Public Infrastructure Committee Meeting

September 26, 2022

Mayor Drotzmann called the meeting to order at 6:00pm. Councilor Peterson was present. Councilor Spicerkuhn was excused. City staff in attendance included: Assistant City Manager Mark Morgan, City Manager Byron Smith, Finance Director Mark Krawczyk, City Attorney Rich Tovey, Street Superintendent Ron Sivey, Wastewater Superintendent Bill Schmittle, and Planning Assistant Heather La Beau. Anderson Perry engineers Joshua Lott and Jay Marlow were in attendance.

Umatilla River Bridge PER

City Engineer, Joshua Lott presented information about the report for a new bridge. The Transportation System Plan has included a bridge over the Umatilla River since 1997. A precise location was not specified. A report was commissioned by the City of Umatilla, City of Hermiston, and Umatilla County to study the options for bridge placement. The optimal bridge location was determined to be the Punkin Center location. A traffic impact analysis was completed. Direct connections to the interstate, City of Umatilla residents, as well as undeveloped land west of the Umatilla River would be provided with this location. Land use and acquisition was discussed in the report. The Punkin Center location allows the project to be phase able for additional future connections. The bridge is not anticipated to be designated as a truck route. The Transportation System Plan will be updated within the next year or two. The Memorandum of Understanding (MOU) for the report is being presented to the City Council for adoption at tonight's meeting.

N 1st Reconstruction Project

Assistant City Manager Morgan stated the project will go out to bid in November and anticipate construction to begin early 2023. As demonstrated with PowerPoint slides, driveways were designed to eliminate vehicles backing onto the heavily trafficked arterial roadway. Some properties will lose the ability to park in the front of their businesses. On-Street parking will not be available. Needs of the businesses were considered as was overall safety and ADA compliance. The project is being funded by ODOT and will meet the State's ADA requirements. An informational handout is being delivered this week to businesses on N 1st St as well as business on W Hermiston Ave from 1st to 3rd. A gravel portion of the NW 3rd St detour was paved recently as part of the project.

Lift 3 and Lift 6 Project

Jay Marlow updated the committee on the lift projects. The contractor began work on lift station #6 at the intersection of Ridgeway and N 1st Place. The contractor for lift #3 began excavating for the pit underneath railroad right-of-way. Additional investigative work was requested by Union Pacific prior to boring. Ground penetrating radar survey work was done and the results have been submitted to the railroads for review. He is hopeful work can continue soon. The project may still be completed on time or it may be delayed until spring due to the time needed to complete the road replacement. Delays do increase the cost, however there is substantial savings over the long-term with the new system.

Regional Water System (RWS) Extension/Expansion

Amazon Data Services has requested cooling water be delivered to the proposed data centers located at the Feedville/Kelli location (PDX 138) by September of 2023. Design of the water delivery expansion began earlier this year. In order to meet the expected date, the existing potable line from 1st to Feedville will be extended to Kelli Blvd. The property owner will incur the costs associated with the extension. It is anticipated this line will serve the facility for the first 1 to 2 years. To meet capacity, the OSU extension will no longer use water from the line.

An additional system will simultaneously be constructed with a redundant 24" line that will take non-potable water from the river to service the entire facility. Once the line is operational, the city will then retain the potable line for future industrial users. The project is anticipated to go out to bid in November and begin construction at the beginning of the year.

DRAFT

Capital Improvement Projects (CIP) update

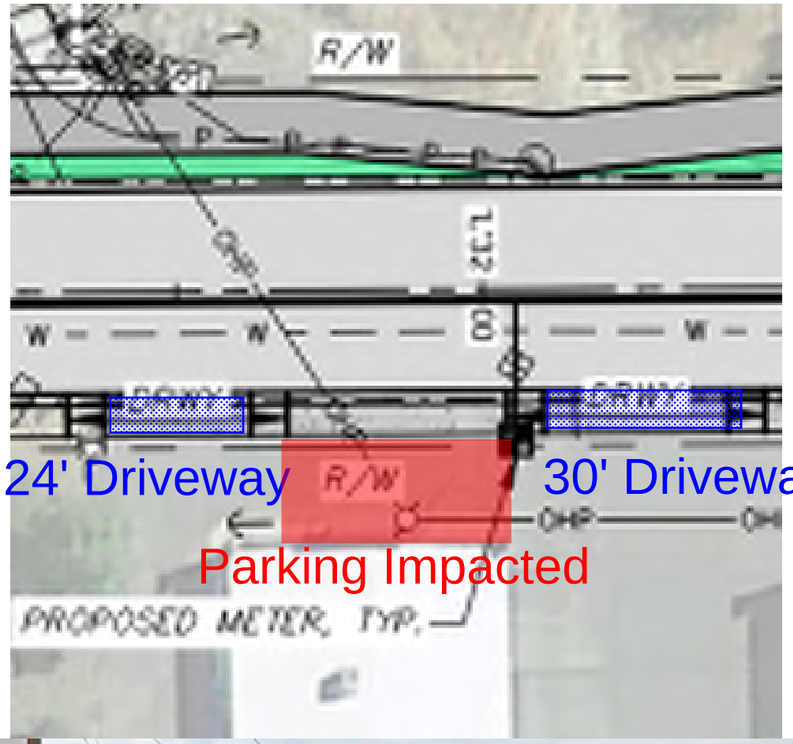
The CIP is updated every two years. Department heads have begun review of the plan to address any new projects and Anderson Perry will update cost estimates for existing projects. The updated plan should be ready for council adoption in January.

Adjourn

Mayor Drotzmann adjourned the meeting at 6:52pm.

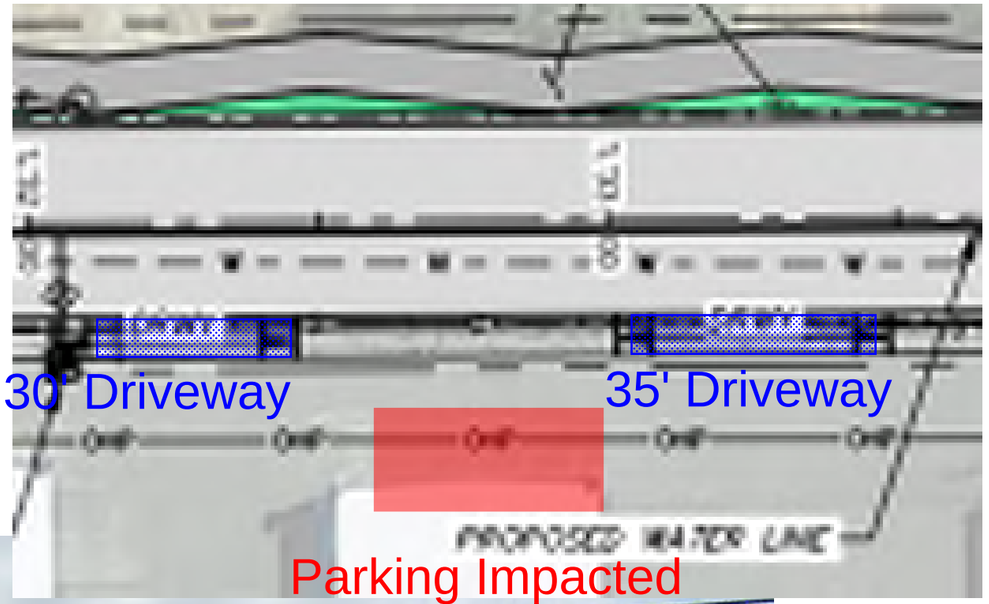
DRAFT

Identifier: 1,2
Parking Spots impacted: 4
Access Inhibited during construction: No

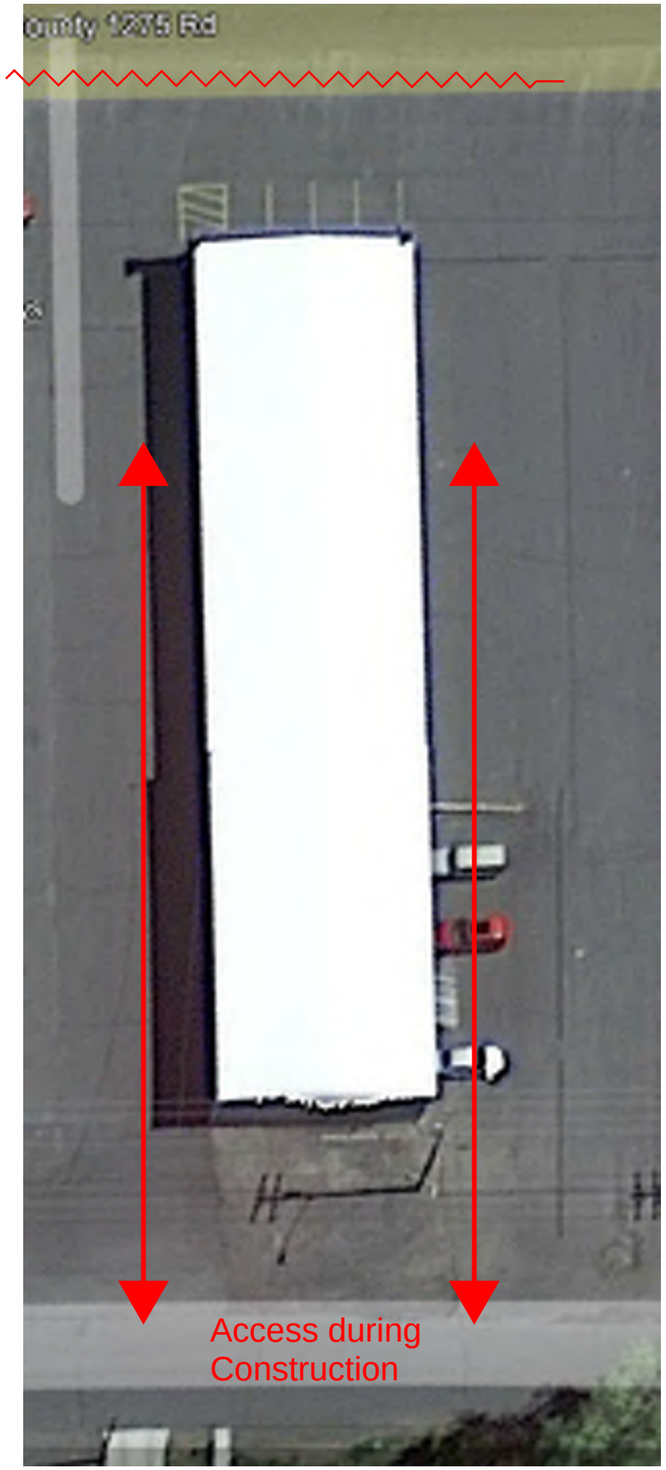


No Access during Construction

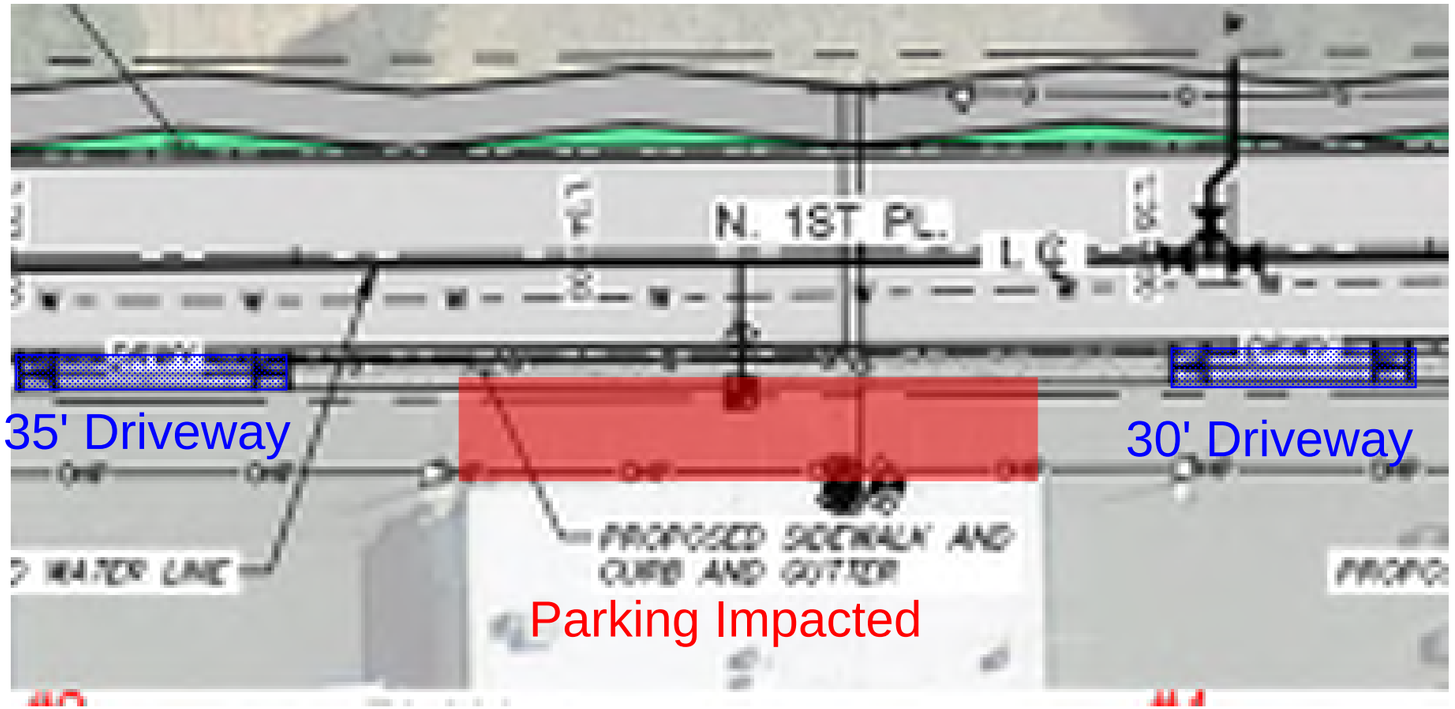
Identifier: 2,3
Parking Spots impacted: 4
Access Inhibited during construction: No



No Access during Construction

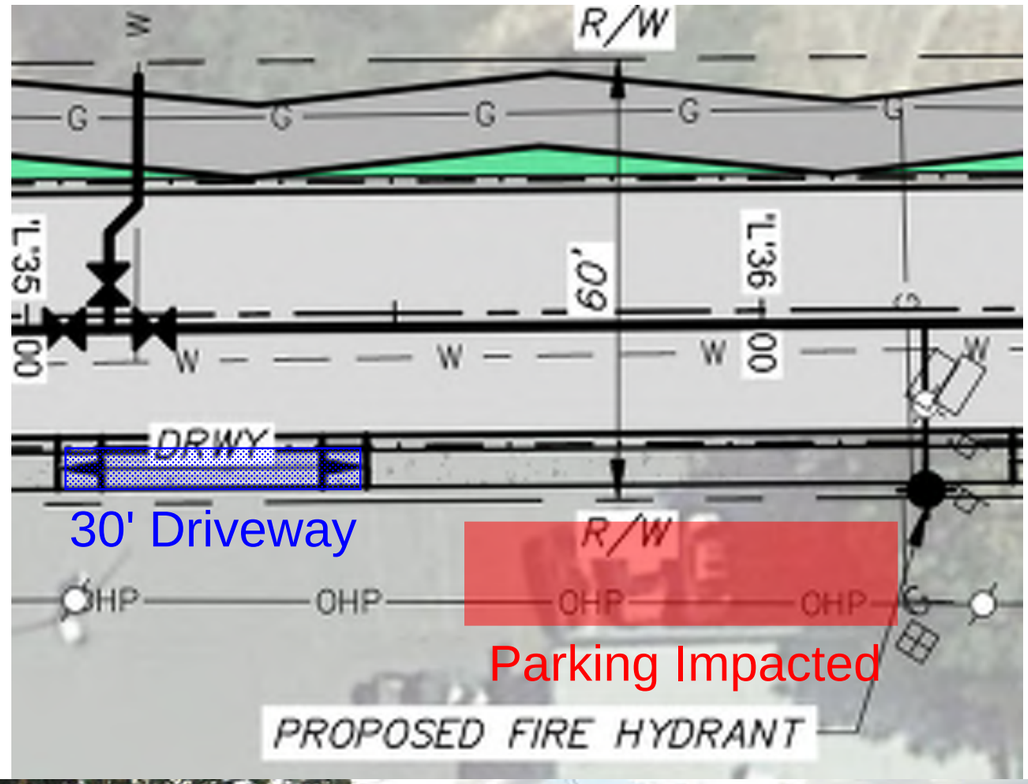


Identifier: 3,4
Parking Spots impacted: 11
Access Inhibited during construction: No



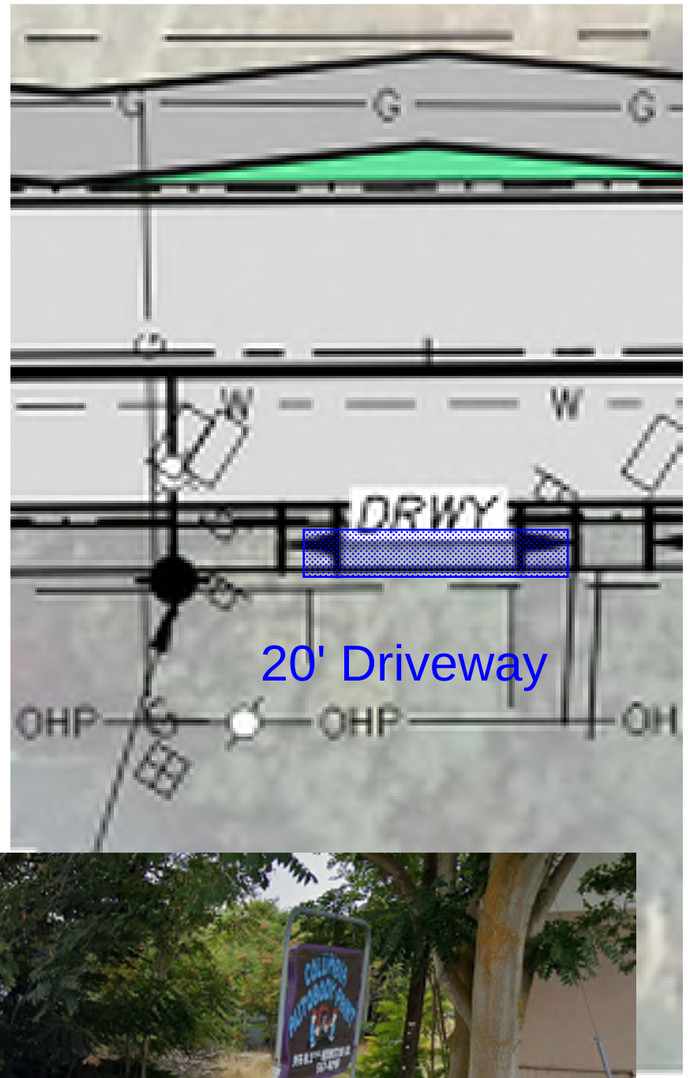
No Access during
Construction

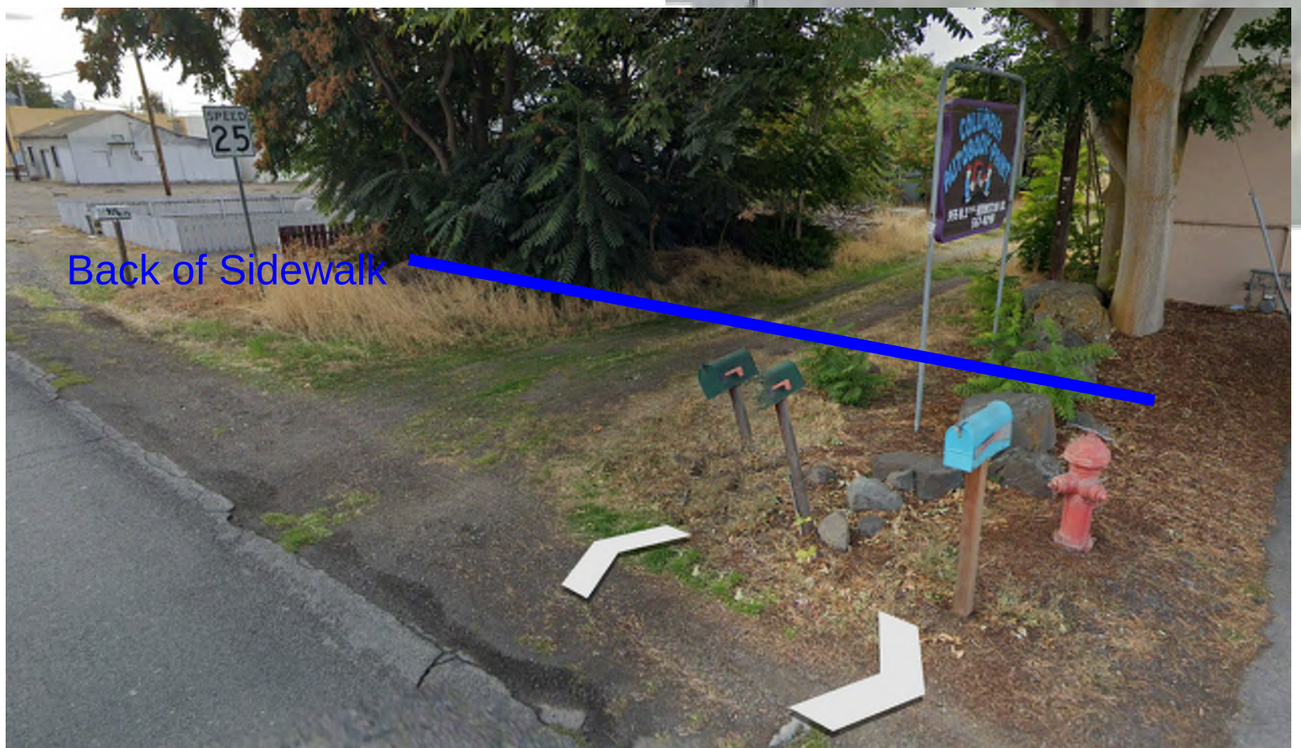
Identifier: 4
Parking Spots impacted: 9
Access Inhibited during construction: No



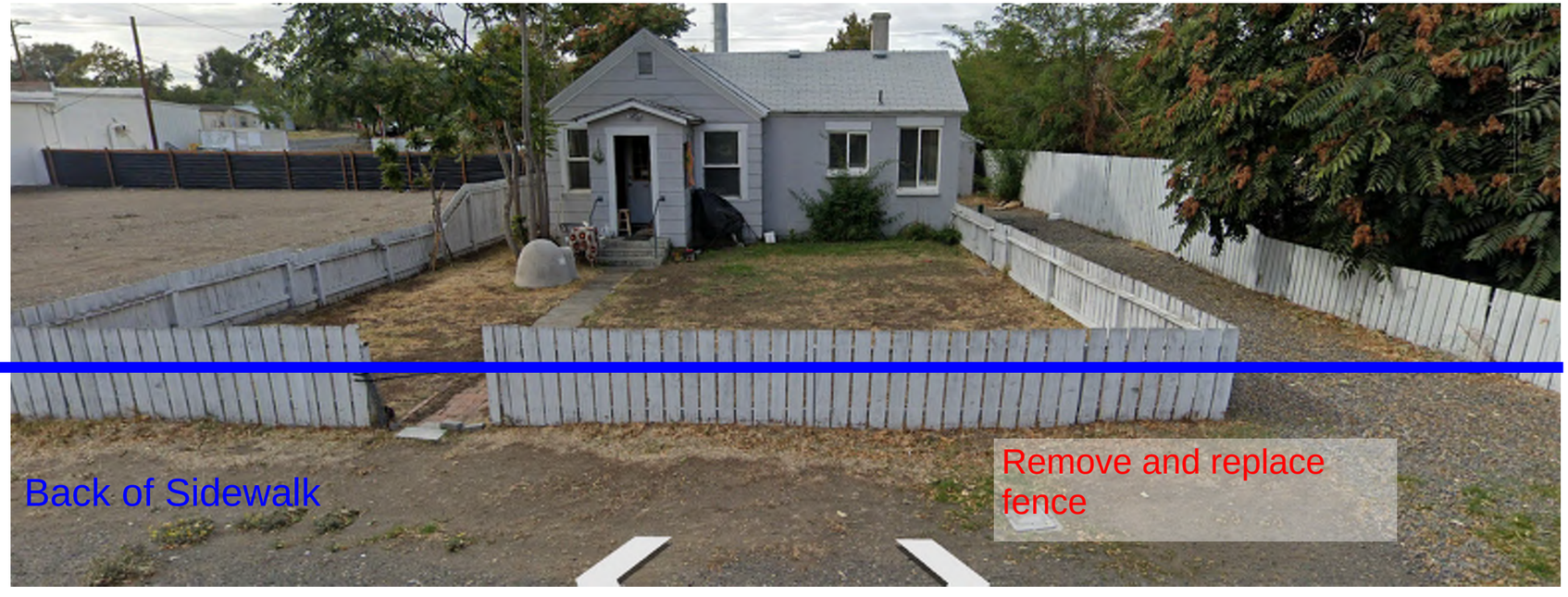
No Access during Construction

Identifier: 5
Parking Spots Impacted: None
Access Inhibited during construction: No

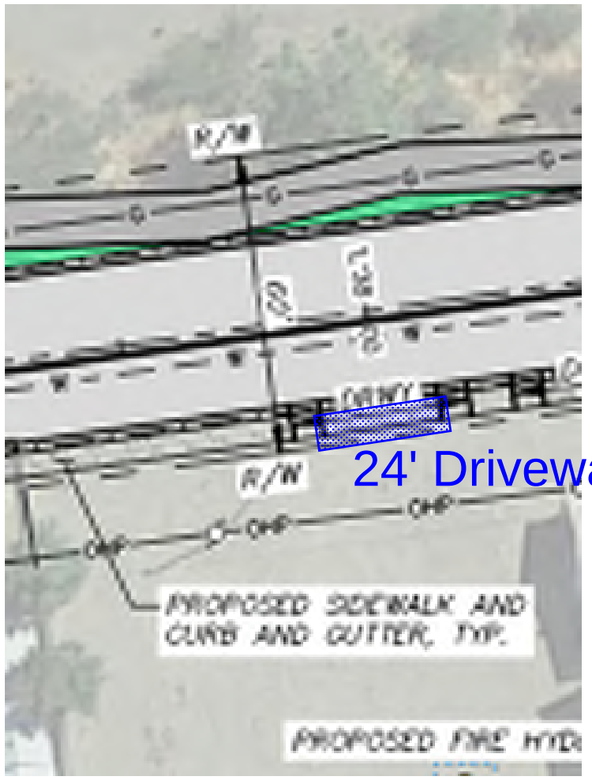




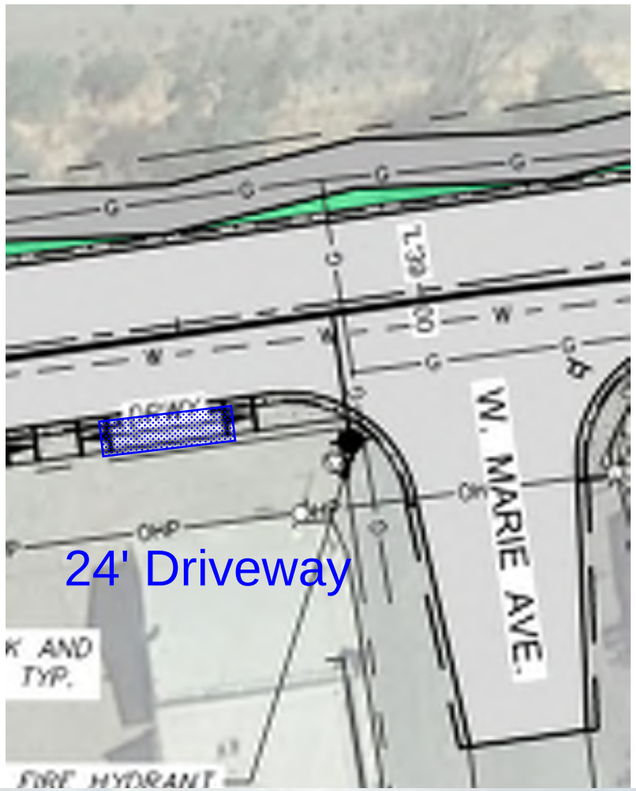
Identifier: 6
Parking Spots Impacted: None
Access Inhibited during construction: Yes



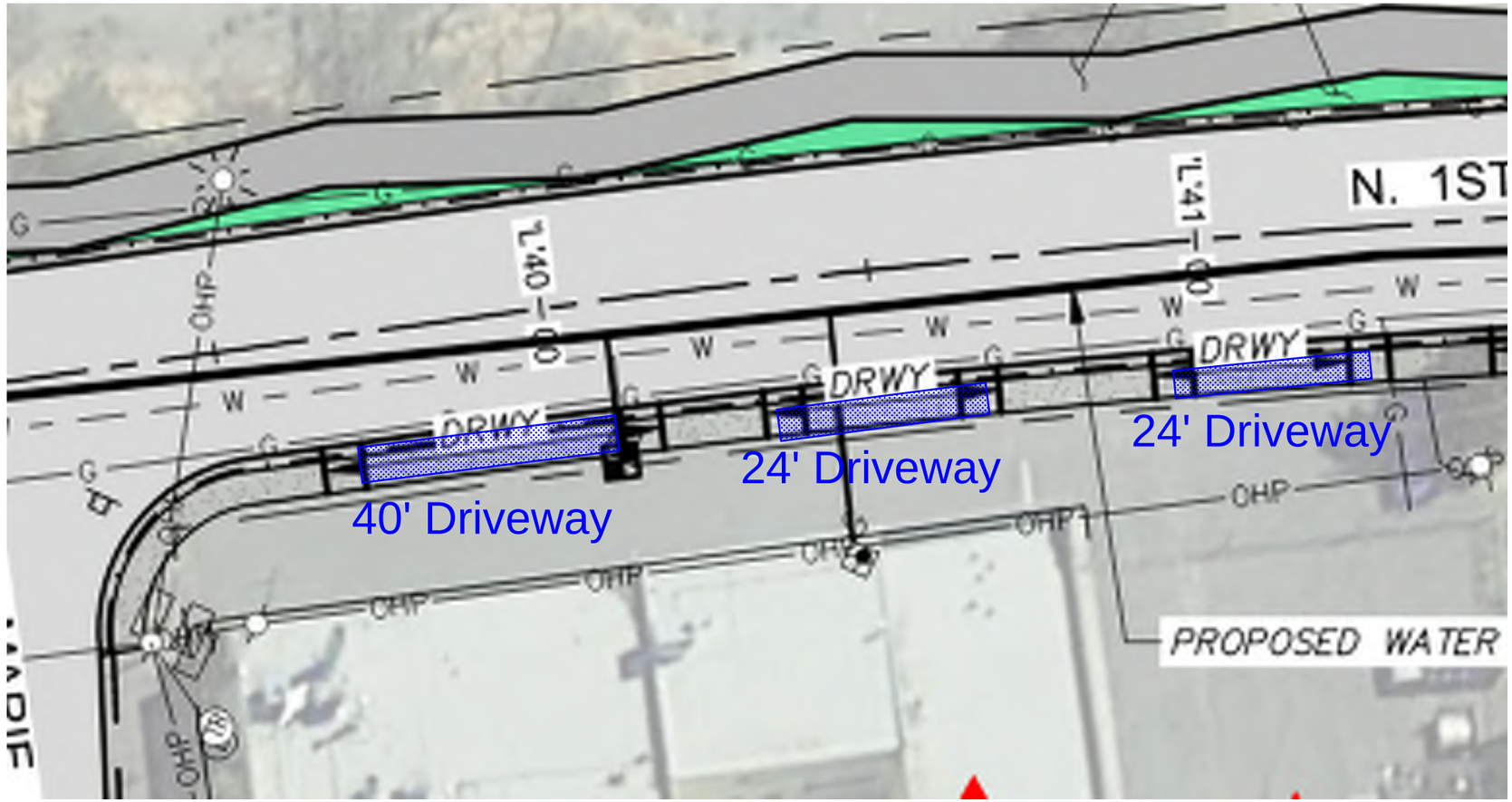
Identifier: 7
Parking Spots Impacted: None
Access Inhibited during construction: Yes



Identifier: 8
Parking Spots Impacted: None
Access Inhibited during construction: No

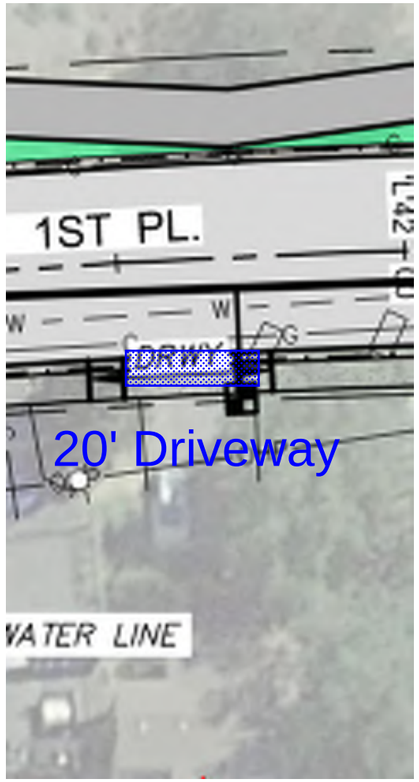


Identifier: 9,10,11
Parking Spots Impacted: 9
Access Inhibited during construction: Yes

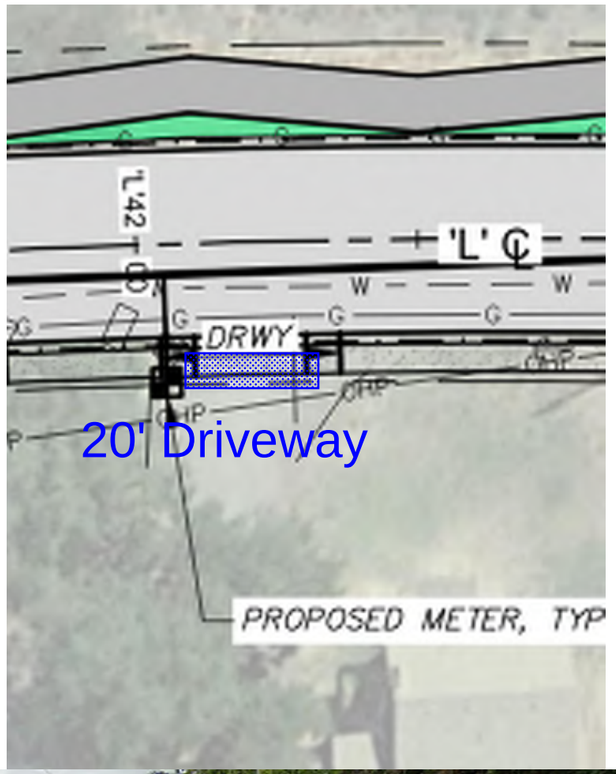


Identifier: 9,10,11
Parking Spots Impacted: 9
Access Inhibited during construction: Yes

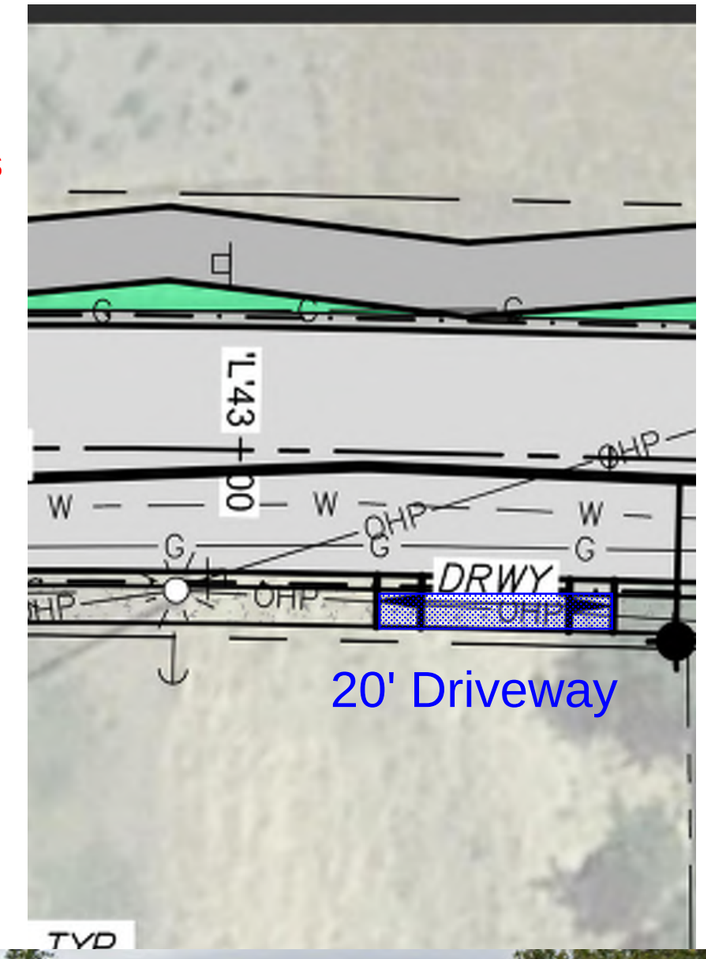
Identifier: 12
Parking Spots Impacted: None
Access Inhibited during construction: Yes



Identifier: 13
Parking Spots Impacted: None
Access Inhibited during construction: Yes

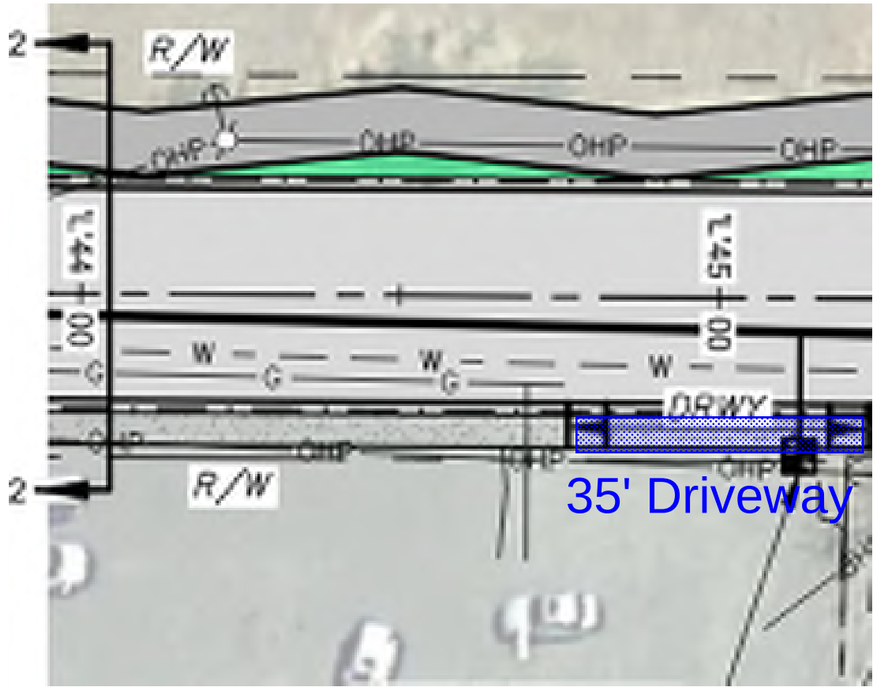


Identifier: 14
Parking Spots Impacted: None
Access Inhibited during construction: Yes

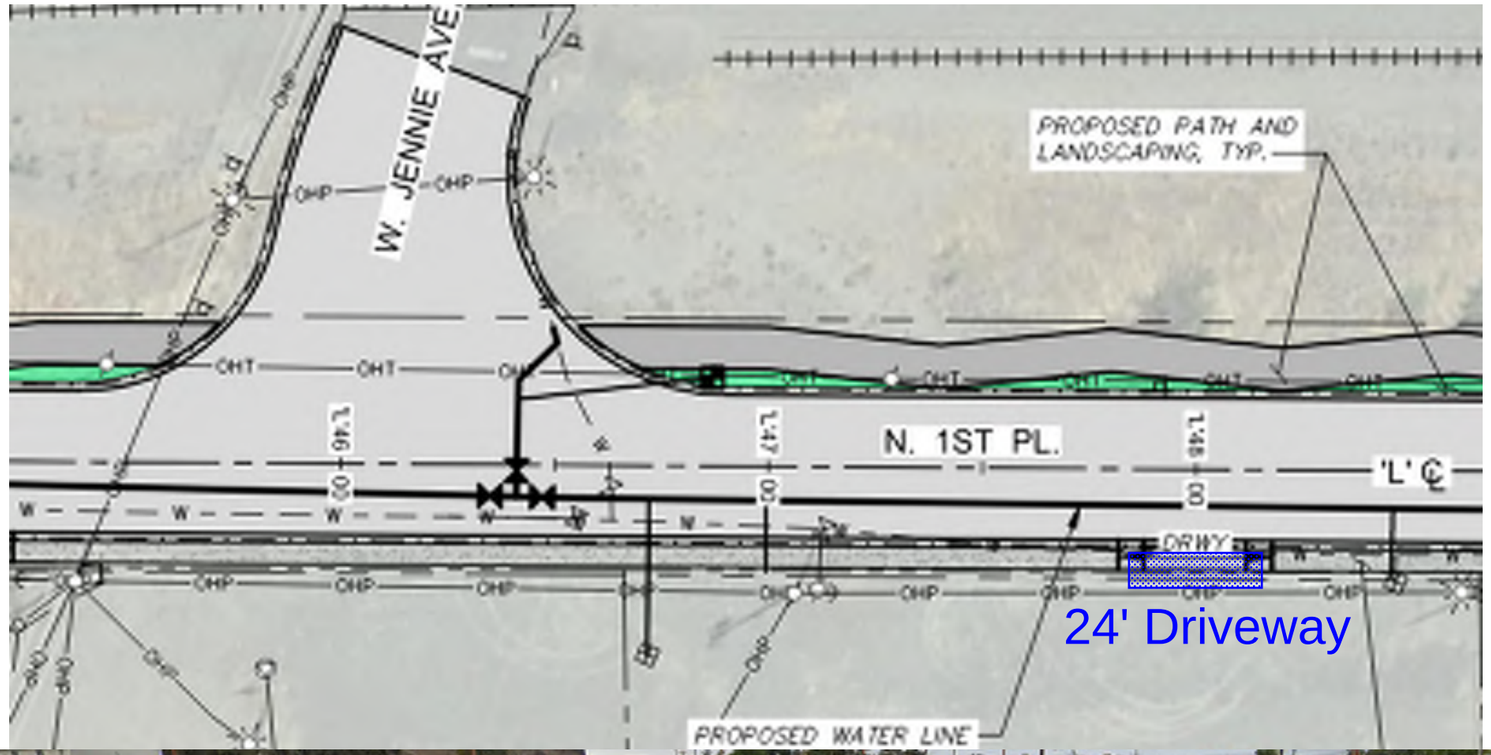


Local Access Required during Construction

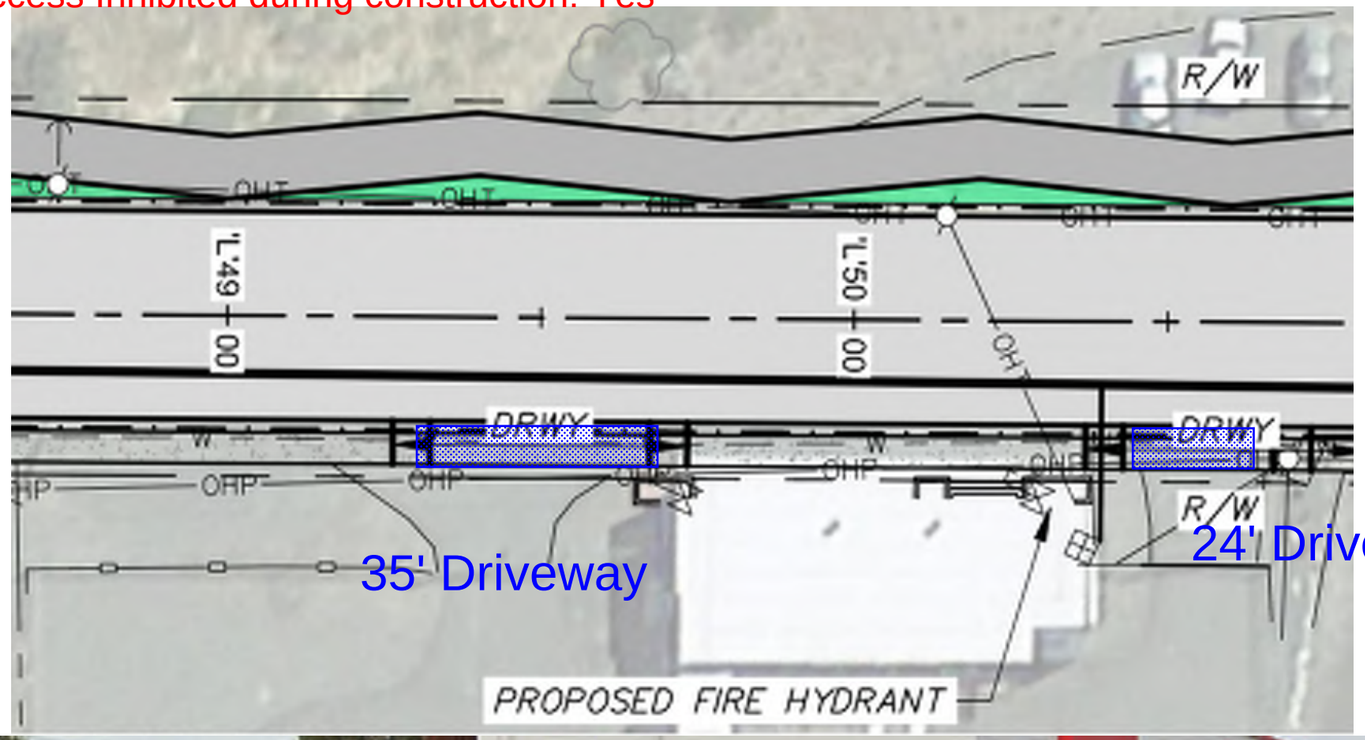
Identifier: 15
Parking Spots Impacted: None
Access Inhibited during construction: Yes



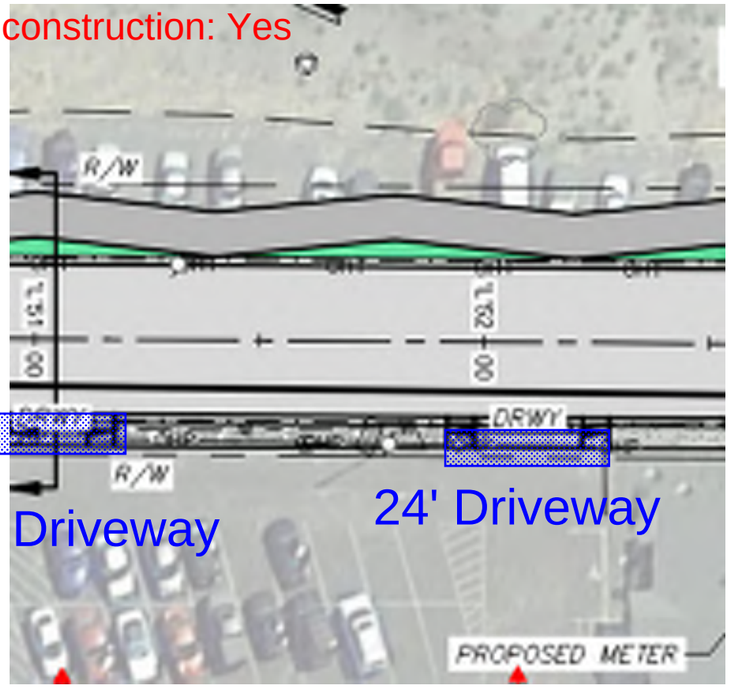
Identifier: 16
Parking Spots Impacted: None
Access Inhibited during construction: Yes



Identifier: 17,18
Parking Spots Impacted: None
Access Inhibited during construction: Yes



Identifier: 19,20
Parking Spots Impacted: None
Access Inhibited during construction: Yes

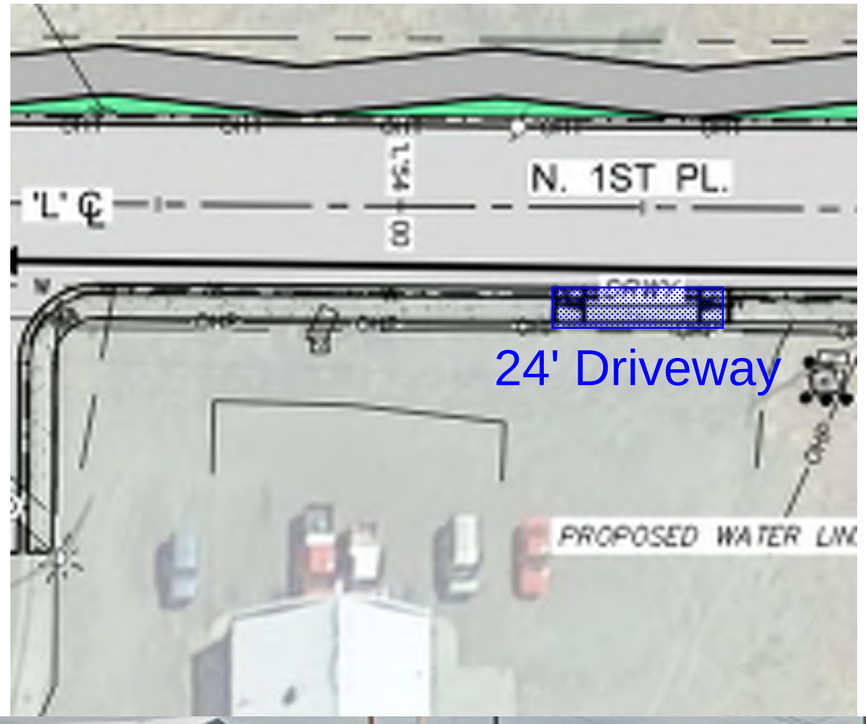


24' Driveway

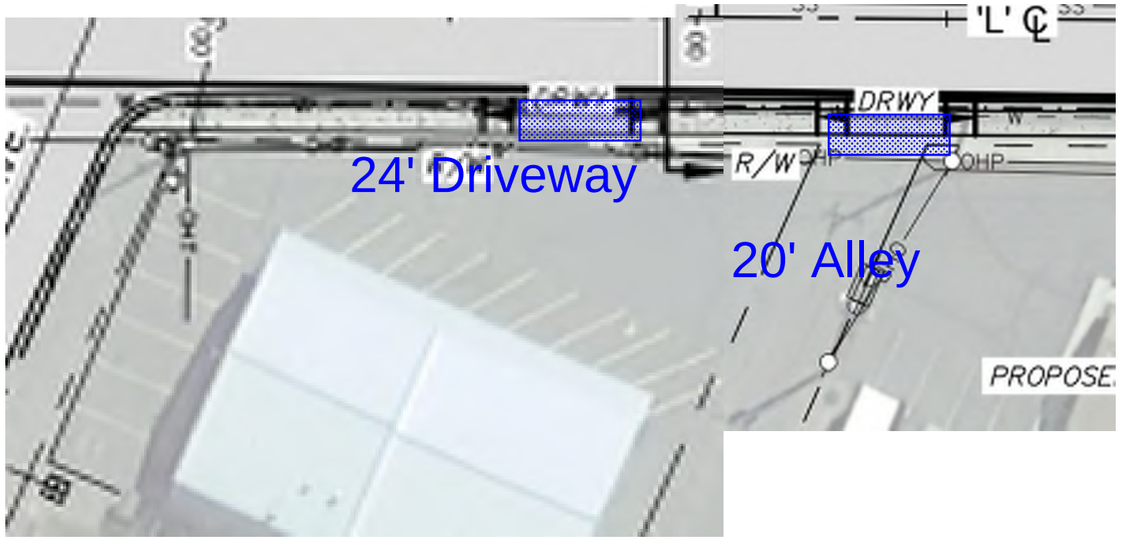
24' Driveway

Back of Sidewalk

Identifier:21
Parking Spots Impacted: None
Access Inhibited during construction: Yes

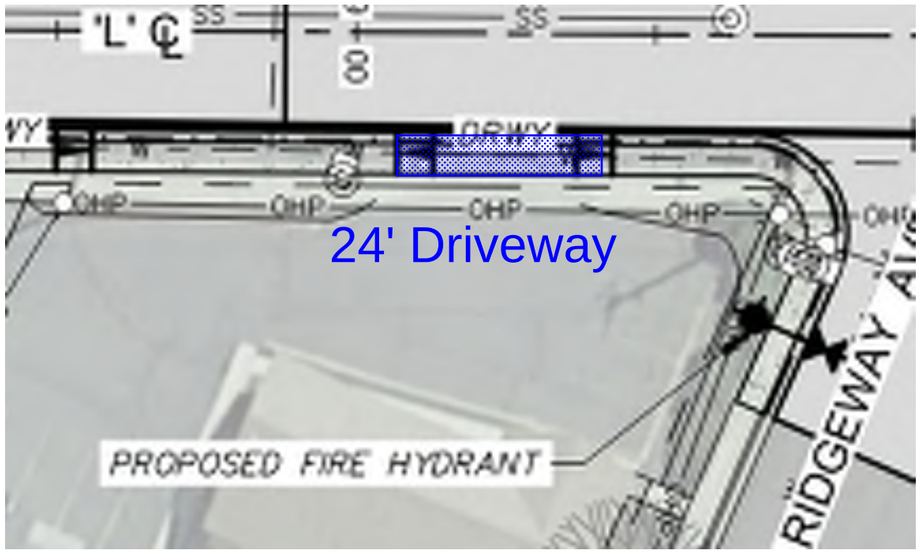


Identifier:23,24
Parking Spots Impacted: None
Access Inhibited during construction: No

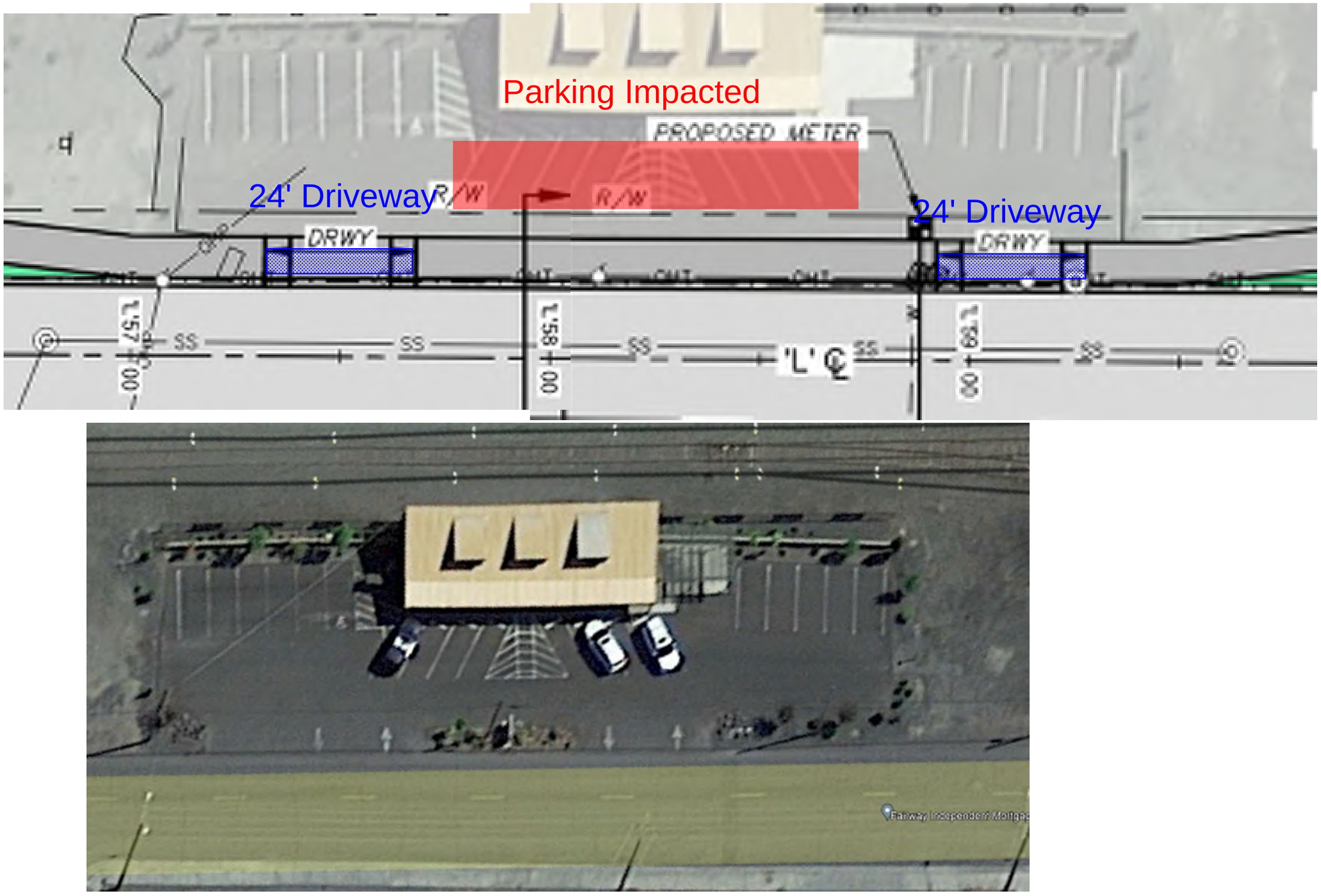


Access during
construction

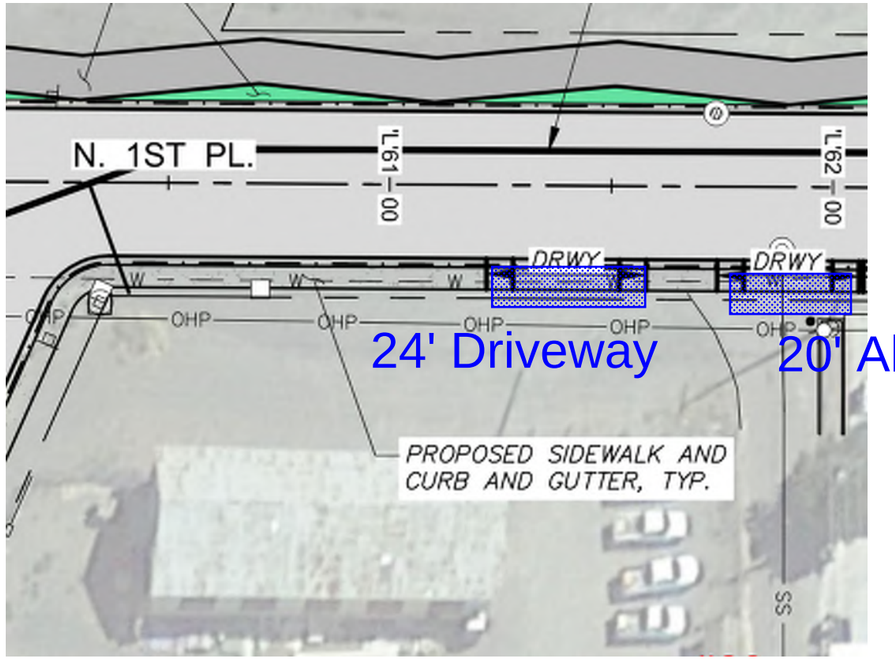
Identifier:26
Parking Spots Impacted: None
Access Inhibited during construction: No



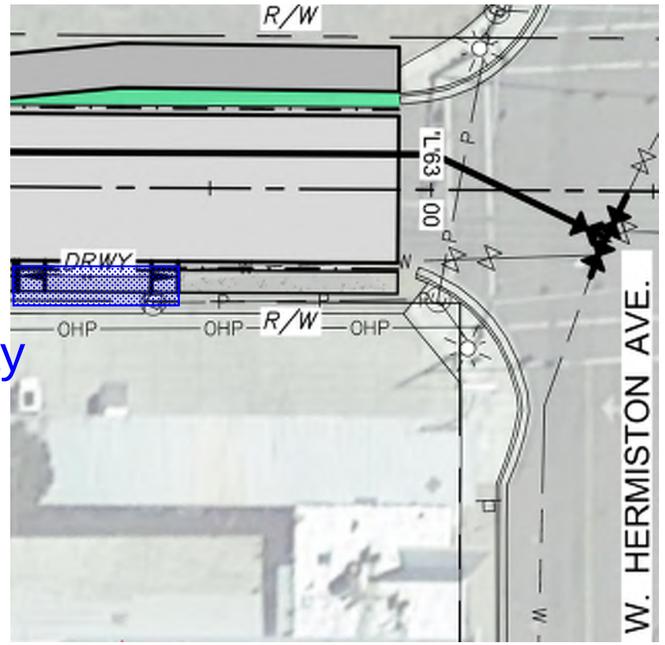
Identifier: 22,25
Parking Spots Impacted: 8
Access Inhibited during construction: Yes



Identifier:27,28
Parking Spots Impacted: None
Access Inhibited during construction: No



Identifier:29
Parking Spots Impacted: None
Access Inhibited during construction: Yes



24' Driveway

Customers park on Hermiston AVE. during construction operations

City of Hermiston, Oregon
Regional Water System Improvements (2023 to 2026) - Option 1

Phase 1 - Improvements for PDX138 (September 2023)

1. City of Hermiston would temporarily lease 1,200 gpm of their developed water right in RWS to Vadata. (Vadata needs 1,300 gpm and would use 100 gpm of their developed unused water right for the new PDX138 campus in addition to leasing 1,200 gpm from the City of Hermiston.)
2. Extend the City of Hermiston 16-inch PVC non-potable water line from S. 1st Street to Kelli Blvd.
3. Install a 12-inch DI water line on Kelli Blvd. from Penney Avenue to Feedville Road.
4. Install a valve/meter vault for the new campus.
5. Upgrade the existing City of Hermiston pump and motor in NPPS No. 2 from 780 gpm at 137 feet TDH to 2,080 gpm at approximately 215 feet TDH with a 150 HP motor and VFD.
6. Install a new 1000 KVA transformer at NPPS No. 2 and associated electrical and controls.

Phase 2 - Improvements for PDX146 (August 2024)

1. Vadata would upgrade the river IPS and NPPS No. 2 to supply an additional 2,500 gpm of newly developed non-potable water and install a 24-inch PVC non-potable water line along Feedville Road from NPPS No. 2 to Kelli Blvd. to supply 1,300 gpm to each new campus (PDX138 and PDX146).
2. The lease from the City of Hermiston would end once Phase 2 improvements are in place.
3. Install two new pumps at the river IPS with a capacity of 6,200 gpm at approximately 290 feet TDH with 600 HP motors and VFDs.
4. Upgrade the river IPS piping, valves, flowmeter, electrical, and controls.
5. Expand the footprint of NPPS No. 2 to accommodate two new pumps. The estimated footprint would encompass 400 square feet.
6. Install two new pumps at NPPS No. 2, each with a capacity of 2,600 gpm at approximately 215 feet TDH with 200 HP motors and VFDs.
7. Install all associated piping, valves, electrical, and controls pertaining to the new NPPS No. 2 expansion.
8. Install a new 24-inch PVC non-potable water line along Feedville Road from NPPS No. 2 to Kelli Blvd.
9. Install a valve/meter vault for the new campus.
10. Install a water supply well and domestic septic sewer service for the new campus.

Phase 3 - Improvements for PDX?? (January 2026)

1. Vadata would upgrade the river IPS and NPPS No. 2 to supply an additional 1,300 gpm of developed non-potable water (above and beyond Phase 2improvements) for the new campus located somewhere north and adjacent to Feedville Road.
2. Install one new pump at the river IPS with a capacity of 6,200 gpm at approximately 290 feet TDH with a 600 HP motor and VFD.
3. Upgrade the river IPS piping, valves, electrical, and controls.
4. Install two new pumps at NPPS No. 2, each with a capacity of 3,900 gpm at approximately 215 feet TDH with 300 HP motors and VFDs.
5. Install all associated piping, valves, electrical, and controls pertaining to the new pumps at NPPS No. 2.
6. Install a valve/meter vault for the new campus.
7. Install a water supply well and domestic septic sewer service for the new campus.

PHASE 1 (SEPTEMBER 2023)
NO IMPROVEMENTS NEEDED

PHASE 2 (AUGUST 2024)
UPGRADE PIPING, VALVES, AND FLOW METERS
INSTALL 2 NEW PUMPS AND MOTORS (6,2000 GPM WITH ~ 290' TDH, 600 HP)
INSTALL NEW PIPING, VALVES, AND FLOW METERS
UPGRADE ELECTRICAL AND CONTROL SYSTEM FOR NEW PUMPS AND MOTORS

PHASE 3 (JANUARY 2026)
UPGRADE PIPING, VALVES, AND FLOW METERS
INSTALL 1 NEW PUMP AND MOTOR (6,200 GPM WITH ~290' TDH, 600 HP)
UPGRADE ELECTRICAL AND CONTROL SYSTEM FOR NEW PUMP AND MOTOR

Port of Umatilla
Intake Pump Station (IPS)
Existing 42" Non-Potable PCCP Pipe
Vadata (Bonney Site)
SEE FIGURE 3
Calpine / Simplot
NPPS-1, NPPS-2 & WTP
Shearer's
24" PVC
SEE FIGURE 2 FOR CONNECTION DETAILS
Vadata (Hermiston Gen Site)
12" Gas Transmission Line
First Oregon and HGC
Wetland Areas
Vadata (Bonney Site)
0 350 700
SCALE IN FEET
0 500 1,000
SCALE IN FEET
N Highway 395
Umatilla River Rd
Umatilla River
Co 1275 Rd
6th St
7th St
Columbia River
Christy Rd
E Elm Ave
W Elm Ave
N Main St
N Hermiston Ave
W Highland Ave
N 1st St
S 1st St
N 1st Pl
SW 11th St
South Reservoir
Butte Reservoir
S Highway 395
Feedville Road
Westland Rd
Maxwell Canal
Umatilla River
bing

LEGEND

- 12" High Pressure Gas Transmission Line
- Non-potable Line
- Interstate
- Highway
- Major Road
- Railroad
- Parcels

Bonney Site - Wetlands
- Freshwater Emergent Wetland
- Freshwater Forest / Shrub Wetland
- Water

0 3,200 6,400
SCALE IN FEET

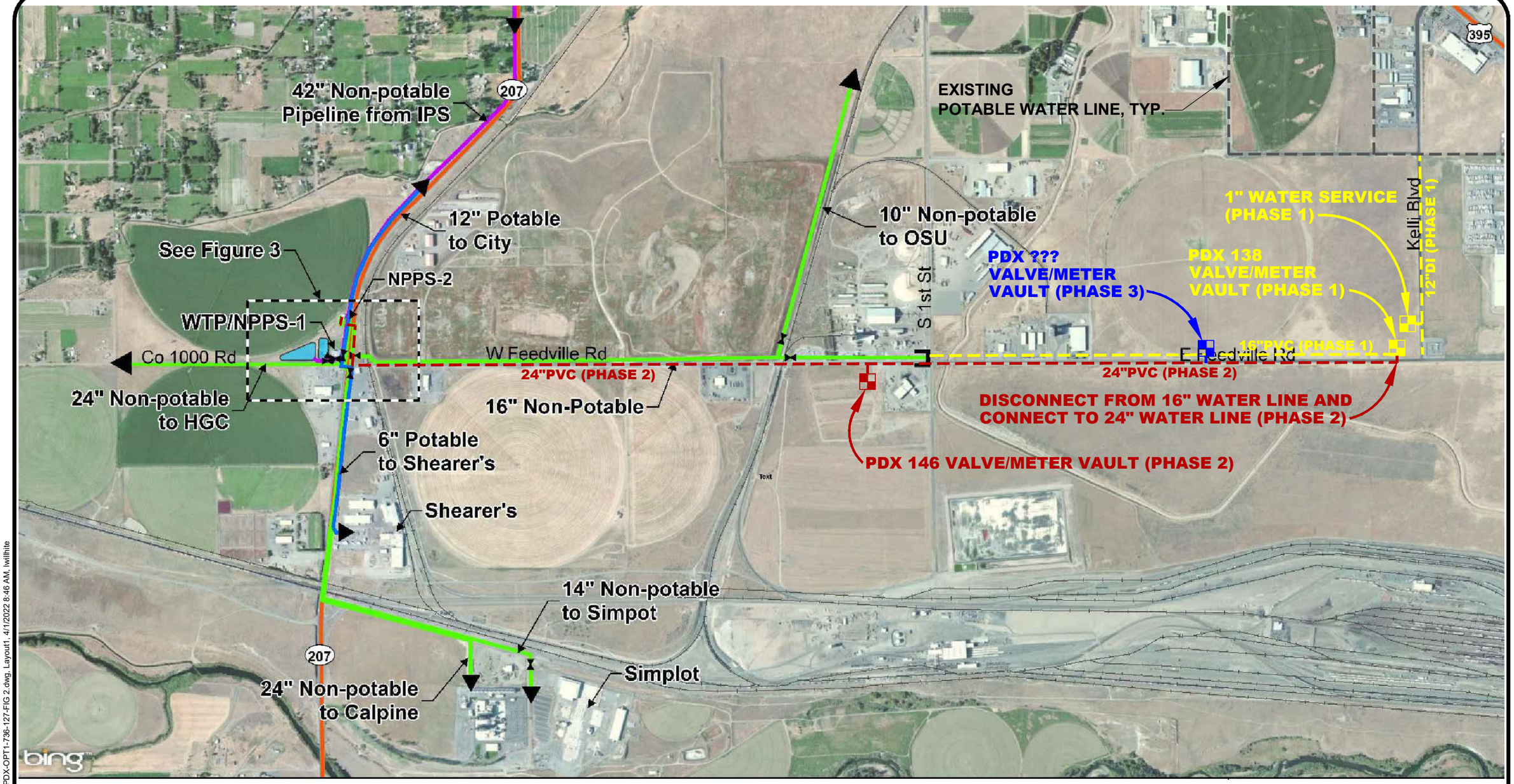
anderson perry & associates, inc.

CITY OF
HERMISTON, OREGON
VADATA UPGRADES 2022-2026

OPTION 1 (PDX138, PDX146, PDX???)
VADATA CONNECTION

FIGURE
1

Q:\HERMISTON\736-127 RWS GenEng\Drafting\PDX-OPT1-736-127-FIG 1.dwg, Layout1, 3/31/2022 4:07 PM, lwilhite



LEGEND

- Valve
- Pipeline Cap
- Non-potable Water Piping
- Non-potable Water Piping from IPS
- Potable Water Water Piping
- Highway
- Railroad
- Ponds / Lagoons
- Existing Non-Potable Water Piping
- New Non-Potable Water Piping (Phase 1)
- New Non-Potable Water Piping (Phase 2)
- New Non-Potable Water Piping (Phase 3)

N
W E
S

0 1,200 2,400
SCALE IN FEET

anderson perry & associates, inc.

CITY OF
HERMISTON, OREGON
VADATA UPGRADES 2022-2026
OPTION 1 (PDX 138, PDX146, PDX???) REGIONAL WATER TRANSMISSION CONNECTIONS

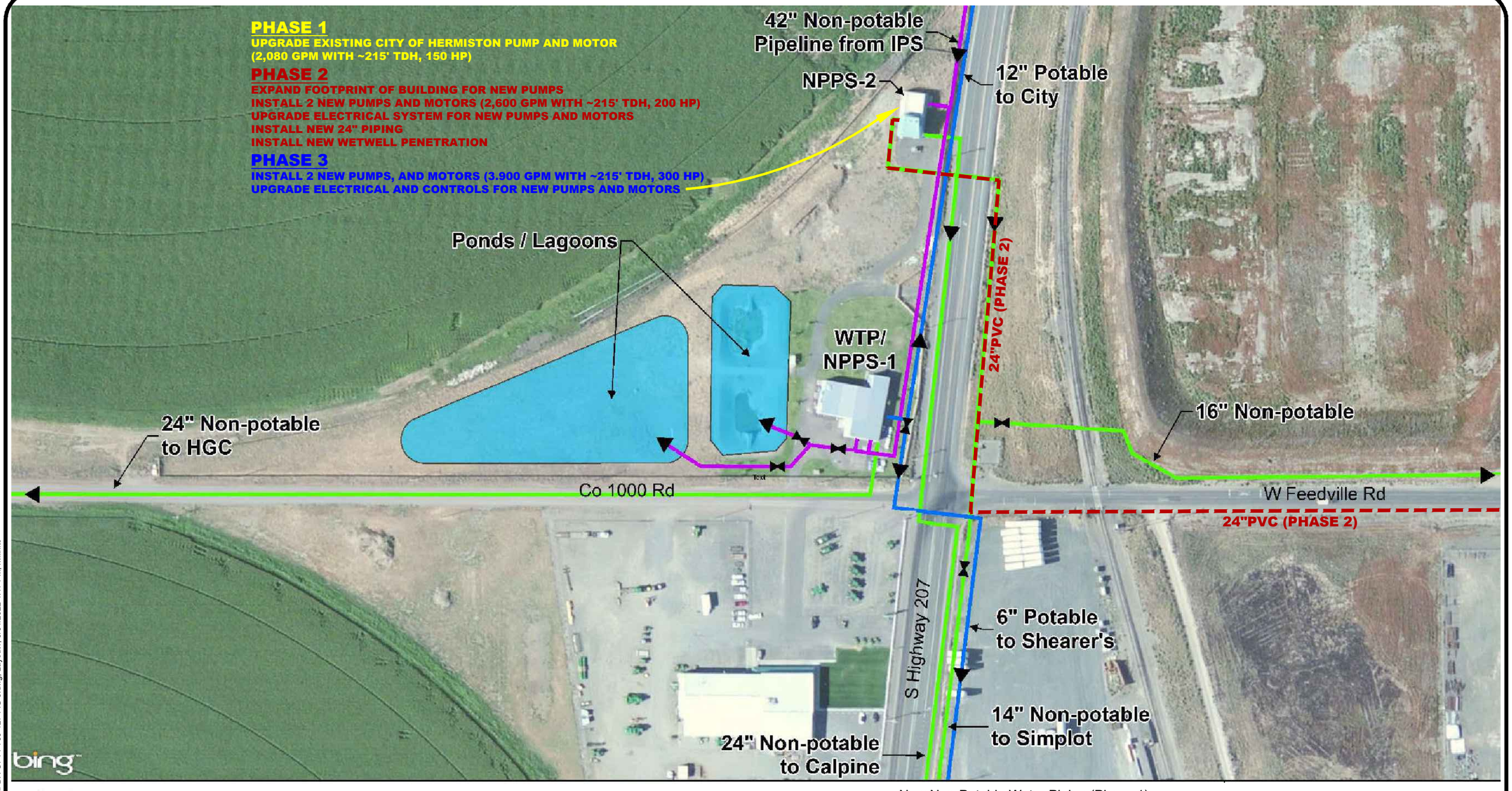
FIGURE
2

Q:\HERMISTON\736-127 RWS GenEng\Drafting\PDX-OPT1-736-127-FIG 2.dwg, Layout1, 4/1/2022 8:46 AM, lwillhite

PHASE 1
UPGRADE EXISTING CITY OF HERMISTON PUMP AND MOTOR
(2,080 GPM WITH ~215' TDH, 150 HP)

PHASE 2
EXPAND FOOTPRINT OF BUILDING FOR NEW PUMPS
INSTALL 2 NEW PUMPS AND MOTORS (2,600 GPM WITH ~215' TDH, 200 HP)
UPGRADE ELECTRICAL SYSTEM FOR NEW PUMPS AND MOTORS
INSTALL NEW 24" PIPING
INSTALL NEW WETWELL PENETRATION

PHASE 3
INSTALL 2 NEW PUMPS, AND MOTORS (3.900 GPM WITH ~215' TDH, 300 HP)
UPGRADE ELECTRICAL AND CONTROLS FOR NEW PUMPS AND MOTORS



LEGEND

- Valve
- Non-potable Water Piping
- Non-Potable from IPS
- Potable Water Water Piping
- Ponds / Lagoons
- New Non-Potable Water Piping

- New Non-Potable Water Piping (Phase 1)
- New Non-Potable Water Piping (Phase 2)
- New Non-Potable Water Piping (Phase 3)

N W E S

0 150 300
SCALE IN FEET

anderson perry & associates, inc.

CITY OF
HERMISTON, OREGON
VADATA UPGRADES 2022-2026

OPTION 1 (PDX138, PDX146, PDX???)
AREA PIPING LAYOUT

FIGURE
3

Q:\HERMISTON\736-127 RWS GenEng\Drafting\PDX-OPT1-736-127-FIG 3.dwg, Layout1, 3/31/2022 4:17 PM, lwillhite

CITY OF HERMISTON, OREGON
PRELIMINARY COST ESTIMATE
REGIONAL WATER SYSTEM IMPROVEMENTS - OPTION 1
PHASE 1 - PDX138 CAMPUS (September 2023)
March 31, 2022

NO.	DESCRIPTION	UNIT	UNIT PRICE	ESTIMATED QUANTITY	TOTAL PRICE
1	Mobilization/Demobilization	LS	$ 85,500	All Req'd	$ 85,500
Non-potable Pump Station No. 2					
2	NPPS No. 2 Demolition (motor, pump, controls, instrumentation, etc.)	LS	5,000	All Req'd	5,000
3	NPPS No. 2 Pump and Motor Upsize (furnish and install) (150 HP)	EA	60,000	1	60,000
4	NPPS No. 2 Pump VFD Upgrade	EA	40,000	1	40,000
5	NPPS No. 2 New Power Supply (1000KVA Transformer)	EA	60,000	1	60,000
6	NPPS No. 2 Electrical	LS	40,000	All Req'd	40,000
7	NPPS No. 2 Controls and Instrumentation	LS	20,000	All Req'd	20,000
Feedville Transmission Line					
8	16-inch PVC Water Line	LF	150	6,350	952,500
9	12-inch DI Water Line (on Kelli Blvd)	LF	130	2,700	351,000
10	Tie into Existing Water Line	LS	5,000	All Req'd	5,000
11	Valve and Meter Vault to New Campus	LS	150,000	All Req'd	150,000
12	Surface Restoration	LS	30,000	All Req'd	30,000
				Total Estimated Construction Cost	**$ 1,799,000**
				Construction Contingencies (35%)	630,000
				Design and Construction Engineering (20%)	360,000
				Permitting, Environmental, Cultural Resources	20,000
				TOTAL ESTIMATED PROJECT COST (2022)	**$ 2,809,000**
				Inflation to the time of construction (assumed construction 2023)	141,000
				TOTAL ESTIMATED PROJECT COST (2023)	**$ 2,950,000**

Assumptions:

IPS Improvements

No improvments would be needed at the river IPS.

NPPS No. 2 Improvements

Pump and motor upsize needede including removal and replacement of 1 pump. Capacity would be 2,080 gpm at approx. 215' TDH.

VFD installation would be necessary for the motor.

Discharge piping would not need modified.

Electrical system would not handle the new motor size and would need upsized.

Feedville Transmission Line

16-inch diameter piping would be needed on Feedville Rd.

12-inch diameter piping would be needed on Kelli Blvd.

CITY OF HERMISTON, OREGON
PRELIMINARY COST ESTIMATE
REGIONAL WATER SYSTEM IMPROVEMENTS - OPTION 1
PHASE 2 - PDX146 CAMPUS (August 2024)
March 31, 2022

NO.	DESCRIPTION	UNIT	UNIT PRICE	ESTIMATED QUANTITY	TOTAL PRICE
1	Mobilization/Demobilization	LS	$ 280,000	All Req'd	$ 280,000
River Intake Pump Station					
2	River IPS Demolition (motor, pump, controls, instrumentation, etc.)	LS	10,000	All Req'd	10,000
3	River IPS Pump and Motor Upsize (furnish and install) (600 HP)	EA	250,000	2	500,000
4	River IPS Pump Pad and Pedestal Modifications	EA	7,000	2	14,000
5	River IPS Pump VFD	EA	200,000	2	400,000
6	River IPS Piping/Fittings	EA	25,000	2	50,000
7	River IPS Valves	EA	25,000	2	50,000
8	River IPS Electrical	LS	40,000	All Req'd	40,000
9	River IPS Controls and Instrumentation	LS	40,000	All Req'd	40,000
Non-potable Pump Station No. 2					
10	NPPS No. 2 New Pump Enclosure	SF	350	400	140,000
11	NPPS No. 2 Pump and Motor Upsize (furnish and install) (200 HP)	EA	80,000	2	160,000
12	NPPS No. 2 Pump Pad and Pedestal	EA	5,000	2	10,000
13	NPPS No. 2 New Wetwell Penetration	EA	50,000	1	50,000
14	NPPS No. 2 Portable Pump Crane	EA	15,000	1	15,000
15	NPPS No. 2 Pump VFD	EA	60,000	2	120,000
16	NPPS No. 2 Piping/Fittings	LS	150,000	All Req'd	150,000
17	NPPS No. 2 Electrical	LS	50,000	All Req'd	50,000
18	NPPS No. 2 Controls and Instrumentation	LS	30,000	All Req'd	30,000
Feedville Transmission Line					
19	24-inch PVC Water Line	LF	220	13,400	2,948,000
20	Railroad Jack and Bore	EA	180,000	2	360,000
21	Valve and Meter Vault to New Campus	EA	150,000	3	450,000
22	Surface Restoration	LS	50,000	All Req'd	50,000
				Total Estimated Construction Cost	**$ 5,917,000**
				Construction Contingencies (35%)	2,071,000
				Design and Construction Engineering (20%)	1,184,000
				Permitting, Environmental, Cultural Resources	50,000
				TOTAL ESTIMATED PROJECT COST (2022)	**$ 9,222,000**
				Inflation to the time of construction (assumed construction 2024)	946,000
				TOTAL ESTIMATED PROJECT COST (2024)	**$ 10,168,000**

Assumptions:

IPS Improvements

Pump and motor upsizes including removal and replacement of 2 pumps. New capacity would be 6,200 gpm each at approx. 290' TDH.

VFD installation would be necessary for each motor.

Discharge piping would be modified.

Electrical system could handle the new motor sizes without upgrading transformers.

Improvements to the existing fish screens would not be needed.

Pump shaft column piping size is adequate for upgrade.

NPPS No. 2 Improvements

Pump and motor upsizes including removal and replacement of 2 pumps. Capacity would be 2,600 gpm each at approx. 215' TDH.

VFD installation would be necessary for each motor.

New discharge piping would be needed.

Electrical system installed in Phase 1 would handle the new motor sizes and would no need upsized.

Feedville Transmission Line

24-inch diameter piping would be needed.

40-inch steel casings would be installed at each railroad crossing.

CITY OF HERMISTON, OREGON
PRELIMINARY COST ESTIMATE
REGIONAL WATER SYSTEM IMPROVEMENTS - OPTION 1
PHASE 3 - PDX?? CAMPUS (January 2026)
March 31, 2022

NO.	DESCRIPTION	UNIT	UNIT PRICE	ESTIMATED QUANTITY	TOTAL PRICE
1	Mobilization/Demobilization	LS	$ 55,000	All Req'd	$ 55,000
River Intake Pump Station					
2	River IPS Demolition (motor, pump, controls, instrumentation, etc.)	LS	5,000	All Req'd	5,000
3	River IPS Pump and Motor Upsize (furnish and install) (600 HP)	EA	250,000	1	250,000
4	River IPS Pump Pad and Pedestal Modifications	EA	7,000	1	7,000
5	River IPS Pump VFD	EA	200,000	1	200,000
6	River IPS Piping/Fittings	EA	25,000	1	25,000
7	River IPS Valves	EA	25,000	1	25,000
8	River IPS Electrical	LS	25,000	All Req'd	25,000
9	River IPS Controls and Instrumentation	LS	25,000	All Req'd	25,000
Non-potable Pump Station No. 2					
10	NPPS No. 2 Pump and Motor Upsize (furnish and install) (300 HP)	EA	100,000	2	200,000
11	NPPS No. 2 Pump Pad and Pedestal	EA	5,000	2	10,000
12	NPPS No. 2 Pump VFD	EA	80,000	2	160,000
13	NPPS No. 2 Electrical	LS	20,000	All Req'd	20,000
14	NPPS No. 2 Controls and Instrumentation	LS	20,000	All Req'd	20,000
Feedville Transmission Line					
15	Valve and Meter Vault to New Campus	EA	150,000	1	150,000
				Total Estimated Construction Cost	**$ 1,177,000**
				Construction Contingencies (35%)	412,000
				Design and Construction Engineering (20%)	236,000
				Permitting, Environmental, Cultural Resources	10,000
				TOTAL ESTIMATED PROJECT COST (2022)	**$ 1,835,000**
				Inflation to the time of construction (assumed construction 2025)	290,000
				TOTAL ESTIMATED PROJECT COST (2025)	**$ 2,125,000**

Assumptions:

IPS Improvements

Pump and motor upsizes including removal and replacement of 1 pump. New capacity would be 6,200 gpm each at approx. 290' TDH.

VFD installation would be necessary for the motor.

Discharge piping would be modified.

Electrical system could handle the new motor size without upgrading transformers.

Improvements to the existing fish screens would not be needed.

Pump shaft column piping size is adequate for upgrade.

NPPS No. 2 Improvements

Pump and motor upsizes including removal and replacement of 2 pumps. Capacity would be 3,900 gpm each at approx. 215' TDH.

VFD installation would be necessary for each motor.

New discharge piping would not be needed.

Electrical system installed in Phase 1 would handle the new motor sizes and would no need upsized.

Feedville Transmission Line

No improvements needed other than tieing into 24-inch water line.