



HAPPY VALLEY PUBLIC WORKS COMPLEX MASTER PLAN

DATE: 05.02.25

PREPARED BY:



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PROJECT TEAM



Happy Valley Public Works:
Chris Randall - Public Works Director
Ben Bryant - Assistant City Manager



Scott Edwards Architecture:
Brandon Dole - Project Manager
Eddie Rivas - Project Architect



3J Consulting:
Brian Feeney - Principal Engineer
Brian O'Rourke - Project Manager



EXECUTIVE SUMMARY

A. Introduction

This feasibility study evaluates the proposed site for relocating the Happy Valley Public Works Department.

B. Goals

The primary goal is intended to evaluate and test fit the Public Works on the industrial site located at SE Armstrong Cir and State Hwy 212 and assist in understanding the regulatory requirements for the potential development of the property. And to provide guidance of a sustainable approach to a new modern facility that focuses on energy conservation and alternate energy options.

C. City Requirements

SEA has done preliminary research to understand any zoning challenges the site might face. The Industrial Campus development standards will govern and these can be found in the Zoning section of this document.

SEA worked closely with the Public Works group and civil engineering consultant, meeting at regular intervals of one or two weeks. Together the team worked through the program confirmation and site layouts. SEA presented 3 site layout options to city council for review as shown on the following pages.

Options 2 ~~and 3~~ were the preferred options which placed the Public Works site in a north-south orientation ~~in option 2 and west east orientation in option 3. Both options offer two access points and site circulation with no turnaround.~~

D. Civil Engineering Review

Happy Valley follows the Water Environment Services (WES) Stormwater Standards for Clackamas County. The site proposes more than 5,000 sf of new/replaced impervious surface area and therefore is required to meet the standards for all newly proposed and replaced impervious surface areas within the project boundary.

Water Quality Performance Standard:

Treat 80% of the average annual runoff volume, to the maximum extent practicable with the goal of 80% total suspended solids (TSS) removal.

The project proposes to have each individual lot handle their own stormwater on-site at the time of development. A 5,600 sf rain garden with a depth of 16" is proposed to mitigate runoff from the proposed public road only. The rain garden was sized assuming near zero infiltration due to the Group C soils present on the site.

Water, storm and sewer main extensions will be required to provide services for the proposed site. The extension will start along SE Armstrong Court, at the eastern end of the Sunrise Water Authority development, continue west to the proposed public road, and extend north

through the proposed north-south public road. The extensions will be approximately 1,500 ft each.

A proposed north-south public road is proposed to access the site and will include 3/4-street improvements, including a separated sidewalk along the east side, following City of Happy Valley design standards.

Approximately 0.25 ac of contaminated soils were identified on the SE portion of the site. Special handling and disposal of contaminated soils will likely be required due to elevated levels of lead and benzo(a)pyrene.

An approximately 0.08 ac wetland was identified on the SW corner of the site. The wetland is subject to the permit requirements of the state Removal-Fill Law. Under current regulations, a state permit is required for cumulative fill or annual excavation of 50 cubic yards or more in wetlands or below the ordinary high-water line (OHWL) of the waterway (or the 2-year recurrence interval flood elevation if OHWL cannot be determined).

E. Results of Analysis

The building programs summarized on pages 12-15 of this report can be accommodated on this site and sufficiently allow for growth as planned. This includes the following features:

1. Separate and clearly identified areas for staff and visitor parking as programmed.
2. 2-story pre-engineered metal office building accommodating all office and facility type functions shared between departments on each floor with proper security separation between PW & Public areas as needed for functional requirements.
3. Public works site facilities for materials and equipment included.
4. Vehicle maintenance facilities and storage for vehicles on site.
5. Wash down areas for Public Works equipment and vehicles.

The preferred site plan options illustrate these proposed layout and vehicle flow patterns.

Further study could be considered for the following:

1. Geotechnical investigations.
2. Civil storm water accommodations.
3. More detailed layouts of site and building planning.
4. Detailed layouts of warehouse and maintenance facilities.

EXISTING CONDITIONS

ADMINISTRATION BUILDING - 1,100SF

- Offices - director's w/printer, two workstation room w/ printer, admin w/ eight workstations, storage cabinet, standing only hallway meeting areas
- Restroom off hallway
- Kitchenette w/ sink, dish washer, microwave, cabinetry, refrigerator, coffee maker
- Locker room (approx. 15 units) w/ city server, clothes rack
- Visitor parking front of bldg. Three spaces
- Bbq area in back of bldg.

MATERIAL STORAGE YARD - 900 SF

DECANT / DRYING AREA - 1,300 SF

- Space to allow time for water/fluids to leach out of dirt/gravel prior to further disposal options

MATERIAL STORAGE YARD - 500 SF

EQUIPMENT STORAGE YARD - 400 SF

- Loader/truck equipment - plows

EQUIPMENT STORAGE YARD - 150 SF

- Road signage equipment, pellets, wheelbarrow

POWER GENERATOR

- Lot size approx 1,700 SF

STORAGE BUILDING - 4,200 SF

- Two vehicle bays, one oversized
- Shelves/racks along perimeter for tools, equipment & materials
- Loft area w/ additional shelves for storage
- Lockers & workbench
- Enclosed area for larger field equipment



EMPLOYEE PARKING & CIRCULATION

- 8 standard parking spaces, some tandem spaces
- Lot size approx. 5,000 SF, includes maneuvering room

FUELING AREA

- Dual gasoline & diesel tank - 650 SF pad

MATERIAL STORAGE YARD - 250 SF

MAG. CHLORIDE TANK - 250 SF

COVERED MATERIAL STORAGE - 600 SF

MATERIAL STORAGE YARD - 900 SF

- 2 bays

EQUIPMENT STORAGE YARD - 4,500 SF

- Various equipment, forklifts, spreaders

WORK VEHICLE & EQUIPMENT CIRCULATION

- Lot size approx. 10,000 SF, includes maneuvering room
- Trailer staging area
- 2 larger parking spaces near generator

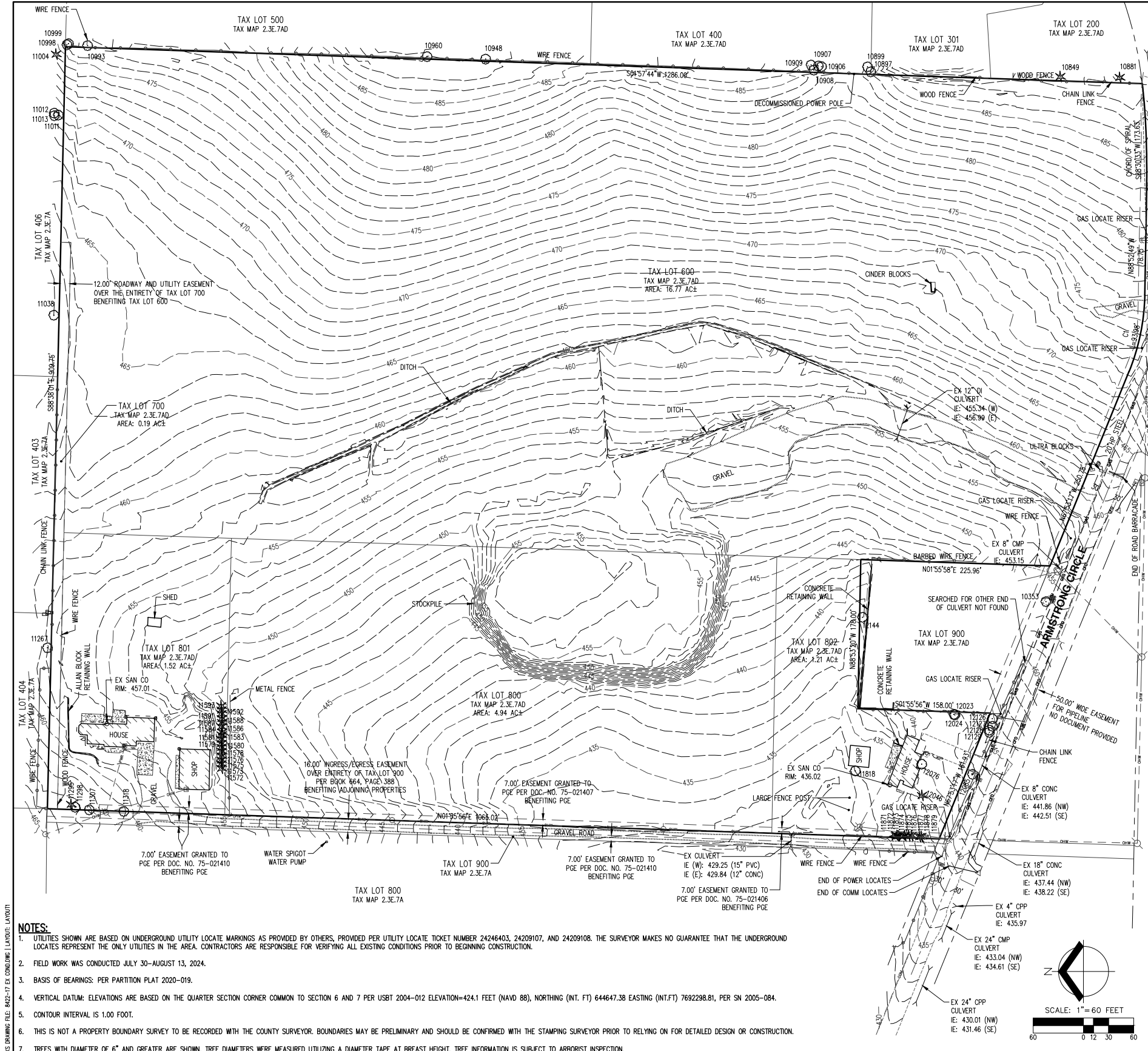
COVERED OPEN AIR STORAGE - 120 SF

- Bulk fluids, tires

FLEET MAINTENANCE BUILDING - 900SF

- Two vehicle work bays w/ lift
- Tool boxes, shelves/racks for parts & material storage along perimeter
- Clothes rack





CURVE TABLE				
CURVE	RADIUS	DELTA	LENGTH	CHORD
C1	256.52'	20°59'32"	93.98'	N78°23'03"W 93.46'

TREE TABLE			TREE TABLE		
TREE NUMBER	TYPE	DBH (IN.)	TREE NUMBER	TYPE	DBH (IN.)
10353	DECIDUOUS	6,9,10	11580	CONIFEROUS	11
10849	CONIFEROUS	32	11581	CONIFEROUS	15
10881	CONIFEROUS	10	11583	CONIFEROUS	13
10897	DECIDUOUS	38	11584	CONIFEROUS	11
10899	DECIDUOUS	8	11586	CONIFEROUS	9
10906	DECIDUOUS	7,8,8	11587	CONIFEROUS	9
10907	DECIDUOUS	7,8,8	11588	CONIFEROUS	10
10908	DECIDUOUS	7	11591	CONIFEROUS	12
10909	DECIDUOUS	7,8	11592	CONIFEROUS	11
10948	DECIDUOUS	24	11593	CONIFEROUS	10
10960	DECIDUOUS	6,6,7	11818	DECIDUOUS	7,11
10993	DECIDUOUS	6	11871	CONIFEROUS	6,6,7
10998	DECIDUOUS	7	11872	CONIFEROUS	6
10999	DECIDUOUS	7	11873	CONIFEROUS	6,6
11004	CONIFEROUS	14	11874	CONIFEROUS	6
11011	DECIDUOUS	8	11875	CONIFEROUS	6,7
11012	DECIDUOUS	8	11876	CONIFEROUS	6,7
11013	DECIDUOUS	8	11877	CONIFEROUS	6
11038	DECIDUOUS	8,10	11878	CONIFEROUS	7
11267	DECIDUOUS	30	11879	CONIFEROUS	6,6,8
11295	CONIFEROUS	25	12023	DECIDUOUS	8
11298	DECIDUOUS	24	12024	DECIDUOUS	6,6
11307	DECIDUOUS	22,24	12046	CONIFEROUS	22
11318	DECIDUOUS	11,12	12076	DECIDUOUS	9,9,9,10
11572	CONIFEROUS	17	12085	DECIDUOUS	6,6
11573	CONIFEROUS	13	12126	DECIDUOUS	7,8,8
11575	CONIFEROUS	12	12127	DECIDUOUS	6,11
11576	CONIFEROUS	14	12128	DECIDUOUS	6,6,7
11578	CONIFEROUS	15	12129	DECIDUOUS	6,6,7
11579	CONIFEROUS	14	12144	DECIDUOUS	6,6

LEGEND

DECIDUOUS TREE		EXISTING	STORM DOWN SPOUT		EXISTING
CONIFEROUS TREE		EXISTING	GUY WIRE ANCHOR		EXISTING
WATER METER		EXISTING	UTILITY POLE		EXISTING
WATER VALVE		EXISTING	POWER JUNCTION BOX		EXISTING
SANITARY SEWER CLEAN OUT		EXISTING	COMMUNICATIONS VAULT		EXISTING
MAILBOX		EXISTING	COMMUNICATIONS JUNCTION BOX		EXISTING
RIGHT-OF-WAY LINE		EXISTING			
BOUNDARY LINE		EXISTING			
PROPERTY LINE		EXISTING			
CENTERLINE		EXISTING			
DITCH		EXISTING			
EDGE OF PAVEMENT		EXISTING			
EASEMENT		EXISTING			
FENCE LINE		EXISTING			
GRAVEL EDGE		EXISTING			
POWER LINE		EXISTING			
OVERHEAD WIRE		EXISTING			
COMMUNICATIONS LINE		EXISTING			
FIBER OPTIC LINE		EXISTING			
GAS LINE		EXISTING			

AKS
AKS ENGINEERING & FORESTRY, LLC
12965 SW HERMAN RD., STE 100
CLATSOP COUNTY, OREGON 97102
503.545.5151
WWW.AKS-ENG.COM

17981 SE HWY 212
HAPPY VALLEY
CLATSOP COUNTY, OREGON
TAX LOTS 600,800,1, AND 802

EXISTING CONDITIONS PLAN

DESIGNED BY: KB
DRAWN BY: MTR
MANAGED BY: MTR
CHECKED BY: MTR
DATE: 09/25/2024
REGISTERED PROFESSIONAL LAND SURVEYOR
ROBERT D. REITIG
80245
RENEWS: 12/31/24

JOB NUMBER
8422-17

SHEET
01

- NOTES:**
- UTILITIES SHOWN ARE BASED ON UNDERGROUND UTILITY LOCATE MARKINGS AS PROVIDED BY OTHERS, PROVIDED PER UTILITY LOCATE TICKET NUMBER 24246403, 24209107, AND 24209108. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND LOCATES REPRESENT THE ONLY UTILITIES IN THE AREA. CONTRACTORS ARE RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION.
 - FIELD WORK WAS CONDUCTED JULY 30-AUGUST 13, 2024.
 - BASIS OF BEARINGS: PER PARTITION PLAT 2020-019.
 - VERTICAL DATUM: ELEVATIONS ARE BASED ON THE QUARTER SECTION CORNER COMMON TO SECTION 6 AND 7 PER USBT 2004-012 ELEVATION=424.1 FEET (NAVD 88), NORTHING (N.T.FT) 644647.38 EASTING (E.T.FT) 7692298.81, PER SN 2005-084.
 - CONTOUR INTERVAL IS 1.00 FOOT.
 - THIS IS NOT A PROPERTY BOUNDARY SURVEY TO BE RECORDED WITH THE COUNTY SURVEYOR. BOUNDARIES MAY BE PRELIMINARY AND SHOULD BE CONFIRMED WITH THE STAMPING SURVEYOR PRIOR TO RELYING ON FOR DETAILED DESIGN OR CONSTRUCTION.
 - TREES WITH DIAMETER OF 6" AND GREATER ARE SHOWN. TREE DIAMETERS WERE MEASURED UTILIZING A DIAMETER TAPE AT BREAST HEIGHT. TREE INFORMATION IS SUBJECT TO ARBORIST INSPECTION.

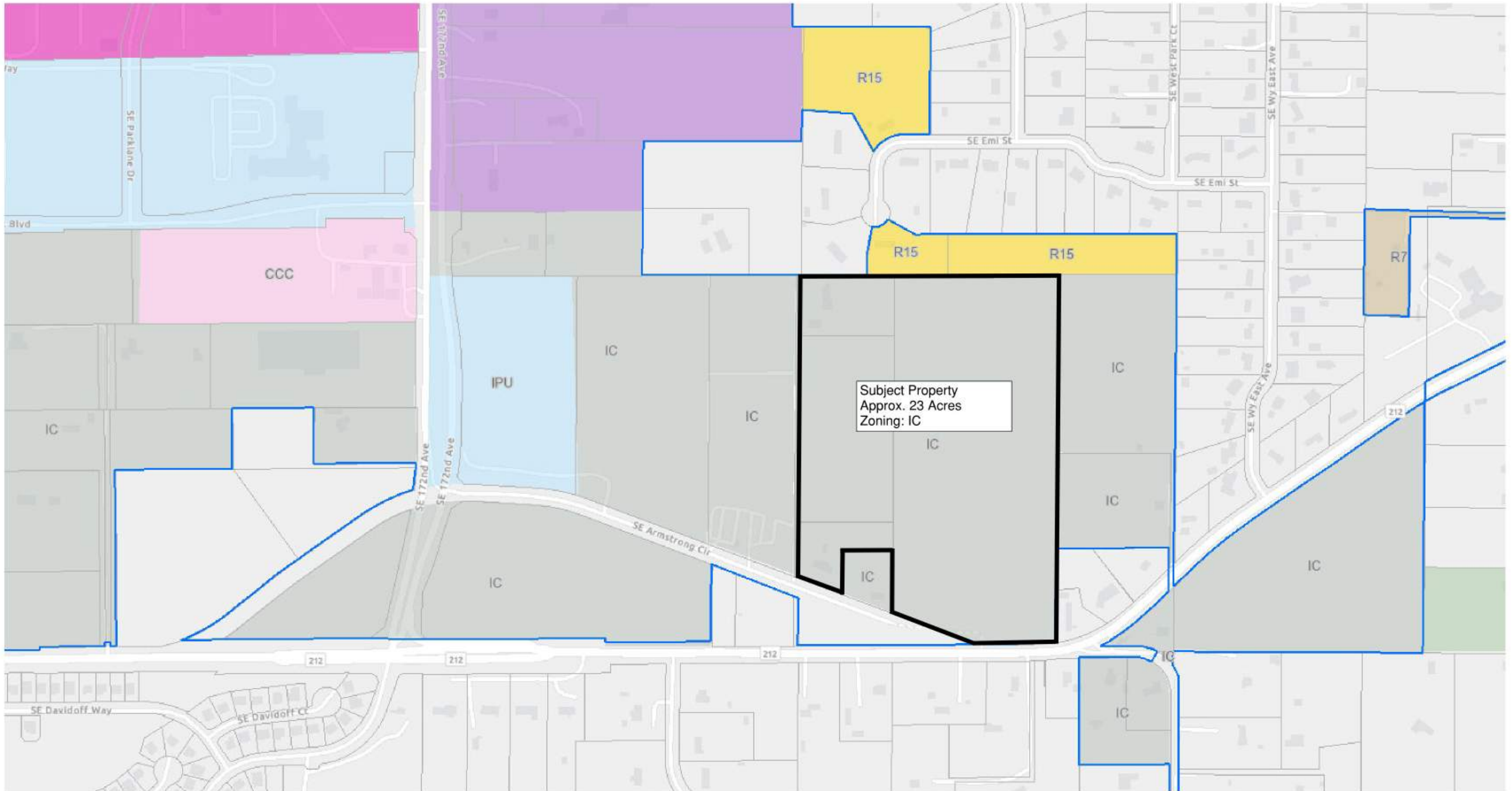
Existing Conditions





Easement Map





- | | |
|-----------------------------------|--|
| City Limits | Institutional and Public Use (IPU) |
| Taxlots | Mixed Use Employment (MUE) |
| Happy Valley Zoning | |
| Community Commercial Center (CCC) | Very Low Density Residential R-15 (1 Unit/15,000 Sq.Ft.) |
| Employment Center (EC) | Medium Density Single-Family Residential R-5 (1 Unit/5,000 Sq.Ft.) |
| Industrial Campus (IC) | Low Density Residential R-7 (1 Unit/7,000 Sq.Ft.) |



16.25.010 Industrial districts.

E. Development Standards. The development standards in Table 16.25.010-2 apply to all uses, structures, buildings, and development within the EC and IC Districts.

Table 16.25.010-2 Development Standards for EC and IC Districts

Standard	EC	IC
Residential density (maximum)	NA	NA
Lot size (minimum)	None	None ¹
Lot width (minimum)	None	None
Lot depth (minimum)	None	None
Lot coverage, including all impervious surfaces (maximum)	85%	75%
Open space (minimum)	15%	15%
Landscaping (minimum)	The requirements of Chapter 16.42 apply, including the screening provisions of Section 16.42.060(G). In addition, the approval authority may require landscaping, fences, walls or other buffering that exceed the landscaping standards when it finds that more or different buffering is necessary to mitigate adverse noise, light, glare, and/or aesthetic impacts to adjacent properties	
Building setbacks (minimum):		
Front	10 ft.	10 ft.
Rear (abutting a nonresidential district)	10 ft.	20 ft.
Rear (abutting a residential district)	20 ft.	20 ft./50 ft. ³
Side	0 ft./10 ft. ²	0 ft./20 ft./50 ft. ^{2,3}
Building setbacks (maximum):		
Front	None	None
Rear	None	None
Side	None	None
Building height (maximum)	45 ft.	45 ft.

NOTES:
¹ Lots or parcels larger than fifty (50) acres may be divided into smaller lots and parcels pursuant to a master plan approved by the City so long as the resulting division yields at least one lot or parcel of at least fifty (50) acres in size.
² The minimum required side and rear building setbacks shall be increased by one-half foot for each foot by which building height exceeds twenty (20) feet. Zero lot lines area allowed along interior side lot lines where both parcels are within the EC or IC zones subject to approval by the building official and Clackamas fire district.
³ **The minimum setback for buildings and outdoor storage or activities within the Rock Creek Employment Center is 50 ft. when abutting a residential zone. Within the 50 foot setback, parking and maneuvering of noncommercial vehicles may be allowed up to 20 feet from the property line.**

16.25.010 Industrial districts.

F. Rock Creek Employment Center Subdistrict.

1. The boundaries of the Rock Creek Employment Center Subdistrict are shown on Figure 16.25.010-1.
2. Subarea A—Trip Limitation Requirement. The standards in this subsection apply to all development proposed within Subarea A identified on Figure 16.25.010-1.
 - a. The cumulative total p.m. peak hour trips for the subarea shall not exceed two hundred seventeen (217) trips except as permitted by subsection (F)(3).
 - b. Development applications within the subarea shall include a trip generation estimate demonstrating that proposed development will not cause the subarea to exceed two hundred seventeen (217) total cumulative p.m. peak hour trips.
 - c. The trip limitation of two hundred seventeen (217) p.m. peak hour trips may be exceeded if an applicant can demonstrate that there are funded transportation projects in the area to accommodate the additional trips or if a subsequent traffic analysis shows that additional traffic will not have a significant effect on the transportation system.
3. Subarea B—Distribution Center and Warehouses. Distribution centers and warehouses are permitted as primary uses within the area identified as Subarea B on Figure 16.25.010-1 and are exempted from the provisions of Chapter 16.65 (Master Planned Developments) provided:
 - a. At least eight percent but not more than forty (40) percent of the gross floor area square footage of the distribution center or warehouse facility is executive and/or administrative offices related to the operation of the distribution center or warehouse; or,
 - b. The distribution center or warehouse is intended and designed to accommodate at least one employee per two thousand (2,000) square feet of gross floor area.
4. **Development in the Industrial Campus (IC) District abutting a residential zone shall comply with the following within the setback along the adjoining property lines:**
 - a. **Installation of a minimum twelve (12) foot tall fully sight-obscured masonry wall.**
 - b. **Landscaping on the either side of the wall including:**
 - i. **A row of coniferous trees a minimum of six (6) feet in height planted on average thirty (30) feet on center; and**
 - ii. **An evergreen hedge screen of forty-two (42) inches high or shrubs a minimum of two (2) feet in height spaced no more than four (4) feet apart on average; and**
 - iii. **Ground cover plants, which includes grasses covering all landscaping areas. Mulch (as a ground cover) shall only be allowed underneath plants at full growth and within two feet of the base of a tree.**
 - c. **The emission of air pollutants or odorous gasses and changes in temperature detectable by the human senses without the aid of instruments on adjacent residential property is prohibited. No maneuvering or parking of commercial vehicles is permitted within the minimum setback, except for the driveway access.**

Figure 16.25.010-1 Rock Creek Employment Center Subdistrict

SPACE PROGRAMMING

HAPPY VALLEY PUBLIC WORKS & PARKS OPERATION FACILITY

ROOM	QTY	ENCLOSED OFFICE	OPEN OFFICE	W	x	L	AREA	TOTAL AREA NSF	CURRENT SIZE	ENCLOSED OFFICE	OPEN OFFICE	SHARED OFFICE	NOTES	EMPLOYEE
Public Works Department - Administration Offices														
Administration														
Public Works Director/City Engineer	1	•		12	x	16	192	192	100				Existing: large u-shape workstation, computer, printer, (2) chairs	Chris Randall
Public Works Assistant	1	•		10	x	12	120	120	140				Existing: (3) workstations, office server, shelves, map boards, large printer, drawing bins, chair storage, tv	Sheri Bartholomew
Public Works Personnel	1	•		10	x	12	120	120						
Public Works Personnel	1	•		10	x	12	120	120						
Subtotal	4							552	240					
Public Works Department - Streets & Facilities Offices														
Future Division														
Supervisor	1	•		10	x	12	120	120						
Utility Workers	5		•	5	x	5	25	125						
Crew Room	1		•	15	x	15	225	225						
Future Division														
Supervisor	1	•		10	x	12	120	120						
Utility Workers	5		•	5	x	5	25	125						
Crew Room	1		•	15	x	15	225	225						
Streets Division														
Supervisor	1	•		10	x	12	120	120	160				Existing: 8 workstations, computers, phones, storage cabinet	
Street Sweeper	1		•	5	x	5	25	25						Jose Herrera
Utility Workers	6		•	5	x	5	25	150						Gregg, Daniel, Shayne, Marco, Karee, Jack
Crew Room	1		•	15	x	15	225	225						
Facilities Maintenance Division														
Facilities Maintenance Technician	1		•	10	x	12	120	120						Joe Rickard
Utility Workers	1		•	5	x	5	25	25						
Subtotal	9							665						
Public Works Department - Parks Maintenance														
Parks Maintenance														
Supervisor	1	•		10	x	12	120	120						Chris Sliwka
Maintenance Staff	9		•	5	x	5	25	225						
Seasonal Maintenance	8		•	-	x	-	-	-						
Crew Room	1		•	15	x	15	225	225						
Facilities														
Staff	1		•	5	x	5	25	25						
Subtotal	1							595	1100 SF				Existing: 3 office areas, kitchenette, locker room, restroom, storage, circulation	
Total Employpess (FT & Seasonal)	14							1,337						

Office Support Spaces														
ROOM	QTY	ENCLOSED OFFICE	OPEN OFFICE	W	x	L	AREA	TOTAL AREA NSF	CURRENT SIZE	ENCLOSED OFFICE	OPEN OFFICE	SHARED OFFICE	NOTES	EMPLOYEE
Entry Vestibule	1	•		10	x	10	100	100						
Lobby / Waiting Area	1	•		20	x	15	300	300						
Reception Counter	1	•		10	x	15	150	150						
Conference Room (small)	2	•		16	x	19	300	600	30		•		4 - 6 people Existing: hallway standing room only w/ white board	
Conference Room (medium)	1	•		16	x	25	400	400						
Conference Room (large)	1	•		20	x	30	600	600					15 - 25 people	
Copy/Workroom	2	•		10	x	10	100	200						
Lunch Room/Break Room, Kitchenette	1	•		30	x	50	1,500	1,500	120				Existing kitchenette : sink, dishwasher, trash bin, fridge, 9' counter w/ uppers/lowers, coffee mkr, micro, no seating	
Mud Room w/ Wash-down Area	2	•		10	x	15	150	300						
Laundry Room	1	•		10	x	10	100	100						
Dry Room	1	•		10	x	16	160	160						
Locker Area	1	•		30	x	40	1,200	1,200	70				Existing: 16 sm lockers, 1 lg locker unit, minimal aisle clearance, city server, clothes rack, storage above lockers	
Lav Area	1	•		15	x	20	300	300						
Water Closets	6	•		9	x	10	90	540						
Unisex Restroom - Private	3	•		9	x	10	90	270						
Unisex Restroom - Public	1	•		9	x	10	90	90	70				Off hallway	
Shower Rooms	4	•		15	x	10	150	600						
Changing Rooms	4	•		15	x	10	150	600						
Storage: Office Supply	3	•		6	x	8	48	144						
Storage: Files	1	•		10	x	10	100	100						
Storage: Conference Room	2	•		2	x	10	20	40						
General Storage	1	•		10	x	10	100	100	50				Existing: storage locker, other	
Emergency Sleeping Rooms (Storage)	4	•		8	x	10	80	320						
Emergency Management Office	1	•		10	x	10	100	100						
Storage: Emergency Management	1	•		20	x	15	300	300						
Storage: Archive (finance storage)	4	•		12	x	25	300	1,200						
Storage: Record Drawing Library, Plotter	1	•		10	x	16	160	160						
Janitor Closet	2	•		10	x	10	100	200						
SCADA / Radio Closet	1	•		8	x	10	80	80						
Covered Patio	1		•	10	x	20	200	200						
Server Room / Telecom Closet	1	•		10	x	15	150	150					verify ventilation requirements w/ owner	
Office Support Spaces Subtotal								11,104					(included in office subtotal above - 1,100SF)	

Warehouse & Shop Spaces														
ROOM	QTY	ENCLOSED OFFICE	OPEN OFFICE	W	x	L	AREA	TOTAL AREA NSF	CURRENT SIZE	ENCLOSED	OPEN	SHARED	NOTES	EMPLOYEE
Fleet Service Heavy Equipment Mechanic	1	•		10	x	10	100	100						Mike Dale
Mechanic Service Area	2		•	10	x	10	100	200					wet clothing area, work station only	
Fleet Service Counter	1		•	15	x	15	225	225					delivery storage area	
Fleet Vehicle Repair Bays, Carport	1		•	60	x	80	4,800	4,800	700				Existing: x2 repair bays w/ in-place lift, pull-in only, misc part/tool storage along walls, metal shelf units along wall, tool carts, white board, misc shop equipment, coat rack	
Fleet Storage: Small-Med. Vehicle Equip. Parts	1	•		12	x	20	240	240	100				Existing: small part drawers/shelves, open shelf parts, boxed parts	
Fleet Storage: Large Vehicle Equipment Parts	1	•		20	x	20	400	400						
Fleet Storage: Fleet Waste Chemical	1	•		10	x	10	100	100					include conveyance systems to service bays	

Fleet Storage: Fleet Chemical	1	•	10	x	10	100	100	120	•	Existing: Outdoor covered area for chem storage/waste drums
Fleet Storage: Fleet Tools	1	•	15	x	15	225	225	100		Existing: misc tools stored in carts, tools hung on walls,
Fleet Storage: Fabrication Area	1	•	15	x	15	225	225			
Fleet Storage: Fabrication Area	1	•	6	x	9	54	54			
Unisex Restroom	1	•	12	x	10	120	120			
Sign Shop	1	•	20	x	20	400	400			
Vehicle Staging Area	1	•	12	x	20	240	240			
Paint Shop	1	•	20	x	20	400	400			provide ventilation
Wood Shop	1	•	20	x	20	400	400			provide ventilation
Machine & Welding Shop	1	•	20	x	20	400	400			provide ventilation
Server Room / Telecom Closet	1	•	8	x	10	80	80			verify ventilation requirements w/ owner
Storage: Park Tools	1	•	20	x	50	1,000	1,000			
Storage: Parks Equipment & Materials	1	•	20	x	50	1,000	1,000	3,600		Existing: x2 bays (1 sm, 1 lg), open shelf storage along walls, loft space for additional open, 7 lockers, work table, wall mounted equipment
Storage:	1	•	10	x	20	200	200			
Storage: Streets & Drainage	1	•	20	x	50	1,000	1,000			
Storage: Future Division	1	•	20	x	50	1,000	1,000			
Storage:	1	•	20	x	50	1,000	1,000			
Storage:	1	•	20	x	50	1,000	1,000			includes pipe storage and cutting station
Storage:	1	•	20	x	50	1,000	1,000			
Storage:	1	•	-	x	-	-	-			
Storage: Miscellaneous	1	•	20	x	50	1,000	1,000			
Storage: Paint	1	•	10	x	10	100	100			include paint cleaning area
Storage: Decorations	1	•	10	x	20	200	200			
Storage: Property	1	•	-	x	-	-	-			
Vehicle Storage: Large Equipment	3	•	25	x	50	1,250	3,750			
Vehicle Storage: Enclosed - Heated/AC	4	•	16	x	50	800	3,200	600		Existing: riding equipment stored along perimeter

Subtotal 25,159

PROJECT TOTALS

AREAS	QTY	Markup	NSF
Office Area Subtotals			13,658
Circulation / Building Infrastructure		25%	3,415
Future Expansion		10%	1,366
Total Office Area			18,438
Warehouse Shop Subtotals			25,159
Circulation / Building Infrastructure		15%	3,774
Future Expansion		10%	2,516
Total Warehouse & Shop Area			31,449
TOTAL PROJECT AREA			49,887

1,100 Existing: 3 office areas, kitchenette, locker room, restroom, storage, circulation

Yard Spaces

SPACE	QTY	COVERED	UNCOVERED	W	x	L	AREA	TOTAL AREA NSF	CURRENT SIZE	ENCLOSED	OPEN	SHARED	NOTES	EMPLOYEE
Covered Work Vehicle Parking	1	•		12	x	30	360	360						
Uncovered Work Vehicle Parking	1		•	12	x	30	360	360	2,100				Existing: approx. 13 parking spaces for work trucks/equip	
Parks Department Storage	-		•						800		•		Existing: behind fleet maintenance bldg	
Covered Material Storage: Sanding Rock?	1	•		30	x	30	900	900	600				Existing: 2 Bays	

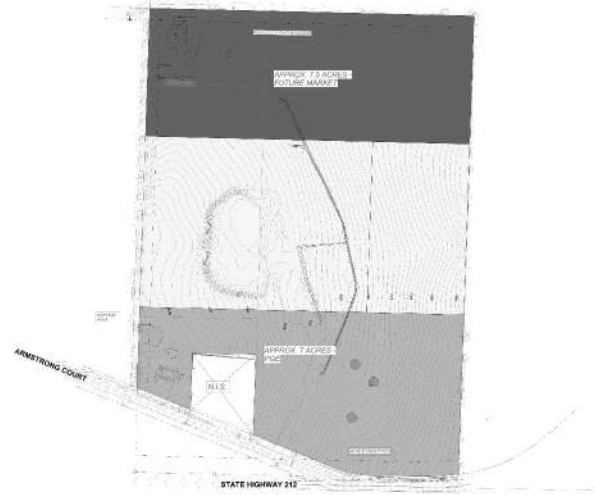
Covered Material Storage: Cold Mix	1	•	20	x	25	500	500								
Material Storage Yard #1: -	1	•	20	x	25	500	500	900		•	Existing: 1 Bay, next to admin bldg.				
Material Storage Yard #2: -	1	•	20	x	25	500	500	500		•	Existing: 1 Bay, next to decant area				
Material Storage Yard #3: -	1	•	20	x	25	500	500	250		•	Existing: 1 Bay, b/t fueling area & chloride tank				
Material Storage Yard #4: -	1	•	20	x	25	500	500	900		•	Existing: 2 Bays, next to covered material storage				
Material Storage: Dirt & Debris	1	•	20	x	25	500	500								
Material Storage: Catch Basin Waste Material	1	•	20	x	25	500	500								
Sand Bagging Area	1	•	20	x	25	500	500								
Equipment Storage	1	•	100	x	50	5,000	5,000	4,200		•	Existing: uncovered area outdoors, various equipment, forklifts, spreaders, road signage equipment, pellets, wheelbarrow, plows				
Power Generator	1	•	15	x	20	300	300	1,700		•	Existing: includes sw corner of lot adj to storage bldg				
Fueling Station	1	•	20	x	20	400	400	650		•	Existing: uncovered area outdoors, adj to material storage yard #3				
Wash Bays w/ Water Fill Station	2	•	25	x	35	875	1,750								
Disposal Area	2	•	20	x	50	1,000	2,000								
Decant Area	1	•	36	x	26	936	936	1,300		•	Existing: uncovered area outdoors, adj to material storage yard #2				
Deicer Tank	1	•	20	x	20	400	400								
Parks Material Yard	1	•	30	x	35	1,050	1,050								
Street Dept. Material Yard	1	•	30	x	35	1,050	1,050								
Environmental Services Material Yard	1	•	30	x	35	1,050	1,050								
AREAS	QTY						Markup	NSF							
Yard Space Subtotals								19,556							
Circulation / Building Infrastructure							25%	4,889							
Future Expansion							10%	1,956							
Total Yard Area								26,401							

Parking Areas															
SPACE	QTY	COVERED	UNCOVERED	W	x	L	AREA	TOTAL AREA NSF	CURRENT SIZE	ENCLOSED	OPEN	SHARED	NOTES	EMPLOYEE	
Staff Parking				-	x	-	-	-							
Off-Site Parking				-	x	-	-	-							
Water Parking				-	x	-	-	-							
PW Work Vehicle Parking (all departments)	13			-	x	-	-	-					Existing: (8) striped staff/crew spaces in lot near access gate w/(3) tandem spaces, (2) truck spaces near storage bldg.		
Parks Parking				-	x	-	-	-							
Proprty / Management				-	x	-	-	-							
Non-profit Partners Parking				9	x	20	180	-							
PW Visitor Parking	3			-	x	-	-	-					Existing: 3 spaces, front of admin		
Parking Total (per zoning)				9	x	20	180	-							
Parking Total	16														

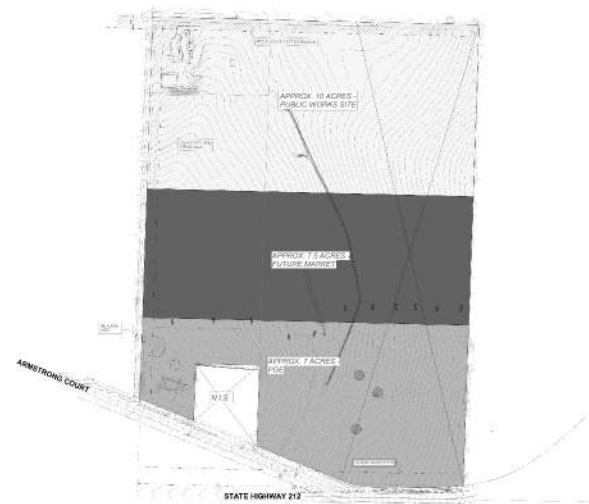
Employee Count			
DEPARTMENT	FULL TIME	SEASONAL	FUTURE
Leadership & Admin (PW)	2	0	2
Ops Crew, Facilities & Parks Maintenance (PW)	10	0	0
Fleet Mechanic (PW)	1	0	0
Subtotals	13	0	2
STAFF TOTALS	15		

PROCESS DIAGRAMS

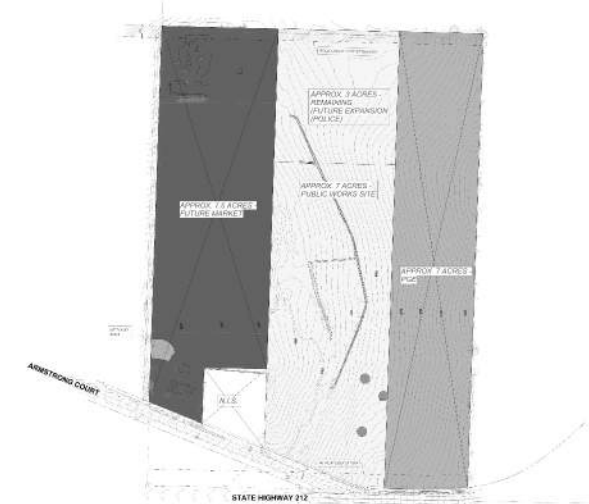
*PUBLIC WORKS - MIDDLE PARCEL (EAST-WEST SITE ORIENTATION)



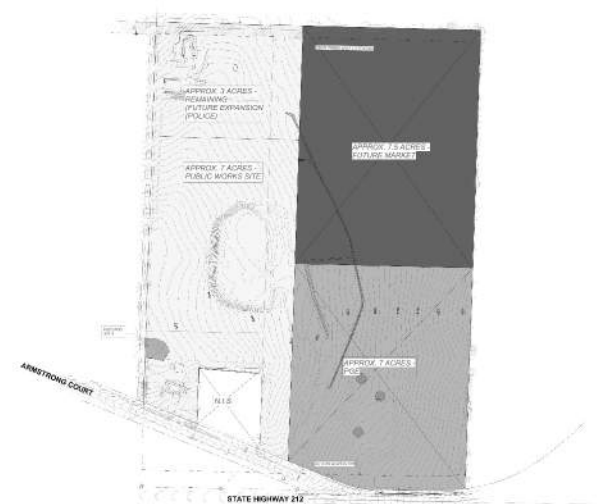
*PUBLIC WORKS - NORTH PARCEL (EAST-WEST SITE ORIENTATION)



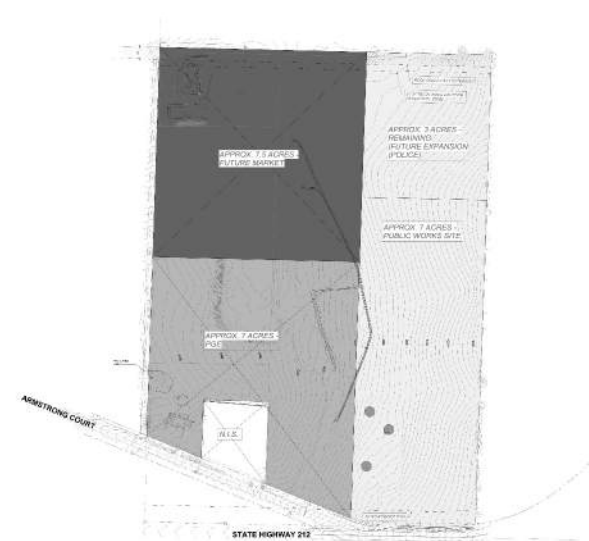
PUBLIC WORKS - MIDDLE PARCEL (NORTH-SOUTH SITE ORIENTATION)



*PUBLIC WORKS - WEST PARCEL (NORTH-SOUTH SITE ORIENTATION)



PUBLIC WORKS - EAST PARCEL (NORTH-SOUTH SITE ORIENTATION)



Happy Valley Public Works

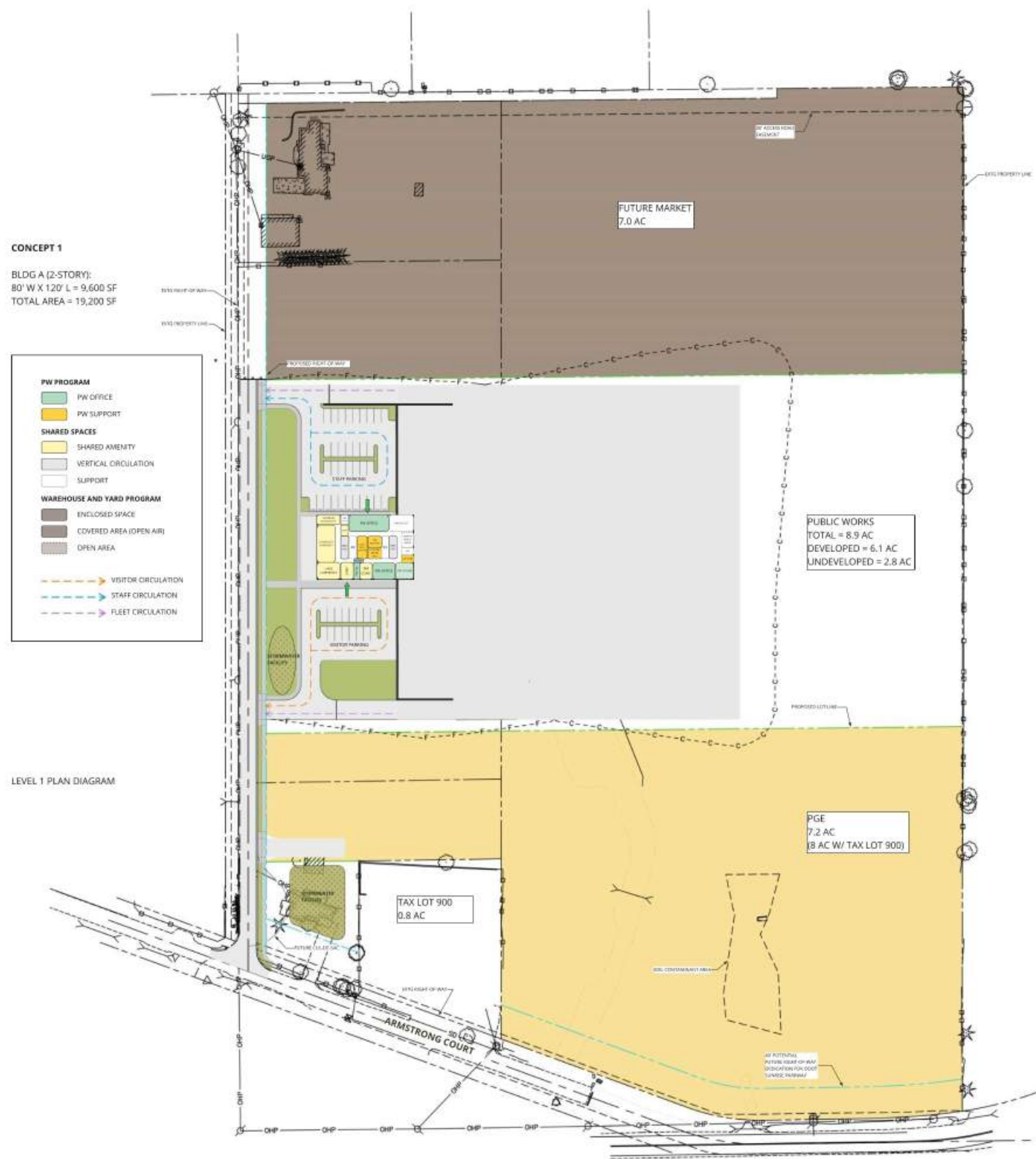
SE Armstrong Cir and State Hwy 212, Happy Valley, OR 97089

Project #24116

05.02.2025



Scott
Edwards
Architecture



Pros:

- East-west lot orientation allows for a north-south public road to be constructed that provides access to all lots from Armstrong Court now, while also allowing access to all lots in future conditions when Rock Creek Blvd extension is constructed.
- Public utilities can be located within the public road to service each lot without utility easements.
- Placing Building B elevation at Building A second floor elevation utilizes the existing topography well to help balance earthwork cut/fill.
- Provides stormwater facility area to account for proposed public north-south road improvements.
- Two access points provide circulation with no turnaround.
- Easy access from Building A to Building B.
- Offers separate and clearly identified areas for staff and visitor parking.
- Site layout offers flexibility to maximize ventilation/ solar efficiency.

Cons:

- The market space being furthest from OR 212 and Armstrong Court may be less desirable/marketable for businesses. It would be less visible, in the near term, from OR 212 with the PGE facility and PW building to the south.
- Existing soil stockpile located within PW lot. Removing or relocating stockpile would need to be addressed with city construction.



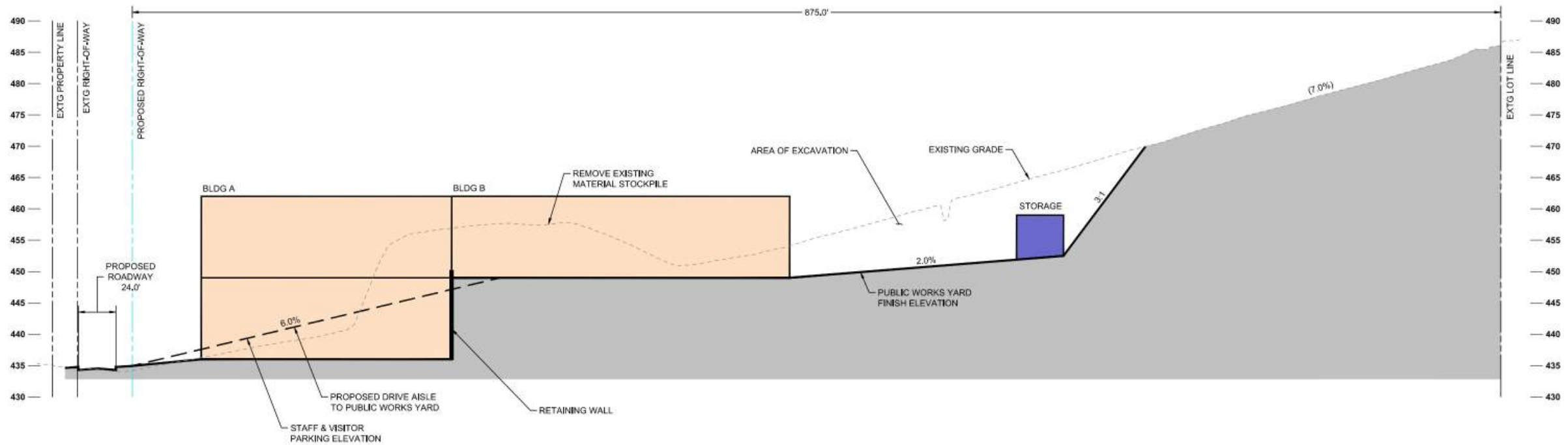
Concept 1 Plan Diagram



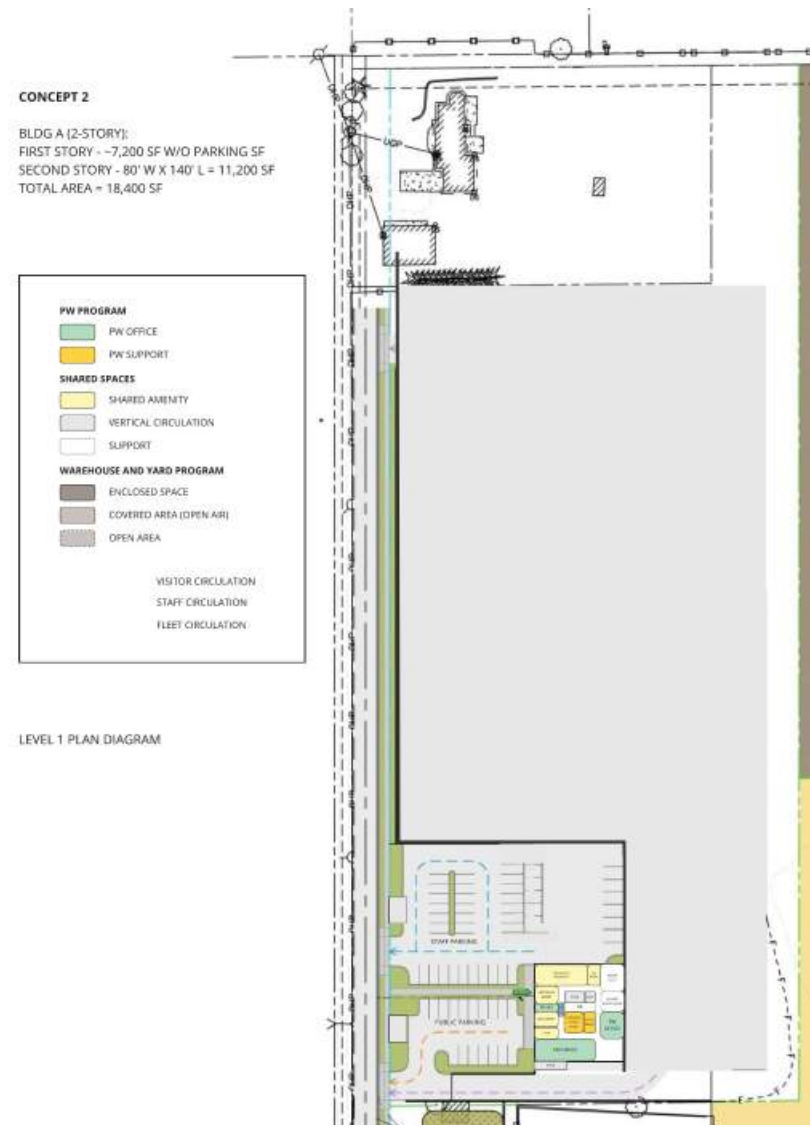
Happy Valley Public Works

SE Armstrong Cir and State Hwy 212, Happy Valley, OR 97089
 Project #24116 05.02.2025





SECTION A



Pros:

- Provides stormwater facility area for proposed public north-south road improvements.
- Two access points provide circulation with no turnaround.
- Largest acreage for future market parcel.
- Building A and B orientations work best with existing grades.
- Easy access between Building A and B.
- North-south orientation promotes better natural ventilation.
- Offers building layout flexibility.

Cons:

- Future market is less visible and accessible from public road. Requires a separate access road to reach the future market area. Current layout shows a shared road with Public Works lot/traffic.
- Utility easement required for utilities to PGE and future market assuming new utilities to be routed in proposed public road.
- Wall needed south of Building A and access road due to grades.
- Existing soil stockpile located within Public Works lot. Removing or relocating stockpile would need to be addressed with city construction.
- Requires ~10' wall on south side of development to match grades at tax lot 900.
- Smallest Public Works parcel out of the options.
- Staff and visitor parking located next to each other.

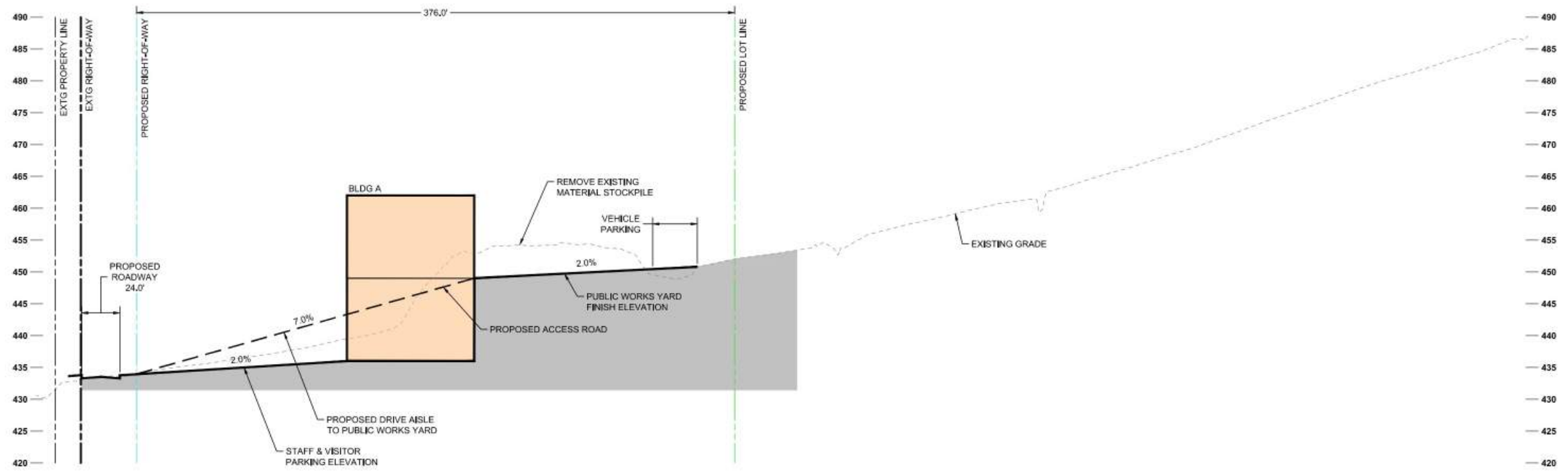
Concept 2 Plan Diagram



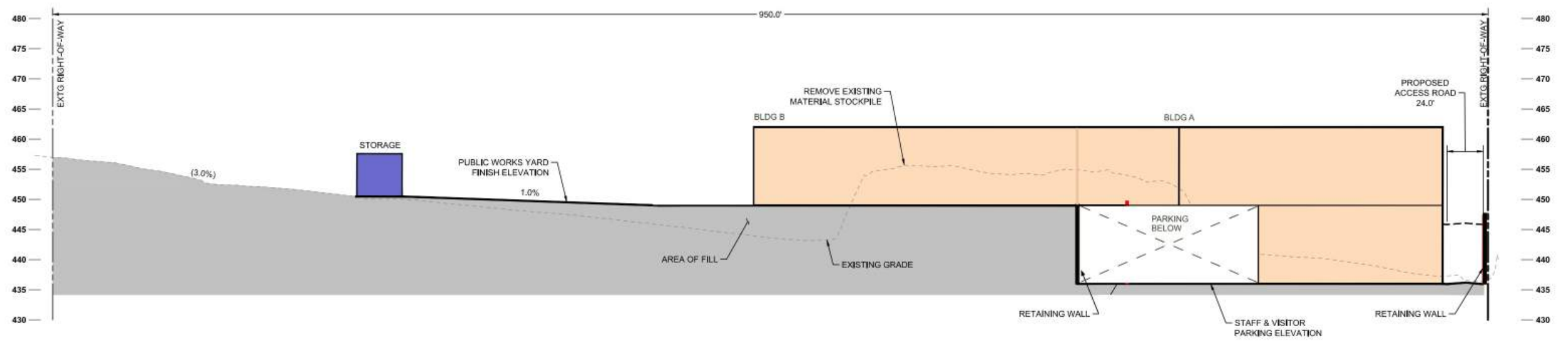
Happy Valley Public Works

SE Armstrong Cir and State Hwy 212, Happy Valley, OR 97089
 Project #24116 05.02.2025





SECTION A



SECTION B

CONCEPT 3

BLDG A (2-STORY):
 FIRST STORY - 80' W X 140' L = 11,200 SF
 SECOND STORY - 80' W X 100' L = 8,000 SF
 TOTAL AREA = 19,200 SF



LEVEL 1 PLAN DIAGRAM



LEVEL 2 PLAN DIAGRAM



WAREHOUSE/ GARAGE - MEZZANINE LEVEL

Pros:

- East-west lot orientation allows for a north-south public road to be constructed that provides access to all lots from Armstrong Court now, while also allowing access to all lots in future conditions when Rock Creek Blvd extension is constructed.
- Public utilities can be located within the public road to service each lot without utility easements.
- Provides stormwater facility area for proposed public north-south road improvements.
- Two access points provide circulation with no turnaround.
- Public Works parcel is not adjacent to PGE parcel.
- Flattest site. Proposed Buildings are not retaining earth. No proposed retaining walls.
- Public Works lot is closest to future Rock Creek Blvd extension if that becomes main access to the site.
- Existing soil stockpile located outside of Public Works lot. City would not need to address with PW construction.
- Visitor parking is separated from staff/yard traffic. Located in front of building entry.
- Admin and warehouse buildings have clear identities with minimal travel distance between them.

Cons:

- City would need to build the public road and utilities in full from Armstrong Court to the north.
- This currently proposed Public Works layout minimizes the future market area compared to other options.
- Potential increased neighbor concern about PW construction due to proximity with adjacent residential properties to the north.
- City would need to finalize demolition of house and removal of trees at northwest corner of site.

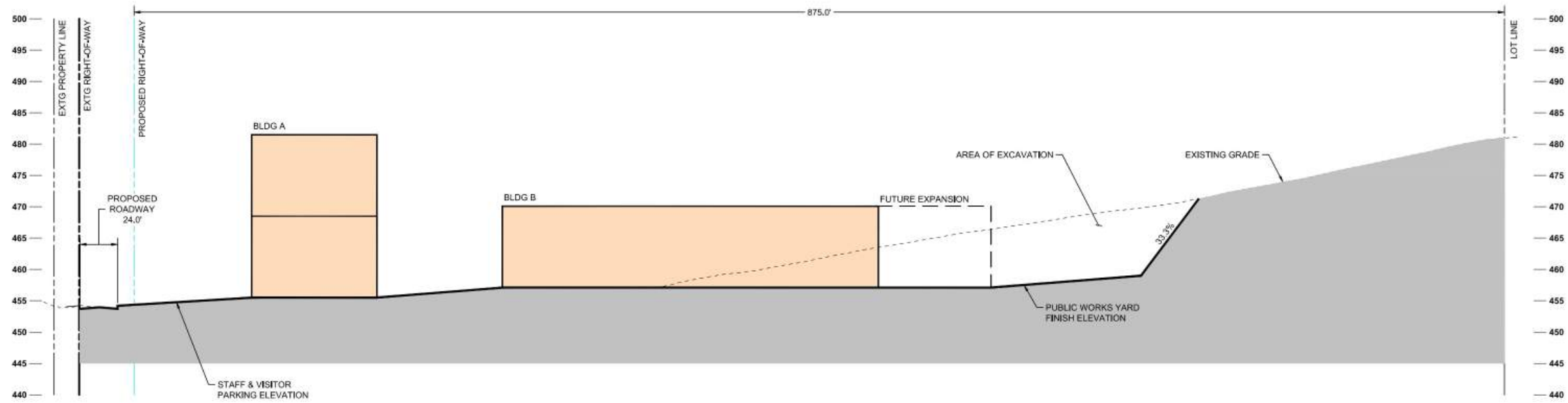
Concept 3 Plan Diagram



Happy Valley Public Works

SE Armstrong Cir and State Hwy 212, Happy Valley, OR 97089
 Project #24116 05.02.2025





SECTION A

PRELIMINARY PROJECT BUDGET

Concept 1 with PEMB (Pre-Engineered Metal Building) Construction Type

Construction Hard Costs

Area Description	Low	High
Building A – Admin Building (PEMB) 19,200 sf x \$250/325 =	\$4,800,000	\$6,240,000
Building B – Warehouse/Garage (PEMB) 23,040 sf x \$250/325 =	\$5,760,000	\$7,488,000
Building C – Vehicle Wash Bay:	\$370,000	\$370,000
Building D – Bulk Storage Canopy:	\$415,000	\$415,000
Building E – Decant/ De-watering Canopy:	\$227,000	\$227,000
Building F – Sand Bag Canopy:	\$190,000	\$190,000
Site Development Costs: 265,716 sf x \$18 / \$33 =	\$4,782,888	\$8,768,628
Off-site Improvements:	\$450,000	\$450,000
Construction Cost Sub-Total:	\$16,994,888	\$24,148,628

Estimating Construction Contingency at 10%: \$1,699,489 \$2,414,863

Total Estimated Construction Costs, January 2025: \$18,694,377 \$26,563,491
VE Options (none at this time) - -

Escalation- Assumed construction start March 2026
±12 months at 4% / annually = \$747,775 \$1,062,540

Construction Cost with Escalation: \$19,442,152 \$27,626,031

Construction Soft Costs

General Requirements: 3.5%	\$680,475	\$966,911
General Conditions: 3.5%	\$680,475	\$966,911
Office Overhead and Profit: 3.5%	\$680,475	\$966,911
Bonds/Insurance/various taxes:	\$800,000	\$800,000

Soft Costs Sub-Total: \$2,841,425 \$3,700,733

Total Anticipated Construction Costs: \$22,283,577 \$31,326,764

Soft Costs

Permitting Fees (Land Use, Building, Engineering, SDC's):	\$500,000	\$500,000
Architectural/Engineering Fee at 10% of Total Construction Cost:	\$2,228,358	\$3,132,676
Reimbursable expenses (printing, bidding, travel, etc.):	\$30,000	\$30,000
City Project Management Fee:	\$500,000	\$500,000
Traffic Impact Analysis:	\$15,000	\$15,000
Special Inspections (third party during construction):	\$50,000	\$50,000
Utility Locates and Video Scoping:	\$5,000	\$5,000
FF&E:	\$700,000	\$700,000
Legal:	\$30,000	\$30,000
Insurance:	\$50,000	\$50,000
Estimating Contingency at 5% of soft costs:	\$205,418	\$250,634

Total Estimated Soft Costs: \$4,313,776 \$5,263,310

Total Estimated Project Cost: \$26,597,353 \$36,590,074

Concept 2 with PEMB (Pre-Engineered Metal Building) Construction Type

Construction Hard Costs

Area Description	Low	High
Building A – Admin Building (PEMB) 18,400 sf x \$250/325 =	\$4,600,000	\$5,980,000
Building B – Warehouse/Garage (PEMB) 23,040 sf x \$250/325 =	\$5,760,000	\$7,488,000
Building C – Vehicle Wash Bay:	\$370,000	\$370,000
Building D – Bulk Storage Canopy:	\$415,000	\$415,000
Building E – Decant/ De-watering Canopy:	\$227,000	\$227,000
Building F – Sand Bag Canopy:	\$190,000	\$190,000
Site Development Costs: 252,648 sf x \$18 / \$33 =	\$4,547,664	\$8,337,384
Off-site Improvements:	\$450,000	\$450,000
Construction Cost Sub-Total:	\$16,559,664	\$23,457,384

Estimating Construction Contingency at 10%: \$1,655,966 \$2,345,738

Total Estimated Construction Costs, January 2025: \$18,215,630 \$25,803,122
VE Options (none at this time) - -

Escalation- Assumed construction start March 2026
±12 months at 4% / annually = \$728,625 \$1,032,125

Construction Cost with Escalation: \$18,944,255 \$26,835,247

Construction Soft Costs

General Requirements: 3.5%	\$663,049	\$939,234
General Conditions: 3.5%	\$663,049	\$939,234
Office Overhead and Profit: 3.5%	\$663,049	\$939,234
Bonds/Insurance/various taxes:	\$800,000	\$800,000

Soft Costs Sub-Total: \$2,789,147 \$3,617,702

Total Anticipated Construction Costs: \$21,733,402 \$30,452,949

Soft Costs

Permitting Fees (Land Use, Building, Engineering, SDC's):	\$500,000	\$500,000
Architectural/Engineering Fee at 10% of Construction Cost:	\$2,173,340	\$3,045,295
Reimbursable expenses (printing, bidding, travel, etc.):	\$30,000	\$30,000
City Project Management Fee:	\$500,000	\$500,000
Traffic Impact Analysis:	\$15,000	\$15,000
Special Inspections (third party during construction):	\$50,000	\$50,000
Utility Locates and Video Scoping:	\$5,000	\$5,000
FF&E:	\$700,000	\$700,000
Legal:	\$30,000	\$30,000
Insurance:	\$50,000	\$50,000
Estimating Contingency at 5% of soft costs:	\$202,667	\$246,265

Total Estimated Soft Costs: \$4,256,007 \$5,171,560

Total Estimated Project Cost: \$25,989,409 \$35,624,509

Concept 3 with PEMB (Pre-Engineered Metal Building) Construction Type

Construction Hard Costs

Area Description	Low	High
Building A – Admin Building (PEMB) 19,200 sf x \$250/325 =	\$4,800,000	\$6,240,000
Building B – Warehouse/Garage (PEMB) 23,040 sf x \$250/325 =	\$5,760,000	\$7,488,000
Building C – Vehicle Wash Bay:	\$370,000	\$370,000
Building D – Bulk Storage Canopy:	\$415,000	\$415,000
Building E – Decant/ De-watering Canopy:	\$227,000	\$227,000
Building F – Sand Bag Canopy:	\$190,000	\$190,000
Site Development Costs: 300,564 sf x \$18 / \$33 =	\$5,410,152	\$9,918,612
Off-site Improvements:	\$450,000	\$450,000
Construction Cost Sub-Total:	\$17,662,152	\$25,298,612
Estimating Construction Contingency at 10%:	\$1,762,215	\$2,529,861
Total Estimated Construction Costs, January 2025:	\$19,424,367	\$27,828,473
VE Options (none at this time)	-	-
Escalation- Assumed construction start March 2026 ±12 months at 4% / annually =	\$776,975	\$1,113,139
Construction Cost with Escalation:	\$20,201,342	\$28,941,612

Construction Soft Costs

General Requirements: 3.5%	\$707,047	\$1,012,956
General Conditions: 3.5%	\$707,047	\$1,012,956
Office Overhead and Profit: 3.5%	\$707,047	\$1,012,956
Bonds/Insurance/various taxes:	\$800,000	\$800,000
Soft Costs Sub-Total:	\$2,921,141	\$3,838,868
Total Anticipated Construction Costs:	\$23,122,483	\$32,780,480

Soft Costs

Permitting Fees (Land Use, Building, Engineering, SDC's):	\$500,000	\$500,000
Architectural/Engineering Fee at 10% of Total Construction Cost:	\$2,312,248	\$3,278,048
Reimbursable expenses (printing, bidding, travel, etc.):	\$30,000	\$30,000
City Project Management Fee:	\$500,000	\$500,000
Traffic Impact Analysis:	\$15,000	\$15,000
Special Inspections (third party during construction):	\$50,000	\$50,000
Utility Locates and Video Scoping:	\$5,000	\$5,000
FF&E:	\$700,000	\$700,000
Legal:	\$30,000	\$30,000
Insurance:	\$50,000	\$50,000
Estimating Contingency at 5% of soft costs:	\$209,612	\$257,902
Total Estimated Soft Costs:	\$4,401,860	\$5,415,950
Total Estimated Project Cost:	\$27,524,343	\$38,196,430

APPENDIX

- 1 Land Survey
- 2 Rock Creek Blvd Extension
- 3 Wetlands
- 4 Soil Contaminant Area
- 5 Space Programming (including Police)
- 6 Project Budget (including Police)
- 7 Previously Completed Reports
 - Natural Resource Assessment Report
 - Phase II Environmental Site Assessment

LAND SURVEY

SN2006-387

CLACKAMAS COUNTY SURVEYOR
 DATE RECEIVED: 10-26-05
 DATE ACCEPTED/FILED: 10-26-06
 SURVEY NUMBER: SN2006-387

PREPARED FOR:
 DEBBIE BENSON

REFERENCE SURVEYS LEGEND:

- ### - DENOTES MEASURED DISTANCE
- ###(##) - DENOTES RECORD DISTANCE PER REFERENCE NUMBER (BELOW)
- (##) - DENOTES RECORD INFORMATION PER "BARCELONA KNOLL" 2065
- (1) - DENOTES RECORD INFORMATION PER "BEL AIR ACRES" 1332
- (2) - DENOTES RECORD INFORMATION PER SN 5722
- (3) - DENOTES RECORD INFORMATION PER SN 5813
- (4) - DENOTES RECORD INFORMATION PER SN 5813
- (5) - DENOTES RECORD INFORMATION PER "WY EAST ACRES" 1238
- (6) - DENOTES RECORD INFORMATION PER SN 22118
- (7) - DENOTES RECORD INFORMATION PER DEED 72-00084
- (8) - DENOTES RECORD INFORMATION PER DEED 78-42016
- (9) - DENOTES RECORD INFORMATION PER OSHD DRAWING NO. 7B-27-3
- (10) - DENOTES RECORD INFORMATION PER MAP OF MARKET ROAD NO. 16
- (11) - ROCK CREEK BRIDGE TO MT. HOOD LOOP

BASIS OF BEARINGS:

THE BEARING OF N89°27'15"E IS THE BASIS OF BEARING FOR THIS SURVEY, ALONG THE SOUTH LINE OF THE PLAT OF "BARCELONA KNOLL", AS SHOWN HEREON.

RECORD OF SURVEY

LOCATED IN THE NORTHEAST ONE-QUARTER OF SECTION 7,
 TOWNSHIP 2 SOUTH, RANGE 3 EAST, W.M.
 CITY OF DAMASCUS, CLACKAMAS COUNTY, OREGON

JANUARY 20, 2006

LEGEND:

- - DENOTES QUARTER SECTION CORNER, AS NOTED
- - DENOTES SET 5/8" X 30" IRON ROD WITH YELLOW PLASTIC CAP MARKED "WRG DESIGN, INC."
- - DENOTES FOUND MONUMENT AS NOTED. HELD UNLESS OTHERWISE NOTED.
- ☐ - SEE SURVEY MONUMENT TABLE
- YPC - DENOTES YELLOW PLASTIC CAP
- ALC - DENOTES WITH ALUMINUM CAP
- S.F. - DENOTES SQUARE FEET
- SN - DENOTES SURVEY NUMBER, CLACKAMAS COUNTY SURVEY RECORDS.
- FD - DENOTES FOUND
- IR - DENOTES IRON ROD
- IP - DENOTES IRON PIPE
- FENCE - DENOTES FARM WIRE FENCE 4'-5' HIGH
- STA. - DENOTES STATIONING OF OREGON STATE HIGHWAY DEPARTMENT DRAWING NO. 7B-27-3

NARRATIVE:

THE PURPOSE OF THIS SURVEY IS TO ESTABLISH AND MONUMENT THAT TRACT OF LAND AS DESCRIBED IN DEED RECORDED IN DOCUMENT NO. 2005-004326, CLACKAMAS COUNTY DEED RECORDS, SITUATED IN THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 2 SOUTH, RANGE 3 EAST, WILLAMETTE MERIDIAN, CLACKAMAS COUNTY, STATE OF OREGON, FOR SUBDIVISION PURPOSES. THE BOUNDARY LINES ARE MORE PARTICULARLY DESCRIBED AS FOLLOWS:

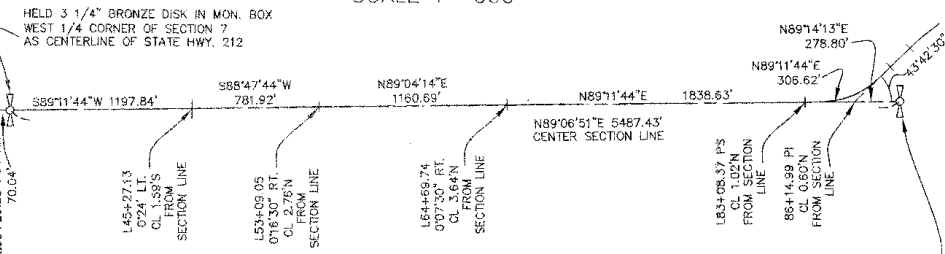
THE SOUTH LINE OF "BARCELONA KNOLL" WAS HELD AS THE BASIS OF BEARINGS. THE NORTH LINE WAS ESTABLISHED BY HOLDING A FOUND 5/8" IRON ROD AT SOUTHWEST CORNER OF SAID "BARCELONA KNOLL" AND A FOUND 5/8" IRON ROD AT THE 1/16 CORNER PER SURVEY NUMBER 5722, ALONG THE EAST LINE OF SAID SECTION 7 AS NOTED HEREON.

THE EAST LINE WAS ESTABLISHED BY HOLDING DEED 25 RODS PARALLEL TO THE EAST LINE OF SAID SECTION 7, 412.50 FEET MEASURED ALONG THE NORTH LINE OF SAID 1/16 LINE. THE NORTHEAST CORNER WAS ESTABLISHED BY INTERSECTING SAID 1/16 LINE AND SAID EAST LINE. THE SOUTHEAST CORNER WAS ESTABLISHED BY INTERSECTING THE ESTABLISHED NORTH RIGHT OF WAY LINE OF STATE HIGHWAY NO. 212 AND SAID ESTABLISHED EAST LINE.

THE SOUTH LINES WERE ESTABLISHED AS THE NORTH RIGHT-OF-WAY LINES OF ARMSTRONG CIRCLE AND STATE HIGHWAY 212. STATE HIGHWAY 212 CENTERLINE WAS ESTABLISHED BY HOLDING RECORD DISTANCE OF 278.80 FEET BETWEEN THE POINT OF INTERSECTION AT STATION 86+44.99 AND THE EAST QUARTER CORNER OF SAID SECTION 7 AND RECORD ANGLE OF 43°42'30" AT SAID POINT OF INTERSECTION BETWEEN TANGENT CENTERLINE OF STATE HIGHWAY STATION 189+00.28 AND SAID EAST QUARTER CORNER OF SECTION 7. THE EAST QUARTER CORNER WAS HELD AS THE BASE POINT TYPING TO SAID POINT OF INTERSECTION ADJUSTING THE RECORD STATE CENTERLINE TO INTERSECT WITH THE WEST QUARTER CORNER OF SAID SECTION 7. STATE HIGHWAY 212 WAS ESTABLISHED PER DRAWING NO. 7B-27-3. SEE DETAIL OF STATE HIGHWAY 212 HEREON. FOUND MONUMENTS NUMBERED [27] AND [30] MATCHED STATE RECORD INFORMATION ON THE RIGHT-OF-WAY LINES AT STATION 183+03.37 P.S. AND WAS HELD. FOUND MONUMENTS NUMBERED [26], [28], [29] AND [32] WERE HELD AS NOTED HEREON. THE NORTH RIGHT-OF-WAY LINE OF STATE HIGHWAY 212 INTERSECTED WITH THE RIGHT-OF-WAY OF ARMSTRONG CIRCLE. THE NORTH RIGHT-OF-WAY LINE OF ARMSTRONG CIRCLE WAS ESTABLISHED BY HOLDING SURVEY MONUMENT NUMBERS [15], [16], [17] AND [18]. THE ALIGNMENT OF ARMSTRONG CIRCLE WAS BASED ON "MARKET ROAD NO. 16" MAP.

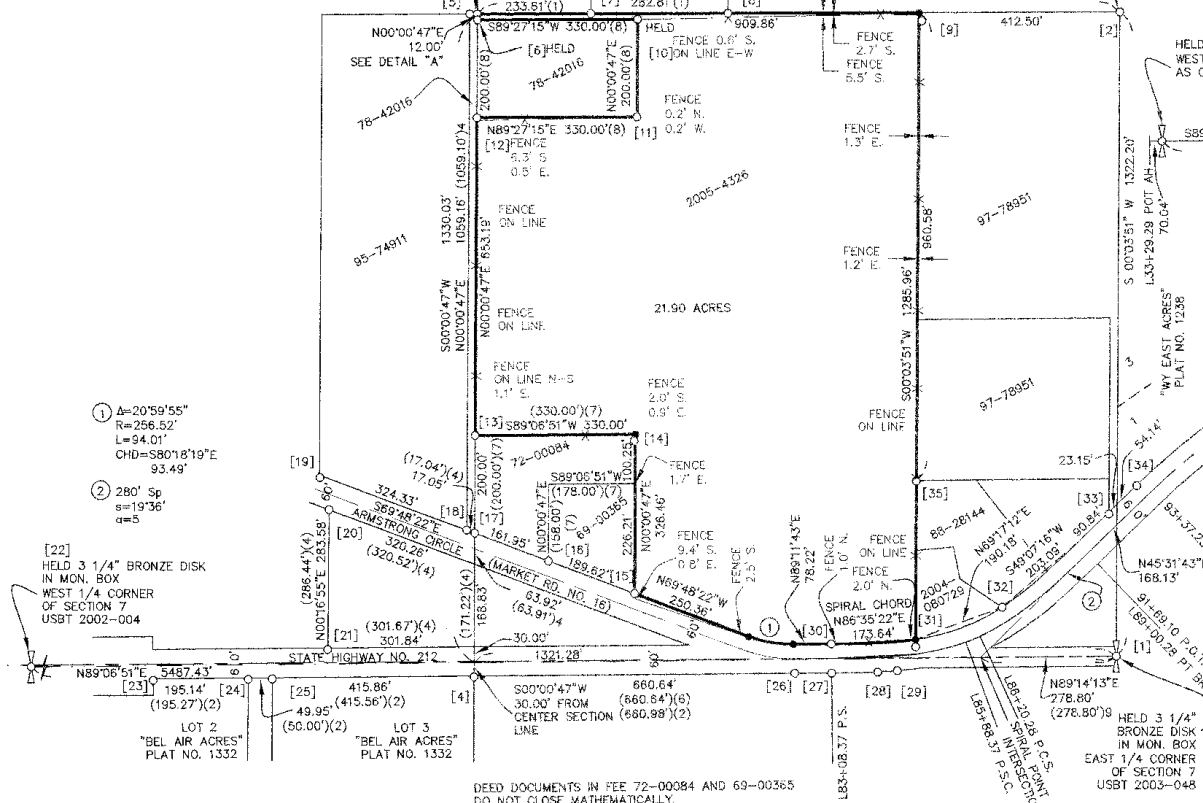
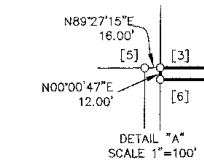
THE WEST LINES WERE ESTABLISHED BY HOLDING SURVEY MONUMENT NUMBERS [3] AND [4] AS RECORDED IN PLATS "BARCELONA KNOLL" AND "BEL AIR ACRES" RESPECTIVELY. THE BOUNDARY LINES OF THAT TRACT OF LAND AS DESCRIBED IN DOCUMENT NO. 78-42016, WAS ESTABLISHED PER FOUND MONUMENTS NUMBERED [6], [10], [11] AND [12]. THE BOUNDARY LINES OF THAT TRACT OF LAND AS DESCRIBED IN DOCUMENT NO. 72-00084, WAS ESTABLISHED AS CALLED PER SAID DEED BEGINNING AT THE INTERSECTION OF THE NORTH RIGHT OF WAY LINE OF MARKET ROAD NO. 16; THENCE NORTHERLY ALONG THE 1/16 SECTION LINE 200.00 FEET; THENCE EASTERLY PARALLEL TO THE 1/4 SECTION LINE 330.00 FEET; THENCE SOUTHERLY PARALLEL TO SAID 1/16 LINE TO THE NORTH RIGHT OF WAY LINE.

DETAIL OF STATE HIGHWAY 212 PER DRAWING NO. 7B-27-3
 SCALE 1"=600'



SURVEY MONUMENT TABLE:

- [1] FOUND AS NOTED HEREON.
- [2] FOUND AS NOTED HEREON.
- [3] FOUND AS NOTED HEREON.
- [4] FOUND 5/8" IR HELD AS E-W 1/16 LINE, S00°00'47"W, 1.92' PER THE PLAT OF "BEL AIR ACRES" 1332
- [5] FOUND 5/8" IR S89°27'15"W, 16.00' FROM 1/16 CORNER UNKNOWN ORIGIN
- [6] FOUND 5/8" IR HELD PER SN 19504
- [7] FOUND 5/8" IR HELD PER THE PLAT OF "BARCELONA KNOLL" 2065
- [8] FOUND 5/8" IR HELD PER THE PLAT OF "BARCELONA KNOLL" 2065
- [9] FOUND 3/4" IP S21°24'53"E, 2.18' UNKNOWN ORIGIN
- [10] FOUND 5/8" IR W/YPC "PENSE LS 460" HELD PER SN 19504
- [11] FOUND 5/8" IR W/YPC "PENSE LS 460" N79°01'21"W, 0.22' PER SN 19504
- [12] FOUND 5/8" IR W/YPC "PENSE LS 460" S00°00'47"W, 0.61' PER SN 19504
- [13] FOUND 5/8" IR S89°06'51"W, 0.30' PER SN 20726
- [14] FOUND 5/8" IR S14°54'21"W, 1.98' PER SN 20726
- [15] FOUND 5/8" IR W/YPC "PENSE LS 460" N69°48'22"W, 0.43' PER SN 20726
- [16] FOUND 5/8" IR W/YPC "PENSE LS 460" HELD PER SN 20726
- [17] FOUND 5/8" IR W/YPC "PENSE LS 460" HELD PER SN 20726
- [18] FOUND 5/8" IR W/YPC "PENSE LS 460" N69°48'22"W, 0.25' PER SN 19504
- [19] FOUND 5/8" IR W/YPC "PENSE LS 460" N69°48'22"W, 0.39' PER SN 19504
- [20] FOUND 3/4" IP S09°02'45"E, 5.14' UNKNOWN ORIGIN
- [21] FOUND 5/8" IR N06°16'55"E, 0.42' UNKNOWN ORIGIN
- [22] FOUND 5/8" IR S00°16'55"W, 2.61' PER SN 5813
- [23] FOUND AS NOTED HEREON.
- [24] FOUND 5/8" IR S0°48'17"E, 2.69' PER "BEL AIR ACRES" 1332
- [25] FOUND 5/8" IR S0°48'17"E, 2.47' PER "BEL AIR ACRES" 1332
- [26] FOUND 5/8" IR S0°48'17"W, 2.44' PER "BEL AIR ACRES" 1332
- [27] FOUND 5/8" IR W/YPC "LOVE 747" HELD UNKNOWN ORIGIN STA. 82+32.72 RT. 30.00'
- [28] FOUND 5/8" IR W/YPC "LOVE 747" HELD PER SN 22118 STA. 84+02.38 RT. 30.00'
- [29] FOUND 5/8" IR W/YPC "LOVE 747" HELD PER SN 22118 STA. 84+41.22 RT. 30.00'
- [30] FOUND 5/8" IR HELD UNKNOWN ORIGIN STA. 83+08.37 PS LT. 30.00'
- [31] FOUND 5/8" IR S04°37'47"E, 7.68' (8.82' SN 5256)
- [32] FOUND 1" IP HELD PER SN 5256 STA. 86+91.10 LT. 30.00'
- [33] FOUND 1" IP S00°03'51"W, 3.77' PER SN 5256
- [34] FOUND 5/8" IR N63°48'42"E, 1.81' PER "WY EAST ACRES" 1238
- [35] FOUND 3/4" IP N89°56'00"W, 0.35' PER SN 5256



① Δ=20°59'55"
 R=256.52'
 L=94.01'
 CHD=S80°18'19"E
 93.49'

② 280' Sp
 s=19'36"
 c=5

[22] HELD 3 1/4" BRONZE DISK IN MON. BOX WEST 1/4 CORNER OF SECTION 7 USBT 2003-004

LOT 2 "BEL AIR ACRES" PLAT NO. 1332

LOT 3 "BEL AIR ACRES" PLAT NO. 1332

DEED DOCUMENTS IN FEE 72-00084 AND 69-00365 DO NOT CLOSE MATHEMATICALLY.

REGISTERED PROFESSIONAL LAND SURVEYOR

OREGON NOV. 16, 1998 MICHAEL D. FRANK 52004

GENERAL DATT 12-31-07

SHEET 1 OF 1

BSN6347 RLC 06-20-2006

DESIGN INC.

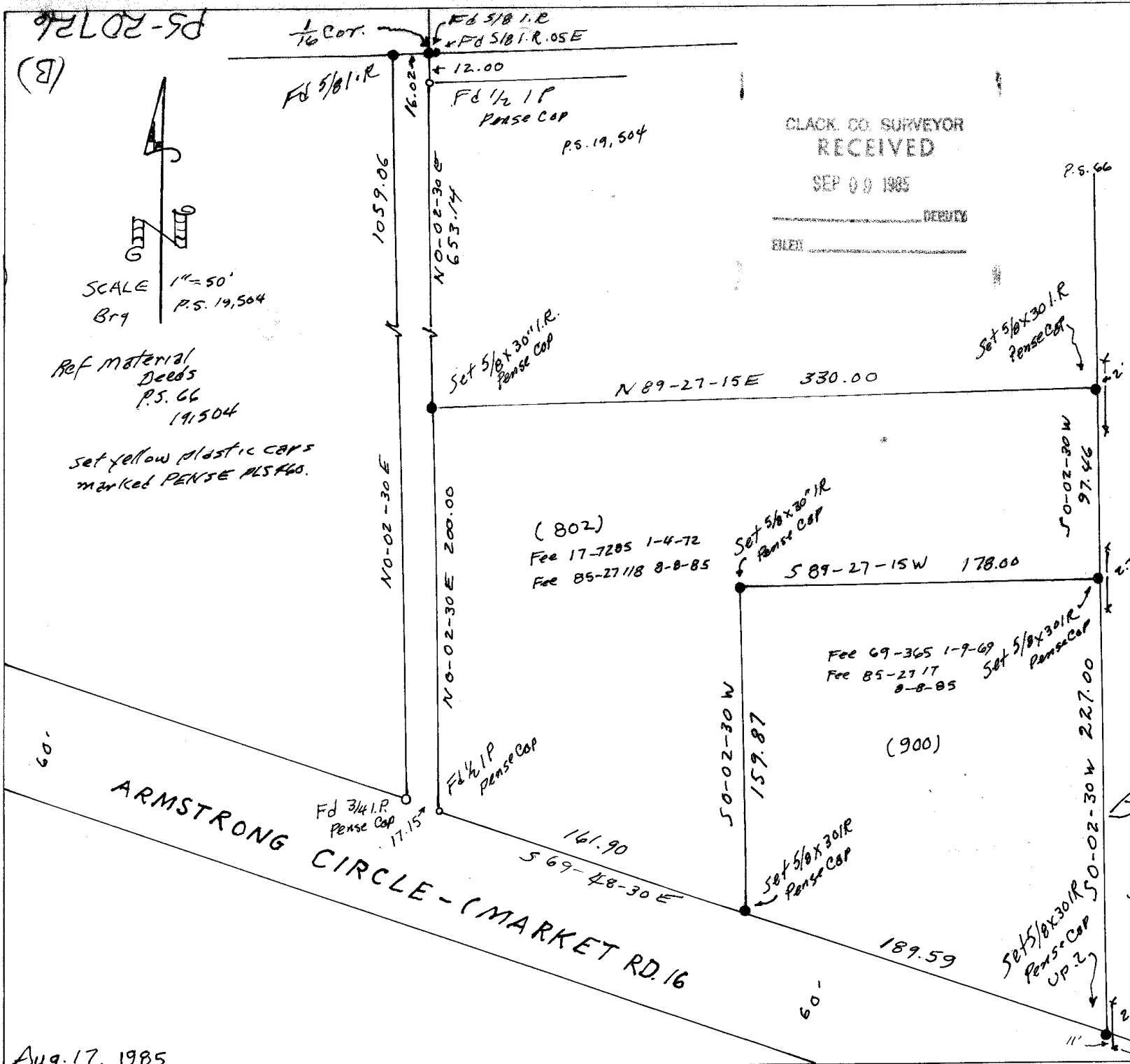
5415 SW WESTGATE DR., PORTLAND, OREGON 97221

(503) 419-2500 FAX: (503) 419-2600

PLANNERS • ENGINEERS • LANDSCAPE ARCHITECTS • SURVEYORS



Narrative: Began survey July 26.
 The deeds showed 9.29' overlap of
 Tax Lot 900 onto Tax Lot 802;
 leaving a 9.29' gap on the E. side
 Tax lot 900. Quit Claim Deeds
 were given and the problem cleared
 up in deeds recorded 8-8-85.
 Completed field work Aug. 17, 1985
 Crew: C. Pense
 Y. Emrick
 D. Reynolds.



CLACK CO. SURVEYOR
 RECEIVED
 SEP 09 1985
 DEPT. OF REVENUE

REGISTERED
 PROFESSIONAL
 LAND SURVEYOR
 Clair Ernest Pense
 OREGON
 OCT 24, 1950
 CLAIR E. PENSE
 460

MR. CLAIR E. PENSE, P. L. S.,
 17021 S. E. DIV. ST.
 PORTLAND, OR 97236
 Ph. 761-6279

BOUNDARY SURVEY
 IN SE 1/4 OF NE 1/4
 SECTION 7, T. 2 S. - R. 3 E., W.M.
 Tax Lot 802
 For John Davis et ux
 and
 Tax Lot 900
 For William TenExck, et ux.

CLACK CO.

PS-20726

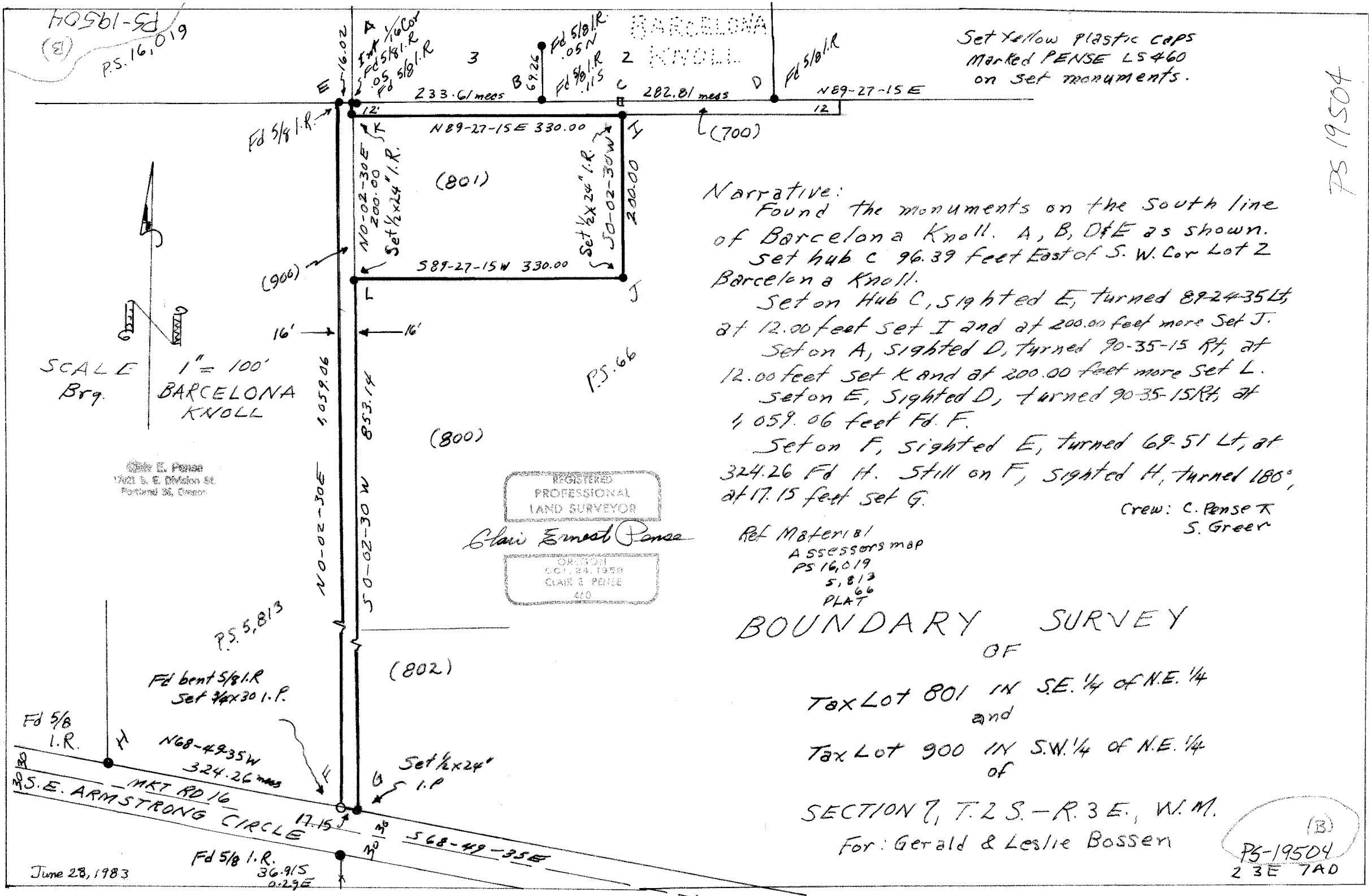
(B)

SCALE 1"=50'
 Br 9 P.S. 19,504

Ref material
 Deeds
 P.S. 66
 19,504

Set yellow plastic caps
 marked PENSE ALS 460.

Aug. 17, 1985



Set yellow plastic caps
 Marked PENSE LS460
 on set monuments.

Narrative:
 Found the monuments on the South line
 of Barcelona Knoll. A, B, D & E as shown.
 Set hub C 96.39 feet East of S.W. Cor Lot 2
 Barcelona Knoll.
 Set on Hub C, sighted E, turned 89-24-35 Lt,
 at 12.00 feet set I and at 200.00 feet more Set J.
 Set on A, sighted D, turned 90-35-15 Rt, at
 12.00 feet set K and at 200.00 feet more Set L.
 Set on E, sighted D, turned 90-35-15 Rt, at
 1,059.06 feet Fd. F.
 Set on F, sighted E, turned 69-51 Lt, at
 324.26 Fd. H. Still on F, sighted H, turned 180°,
 at 17.15 feet set G.

Crew: C. Pense &
 S. Greer

Ref Material
 Assessor's map
 PS 16,019
 5,813
 66
 PLAT

BOUNDARY SURVEY

OF
 Tax Lot 801 IN S.E. 1/4 of N.E. 1/4
 and
 Tax Lot 900 IN S.W. 1/4 of N.E. 1/4
 of

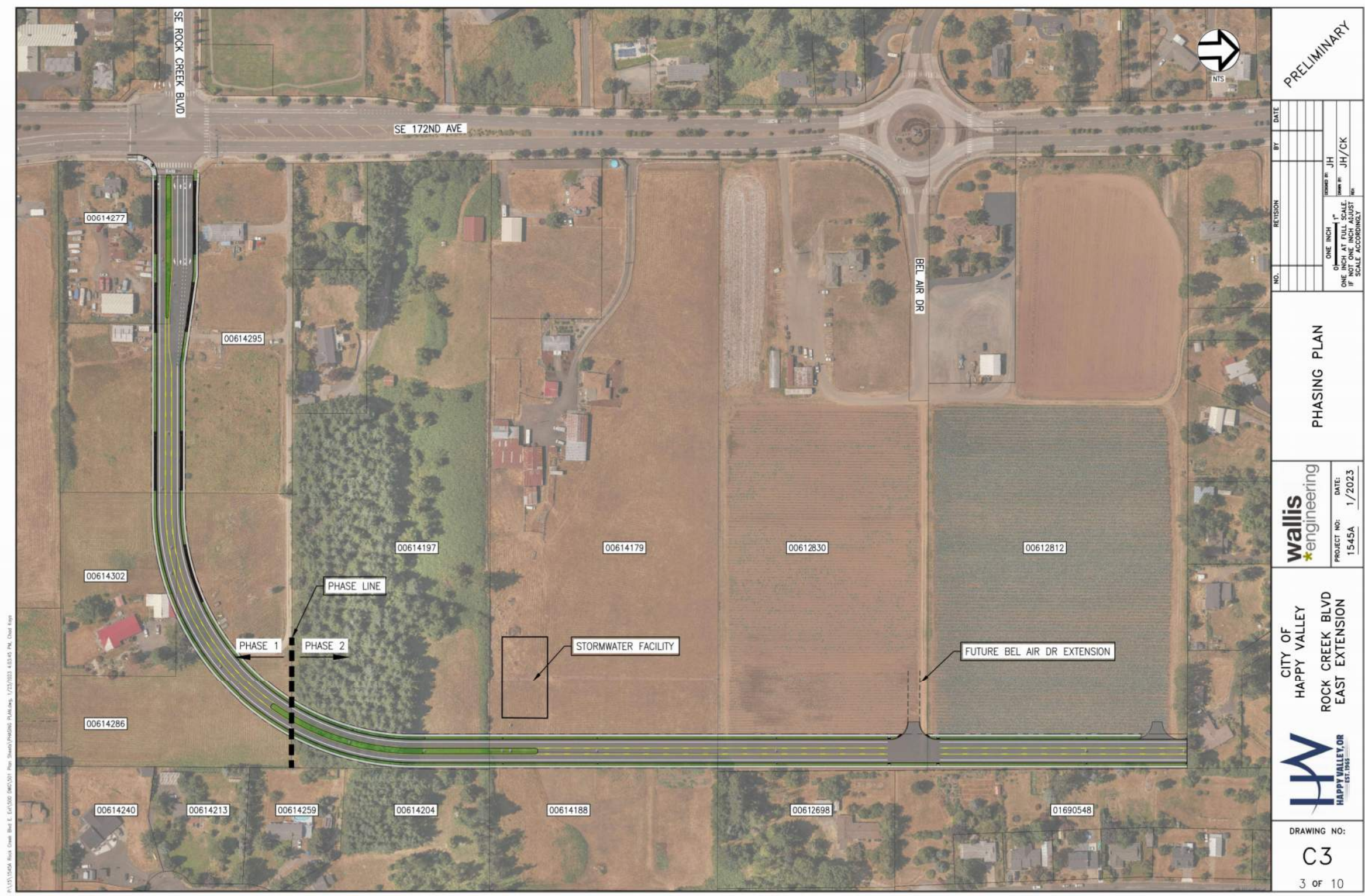
SECTION 7, T.2 S. - R.3 E., W.M.
 For: Gerald & Leslie Bossen

(B)
 PS-19504
 23E7AD

PS 19504

June 28, 1983

ROCK CREEK BLVD EXTENSION



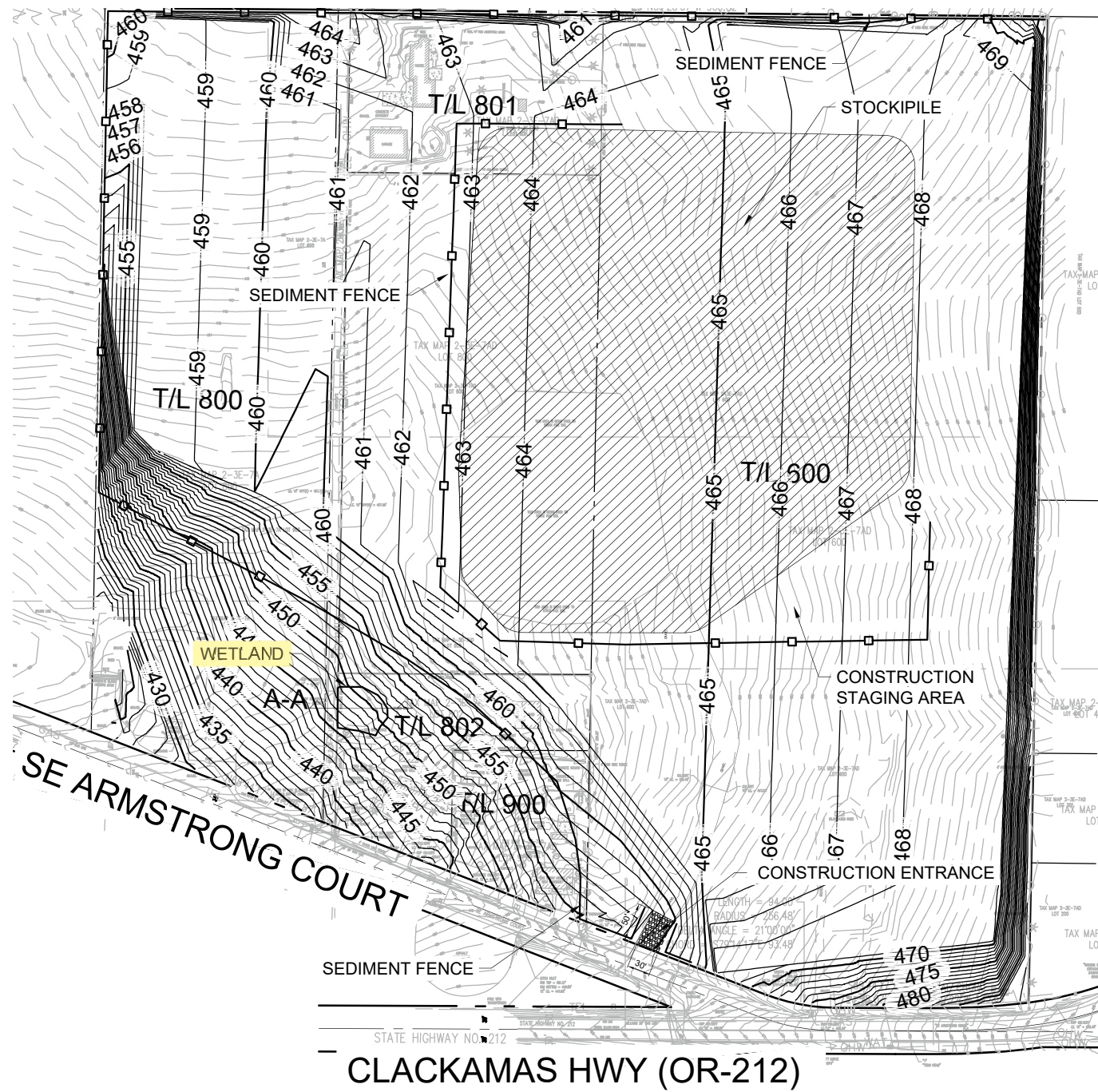
15/01/2023 Rock Creek Blvd E. 15/01/2023 09:03:00 AM. Plan: 15/01/2023 10:03:00 AM. Date: 1/23/2023 10:03:00 AM. User: JH/CK

 NTS		PRELIMINARY	
NO.	REVISION	BY	DATE
ONE INCH AT FULL SCALE. IF NOT ONE INCH ADJUST SCALE ACCORDINGLY.		DRAWN BY: JH/CK	CHECKED BY: JH/CK
PHASING PLAN			
 PROJECT NO: 1545A		DATE: 1/2023	
CITY OF HAPPY VALLEY ROCK CREEK BLVD EAST EXTENSION			
 HAPPY VALLEY, OR EST. 1995		DRAWING NO: C3 3 of 10	

SE 162nd Avenue/SE 172nd Avenue Split-Diamond Interchange Option

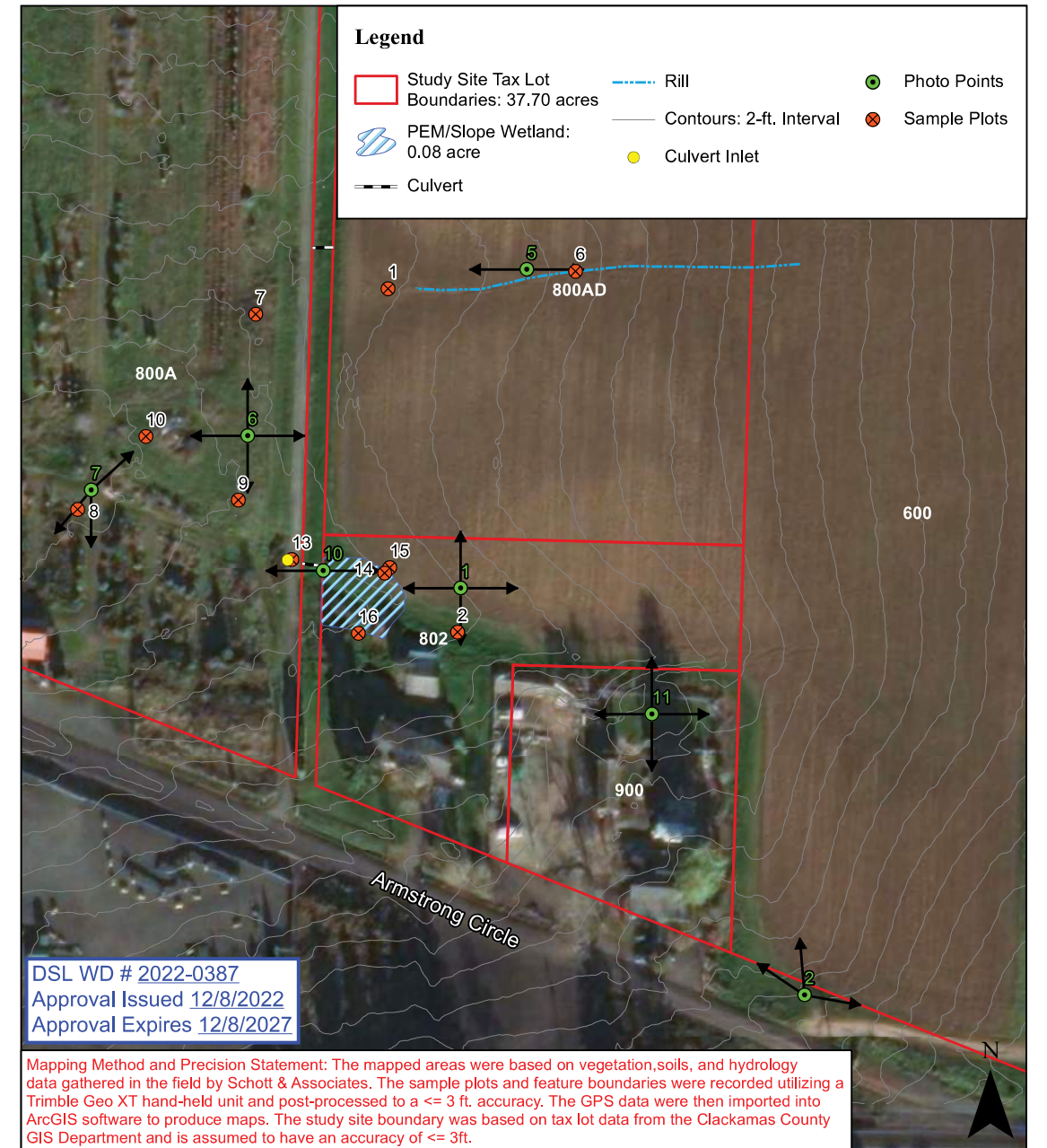


WETLANDS



LEGEND

- PROPOSED CONTOUR
- EXISTING CONTOUR
- SEDIMENT FENCE
- EXISTING DRAINAGE FLOW ARROW
- PROPOSED DRAINAGE FLOW ARROW
- CONSTRUCTION ENTRANCE
- SOIL STOCKPILE AREA



Date: 2/8/2022

Data Source: ESRI, 2022; Clackamas County GIS Dept, 2022; DOGAMI, 2014

Figure 6b. Wetland Delineation Map - Detail

M Mackenzie
 Portland 503.224.9560
 Vancouver 360.695.7879
 Seattle 206.749.9993
 www.mcknze.com
 Architecture - Interiors
 Planning - Engineering

LEAHY PROPERTY-ARMSTRONG CIRCLE

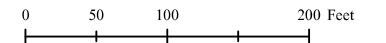
 15 0 7.5 15 30 60
 (IN FEET)
 1 inch = 30 ft.

EXHIBIT 'C'

DATE: 03/01/2023
 JOB NUMBER: 2210487.00



9th Street Project Site: S&A # 2942



SOIL CONTAMINANT AREA



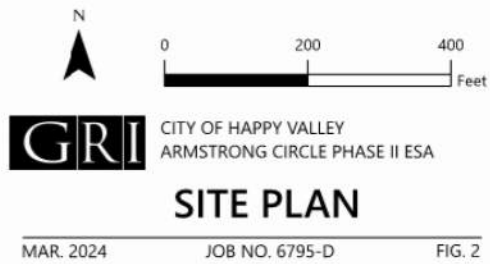
BASEMAP PROVIDED BY GOOGLE EARTH, 2020

NOTES:

1. FIGURE INTENDED FOR ELECTRONIC COLOR DISPLAY.

Hand Auger Locations

- A- Area Samples
- B- Area Samples
- C- Area Samples
- D- Area Samples



The Area C borings were completed in the area of an old structure in the southeast corner of the site where there used to be buildings. In several places, about 3 inches of gravel was encountered at the ground surface, and brown SILT with some subangular to rounded gravel was encountered below the gravel.

Boring D-1 was on the northwest part of the site, on a residential property. The hole was dug in a shed right next to a few old oil drums. The material was brown, Clayey SILT to Silty CLAY with trace fine-grained sand, and water was present at approximately 2.75 feet below the ground surface. Boring D-2 was dug in a shed on the southwest property on the site. There was oil staining observed on parts of the gravel floor near a few old lawn mowers. The upper foot of the hole was silty GRAVEL with some fine- to coarse-grained sand. Below that, the material was brown Silty CLAY to Clayey SILT with trace fine-grained sand. Water was present at 2 feet below the ground surface.

4 SOIL ANALYTICAL RESULTS

Based on the field screening, observations of petroleum sheen, odor, or discoloration were not identified in the samples. Soil samples selected for chemical analysis were composited in the field and analyzed for petroleum hydrocarbons, metals, PAHs, pesticides, and herbicides. The analytical laboratory report is provided in Appendix A. Chemical concentrations in soil are summarized in the text and tables below.

Chemical data collected for this evaluation were compared with DEQ RBCs and CFSLs. The concentrations of detected contaminants are compared to current DEQ RBCs as a preliminary screening approach to identify potential human health risks for reasonably anticipated future land-use activities at the site. Occupational RBC levels have been presented to align with current zoning and anticipated future uses for the property. The applicable RBC exposure pathways include soil ingestion, inhalation, and dermal contact under the occupational exposure scenario.

Petroleum. Petroleum hydrocarbons in the form of oil were detected above the method detection limit in the C- designated samples. Oil was detected at borings C-3, C-5, and C-8 at concentrations of 86.5, 137, and 66.6 milligrams per kilogram (mg/kg), respectively. Diesel was not detected in the samples. Table 4-1 presents a summary of the sample results from the NWTP-Dx analysis.

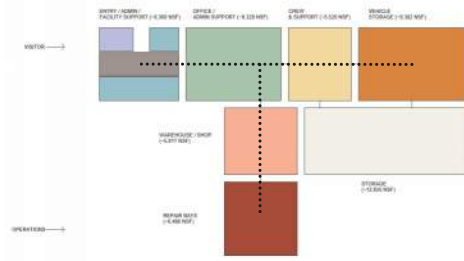
4-1: PETROLEUM DETECTED IN SOIL (mg/kg)

Analyte	Diesel	Oil
B-1	ND	ND
C-1	ND	ND
C-2	ND	ND
C-3	ND	86.5
C-4	ND	ND
C-5	ND	137
C-6	ND	ND
C-7	ND	ND
C-8	ND	66.6
C-9	ND	ND
D1-A	ND	ND
D1-B	ND	ND
D2-A	ND	ND
D2-B	ND	ND
CFSL	1,100	1,100
RBC	14,000	14,000

Bold = Detected analyte

EARLY PROCESS DIAGRAMS

INITIAL ADJACENCY DIAGRAM

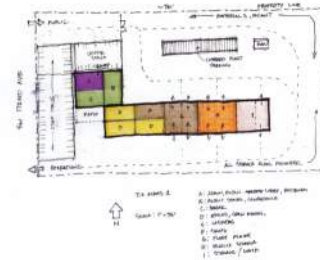


INITIAL CONCEPT SKETCHES

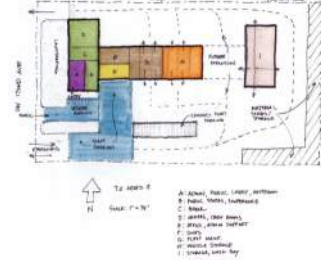
CONCEPT A



CONCEPT B



CONCEPT E



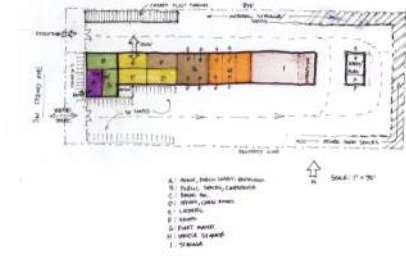
REVISED SITE FOOTPRINT A



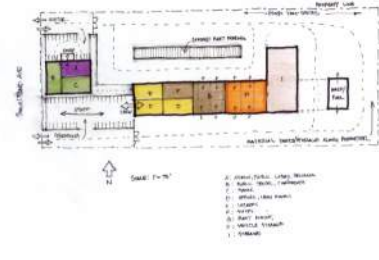
REVISED SITE FOOTPRINT B



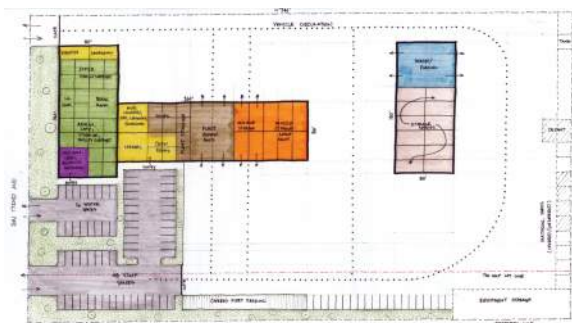
CONCEPT C



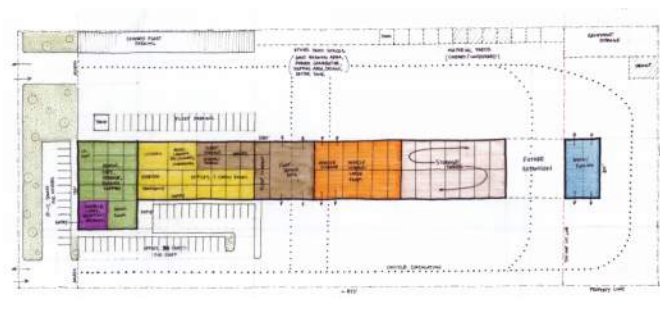
CONCEPT D



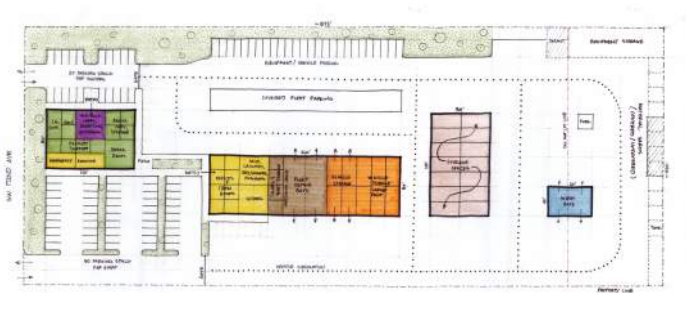
HAPPY VALLEY PUBLIC WORKS MASTER PLAN - CONCEPT B



HAPPY VALLEY PUBLIC WORKS MASTER PLAN - CONCEPT C



HAPPY VALLEY PUBLIC WORKS MASTER PLAN - CONCEPT D



UPPER LEVEL - CONCEPT A



UPPER LEVEL - CONCEPT B



UPPER LEVEL - CONCEPT C



UPPER LEVEL - CONCEPT D

PUBLIC WORKS - MIDDLE

- PROS:**
- DOES NOT INCLUDE WETLANDS
 - DOES NOT INCLUDE NOTCH OUT
 - BEST ORIENTATION FOR NATURAL DAYLIGHT
 - NORTH-SOUTH ORIENTATION PROMOTES BETTER NATURAL VENTILATION

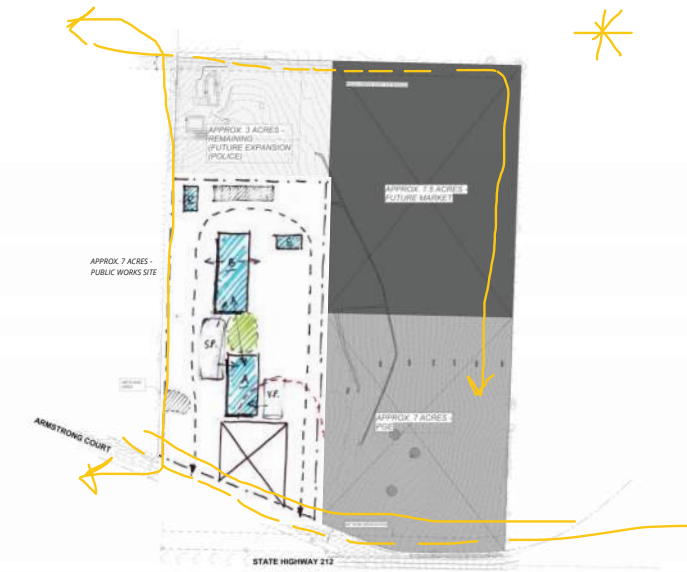
- CONS:**
- BIG GRADE DROP (475'-445')
 - INCLUDES DETECTED PETROLEUM SOIL SAMPLE LOCATIONS



PUBLIC WORKS - WEST

- PROS:**
- WIDEST PW SITE OPTION
 - OFFERS LAYOUT FLEXIBILITY
 - CLOSEST TO ROCK CREEK RD EXTENSION
 - DOES NOT INCLUDE DETECTED PETROLEUM SOIL SAMPLE LOCATIONS
 - NORTH-SOUTH ORIENTATION PROMOTES BETTER NATURAL VENTILATION

- CONS:**
- INCLUDES WETLAND AREA
 - INCLUDES NOTCH OUT
 - 25' GRADE DROP (460'-435')



PUBLIC WORKS - EAST

- PROS:**
- REGULAR SHAPED SITE
 - STRAIGHT FORWARD NORTH/SOUTH SITE ACCESS
 - EASY OPPORTUNITY FOR SITE TO INCLUDE EXPANSION TO THE NORTH (POLICE)
 - ON HIGHEST GRADE OF SITE = MORE VISIBILITY
 - SOUTH FACING OFFICE BLDG CAN CONTRIBUTE TO PASSIVE SOLAR HEATING

- CONS:**
- 25' GRADE DROP (485'-460')
 - 40' ROW DEDICATION THRU-SITE
 - NARROW SITE OFFERS LESS FLEXIBILITY
 - LOCATED FURTHEST FROM ROCK CREEK RD EXTENSION
 - LARGE TREE BUFFER @NORTH OF PROPERTY LINE
 - INCLUDES DETECTED PETROLEUM SOIL SAMPLE LOCATIONS



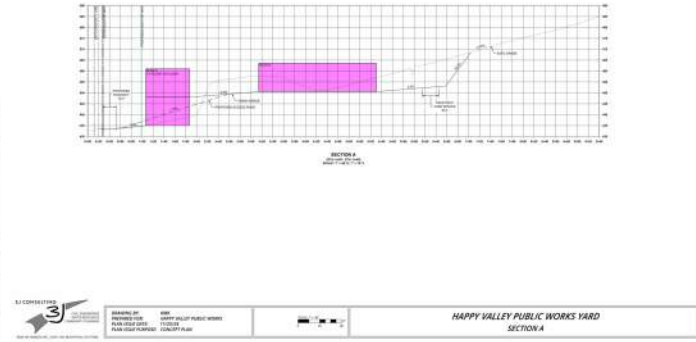
PUBLIC WORKS - MIDDLE (EAST-WEST)

PROS:

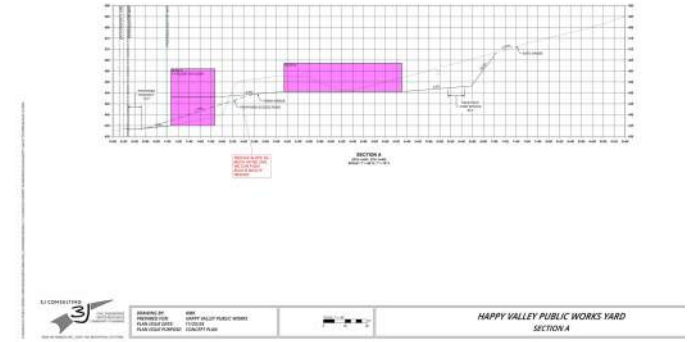
CONS:



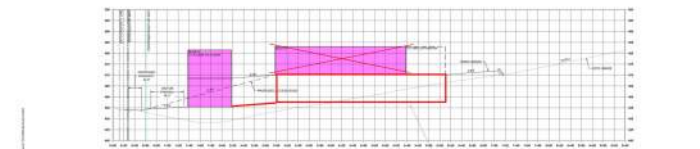
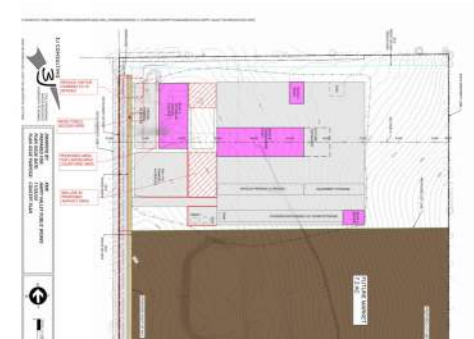
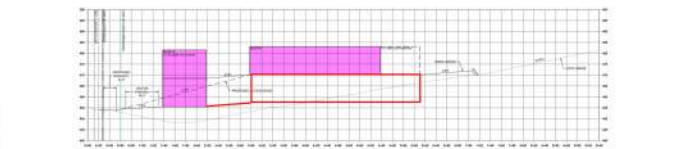
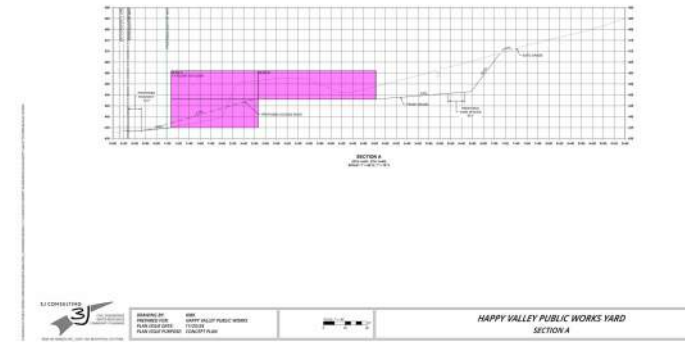
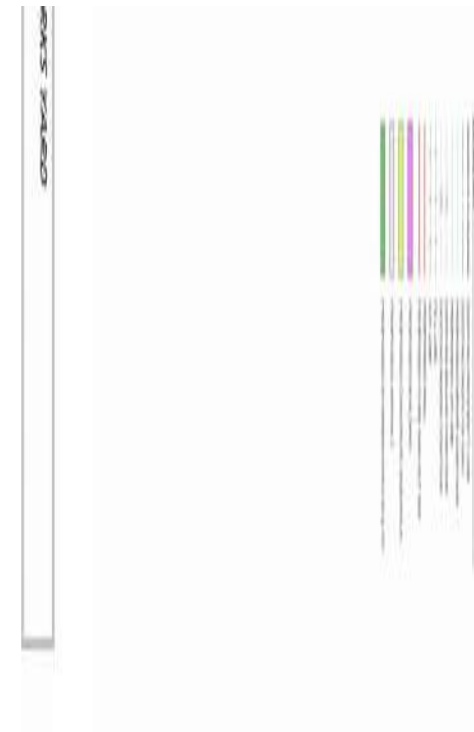
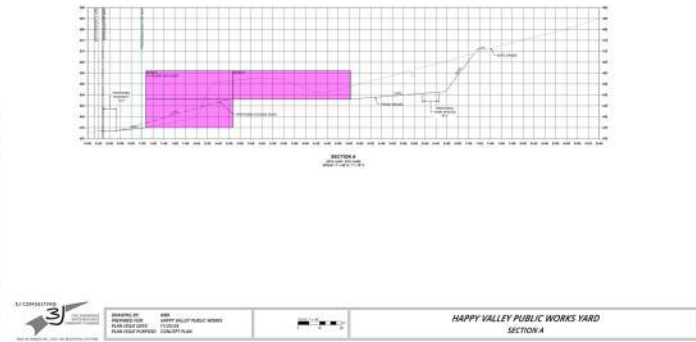
SITE LAYOUTS - CIVIL CONCEPT 1A



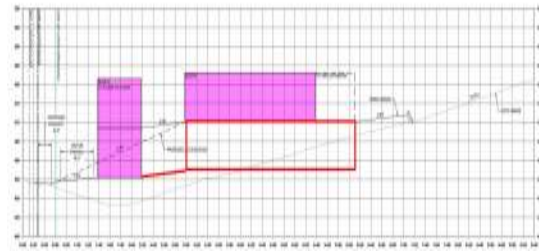
CIVIL CONCEPTS - SEA COMMENTS



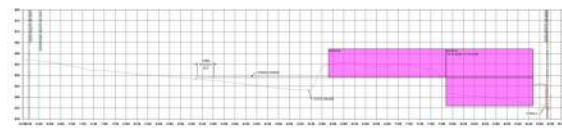
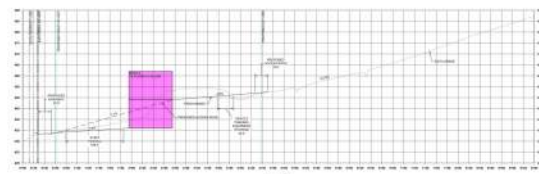
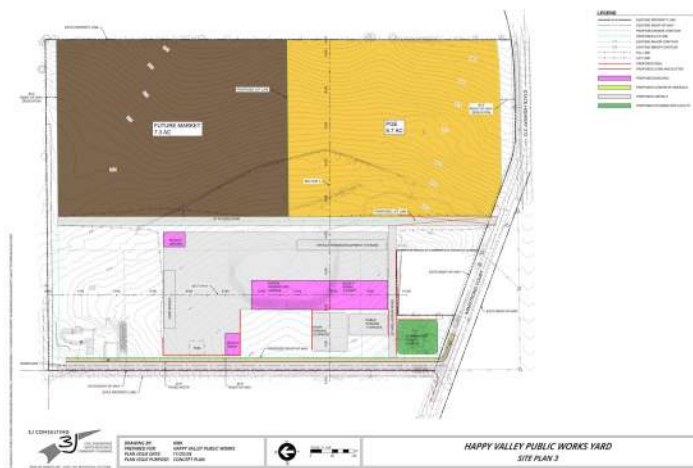
SITE LAYOUTS - CIVIL CONCEPT 1B



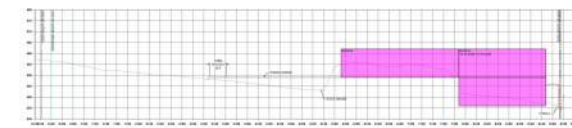
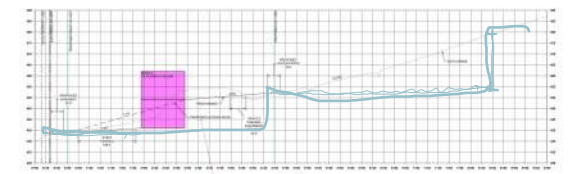
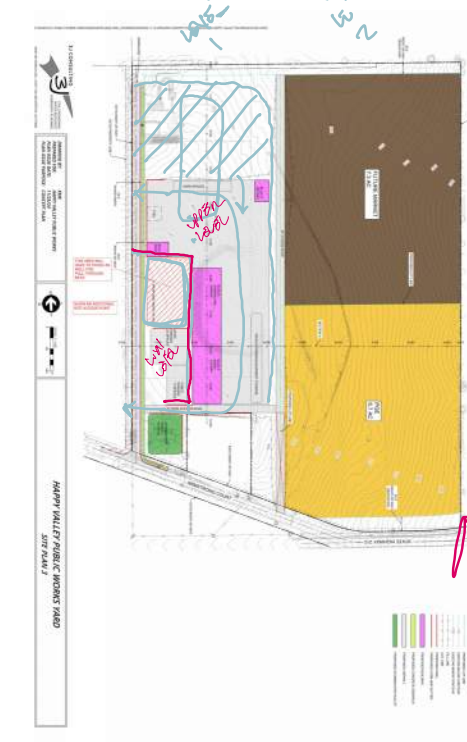
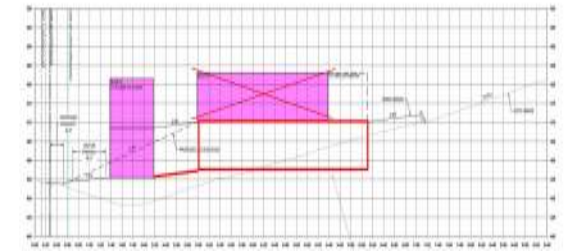
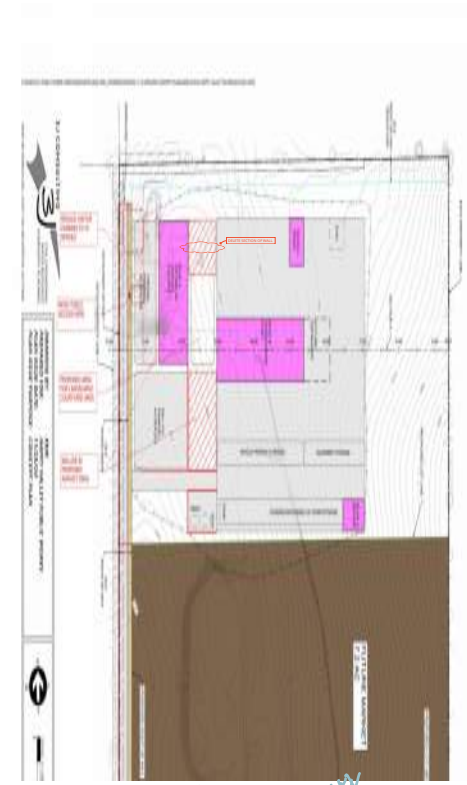
SITE LAYOUTS - CIVIL CONCEPT 2



SITE LAYOUTS - CIVIL CONCEPT 3



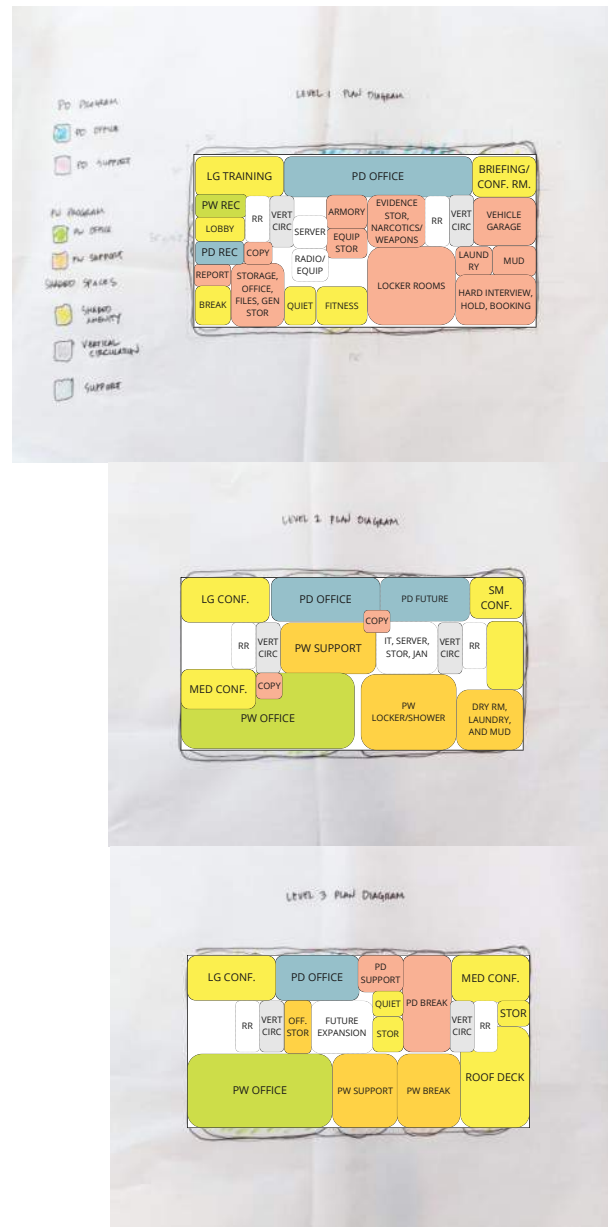
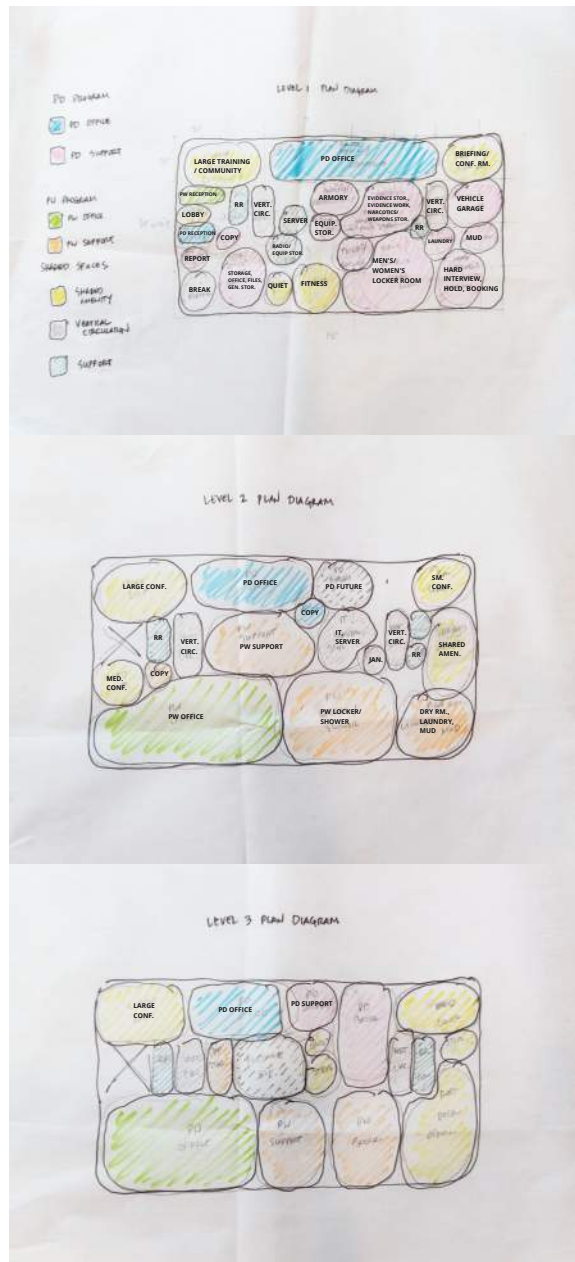
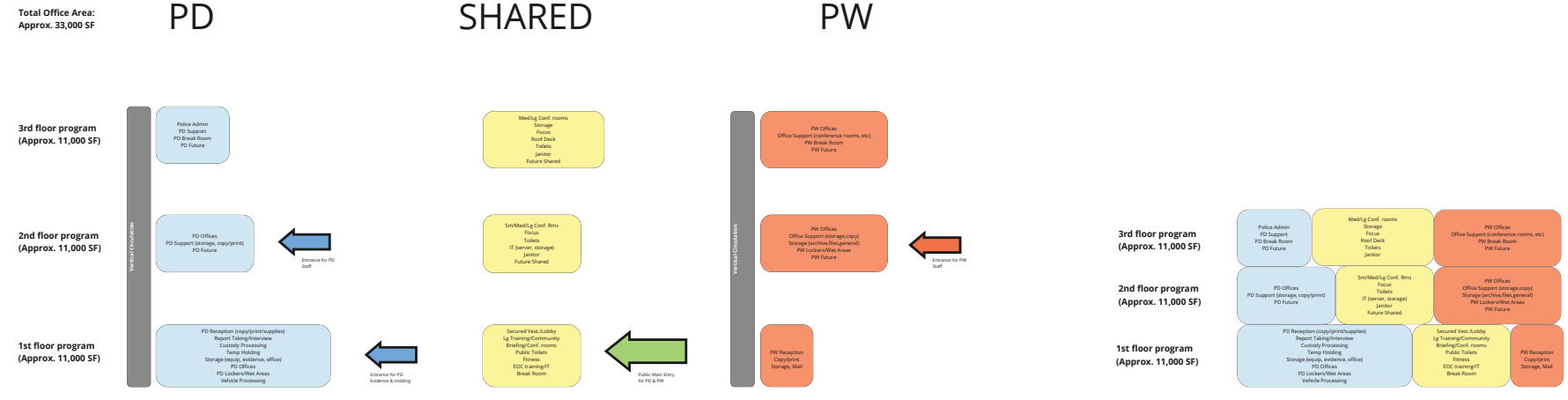
HAPPY VALLEY PUBLIC WORKS YARD
SECTION A & B



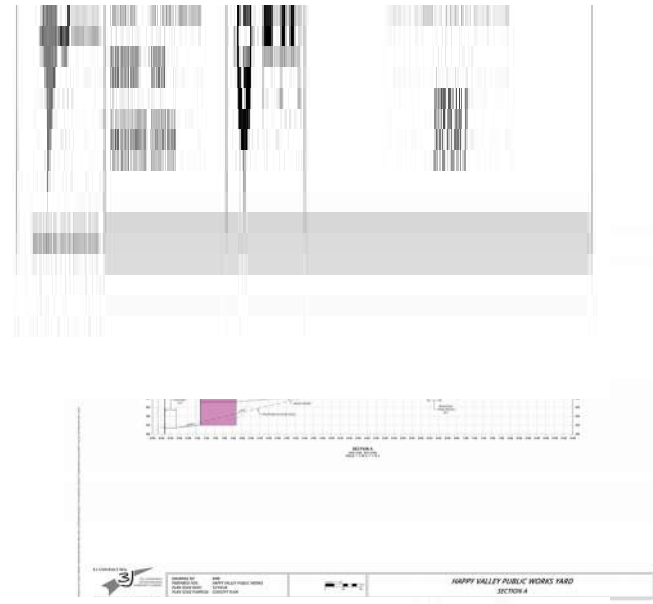
HAPPY VALLEY PUBLIC WORKS YARD
SECTION A & B

OPTION 4
AS A TWO
BLOCK SOLUTION

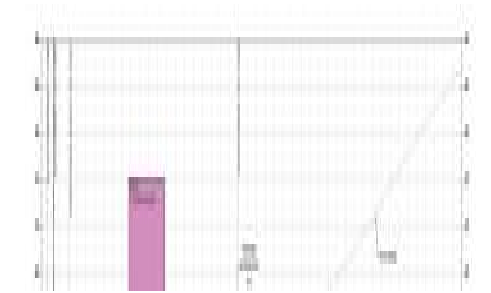
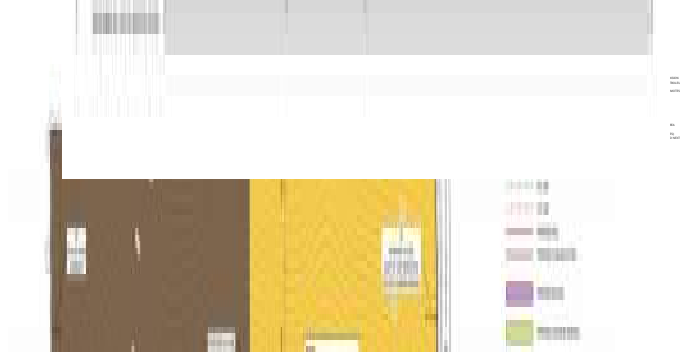
Total Office Area:
Approx. 33,000 SF



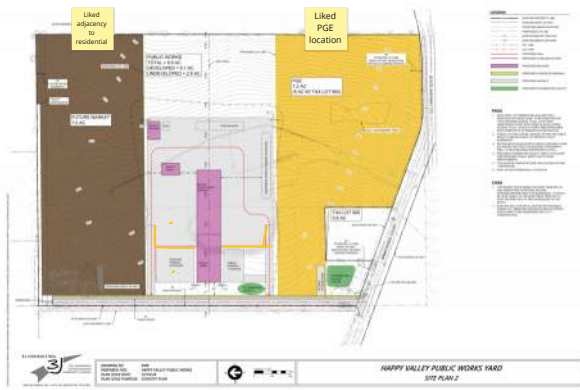
CONCEPT 1



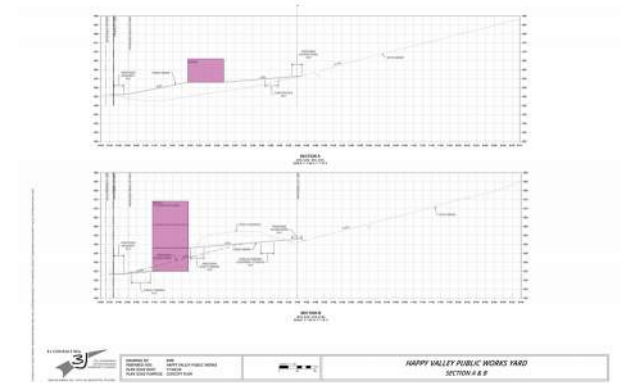
CONC



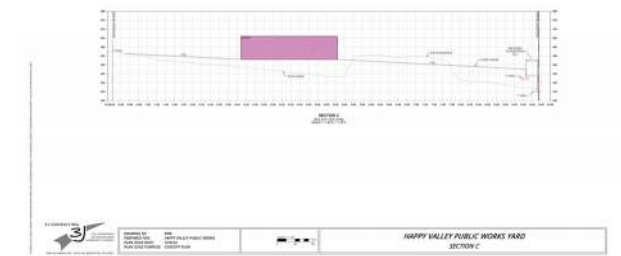
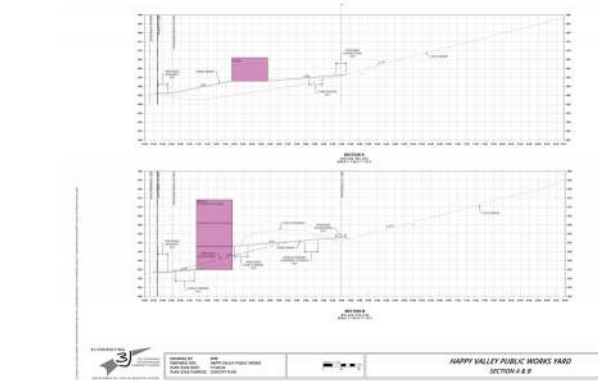
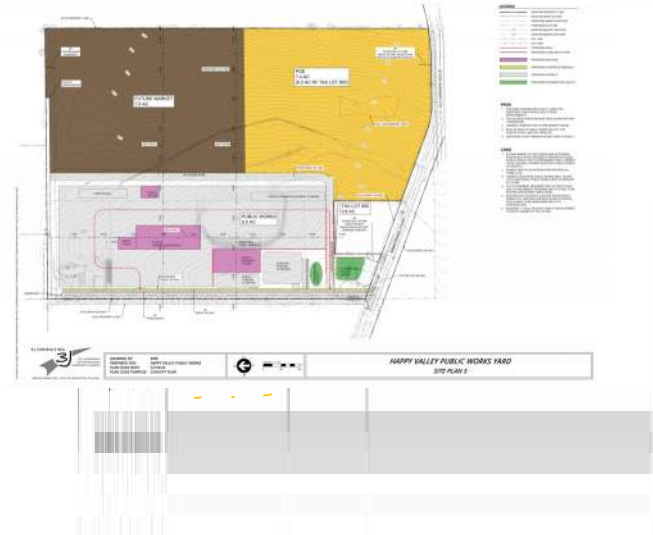
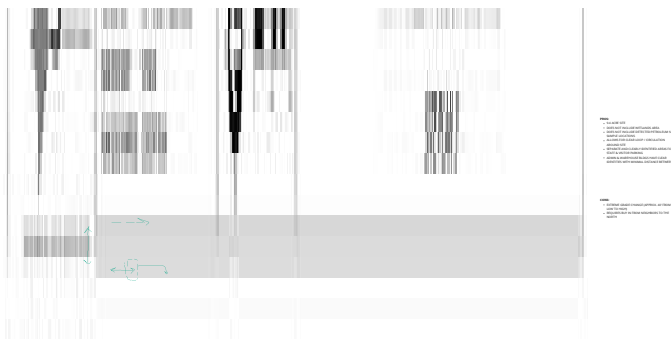
CONCEPT 2



CONC

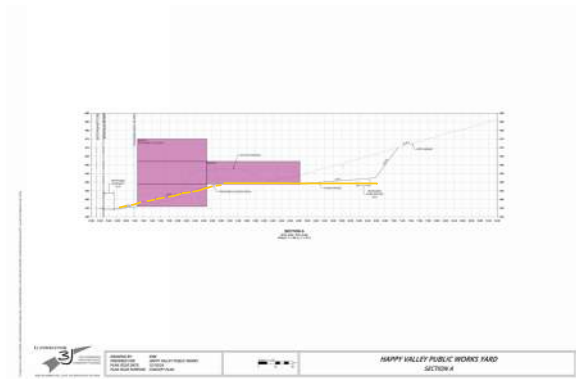


CONCEPT 3

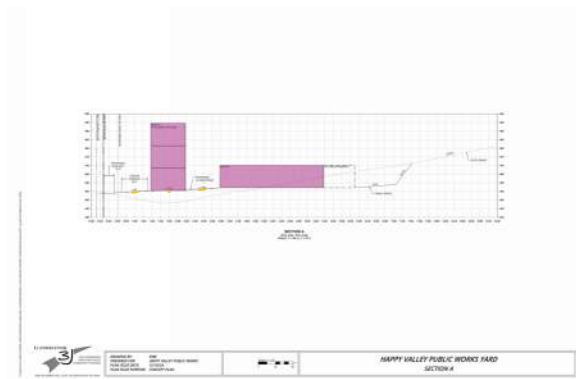


FAVORED CONCEPTS

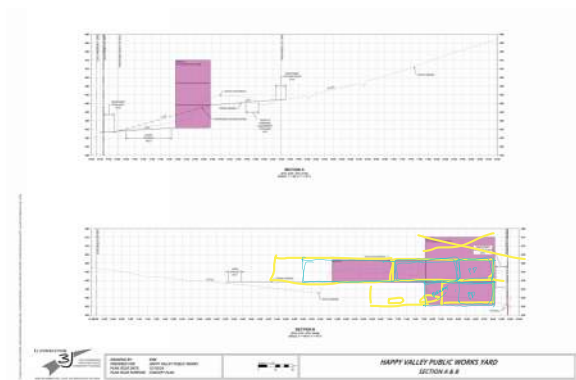
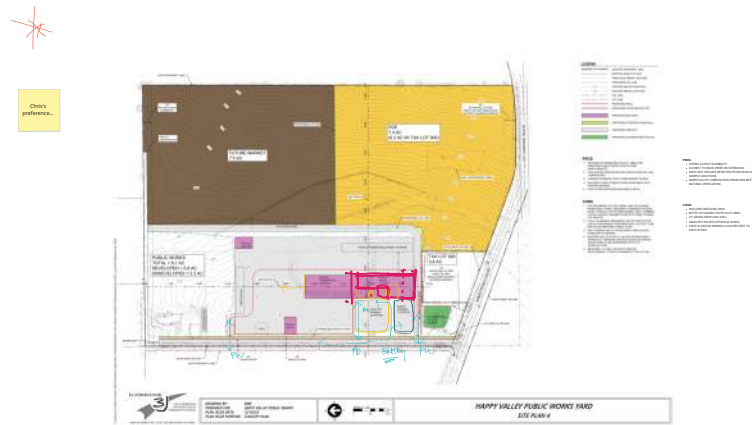
CONCEPT 2



CONCEPT 3



CONCEPT 4



SPACE PROGRAMMING (INCLUDING POLICE)

HAPPY VALLEY POLICE, PUBLIC WORKS, & PARKS OPERATION FACILITY

ROOM	QTY	ENCLOSED OFFICE	OPEN OFFICE	W	x	L	AREA	TOTAL AREA NSF	CURRENT SIZE	ENCLOSED OFFICE	OPEN OFFICE	SHARED OFFICE	NOTES	EMPLOYEE
Happy Valley Police Department														
Administration & Records														
PD Admin	1		•	10	x	12	120	120					Existing: 2 open workstations	
Code Enforcement Officer (Future FTE)	1	•		10	x	10	100	100					Future Position	
Chief of Police	1	•		10	x	12	120	120	120	•			Existing: enclosed office upstairs	Capt. Rich Sheldon
Community Service Officer	1		•	10	x	12	120	120					Existing CSO position	Kimberly Peterson
Police Operations														
Sergeant Detective	1	•		10	x	10	100	100	-	•				
Detectives	1	•		20	x	20	400	400	-	•			This will give enough room for 2-3 detectives to share office	Robert Strand
Patrol Sergeants	4	•		10	x	10	100	400					(2) 200 sf enclosed shared offices	Brett Ethington, Alex Stidham
				10					700					Tyler Simpkins, Matthew Bigoni, Shawn Choe, Alex Mazhnikov, Daniel Moyer, Brenden McKoy, Tyler Van Wormer, Sam Tharp, David McCarthy, Cole Kinman, Kristopher Swalko, David Sloboda
Patrol Officers	12		•		x	10	100	1,200					Existing: - (6) open workstations on first floor, couch, two monitors, camera system, table w/ chairs, (2) open workstations upstairs	
Patrol Officers (Future FTE)	3		•	10	x	10	100	300					Future patrol officer positions	
Public Safety Subtotal	25	4 Future FTE						2,860	820					
Office Support Spaces (Public Safety)														
ROOM	QTY	ENCLOSED OFFICE	OPEN OFFICE	W	x	L	AREA	TOTAL AREA NSF	CURRENT SIZE	ENCLOSED OFFICE	OPEN OFFICE	SHARED OFFICE	NOTES	EMPLOYEE
Entry Vestibule	1	•		10	x	10	100	100						
Lobby / Waiting Area	1	•		20	x	15	300	300	100				Existing: 2 chairs, side table	
Reception Counter/CSO office area	1	•		10	x	10	100	100	20				Existing: 2 workstations, safety glass	
Unisex Restroom - Public	1	•		9	x	10	90	90	160	•			Existing: 1 unisex, 1 ladies	
Report Taking Room	2	•		10	x	12	120	240						
Copy/Print/Mail Center/Workroom/Office Supply	1	•		12	x	20	240	240	60				Existing: open mail area, copy/print machine	
Confidential Records	1	•		8	x	8	64	64						
Lunch Room/Break Room, Kitchenette	1	•		12	x	16	192	192	80				Existing: no sitting area, refrigerator, kitchen sink, counter, coffee, microwave, toaster	
Interview Room	1	•		8	x	10	80	80						
Equipment Storage	1	•		10	x	20	200	200						
Physical Training Room	1	•		20	x	20	400	400	280				Existing: open workout space upstairs (1 treadmill, 1 bench, 1 power rack, 1 rower, free weights, desk w/chair)	

Storage: Files	1	•	10	x	15	150	150							
General Storage	1	•	10	x	10	100	100	100	•				Existing: storage room on first floor, supplies, large safe	
Hard Interview / Intox Room	1	•	10	x	12	120	120							
Briefing / Conference Room	1	•	20	x	30	600	600	1,140	•				Existing: open briefing room on upper level (1 table w/4 chairs, drawing board, shelving), separate 1,000sf annex bldg on lot	
Bicycle Storage - Impound	1	•												
Quiet Room	1	•	8	x	10	80	80	100	•				Existing: enclosed office room on first floor	
Laundry Closet	1	•	10	x	10	100	100							
Mud Room Vestibule / Ready Room	1	•	8	x	14	112	112							
Unisex Toilet Room	1	•	8	x	10	80	80							
Unisex Toilet Room / Shower Room	3	•	9	x	10	90	270	120	•				Existing: one unisex toilet / shower in basement	
Men's Locker Room	1	•	20	x	26	520	520	400	•				Existing: basement open air locker room (12 lockers)	
Women's Locker Room	1	•	10	x	20	200	200							
Server Room / Telecom Closet	1	•	10	x	15	150	150	20	•				Existing: server wall mounted rack (basement)	
Office Support Spaces (PS HQ) Subtotal							4,488	2,580						

AREAS	QTY	Markup	NSF	
Office Area Subtotals			7,348	3,400
Circulation / Building Infrastructure		30%	2,204	
Future Expansion		10%	735	
Total Office Area			10,287	
Warehouse Shop Subtotals			-	
Circulation / Building Infrastructure		15%	-	
Future Expansion		10%	-	
Total Warehouse & Shop Area			-	
TOTAL PROJECT AREA			10,287	

ROOM	QTY	ENCLOSED OFFICE	OPEN OFFICE	W	x	L	AREA	TOTAL AREA NSF	CURRENT SIZE	ENCLOSED OFFICE	OPEN OFFICE	SHARED OFFICE	NOTES	EMPLOYEE
Public Works Department - Administration Offices														
Administration														
Public Works Director/City Engineer	1	•		12	x	16	192	192	100				Existing: large u-shape workstation, computer, printer, (2) chairs	Chris Randall
Public Works Assistant	1	•		10	x	12	120	120	140				Existing: (3) workstations, office server, shelves, map boards, large printer, drawing bins, chair storage, tv	Sheri Bartholomew
Public Works Personnel	1	•		10	x	12	120	120						
Public Works Personnel	1	•		10	x	12	120	120						
Subtotal	4							552	240					
Public Works Department - Streets & Facilities Offices														
Future Division														
Supervisor	1	•		10	x	12	120	120						
Utility Workers	5		•	5	x	5	25	125						
Crew Room	1		•	15	x	15	225	225						
Future Division														
Supervisor	1	•		10	x	12	120	120						
Utility Workers	5		•	5	x	5	25	125						
Crew Room	1		•	15	x	15	225	225						
Streets Division														
Supervisor	1	•		10	x	12	120	120	160				Existing: 8 workstations, computers, phones, storage cabinet	
Street Sweeper	1		•	5	x	5	25	25						Jose Herrera
Utility Workers	6		•	5	x	5	25	150						Gregg, Daniel, Shayne, Marco, Karee, Jack

Crew Room	1	•	15	x	15	225	225		
Facilities Maintenance Division									
Facilities Maintenance Technician	1	•	10	x	12	120	120		Joe Rickard
Utility Workers	1	•	5	x	5	25	25		
Subtotal	9						665		
Public Works Department - Parks Maintenance									
Parks Maintenance									
Supervisor	1	•	10	x	12	120	120		Chris Sliwka
Maintenance Staff	9	•	5	x	5	25	225		
Seasonal Maintenance	8	•	-	x	-	-	-		
Crew Room	1	•	15	x	15	225	225		
Facilities									
Staff	1	•	5	x	5	25	25		-
Subtotal	1						595	1100 SF	Existing: 3 office areas, kitchenette, locker room, restroom, storage, circulation
Total Employees (FT & Seasonal)	14						1,337		

Office Support Spaces														
ROOM	QTY	ENCLOSED OFFICE	OPEN OFFICE	W	x	L	AREA	TOTAL AREA NSF	CURRENT SIZE	ENCLOSED OFFICE	OPEN OFFICE	SHARED OFFICE	NOTES	EMPLOYEE
Entry Vestibule	1	•		10	x	10	100	100						
Lobby / Waiting Area	1	•		20	x	15	300	300						
Reception Counter	1	•		10	x	15	150	150						
Conference Room (small)	2	•		16	x	19	300	600	30		•		4 - 6 people Existing: hallway standing room only w/ white board	
Conference Room (medium)	1	•		16	x	25	400	400						
Conference Room (large)	1	•		20	x	30	600	600					15 - 25 people	
Copy/Workroom	2	•		10	x	10	100	200						
Lunch Room/Break Room, Kitchenette	1	•		30	x	50	1,500	1,500	120				Existing kitchenette: sink, dishwasher, trash bin, fridge, 9' counter w/ uppers/lowers, coffee mkr, micro, no seating	
Mud Room w/ Wash-down Area	2	•		10	x	15	150	300						
Laundry Room	1	•		10	x	10	100	100						
Dry Room	1	•		10	x	16	160	160						
Locker Area	1	•		30	x	40	1,200	1,200	70				Existing: 16 sm lockers, 1 lg locker unit, minimal aisle clearance, city server, clothes rack, storage above lockers	
Lav Area	1	•		15	x	20	300	300						
Water Closets	6	•		9	x	10	90	540						
Unisex Restroom - Private	3	•		9	x	10	90	270						
Unisex Restroom - Public	1	•		9	x	10	90	90	70				Off hallway	
Shower Rooms	4	•		15	x	10	150	600						
Changing Rooms	4	•		15	x	10	150	600						
Storage: Office Supply	3	•		6	x	8	48	144						
Storage: Files	1	•		10	x	10	100	100						
Storage: Conference Room	2	•		2	x	10	20	40						
General Storage	1	•		10	x	10	100	100	50				Existing: storage locker, other	
Emergency Sleeping Rooms (Storage)	4	•		8	x	10	80	320						
Emergency Management Office	1	•		10	x	10	100	100						
Storage: Emergency Management	1	•		20	x	15	300	300						
Storage: Archive (finance storage)	4	•		12	x	25	300	1,200						
Storage: Record Drawing Library, Plotter	1	•		10	x	16	160	160						
Janitor Closet	2	•		10	x	10	100	200						

SCADA / Radio Closet	1	•		8	x	10	80	80							
Covered Patio	1		•	10	x	20	200	200							
Server Room / Telecom Closet	1	•		10	x	15	150	150							verify ventilation requirements w/ owner
Office Support Spaces Subtotal								11,104							(included in office subtotal above - 1,100SF)

Warehouse & Shop Spaces

ROOM	QTY	ENCLOSED OFFICE	OPEN OFFICE	W	x	L	AREA	TOTAL AREA NSF	CURRENT SIZE	ENCLOSED	OPEN	SHARED	NOTES	EMPLOYEE
Fleet Service Heavy Equipment Mechanic	1	•		10	x	10	100	100						Mike Dale
Mechanic Service Area	2		•	10	x	10	100	200					wet clothing area, work station only	
Fleet Service Counter	1		•	15	x	15	225	225					delivery storage area	
Fleet Vehicle Repair Bays, Carport	1		•	60	x	80	4,800	4,800	700				Existing: x2 repair bays w/ in-place lift, pull-in only, misc part/tool storage along walls, metal shelf units along wall, tool carts, white board, misc shop equipment, coat rack	
Fleet Storage: Small-Med. Vehicle Equip. Parts	1	•		12	x	20	240	240	100				Existing: small part drawers/shelves, open shelf parts, boxed parts	
Fleet Storage: Large Vehicle Equipment Parts	1	•		20	x	20	400	400						
Fleet Storage: Fleet Waste Chemical	1	•		10	x	10	100	100					include conveyance systems to service bays	
Fleet Storage: Fleet Chemical	1	•		10	x	10	100	100	120		•		Existing: Outdoor covered area for chem storage/waste drums	
Fleet Storage: Fleet Tools	1		•	15	x	15	225	225	100				Existing: misc tools stored in carts, tools hung on walls,	
Fleet Storage: Fabrication Area	1		•	15	x	15	225	225						
Fleet Storage: Fabrication Area	1		•	6	x	9	54	54						
Unisex Restroom	1	•		12	x	10	120	120						
Sign Shop	1	•		20	x	20	400	400						
Vehicle Staging Area	1		•	12	x	20	240	240						
Paint Shop	1	•		20	x	20	400	400					provide ventilation	
Wood Shop	1	•		20	x	20	400	400					provide ventilation	
Machine & Welding Shop	1	•		20	x	20	400	400					provide ventilation	
Server Room / Telecom Closet	1	•		8	x	10	80	80					verify ventilation requirements w/ owner	
Storage: Park Tools	1		•	20	x	50	1,000	1,000						
Storage: Parks Equipment & Materials	1		•	20	x	50	1,000	1,000	3,600				Existing: x2 bays (1 sm, 1 lg), open shelf storage along walls, loft space for additional open, 7 lockers, work table, wall mounted equipment	
Storage:	1	•		10	x	20	200	200						
Storage: Streets & Drainage	1		•	20	x	50	1,000	1,000						
Storage: Future Division	1		•	20	x	50	1,000	1,000						
Storage:	1		•	20	x	50	1,000	1,000						
Storage:	1		•	20	x	50	1,000	1,000					includes pipe storage and cutting station	
Storage:	1		•	20	x	50	1,000	1,000						
Storage:	1		•	20	x	50	1,000	1,000						
Storage:	1		•	-	x	-	-	-						
Storage: Miscellaneous	1		•	20	x	50	1,000	1,000						
Storage: Paint	1	•		10	x	10	100	100					include paint cleaning area	
Storage: Decorations	1		•	10	x	20	200	200						
Storage: Property	1		•	-	x	-	-	-						
Vehicle Storage: Large Equipment	3		•	25	x	50	1,250	3,750						
Vehicle Storage: Enclosed - Heated/AC	4	•		16	x	50	800	3,200	600				Existing: riding equipment stored along perimeter	
Subtotal								25,159						

PROJECT TOTALS			
AREAS	QTY	Markup	NSF
Office Area Subtotals			19,789
Circulation / Building Infrastructure		25%	4,947
Future Expansion		10%	1,979
Total Office Area			26,715
			1,100
			<i>Existing: 3 office areas, kitchenette, locker room, restroom, storage, circulation</i>
Warehouse Shop Subtotals			25,159
Circulation / Building Infrastructure		15%	3,774
Future Expansion		10%	2,516
Total Warehouse & Shop Area			31,449
TOTAL PROJECT AREA			58,164

Yard Spaces

SPACE	QTY	COVERED	UNCOVERED	W	x	L	AREA	TOTAL AREA NSF	CURRENT SIZE	ENCLOSED	OPEN	SHARED	NOTES	EMPLOYEE
Covered Work Vehicle Parking	1	•		12	x	30	360	360						
Uncovered Work Vehicle Parking	1		•	12	x	30	360	360	2,100				<i>Existing: approx. 13 parking spaces for work trucks/equip</i>	
Parks Department Storage	-		•						800		•		<i>Existing: behind fleet maintenance bldg</i>	
Covered Material Storage: Sanding Rock?	1	•		30	x	30	900	900	600				<i>Existing: 2 Bays</i>	
Covered Material Storage: Cold Mix	1	•		20	x	25	500	500						
Material Storage Yard #1: -	1		•	20	x	25	500	500	900		•		<i>Existing: 1 Bay, next to admin bldg.</i>	
Material Storage Yard #2: -	1		•	20	x	25	500	500	500		•		<i>Existing: 1 Bay, next to decant area</i>	
Material Storage Yard #3: -	1		•	20	x	25	500	500	250		•		<i>Existing: 1 Bay, b/t fueling area & chloride tank</i>	
Material Storage Yard #4: -	1		•	20	x	25	500	500	900		•		<i>Existing: 2 Bays, next to covered material storage</i>	
Material Storage: Dirt & Debris	1		•	20	x	25	500	500						
Material Storage: Catch Basin Waste Material	1		•	20	x	25	500	500						
Sand Bagging Area	1		•	20	x	25	500	500						
Equipment Storage	1		•	100	x	50	5,000	5,000	4,200		•		<i>Existing: uncovered area outdoors, various equipment, forklifts, spreaders, road signage equipment, pellets, wheelbarrow, plows</i>	
Power Generator	1		•	15	x	20	300	300	1,700		•		<i>Existing: includes sw corner of lot adj to storage bldg</i>	
Fueling Station	1	•		20	x	20	400	400	650		•		<i>Existing: uncovered area outdoors, adj to material storage yard #3</i>	
Wash Bays w/ Water Fill Station	2	•		25	x	35	875	1,750			•			
Disposal Area	2		•	20	x	50	1,000	2,000						
Decant Area	1	•		36	x	26	936	936	1,300		•		<i>Existing: uncovered area outdoors, adj to material storage yard #2</i>	
Deicer Tank	1		•	20	x	20	400	400						
Parks Material Yard	1		•	30	x	35	1,050	1,050						
Street Dept. Material Yard	1		•	30	x	35	1,050	1,050						
Environmental Services Material Yard	1		•	30	x	35	1,050	1,050						
AREAS	QTY						Markup	NSF						
Yard Space Subtotals								19,556						
Circulation / Building Infrastructure							25%	4,889						
Future Expansion							10%	1,956						
Total Yard Area								26,401						

Parking Areas														
SPACE	QTY	COVERED	UNCOVERED	W	X	L	AREA	TOTAL AREA NSF	CURRENT SIZE	ENCLOSED	OPEN	SHARED	NOTES	EMPLOYEE
Staff Parking				-	x	-	-	-						
Off-Site Parking				-	x	-	-	-						
Water Parking				-	x	-	-	-						
PW Work Vehicle Parking (all departments)	13			-	x	-	-	-					Existing: (8) striped staff/crew spaces in lot near access gate w/(3) tandem spaces, (2) truck spaces near storage bldg.	
PD Parking	38			-	x	-	-	-					Existing: (38) spaces in lot w/ ada spots	
Parks Parking				-	x	-	-	-						
Proprty / Management				-	x	-	-	-						
Non-profit Partners Parking				9	x	20	180	-						
PW Visitor Parking	3			-	x	-	-	-					Existing: 3 spaces, front of admin	
PD Visitor Parking	8			-	x	-	-	-					Existing: (8) spaces north of main entrance w/ ada spots	
Parking Total (per zoning)				9	x	20	180	-						
Parking Total	62													

Employee Count			
DEPARTMENT	FULL TIME	SEASONAL	FUTURE
Leadership & Admin (PW)	2	0	2
Ops Crew, Facilities & Parks Maintenance (PW)	10	0	0
Fleet Mechanic (PW)	1	0	0
Police Department	21	0	4
Subtotals	34	0	6
STAFF TOTALS	40		

PRELIMINARY PROJECT BUDGET (INCLUDING POLICE)

Concept 1 with PEMB (Pre-Engineered Metal Building) Construction Type

Construction Hard Costs

Area Description	Low	High
Building A – Admin Building (PEMB) 33,600 sf x \$250/325 =	\$8,400,000	\$10,920,000
Building B – Warehouse/Garage (PEMB) 23,040 sf x \$250/325 =	\$5,760,000	\$7,488,000
Building C – Vehicle Wash Bay:	\$370,000	\$370,000
Building D – Bulk Storage Canopy:	\$415,000	\$415,000
Building E – Decant/ De-watering Canopy:	\$227,000	\$227,000
Building F – Sand Bag Canopy:	\$190,000	\$190,000
Site Development Costs: 274,428 sf x \$18 / \$33 =	\$4,939,700	\$9,056,120
Off-site Improvements:	\$450,000	\$450,000
Construction Cost Sub-Total:	\$20,751,700	\$29,116,120

Estimating Construction Contingency at 10%: \$2,075,170 \$2,911,612

Total Estimated Construction Costs, January 2025: \$22,826,870 \$32,027,732
VE Options (none at this time) - -

Escalation- Assumed construction start March 2026
±12 months at 4% / annually = \$913,075 \$1,281,109

Construction Cost with Escalation: \$23,739,945 \$33,308,841

Construction Soft Costs

General Requirements: 3.5%	\$830,898	\$1,165,809
General Conditions: 3.5%	\$830,898	\$1,165,809
Office Overhead and Profit: 3.5%	\$830,898	\$1,165,809
Bonds/Insurance/various taxes:	\$800,000	\$800,000

Soft Costs Sub-Total: \$3,292,694 \$4,297,427

Total Anticipated Construction Costs: \$27,032,639 \$37,606,268

Soft Costs

Permitting Fees (Land Use, Building, Engineering, SDC's):	\$500,000	\$500,000
Architectural/Engineering Fee at 10% of Total Construction Cost:	\$2,703,264	\$3,760,627
Reimbursable expenses (printing, bidding, travel, etc.):	\$30,000	\$30,000
City Project Management Fee:	\$500,000	\$500,000
Traffic Impact Analysis:	\$15,000	\$15,000
Special Inspections (third party during construction):	\$50,000	\$50,000
Utility Locates and Video Scoping:	\$5,000	\$5,000
FF&E:	\$700,000	\$700,000
Legal:	\$30,000	\$30,000
Insurance:	\$50,000	\$50,000
Estimating Contingency at 5% of soft costs:	\$229,163	\$282,031

Total Estimated Soft Costs: \$4,812,427 \$5,922,658

Total Estimated Project Cost: \$31,845,066 \$43,528,926

Concept 2 with PEMB (Pre-Engineered Metal Building) Construction Type

Construction Hard Costs

Area Description	Low	High
Building A – Admin Building (PEMB) 29,600 sf x \$250/325 =	\$7,400,000	\$9,620,000
Building B – Warehouse/Garage (PEMB) 23,040 sf x \$250/325 =	\$5,760,000	\$7,488,000
Building C – Vehicle Wash Bay:	\$370,000	\$370,000
Building D – Bulk Storage Canopy:	\$415,000	\$415,000
Building E – Decant/ De-watering Canopy:	\$227,000	\$227,000
Building F – Sand Bag Canopy:	\$190,000	\$190,000
Site Development Costs: 274,428 sf x \$18 / \$33 =	\$4,939,700	\$9,056,120
Off-site Improvements:	\$450,000	\$450,000
Construction Cost Sub-Total:	\$19,751,700	\$27,816,120

Estimating Construction Contingency at 10%: \$1,975,170 \$2,781,612

Total Estimated Construction Costs, January 2025: \$21,726,870 \$30,597,732
VE Options (none at this time) - -

Escalation- Assumed construction start March 2026
±12 months at 4% / annually = \$869,075 \$1,223,909

Construction Cost with Escalation: \$22,595,945 \$31,821,641

Construction Soft Costs

General Requirements: 3.5%	\$790,858	\$1,113,757
General Conditions: 3.5%	\$790,858	\$1,113,757
Office Overhead and Profit: 3.5%	\$790,858	\$1,113,757
Bonds/Insurance/various taxes:	\$800,000	\$800,000

Soft Costs Sub-Total: \$3,172,574 \$4,141,271

Total Anticipated Construction Costs: \$25,768,519 \$35,962,912

Soft Costs

Permitting Fees (Land Use, Building, Engineering, SDC's):	\$500,000	\$500,000
Architectural/Engineering Fee at 10% of Construction Cost:	\$2,576,852	\$3,596,291
Reimbursable expenses (printing, bidding, travel, etc.):	\$30,000	\$30,000
City Project Management Fee:	\$500,000	\$500,000
Traffic Impact Analysis:	\$15,000	\$15,000
Special Inspections (third party during construction):	\$50,000	\$50,000
Utility Locates and Video Scoping:	\$5,000	\$5,000
FF&E:	\$700,000	\$700,000
Legal:	\$30,000	\$30,000
Insurance:	\$50,000	\$50,000
Estimating Contingency at 5% of soft costs:	\$222,843	\$273,815

Total Estimated Soft Costs: \$4,679,695 \$5,750,106

Total Estimated Project Cost: \$30,448,214 \$41,713,018

Concept 3 with PEMB (Pre-Engineered Metal Building) Construction Type

Construction Hard Costs

Area Description	Low	High
Building A – Admin Building (PEMB) 32,000 sf x \$250/325 =	\$8,000,000	\$10,400,000
Building B – Warehouse/Garage (PEMB) 23,040 sf x \$250/325 =	\$5,760,000	\$7,488,000
Building C – Vehicle Wash Bay:	\$370,000	\$370,000
Building D – Bulk Storage Canopy:	\$415,000	\$415,000
Building E – Decant/ De-watering Canopy:	\$227,000	\$227,000
Building F – Sand Bag Canopy:	\$190,000	\$190,000
Site Development Costs: 300,564 sf x \$18 / \$33 =	\$5,410,152	\$9,918,612
Off-site Improvements:	\$450,000	\$450,000
Construction Cost Sub-Total:	\$20,822,152	\$29,458,612
Estimating Construction Contingency at 10%:	\$2,082,215	\$2,945,861
Total Estimated Construction Costs, January 2025:	\$22,904,367	\$32,404,473
VE Options (none at this time)	-	-
Escalation- Assumed construction start March 2026 ±12 months at 4% / annually =	\$916,175	\$1,296,179
Construction Cost with Escalation:	\$23,820,542	\$33,700,652

Construction Soft Costs

General Requirements: 3.5%	\$833,719	\$1,179,523
General Conditions: 3.5%	\$833,719	\$1,179,523
Office Overhead and Profit: 3.5%	\$833,719	\$1,179,523
Bonds/Insurance/various taxes:	\$800,000	\$800,000
Soft Costs Sub-Total:	\$3,301,157	\$4,338,569
Total Anticipated Construction Costs:	\$27,121,699	\$38,039,221

Soft Costs

Permitting Fees (Land Use, Building, Engineering, SDC's):	\$500,000	\$500,000
Architectural/Engineering Fee at 10% of Construction Cost:	\$2,712,170	\$3,803,922
Reimbursable expenses (printing, bidding, travel, etc.):	\$30,000	\$30,000
City Project Management Fee:	\$500,000	\$500,000
Traffic Impact Analysis:	\$15,000	\$15,000
Special Inspections (third party during construction):	\$50,000	\$50,000
Utility Locates and Video Scoping:	\$5,000	\$5,000
FF&E:	\$700,000	\$700,000
Legal:	\$30,000	\$30,000
Insurance:	\$50,000	\$50,000
Estimating Contingency at 5% of soft costs:	\$229,609	\$284,196
Total Estimated Soft Costs:	\$4,821,779	\$5,968,118
Total Estimated Project Cost:	\$31,943,478	\$44,007,339