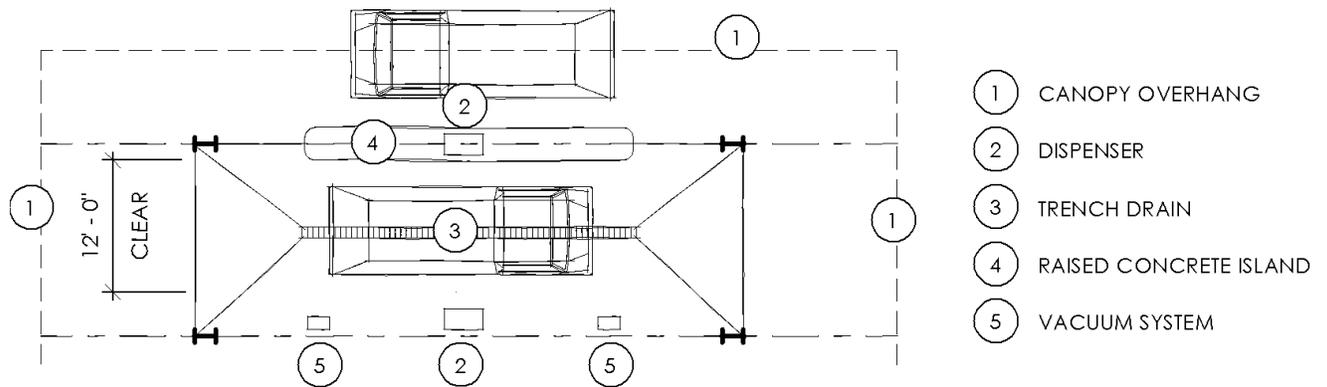
- Wash down of all vehicles and equipment with manual spray wand, heated water
- 1 1/2" hose connection, trench drain to water reclaim system
- Pressure washer with 3/4" hose connection
- Convenient access, end of a structure
- Catwalks on one side (two if space allows)
- Flexibility to wash large and small vehicles, with trailers
- Water reclaim system with sump and grating



FUEL ISLAND

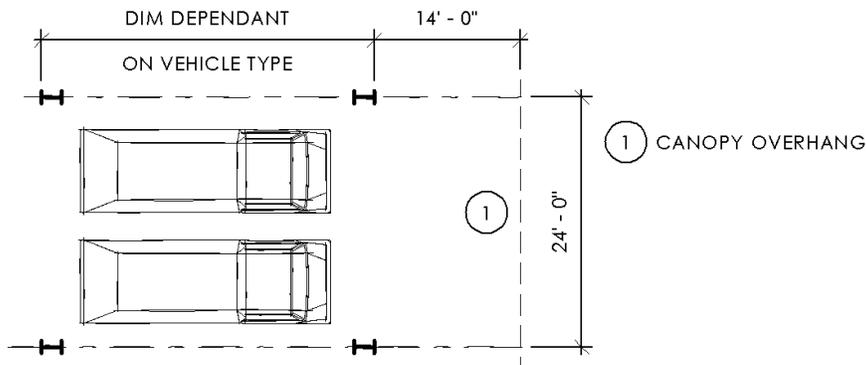
- (2) fueling positions for diesel, (2) for unleaded
- Provide access by all vehicles sizes including trailered equipment
- Convenient access, end of a building towards the front of the site
- Gas (10,000 gallons) and Diesel (5,000 gallons) tanks, above or underground tanks. Quantity to be determined
- Fuel management system accommodating all city vehicles
- The fuel lane should be 20 feet wide by 55 feet long
- Some vehicles fuel on the right and some on the left
- Provide duplicate dispensers on the fuel lane to provide back-up
- Provide a central vacuum system with a 10 foot hose (2 inch diameter) at the front and rear door locations.

- Typically fuel is delivered by double tanker, provide access
- Trench drain, route to dead end sump



VEHICLE STORAGE (SEE FULL VEHICLE AND EQUIPMENT INVENTORY)

- Police vehicle impound, fenced with privacy slats at minimum
- Several sizes, large, medium, and small
- 1-4 surplus vehicles of varying sizes, can be uncovered
- Trench drains at double loaded canopy, 1/8" slope per foot. At single loaded canopy slope away from back wall



MATERIALS AND EQUIPMENT STORAGE (SEE FULL VEHICLE AND EQUIPMENT INVENTORY)

- Barricades, cones, candle sticks, traffic control signs, steel sign parts (10'-12' lengths), etc. (Streets)
- Snow plows and other vehicle attachments
- Spill response kits, erosion control, car wash kits (SWM)
- 2 radar trailers (Size of dolly) need outlet for charging and space for back up battery, sign boards, 1 spare 6'x4' cabinet (Traffic)
- Misc. valves, pipe and clean outs (WW) 2 racks
- Shared by all groups
- Use floor area as well as pallet racks
- Provide canopy and walls at back and sides (open at front)

SANDER BOX STORAGE

- Hung from structure or ground mounted frame

PLOW BLADE STORAGE

- At back wall of storage canopy

VACTOR DECANT CANOPY

- Manhole for wastewater decanting
- 2" water filler
- Consider use of hay bales for drain protection from solids
- Concrete or ecology block back wall
- Slope concrete to manhole

SWEEPER SPOILS CANOPY

- Space to empty sweeper debris and allow to drain liquids
- Concrete or ecology block back wall
- Slope concrete to drain

MATERIALS STORAGE CANOPY

- Salt is delivered off of truck by conveyor belt
- Convenient if salt and deicer are adjacent to each other but not required
- Push wall at back and sides
- Salt storage to have a screen on all 4 sides to protect from weather
- Concrete or ecology block back and side walls

6 – PROGRAM – SITE STORAGE

DEICER TANK

- Approximate size of 8400 gallons
- Electric pumping system with canopy
- Double walled so secondary containment is not required
- Near salt storage if space allows

BULK MATERIALS BUNKERS

- Use ecology blocks to separate material types
- 5/8" minus - 5-10 yards
- 1 ¼" minus - 5-10 yards
- Asphalt waste - 5-10 yards
- Concrete waste - 5-10 yards
- Brush - 5-10 yards
- 20 yard dumpsters (Garbage, metal recycling, street sweeper collection), provide raised vehicle access if site area allows, provide for convenient vendor delivery and collection
- Pole storage - laydown area for minimal quantities of poles and pipes

GENERATOR

- Concrete pad
- Confirm generator size, to power full site

CITY OF SHORELINE
North Maintenance Facility

SPACE PROGRAM

SUMMARY OF PROGRAMMING

This space program was developed during an initial two day workshop held at the City of Shoreline on December 1 and 2, 2015, with representatives of the City's Streets, Surface Water Management, Waste Water, Police, and Environmental Services. Follow up sessions were also held, to review staff comments for incorporation into the final program document. The purpose of the programming workshops were to review all functions supporting City maintenance operations, and develop a program of current and projected space needs, tied to projections for anticipated City growth over a minimum 20 year planning horizon. This program is intended for use in establishing a recommended minimum facility size.

WORKSHOP PARTICIPANTS**The following City staff participated in the workshop with TCF:**

* Randy Witt, Public Works Director	* Allan Unger, WW Maint.
* Kirk Peterson, Parks Sup.	* George Dicks, WW Maint Mgr.
* David LaBelle, PW Maint. Sup	* Cheryl Ooka, ASD Mgr
* Eric Gilmore, SWM Sr. Eng. Tech	* Brian Straathof, Facilities
* Tina Kendall, Env. Serv. Asst	* Noel Hupprich, Cap Pjt. Mgr
* Quang Nguyen, Traffic Eng. II	

TCF DESIGN TEAM

- * Randy Cook, Principal, TCF Architecture
- * Mark Hurley, Project Architect, TCF Architecture
- * Darrell Smith, Civil Engineer, Perteet, Inc
- * Frank Coleman, Industrial Engineer, Pinnacle Consulting

PROGRAM AREA SUMMARY

SF

The summary below provides the total building and site program areas (square footage) derived from the breakdown of all programmed spaces included in this document.

Building Program Area

Enclosed / Heated Building Area	18,099	Administrative / Crew / Maintenance Shops / Vehicle Storage
Unheated / Covered Area	21,041	Vehicles and Equipment Storage / Materials Storage / Wash and Fueling / Decant
Total Building Program Area	39,140	

Site Program Area

Bulk Materials / Miscellaneous Site	3,100	Open Bin Storage / Dumpster / Generator / Deicer
Total Site Program Area	3,100	

SUMMARY OF OPERATIONS STAFFING AND FUTURE GROWTH

The workshop participants discussed the current staffing levels and developed the following assessment and projections for the 20 year planning horizon. The program is based on a facility supporting 28 staff and crew with projected growth to 35. See the design criteria document for a full break down of staffing.

SUMMARY OF VEHICLES AND ROLLING STOCK EQUIPMENT

Vehicles and Rolling stock are categorized by several different sizes totaling 91 pieces. All items are expected to be canopy covered at a minimum, vehicles and equipment with weather sensitivity will be enclosed and heated. In addition to the programmed parking for city-owned maintenance vehicles, plan for 35-40 employee parking stalls plus 4 visitor stalls. See detailed vehicle parking analysis document for a full break down of vehicles and equipment.

WORKSHOP NOTES

See separate meeting notes from the December 1 and 2, 2015 workshop providing additional program information, including room diagrams, supplementing the information presented in this space program document.

CITY OF SHORELINE
North Maintenance Facility

SPACE PROGRAM

Space Description	No.	Proposed Space Standard	20 Year Program			General Space Purpose and Design Criteria	Adjacencies	Clear Height	Other Criteria / Equip. / Furnishing Needs
			Area (SF)	Qty.	Total Area				

ENCLOSED / HEATED FACILITIES

ADMINISTRATION / PUBLIC / CREW

Lobby / Waiting Room	A1	10 x 12	120	1	120	Assume the building will require occasional access by public visitors, as well as internal staff from other departments	Visitor and crew parking	9'	2-3 guest chairs and small table
Reception / Admin Asst.	A2	8 x 10	80	1	80	Provide line of sight from reception desk to lobby and to entry area, parking, and crew yard if possible	Lobby	9'	Built-in reception counter / workstation
Small Conference Room	A3	12 x 12	144	2	288	Provides space to meet with vendors up to 4 people. Future office space	1 adjacent to lobby	9'	Table with chairs, white board
Utility & Operations Manager Office	A4	12 x 12	144	1	144	Private office for manager	Near lobby	9'	work station, bookshelves, white board
Supervisor Office	A5	12 x 12	144	3	432	Private office for supervisors, Streets, WW and SWM	Adjacent to crew areas	9'	work station bookshelves, white board
Lead Office	A6	12 x 18	216	1	216	3-4 leads share open office area	Adjacent to crew rooms	9'	Work surface
Multi Purpose Rm	A7	24 x 32	768	1	768	Seating for 30-40 at chairs and tables, 50 people at chairs only. All hands meetings and training sessions	Kitchenette, convenient access to locker rooms, offices, direct access to Streets and WW crew room, near mailbox alcove	12'	Tables & chairs / (2) flat screens, city maps, posting space, 10' of white board. Projector and projector screen, additional maps in adjacent hallway
Streets and WW Crew & Dispatch Room	A8	18 x 32	576	1	576	Shared work room / map room for use by Streets and WW crew	Direct access to Multi purpose room and corridor. Adjacent to supervisor and lead offices	9'	Stand up height countertop with stool seating, shared computers, 1 per 2 crew. Sliding white board, radio charging station
SWM Crew/Dispatch Rm	A9	14 x 20	280	1	280	Crew and dispatch room for SWM		9'	5 workstations, conf table, (3) 4 drawer lateral files
Kitchenette	A10	6 x 14	84	1	84	Kitchen area shared by all staff and crew	Adjacent to, or contained within the multi purpose rm	9'	(2) full size refrigerators, (2) microwaves, dishwasher, lower and upper cabinets

CITY OF SHORELINE
North Maintenance Facility

SPACE PROGRAM

Space Description	No.	Proposed Space Standard	20 Year Program			General Space Purpose and Design Criteria	Adjacencies	Clear Height	Other Criteria / Equip. / Furnishing Needs
			Area (SF)	Qty.	Total Area				
Men's Locker Room	A11	18 x 32	576	1	576	Private men's locker and toilet room. Toilets, sinks per plumbing code, (minimum 2 urinals)	Adjacent to mud room, wellness room	9' +	Provide space for up to (30-35), 12" wide full height standard lockers, benches. floor drains
Women's Locker Room	A12	14 x 18	252	1	252	Private women's locker and toilet room. Toilets, sinks per plumbing code	Adjacent to mud room, wellness room	9' +	Provide space for up to (6-10), 12" wide full height standard lockers, benches, floor drains
Shower	A13	5 x 8	40	2	80	Unisex private shower stall, ADA accessible	Adjacent to Toilet Rms	9'	Tile, shower accessories, floor drain
Mud Room	A14	18 x 32	576	1	576	Unisex space for storage and drying of wet gear / bulky gear	Adjacent to men's and women's locker rooms and utility room, exterior access, boot wash	9' +	Provide up to 45 cage lockers (24"W x 18"D). Boot dryers integrated into base of lockers, bench, floor drains
Boot Wash	A15	4 x 4	16	1	16	Cleaning of boots before entering the building, exterior space with canopy	Mud room, near exterior door		Hose bib, sump, grating, boot scrubber
Utility Room	A16	12 x 16	192	1	192	Cleaning of work clothing items	Mud room, near exterior door	9'	Provide 2 sets of stacking washer/dryer units / deep sink with goose neck faucets. Hanging rod and working counter. Floor drains
Wellness Room	A17	14 x 16	224	1	224	Open space for exercise equipment shared by all facility personnel. Use as future office	Near to locker rooms	9'	Exercise equipment such as stationary bike, weights, treadmill, to be provided by crew.
Copy/Print alcove	A18	6 x 8	48	1	48	Small area for printer/copier	Near Sups offices	9'	Copier, shelves for paper storage, counter 6'-8' linear feet, Recycle bins
Mailbox Alcove	A19	4 x 6	24	1	24	Mailbox for each crew, up to 40 slots	Multi Purpose room	9'	
IT Room	A20	10 x 10	100	1	100	Primary hub for communications and data systems	Central to building	9'	
Custodial Room	A21	6 x 8	48	1	48	Mop sink/rack	Centrally located	9'	
Electrical Room	A22	10 x 10	100	1	100		Could be part of a mezzanine space	9'	
Mechanical Room	A23	10 x 17	170	1	170		Could be part of a mezzanine space	9'	
SUBTOTAL AREA					5,394				
Circulation / Walls / Misc			30%	1,618					
TOTAL ADMIN / CREW					7,012				

CITY OF SHORELINE
North Maintenance Facility

SPACE PROGRAM

Space Description	No.	Proposed Space Standard		20 Year Program			General Space Purpose and Design Criteria	Adjacencies	Clear Height	Other Criteria / Equip. / Furnishing Needs
				Area (SF)	Qty.	Total Area				

MAINTENANCE / SHOPS / VEHICLES & EQUIPMENT

Facilities Shop	M1	18	x 24	432	1	432	Main shop space for facilities crew / materials, tools. Water Quality lab and 1 cabinet testing space for Traffic	Adjacent to carpentry and fabrication shop	12'	Can be open to structure. 8 lineal feet of rack storage. Gas reading station. Can move to Hamlin site
Carpentry Shop	M2	24	x 30	720	1	720	Enclosed shop for wood working	Adjacent to other shops/storage	12'	Can be open to structure. Provide dust collection system. Table saw, chop saw, sander, work bench, stock storage, 1/2 sheets. Can move to Hamlin site
Fab Shop / Common Work Area	M3	24	x 30	720	1	720	Shared area for miscellaneous, low volume steel fabrication activities	Locate adjacent to carpentry and facilities shop	12'	Welding table, welding / fab equipment. Ventilation boom. Welding curtain
Hazmat Storage	M4	12	x 25	300	1	300	Pesticides, (5) 55 Gal drums of release agent, 250 gal waste oil, provide sump containment and ventilation per code		12'	Can be open to structure. 8x8 overhead door.
Sign Storage	M5	6	x 24	144	1	144	Provide 24 lineal feet of stacked (double row) sign storage racks	Adjacent to other shops/storage. Possibly combined with working stock bay Provide interior access and direct access to exterior	12'	Can be open to structure. Overhead door to exterior. Signage bay with sign storage if space allows
Tool Storage	M6	12	x 40	480	2	960	Secure tool storage for power tools, specialty tools	Adjacent to other shops/storage. Provide interior access and direct access to exterior, adjacent to drive through bay	12'	Fencing to divide space among departments for organization purposes
Working Stock Bay	M7	20	x 40	800	2	1,600	Drive through bay with perimeter sheving for variety of daily used items	Adjacent to other shops/storage. Provide interior access and direct access to exterior	16'	Can be open to structure. 2-3 pallets of police storage for flares, etc.

CITY OF SHORELINE
North Maintenance Facility

SPACE PROGRAM

Space Description	No.	Proposed Space Standard		20 Year Program			General Space Purpose and Design Criteria	Adjacencies	Clear Height	Other Criteria / Equip. / Furnishing Needs	
				Area (SF)	Qty.	Total Area					
Waste Water Shop	M8	24	x 40	960	1	960	Main shop space WW and vehicle storage	Adjacent to other shops/storage. Provide interior access and direct access to exterior	16'	Can be open to structure. Overhead door to exterior. Work bench and tool storage	
Multi-Use Vehicle Bays	M9	24	x 40	960	2	1,920	Miscellaneous shop working space and vehicle storage		16'	Community Response Team (CRT) storage, could also be under canopy storage, 4 portable lifts	
Large Vehicle Parking	M10	12	x 40	480	1	480	See complete vehicle analysis document		16'		
Medium Vehicle Parking	M11	12	x 30	360	1	360	See complete vehicle analysis document		16'		
Wash Bay Equipment Room	M12	15	x 25	375	1	375	Space for water reclaim equipment room	Wash Bay	12'	Can be open to structure. 8x8 overhead door	
Unisex Toilet Room	M13	8	x 8	64	2	128	Single unisex restroom serving shop area	Convenient access within vehicle storage and shops	9'		
IT Room	M14	10	x 10	100	1	100	IT equipment	Centrally located, could be located on mezzanine	9'		
Custodial Room	M15	5	x 8	40	1	40	Mop sink/rack	Centrally located	9'		
Mezzanine	M16		x	-	1	-	Mechanical area, electrical rm, IT rm and bulk storage to optimum foot print		12'	SF determined during design	
SUBTOTAL AREA				9,239							
Circulation / Walls / Misc				20%			1,848				
MAINTENANCE / SHOPS / VEHICLES & EQUIPMENT							11,087				
TOTAL ENCLOSED / HEATED FACILITIES							18,099				

CITY OF SHORELINE
North Maintenance Facility

SPACE PROGRAM

Space Description	No.	Proposed Space Standard	20 Year Program			General Space Purpose and Design Criteria	Adjacencies	Clear Height	Other Criteria / Equip. / Furnishing Needs
			Area (SF)	Qty.	Total Area				

COVERED / UNHEATED FACILITIES

CANOPY-COVERED

Wash Bay	C1	20	x 40	800	1	800	Washdown of all vehicles. Provide 1-1/2" hose connection, trench drain and manhole/catchbasin. Water reclaim system	Located as an end bay adjacent to vehicle storage bays.	20'	Manual pressure system with heated water, catwalk
Fuel Island	C2	20	x 40	800	1	800	Canopy covered bay for fueling of all vehicles	Located near main entry of site to allow for easy access		Above ground or underground tanks are acceptable. Gas and deisel. 5,000 gallons deisel, 10,000 gallons gas
Police Vehicle Impound	C3	10	x 20	200	2	400	Over flow parking for vehicles waiting for search warrants	Easy access at end of canopy		If space allows, possibly enclose with privacy fencing, can move to Hamlin
Large Vehicle Parking	C4	12	x 40	480	2	960	See complete vehicle analysis document		16'	
Medium Vehicle Parking	C5	10	x 30	300	16	4,800	See complete vehicle analysis document		16'	
Small Vehicle Parking	C6	10	x 20	200	29	5,800	See complete vehicle analysis document		12'	
X-Small Vehicle Parking	C7	8	x 12	96	9	864	See complete vehicle analysis document		12'	
XX-Small Equipment Parking	C8	8	x 8	64	21	1,344	See complete vehicle analysis document		12'	
Materials and Equipment Storage	C9	12	x 40	480	2	960	Drive-through bay with rack and floor storage	Adjacent to vehicle storage	16'	Barricades. Cones, miscellaneous items
Sweeper Spoils	C10	20	x 30	600	1	600	Dump sweeper spoils	Adjacent to vactor decant	20'	2" water fill
Vactor Decant	C11	20	x 30	600	1	600	Decanting vactor trucks		20'	Manhole for WW, 2" water fill
Salt	C12	20	x 30	600	2	1,200	200 yrds		20'	Delivered off of truck by conveyor belt
SUBTOTAL AREA						19,128				
Circulation / Walls / Misc				10%		1,913				
TOTAL COVERED / UNHEATED						21,041				
TOTAL BUILDING AREA						39,140				

CITY OF SHORELINE
North Maintenance Facility

SPACE PROGRAM

Space Description	No.	Proposed Space Standard	20 Year Program			General Space Purpose and Design Criteria	Adjacencies	Clear Height	Other Criteria / Equip. / Furnishing Needs
			Area (SF)	Qty.	Total Area				

SITE FACILITIES

Parking

Employee Parking	S1	10	x 20	200	30	6,000			30 stalls min up to 35 for future. ADA stalls as required, fenced if feasible. (1) electric charging spot
Police Parking	S2	10	x 20	200	10	2,000	Squad Cars	In crew parking area	If space allows, fenced in area
Visitor Parking	S3	10	x 20	200	4	800		Near main entry	In unfenced area
Bicycle Parking	S4	4	x 8	32	6	192		Near main entry	Near main entry
						8,992			
Circulation				100%		8,992			
Total Parking						17,984			

Bulk Materials / Miscellaneous Site Items

Deicer tank	S5	9	x 9	81	1	81	Storage and pumping system for deicer		Approximate 8400 gallon tank, electric pumping system under canopy. Specify so a second containment system is not required
5/8" minus	S6	18	x 20	360	1	360	5-10 yards		Ecology Block separators
1 1/4" minus	S7	18	x 20	360	1	360	5-10 yards		Ecology Block separators
Dumpsters	S10	8	x 20	160	3	480	5-10 yards		Garbage, metal recycling, organics, asphalt waste, concrete waste
Pole Storage	S11	5	x 40	200	1	200	Laydown area		Poles and pipes
Generator	S12	10	x 15	150	1	150	Conc Pad		
Subtotal						1,550			
Circulation				100%		1,550			
Total Bulk Materials						3,100			

TOTAL PROGRAMMED SITE AREA	21,084	Not including Structures, drive yard, land scaping, stormwater facilities, setbacks, etc.
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CITY OF SHORELINE
North Maintenance Facility

Vehicle Parking Analysis

VEHICLE PARKING ANALYSIS

L = 12' x 40'
M = 10' x 30'
S = 10' x 20'
XS = 8' x 12'
XXS = 8' x 8'

Vehicle No	Description	Qty.	Size (L,M,S,XS)	Heated				Covered					Remarks
				L	M	S	XS	L	M	S	XS	XXS	
Public Works (Streets and SWM)													
Vehicles													
110	Jeep Cherokee	1	M	0	0	0	0	0	1	0	0	0	To be Replaced w/F250 Ext. cab
114	Facilities Chevrolet 2500 Van	1	M	0	0	0	0	0	1	0	0	0	
119	Ford 1 ton pickup	1	M	0	0	0	0	0	1	0	0	0	Approx. 23' long
121	Facilities Chev 1/2 ton pickup	1	S	0	0	0	0	0	0	1	0	0	Added facilities Pickup
122	Chev 1/2 ton pickup	1	S	0	0	0	0	0	0	1	0	0	
125	Intl 5 yd dump truck	1	M	0	0	0	0	0	1	0	0	0	Approx. 22' long
126	Surface Water Chev 1/2 ton pickup	1	S	0	0	0	0	0	0	1	0	0	Added S.W. Pickup
134	Chevy silverado pickup	1	M	0	0	0	0	0	1	0	0	0	Approx 24' long
173	Elgin Crosswind Street sweeper	1	M	0	1	0	0	0	0	0	0	0	New, Replaced street sweeper #149
158	Ford F550 super crew 4x4	1	M	0	0	0	0	0	1	0	0	0	Approx. 25' long
159	F550 suber cab 4x4	1	M	0	0	0	0	0	1	0	0	0	Approx. 26' long
165	Surface Water Dodge 1/2 ton pickup	1	S	0	0	0	0	0	0	1	0	0	Added S.W. Pickup
166	Navistar Intl 7000 sfa	1	L	0	0	0	0	1	0	0	0	0	Approx. 29' long
287	Caterpillar Backhoe	1	M	0	0	0	0	0	1	0	0	0	Approx. 26' long
214	asphalt hot roller												On Trailer 263, see below
227	2002 - Genie TMZ boom	1	M	0	0	0	0	0	1	0	0	0	
233	road shoulder maintenance	1	L	0	0	0	0	1	0	0	0	0	26' long
266	Bobcat A770 Skid steer	1	S	0	0	0	0	0	0	1	0	0	
117	Ford 1 ton pickup	1	S	0	0	0	0	0	0	1	0	0	Cust. Response Team
133	Chevy Silverado 1500 pickup	1	S	0	0	0	0	0	0	1	0	0	Cust. Reponse Team
154	Ford X30 F350 SC 4x2 c&c	1	M	0	0	0	0	0	1	0	0	0	Cust. Response Team
164	Chevy Colorado	1	S	0	0	0	0	0	0	1	0	0	Traffic Services
170	Ford 1 Ton Dually pickup (Sign Truck)	1	M	0	0	0	0	0	1	0	0	0	Will be new to replace truck #116
PW Vehicles Total		22		0	1	0	0	2	11	8	0	0	
Trailers & Mobile Equipment													
116a	Snow plow	1	XS	0	0	0	0	0	0	0	1	0	8'6"x4'2"
119B	Western hitch mounted spreader for Truck #119	1	XS	0	0	0	0	0	0	0	0	1	5'x2'
119C	Meyer 8.5 Snow Plow	1	XS	0	0	0	0	0	0	0	1	0	8'6"x4'2"
125a	2000 - snow plow	1	XS	0	0	0	0	0	0	0	1	0	10'x4'7"
125b	2000 - sander/spreader	1	S	0	0	0	0	0	0	1	0	0	12'9"x8'
158A	Buyers Plow for Truck #158	1	XS	0	0	0	0	0	0	0	1	0	8'6"x5'6"
158B	Buyer Spreader for Truck #158	1	S	0	0	0	0	0	0	0	1	0	12'x7'7"
159A	Buyers Plow for Truck #159	1	XS	0	0	0	0	0	0	0	1	0	8'6"x5'6"
159B	Buyer Spreader for Truck #159	1	S	0	0	0	0	0	0	0	1	0	12'x7'7"

CITY OF SHORELINE
North Maintenance Facility

Vehicle Parking Analysis

VEHICLE PARKING ANALYSIS

L = 12' x 40'
M = 10' x 30'
S = 10' x 20'
XS = 8' x 12'
XXS = 8' x 8'

Vehicle No	Description	Qty.	Size (L,M,S,XS)	Heated				Covered					Remarks
				L	M	S	XS	L	M	S	XS	XXS	
159C	Chipper Box for Truck #159	1	S	0	0	0	0	0	0	1	0	0	Approx. 11' long
166A	American Plow for Truck #166	1	XS	0	0	0	0	0	0	0	1	0	10'6"x6'
166B	Monroe Spreader for Truck #166 *Hook Skid mounted	1	S	0	0	0	0	0	0	1	0	0	18'x7'
166C	Liquid Anti-Icing tank/Sprayer for Truck #166 *Hook Skid mounted	1	S	0	0	0	0	0	0	1	0	0	Approx 14' long
209	trailer - tilt deck	1	S	0	0	0	0	0	0	1	0	0	
217	air compressor trailer	1	XS	0	0	0	0	0	0	0	0	1	
218	concrete saw	1	XS	0	0	0	0	0	0	0	0	1	
235	Chipper	1	S	0	0	0	0	0	0	1	0	0	Approx 15' long
233A	Attachment: General Purpose "Standard" Bucket for Grader #233	1	XS	0	0	0	0	0	0	0	0	1	
233B	Attachment: Angle Sweeper Broom for Grader #233	1	XS	0	0	0	0	0	0	0	0	1	
236	Kubota Tractor												On trailer 237, see below
236B	Auger for Kubota Tractor #236	1	XS	0	0	0	0	0	0	0	0	1	
250	J&D Emergency Trailer	1	XS	0	0	0	0	0	0	0	0	1	
256	Cummings generator	1	S	0	0	0	0	0	0	1	0	0	Longer than 8' with Trailer Tongue (12' Long)
263	Olympic Paving Trailer (#214 Asphalt Roller on Trailer)	1	M	0	0	0	0	0	1	0	0	0	
266	Bobcat A770 Skid Steer												On trailer 269, see below
266A	Attachment: 24" Asphalt Planer/grinder attachment for Skid Steer #266	1	XS	0	0	0	0	0	0	0	0	1	
266B	Attachment: 72" Sweeper attachment for Skid Steer #266	1	XS	0	0	0	0	0	0	0	0	1	
266C	Attachment: Pallet Fork attachment for Skid Steer #266	1	XS	0	0	0	0	0	0	0	0	1	
266D	Attachment: 24" Roadrunner paving box for Skid Steer #266	1	XS	0	0	0	0	0	0	0	0	1	
266E	Attachment: 48" Roadrunner Paving box for Skid Steer #266	1	XS	0	0	0	0	0	0	0	0	1	
266F	Attachment: Multi-Purpose "Clam" Bucket for Skid Steer #266	1	XS	0	0	0	0	0	0	0	0	1	
266G	Attachment: General Purpose "Standard" Bucket for Skid Steer #266	1	XS	0	0	0	0	0	0	0	0	1	
266H	Attachment: Tilt Tach attachment for Skid Steer #266	1	XS	0	0	0	0	0	0	0	0	1	
269	PJ tilt deck Equipment Trailer	1	M	0	0	0	0	0	1	0	0	0	Approx 28' long
271	Interstate Cargo Trailer	1	S	0	0	0	0	0	0	1	0	0	Approx 19' long
286	Stepp Mfg. Hotbox	1	S	0	0	0	0	0	0	1	0	0	
288	Crack Sealer	1	S	0	0	0	0	0	0	1	0	0	
287A	Attachment: General Purpose "Standard" Bucket for Backhoe #287	1	XS	0	0	0	0	0	0	0	0	1	
287B	Attachment: Multi-Purpose "Clam" Bucket for Backhoe #287	1	XS	0	0	0	0	0	0	0	0	1	
287C	Attachment: 12" Backhoe Trenching Bucket for Backhoe #287	1	XS	0	0	0	0	0	0	0	0	1	
287D	Attachment: 20.5" Standard Backhoe digging Bucket for Backhoe #287	1	XS	0	0	0	0	0	0	0	0	1	
287E	Attachment: 48" Ditching Bucket for Backhoe #287	1	XS	0	0	0	0	0	0	0	0	1	
237	Paros Tilt Deck Equipment Trailer (#236 kabuto tractor on trailer)	1	M	0	0	0	0	0	1	0	0	0	
PW Rolling Stock Total		41	0	0	0	0	0	0	0	3	10	8	20
Total Public Works Vehicles and Rolling Stock		63	0	0	0	1	0	0	2	14	18	8	20



- ADMIN/CREW
- BUILDING CIRCULATION
- ENCLOSED/HEATED SHOPS & VEHICLE STORAGE
- CANOPY COVER
- EXISTING STRUCTURES ON ADJACENT PROPERTIES

SITE
127,530 SF

BUILDINGS
BUILDING A
7,000 SF - ADMIN/CREW TOTAL

BUILDING B
5,180 SF - CANOPY TOTAL

BUILDING C
11,300 SF - HEATED/ENCLOSED
6,400 SF - CANOPY STORAGE
1,500 SF - CANOPY WASH BAY
1,320 SF - CANOPY FUEL BAY
20,520 SF - TOTAL

BUILDING D
4,220 SF - CANOPY TOTAL

36,920 SF TOTAL PROGRAM AREA

PARKING

4 - VISITOR
30 - PERSONNEL

CITY-OWNED (SHADED)

LARGE 12' x 40' (3)

MEDIUM 10' x 30' (17)

SMALL 10' x 20' (29)

X-SMALL 8' x 12' (9)

XX-SMALL 8' x 8' (21)

BULK MATERIALS

- 18' x 20' 5/8" MINUS
- 18' x 20' 1 1/4" MINUS
- 12' x 20' CONCRETE WASTE
- 12' x 20' ASPHALT WASTE
- 12' x 20' BRUSH



- ADMIN/CREW
- BUILDING CIRCULATION
- ENCLOSED/HEATED SHOPS & VEHICLE STORAGE
- CANOPY COVER
- EXISTING STRUCTURES ON ADJACENT PROPERTIES

SITE
127,530 SF

BUILDINGS

BUILDING A
7,000 SF - LEVEL 1 CREW/SHOPS
8,500 SF - LEVEL 2 ADMIN/CREW
15,500 SF - TOTAL

BUILDING B
5,180 SF - CANOPY TOTAL

BUILDING C
10,660 SF - HEATED/ENCLOSED
5,000 SF - CANOPY STORAGE
1,000 SF - CANOPY WASH BAY
1,000 SF - CANOPY FUEL BAY
17,660 SF - TOTAL

BUILDING D
4,220 SF - CANOPY TOTAL

42,560 SF TOTAL PROGRAM AREA

PARKING

4 - VISITOR
36 - PERSONNEL

CITY-OWNED (SHADED)

LARGE 12' x 40' (3)

MEDIUM 10' x 30' (17)

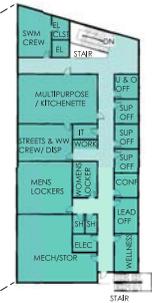
SMALL 10' x 20' (29)

X-SMALL 8' x 12' (9)

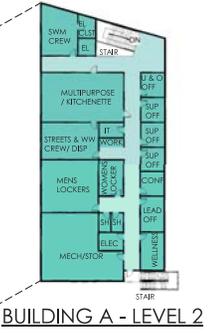
XX-SMALL 8' x 8' (21)

BULK MATERIALS

18' x 20' 5/8" MINUS
18' x 20' 1 1/4" MINUS
12' x 20' CONCRETE WASTE
12' x 20' ASPHALT WASTE
12' x 20' BRUSH



BUILDING A - LEVEL 2



- ADMIN/CREW
- BUILDING CIRCULATION
- ENCLOSED/HEATED SHOPS & VEHICLE STORAGE
- CANOPY COVER
- EXISTING STRUCTURES ON ADJACENT PROPERTIES

SITE
 127,530 SF
 13,400 SF ADJACENT PARCEL
 140,930 SF TOTAL

BUILDINGS

BUILDING A
 7,000 SF - LEVEL 1 CREW/SHOPS
 8,500 SF - LEVEL 2 ADMIN/CREW
 15,500 SF - TOTAL

BUILDING B
 8,090 SF - CANOPY TOTAL

BUILDING C
 10,660 SF - HEATED/ENCLOSED
 5,000 SF - CANOPY STORAGE
 1,000 SF - CANOPY WASH BAY
 1,000 SF - CANOPY FUEL BAY
 17,660 SF - TOTAL

BUILDING D
 4,220 SF - CANOPY TOTAL

45,470 SF TOTAL PROGRAM AREA

PARKING

4 - VISITOR
 40 - PERSONNEL

CITY-OWNED (SHADED)

LARGE 12' x 40' (3)
 MEDIUM 10' x 30' (17)
 SMALL 10' x 20' (29)
 X-SMALL 8' x 12' (9)
 XX-SMALL 8' x 8' (21)

BULK MATERIALS

18' x 20' 5/8" MINUS
 18' x 20' 1 1/4" MINUS
 12' x 20' CONCRETE WASTE
 12' x 20' ASPHALT WASTE
 12' x 20' BRUSH

Criteria	Site Alternative A One Story Main Building No Added Parcel	Site Alternative B Two Story Main Building No Added Parcel
Vehicle Circulation	Opportunities: - Personal vehicles are separated from city owned vehicles - One primary site access, secondary access available - Clear drive aisle between Buildings A and C, increased flexibility	Opportunities: - Personal vehicles are separated from city owned vehicles - One primary site access, secondary access available - Clear drive aisle between Buildings A and C, increased flexibility
People Circulation	Opportunities: - All structures are one story, with the exception of storage mezzanines	Constraints: - The mud room and locker rooms are on different floor levels - High floor to floor height at building A to accommodate shop bay spaces
Building Layout / Program Space	Opportunities: - Optimized shop and storage arrangement - All shops have interior and exterior access - Approx. Building Area: 39,000SF Constraints: - Reduced flexibility in shop bays due to double use as vehicle parking - (3) extra small equipment not covered - (15) small city owned vehicles not covered - Wetland buffer impedes full use of the site	Opportunities: - Increase enclosed heated vehicle storage by (8) stalls from site Alternative A (no double function for vehicle storage in shop space) - Approx. Building Area: 45,000SF Constraints: - Shops have interior access only - Shops are separated from material and equipment storage - (3) extra small equipment not covered - (8) small city owned vehicles not covered - Wetland buffer impedes full use of the site
Economics	Cost Estimate Range: \$14.0 - \$14.7 Million - Least building square footage (Baseline)	Cost Estimate Range: \$15.9 - \$16.7 Million Additional Cost for: - Added building square footage
Environmental /Regulatory/ Community	Opportunities: - No buildings within wetland buffer zone	Opportunities: - No buildings within wetland buffer zone

Criteria	Site Alternative B.1 Two Story Main Building Acquisition of South Parcel	Site Alternative C Wetland Encroachment/Mitigation No Added Parcel
Vehicle Circulation	Opportunities: - Personal vehicles are separated from city owned vehicles - One primary site access, secondary access available - Clear drive aisle between Buildings A and C, increased flexibility - Increased yard between Buildings B and C	Constraints: - No clear drive aisle between Buildings A and C, only access is through fuel bay - Personal vehicles must use southern entrance - Personal vehicle traffic will mix with city owned vehicles
People Circulation	Constraints: - The mud room and locker rooms are on different floor levels - High floor to floor height at building A to accommodate shop bay spaces	Constraints: - The mud room and locker rooms are on different floor levels - High floor to floor height at building A to accommodate shop bay spaces
Building Layout / Program Space	Opportunities: - Increase enclosed heated vehicle storage by (8) stalls from site Alternative A (no double function for vehicle storage in shop space) - All programmed equipment covered - Approx. Building Area: 48,000SF Constraints: - Shops have interior access only - Shops are separated from material and equipment storage - (4) small city owned vehicles not covered - Wetland buffer impedes full use of the site covered - Schedule risk acquiring property	Opportunities: - Increase enclosed heated vehicle storage by (8) stalls from site Alternative A (no double function for vehicle storage in shop space) - All programmed vehicles and equipment are covered - Most building area potential (uses portion of wetland buffer) - Approx. Building Area: 49,000SF Constraints: - Shops have interior access only - Shops are separated from material and equipment storage - (4) small city owned vehicles not covered - Future crew parking is not accounted for
Economics	Cost Estimate Range: \$17.1 - 18.0 Million Additional Cost for: - Added building square footage - Acquisition cost for adjacent property	Cost Estimate Range: \$16.9 - 17.8 Million Additional Cost for: - Added building square footage - Wetland mitigation
Environmental /Regulatory/ Community	Opportunities: - No buildings within wetland buffer zone Constraints: - Facility proximity to existing apartment building	Constraints: - Buildings within wetland buffer zone - Buildings closer to N 25 th Ave NE