

City of Hermiston

1999

**Transportation
System Plan
Update**



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HERMISTON TSP IMPLEMENTATION STUDY TRANSPORTATION PLAN & PROGRAM MODIFICATIONS-Revised

Date: December 1, 1999 **Project #: 3337**

To: Steve Sokolowski, City of Hermiston
From: Alan Danaher, Kittelson & Associates, Inc.

cc: Teresa Penninger, ODOT Region 5

INTRODUCTION

This memorandum summarizes the identified changes to the various plan maps, street standards, and improvement projects and priorities in the Hermiston Transportation System Plan (TSP), from the 1997 TSP prepared by David Evans & Associates, Inc. The plan and program modifications reflect an updated 20-year needs assessment for seven critical intersections in Hermiston (documented in a separate technical memorandum), modifications to the street functional classification map pedestrian/bicycle facility improvements maps, the development of a truck routing plan, and preparation of modified cross section standards for different street classifications. This memo also identifies updated project priorities and costs.

The identified modifications to the Hermiston TSP contained in this memo were reviewed with the City of Hermiston and ODOT Region 5 staff, and then presented to the Hermiston Planning Commission and City Council in a joint work session on August 19, 1999. This memo also reflects changes which surfaced in the Planning Commission review and approval of the TSP in its October 13, 1999 meeting. Separate from this document, the consultant team has developed specific language modifications to the Hermiston Comprehensive Plan, and Zoning and Subdivision Ordinances, to actually implement the recommendations in the TSP.

CHANGES TO MODAL PLANS

Roadway

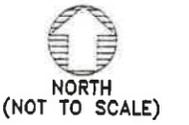
Figure 1 identifies the updated street functional classification plan for Hermiston. The plan keeps the different street classifications identified in the 1997 Plan for arterials and collectors,

namely:

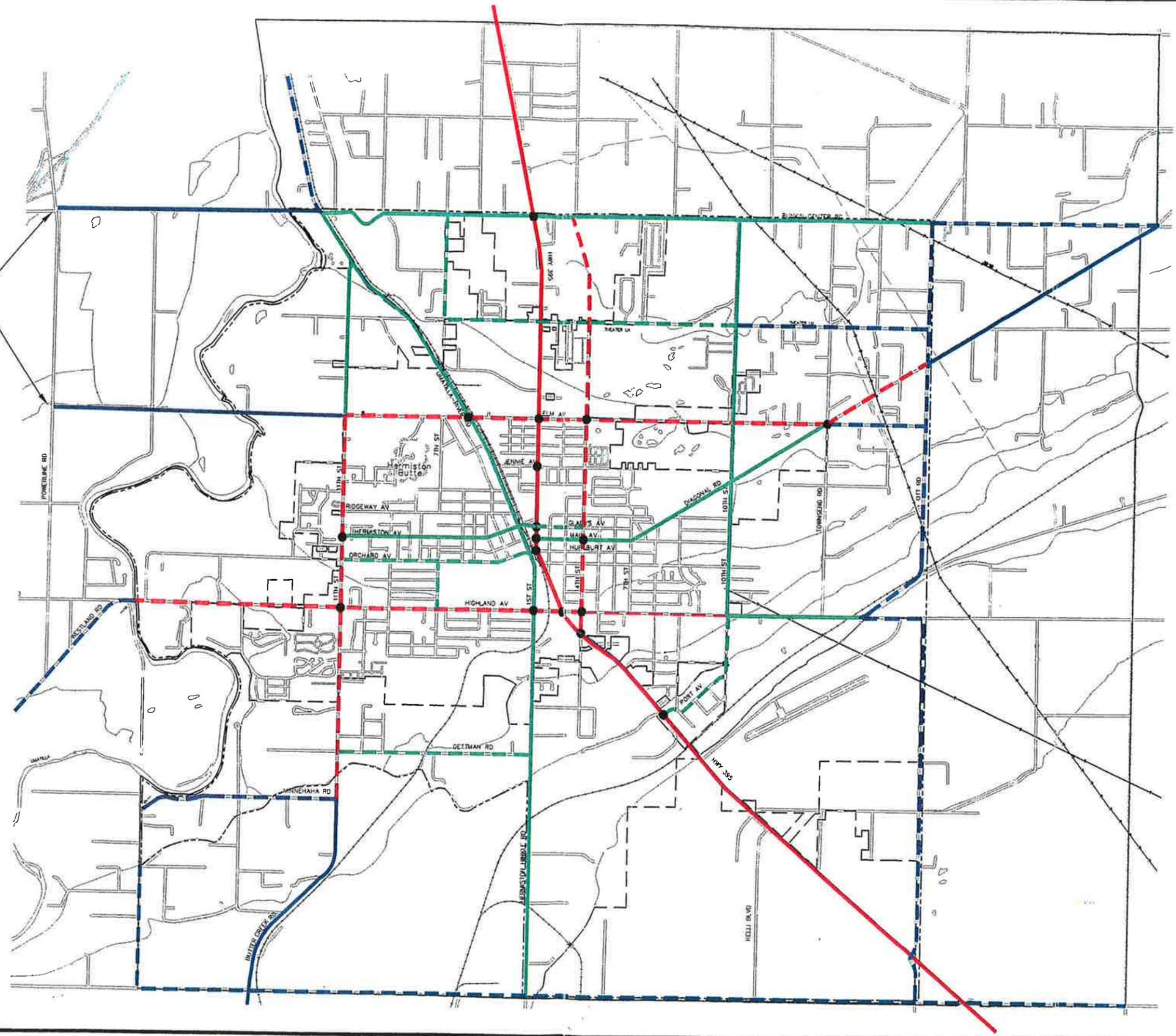
- Urban Major Arterial,
- Urban Minor Arterial,
- Urban Major Collector,
- Urban Minor Collector,
- Rural Arterial, and
- Rural Collector.

The differences in the current plan from the 1997 plan are the following:

1. With the recent redesignation of the 11th Street/Elm Avenue corridor as Highway 207 through Hermiston, these two streets were upgraded to minor arterial status.
2. Theater Lane is upgraded to a collector from the local street designation in the 1997 TSP, given the emerging residential development along this roadway, and the collector function it plays. This roadway is shown as an urban minor collector east to East 10th Street, and a rural collector between 10th Street and Ott Road.
3. Port Avenue is designated as a minor collector to connect East 10th Street to Highway 395 at the south end of Hermiston. This would also allow for an improved connection to serve the industrial park off Highway 395, with a future traffic signal at Highway 395 and Port Avenue.
4. Ott Road becomes a rural collector instead of the urban collector designation in the 1997 TSP, as this roadway is outside of the Hermiston Urban Growth Boundary.
5. Gettman Road is designated as an urban minor collector instead of the local road designation in the 1997 TSP.
6. Minnehaha Road is designated as a rural collector instead of the urban minor collector designation in the 1997 TSP, as this roadway is outside of the Hermiston Urban Growth Boundary.
7. If Punkin Center Road is eventually chosen as the preferred alignment for the new Umatilla River bridge crossing, and if that project proceeds, this roadway within the City of Hermiston should be upgraded to a major collector from the minor collector designation in the 1997 TSP. Outside of the City, the Punkin Center Road corridor (Country Lane) should then become a rural arterial designation, given the direct connection to I-82. In the 1997 TSP, both Punkin Center Road and Elm Avenue were



NOTE: NEW UMATILLA RIVER BRIDGE CROSSING ON EITHER PUNKIN CENTER RD. OR ELM AVE.



LEGEND	
	URBAN MAJOR ARTERIAL
	URBAN MINOR ARTERIAL
	URBAN MAJOR COLLECTOR
	URBAN MINOR COLLECTOR
	RURAL ARTERIAL
	RURAL COLLECTOR
	TRAFFIC SIGNAL
	STUDY AREA BOUNDARY
	UGB
	CITY LIMITS

REFINED FUTURE STREET CLASSIFICATIONS AND TRAFFIC SIGNALS

HERMISTON TSP IMPLEMENTATION STUDY
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FIGURE

1



shown as optional corridors for the crossing, and that has not changed at this time. The upcoming Umatilla River Bridge Crossing Study sponsored by the City of Hermiston will further evaluate both alignment alternatives, and make a final recommendation on a crossing location which will be incorporated into the updated TSP.

If the Punkin Center Road alignment is not chosen for the new Umatilla River bridge crossing, then the section of this roadway between Theater Lane and Umatilla River Road should be upgraded to a minor collector, from the local street designation in the 1997 TSP.

Truck Routing Plan

Figure 2 shows the proposed truck routing plan through Hermiston. Such a plan was not included in the 1997 TSP. The plan shows the two state highways through Hermiston - Highway 395 and Highway 207 (on the new 11th Street/Elm Avenue route), as designated truck routes, consistent with their function as major through traffic facilities. These routes should have adequate pavement sections to accommodate heavier truck loadings.

Pedestrian Facility Improvement Plan

Figure 3 shows a revised set of pedestrian facility improvements in Hermiston. The map shows those arterial and collector street segments that currently do not have a sidewalk on either side of the street. The State Transportation Planning Rule encourages the provision of sidewalks along such streets. This is a more extensive set of sidewalk improvements than that identified in the 1997 TSP, that just focused on a few street segments.

The plan also shows existing and proposed off-street pathways of use to bicycles. This includes a new trail on the east side of the Umatilla River between Elm and Highland Avenues (identified in the City's newly adopted Parks and Recreation Plan), as well as a pathway along Hermiston Ditch. No off-street pathways were included in the 1997 TSP.

Bicycle Facility Improvement Plan

Figure 4 shows a bicycle facility plan for Hermiston, which reflects bike lanes or routes designated on all arterial and collector streets in the City. The State Transportation Planning Rule encourages the provision of these facilities on these types of streets. The intent would be to develop bike lanes in the future (where not currently present) on all new and reconstructed streets, where adequate right-of-way is available and costs are reasonable, and if not possible, then designated as bike routes.

CHANGES TO STANDARDS

Street Standards

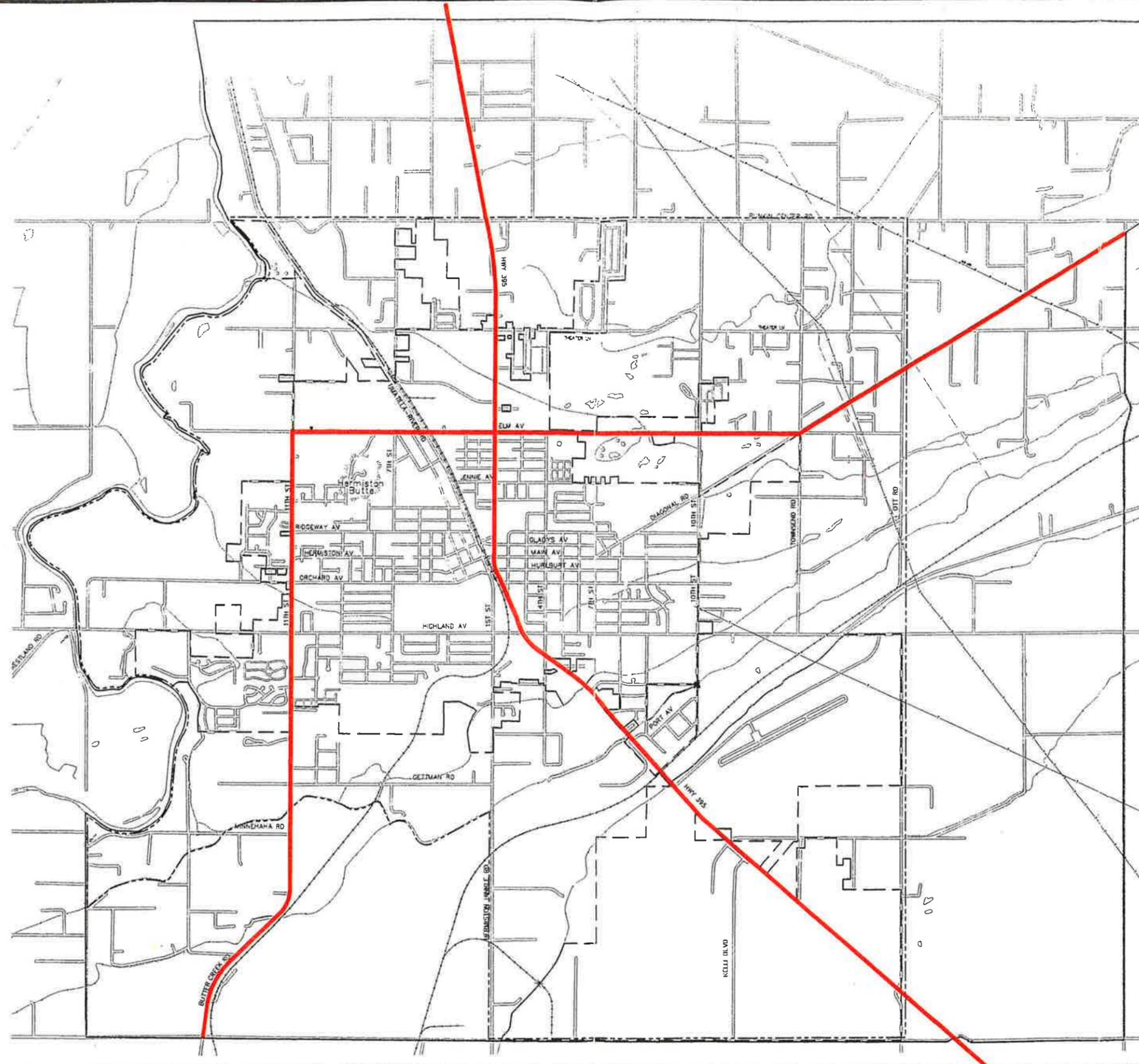
Roadway Cross Section

The cross section standards for the different street classifications in the Hermiston TSP were modified from those in the 1997 TSP to reflect the possible provision of parkway strips with detached sidewalks on streets, as well as some minor modifications in travel and bike lane widths. Tables 1 through 4 identify the proposed standards for urban arterials, urban collectors, urban local streets, rural arterials, rural collectors, and rural local roads. Changes from the 1997 TSP are as follows:

Urban Major Arterial - Different street and right-of-way widths are identified for major arterials (currently only Highway 395 is a designated major arterial in Hermiston) within the Central Business District (CBD) vs. outside of the CBD. The street width reflects a proposed five lane section, with attached eight foot sidewalks in the CBD, and six foot sidewalks outside the CBD. Outside the CBD, sidewalks are shown to be detached from the curb, with a parkway strip in between. The 1997 TSP identified only one cross section standard for major arterials, with eight foot attached sidewalks

Urban Minor Arterial - Different street and right-of-way widths are identified whether or not parking is provided. A minor arterial would only have three lane section, with six foot sidewalks. Either attached or detached sidewalks are allowed, though detached sidewalks (with parking strip) are preferred. The 1997 TSP identified optional cross sections with and without a center left turn lane.

Urban Major Collector - Different street and right-of-way widths are identified with vs. without parking being provided. Only one street cross section for major collectors was in the 1997 TSP. The major collector cross section identifies a center left turn lane being provided, as well as the option for parkway strips (with the strips preferred), both of which were not proposed in the 1997 TSP. Sidewalks are also shown to be six feet wide, vs. five feet in the 1997 TSP.



LEGEND

- DESIGNATED TRUCK ROUTE
- STUDY AREA BOUNDARY
- UGB
- CITY LIMITS

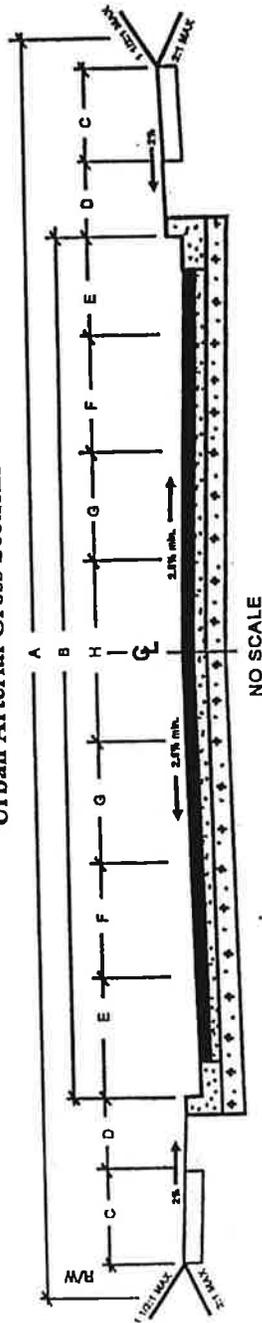
PROPOSED TRUCK ROUTES

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FIGURE
2



Table 1
Urban Arterial Cross Sections

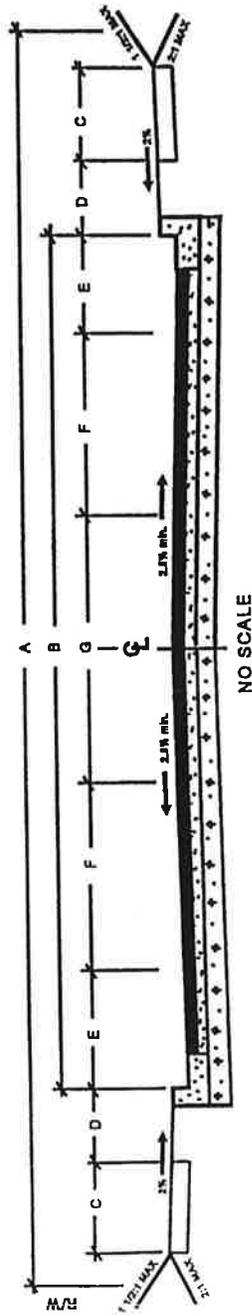


DESIGN SPEED = 35-45 M.P.H.

Road Classification	Criteria	Right-of-Way (Feet)	Paved Width (Feet)	# of Lanes	Side-walk (Feet)	Planting Strip (Feet)	Parking Lane (Feet)	Bike Lane (Feet)	Curb Travel Lane (Feet)	Travel Lane(s) (Feet)	Median or Center Turn Lane	Travel Lane(s) (Feet)	Curb Travel Lane (Feet)	Bike Lane (Feet)	Parking Lane (Feet)	Planting Strip (Feet)	Side-walk (Feet)
Major Arterial	In CBD	90	74	5	8	0	0	6	12	12	14	12	12	6	0	0	8
	Outside CBD	86-98	74	5	6	0-6*	0	6	12	12	14	12	12	6	0	0-6*	6
Minor Arterial	With Parking	74-86	62	3	6	0-6	8	5	12	-	12	-	12	5	8	0-6	5-8
	Without Parking	58-70	46	3	6	0-6*	0	5	12	-	12	-	12	5	0	0-6*	6

* Planting strip preferred

Table 2
Urban Collector Cross Sections

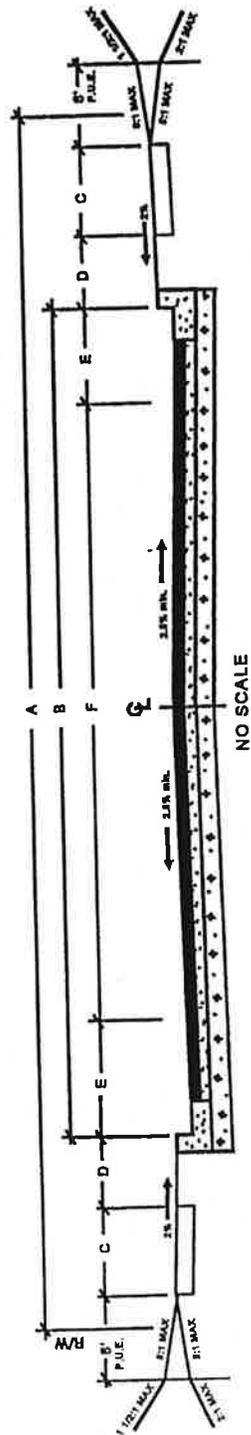


DESIGN SPEED = 35 M.P.H.

Road Classification	Criteria	Right-of-Way (Feet)	Paved Width (Feet)	# of Lanes	Side-walk (Feet)	Planting Strip (Feet)	Parking Lane (Feet)	Bike Lane (Feet)	Travel Lane(s) (Feet)	Center Turn Lane	Travel Lane(s) (Feet)	Bike Lane (Feet)	Travel Lane(s) (Feet)	Center Turn Lane	Travel Lane(s) (Feet)	Bike Lane (Feet)	Parking Lane (Feet)	Planting Strip (Feet)	Side-walk (Feet)
		A	B		C	D	E	F	F	G	F	F	F	G	F	F	E	D	C
Major Collector	With Parking	68-80	58	3	6	0-5	7	5	11	12	11	5	11	12	11	5	7	0-5	6
	Without Parking	54-66	44	3	6	0-5*	0	5	11	12	11	5	11	12	11	5	0	0-5*	6
Minor Collector	With Bike Lanes	56-66	46	2	5	0-5*	7	5	11	0	11	5	11	0	11	5	7	0-5*	5
	Without Bike Lanes	48-58	38	2	5	0-5*	8	0	11	0	11	0	11	0	11	0	8	0-5*	5

* Planting strip preferred

Table 3
 Urban Local Street Cross Sections

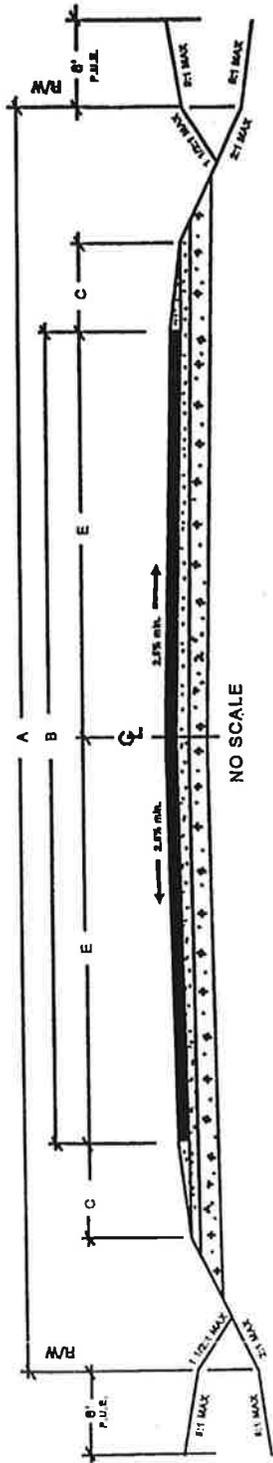


DESIGN SPEED = 25 M.P.H.

Road Classification	Criteria	Right-of-Way (Feet)	Paved Width (Feet)	Sidewalk (Feet)	Planting Strip (Feet)	Parking Lane (Feet)	Travel Way (Feet)	Parking Lane (Feet)	Planting Strip (Feet)	Sidewalk (Feet)
Local Residential	Traditional/ Parking Both Sides	A 42-50	B 32	C 5	D 0-4*	E 8	F 16	E 8	D 0-4*	C 5
	Traditional/ Parking One Side	34-42	24	5	0-4*	8	16	-	0-4*	5
Local Commercial & Residential		54-62	44	5	0-4*	10	24	10	0-4*	5

* Planting strip preferred

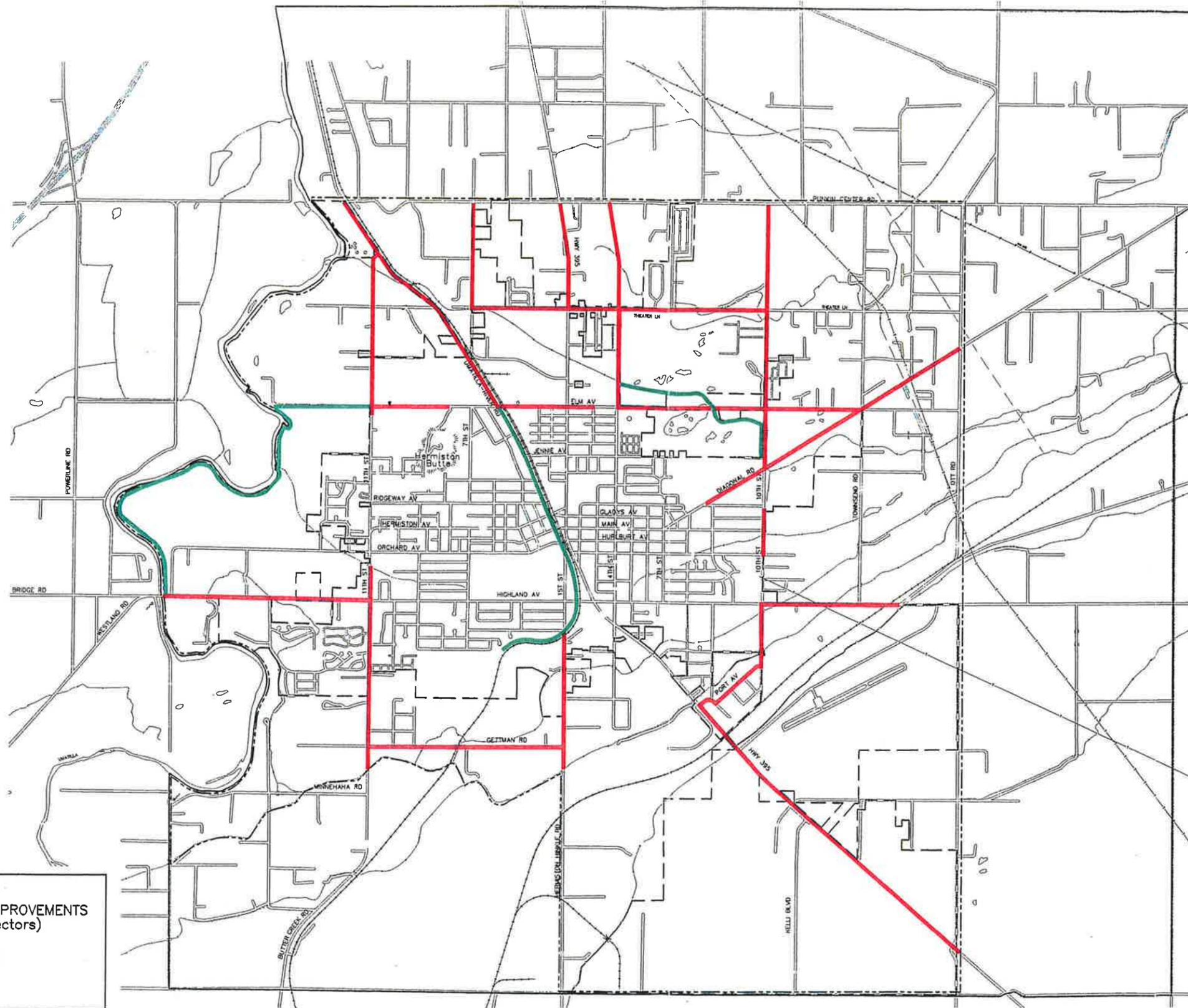
Table 4
 Rural Arterial/Collector/Local Road Cross Sections



DESIGN SPEED = 25-45 M.P.H.

Road Classification	Criteria	Right-of-Way (Feet)	Paved Width (Feet)	# of Lanes	Shoulder (Feet)	Travel Lane(s) (Feet)	Travel Lane(s) (Feet)	Shoulder (Feet)
Arterial	Without Parking	A	B		C	E	E	C
Collector	Without Parking	50-70	36-52	2-3	8	12	12	8
Local	Without Parking	50-65	32-48	2-3	4-6	12	12	4-6
	Without Parking	50	24-28	2	2-4	20	-	2-4

- Notes:
1. Left turn lanes allowed at major intersections.
 2. Bike lanes to be provided on shoulders for arterials and collectors



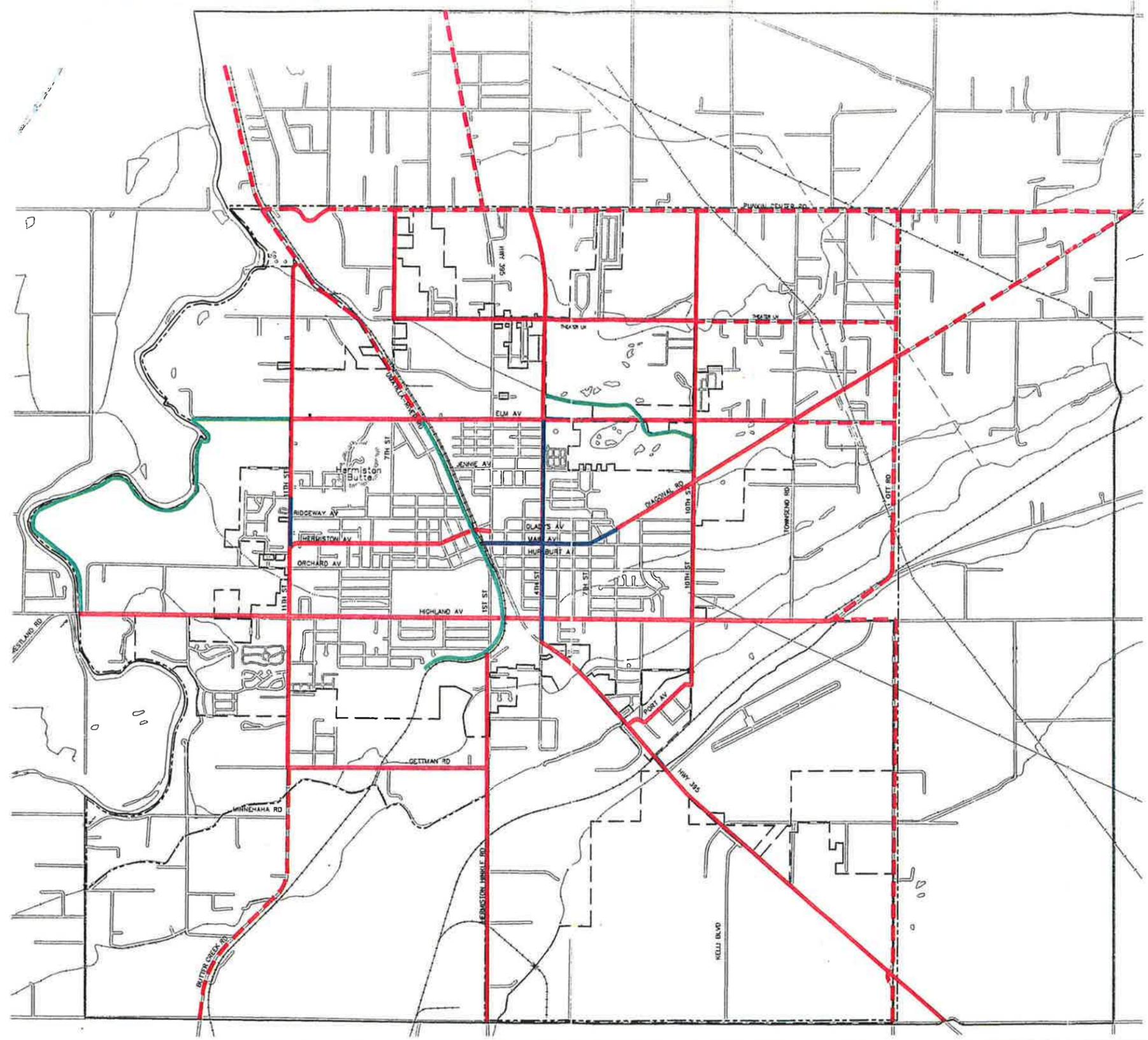
- LEGEND**
- PROPOSED SIDEWALK IMPROVEMENTS (Urban Arterials & Collectors)
 - PROPOSED OFF-STREET PATHWAY IMPROVEMENTS
 - STUDY AREA BOUNDARY
 - - - UGB
 - - - CITY LIMITS

PROPOSED SIDEWALK IMPROVEMENTS ON ARTERIALS & COLLECTORS

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FIGURE
3





LEGEND

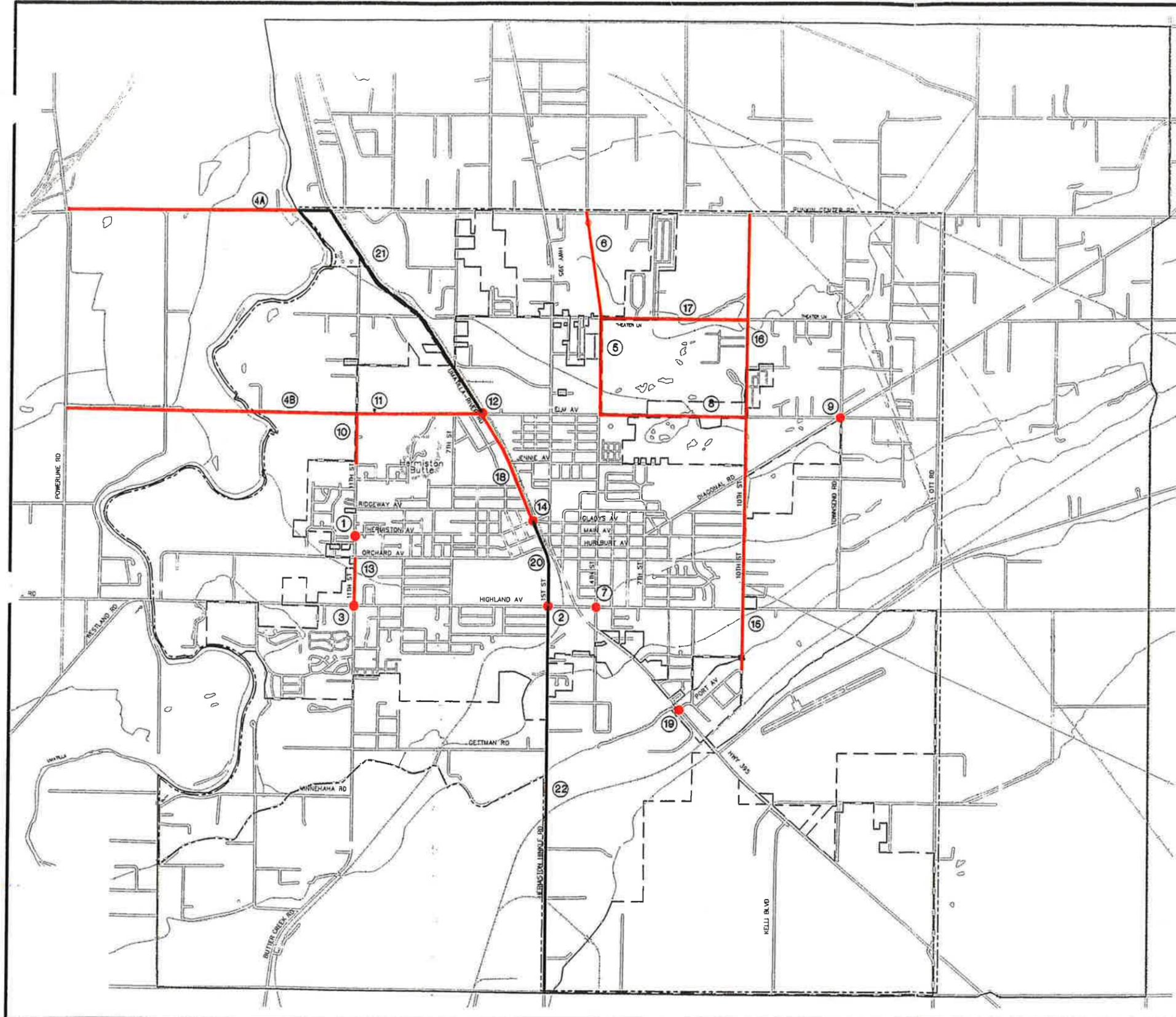
- ON-STREET BIKE LANE
- - - SHOULDER BIKEWAYS
- ON-STREET BIKE ROUTE
- OFF-STREET PATHWAY
- STUDY AREA BOUNDARY
- UGB
- CITY LIMITS

PROPOSED BICYCLE FACILITIES

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FIGURE
4





- ① Improve West 11th St./Hermiston Ave. Intersection (New Traffic Signal, Intersection Rechanelization)
- ② Improve West 1st St./Highland Ave. Intersection (New Traffic Signal)
- ③ Improve Highland Ave./West 11th St. Intersection (Reconfigure Turn Lanes)
- ④A Option 1: Construct Bridge Across Umatilla River and Connect with Punkin Center Rd.
- ④B Option 2: Construct Bridge Across Umatilla River and Connect with Elm Ave.
- ⑤ Extend 4th St. from Elm Ave to Punkin Center Rd. (Include New Signal at Elm Ave.)
- ⑥ Extend 4th St. from Theater Lane to Punkin Center Rd.
- ⑦ Improve West 4th St./Highland Ave. Intersection (New Traffic Signal)
- ⑧ Improve Elm Ave. from East 4th St. to Diagonal Rd (Widen to 3 Lanes)
- ⑨ Elm Ave./Diagonal Rd. Intersection Improvements
- ⑩ Improve West 11th St. Adjacent to Good Samaritan Hospital (Widen to 3 Lanes)
- ⑪ Improve Elm Ave. from West 11th St. to Umatilla River Rd.
- ⑫ Improve Elm Ave./Umatilla River Rd. Intersection (Signal Modified, Add Left Turn Lanes)
- ⑬ Improve West 11th St., north of Highland Ave. (Widen to 3 Lanes)
- ⑭ Improve 1st Place/Hermiston Ave. Intersection (Add Traffic Signal, Intersection Rechanelization)
- ⑮ Improve 10th St. from Columbia Dr. to Elm Ave.
- ⑯ Improve and Relocate 10th St. from Elm Ave. to Punkin Center Rd.
- ⑰ Theater Lane Upgrade from Highway 395 to East 10th St.
- ⑱ Upgrade Umatilla River Rd from Hermiston Ave. to Elm Ave.
- ⑲ Improve Highway 395/Port Ave. Intersection (New Traffic Signal)
- ⑳ Upgrade 1st St. from Hermiston Ave. to Highland Ave.
- ㉑ Upgrade Umatilla River Road from Elm Ave. to Punkin Center Rd.
- ㉒ Upgrade Umatilla River Road from Highland Ave. to Feedville Rd.

LEGEND
 ——— STUDY AREA BOUNDARY
 - - - - UGB
 - - - - CITY LIMITS

REFINED STREET SYSTEM IMPROVEMENTS

HERMISTON TSP IMPLEMENTATION STUDY
 HERMISTON, OREGON
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FIGURE
5

Urban Minor Collector - Different street and right-of-way widths are identified with vs. without bike lanes, assuming parking on both sides of the street would be allowed. In the 1997 TSP, bike lanes were not identified on minor collectors. Only one cross section for minor collectors was in the 1997 TSP. The minor collector cross section includes the option for parkway strips (with the strips preferred), as well as six foot sidewalks (five-foot sidewalks were identified in the 1997 TSP).

Urban Local Street - The proposed new cross section standards for urban local residential streets only address "traditional" width sections. The development of a narrower street width option for local streets, though consistent with the State Transportation Planning Rule's intent to have street right-of-way as consolidated as possible, was not adopted by the Hermiston Planning Commission when it adopted the TSP. It was felt that narrow streets would not be compatible with the larger number of pickups and sport utility vehicles used by Hermiston residents. The traditional width sections are identified for parking on one or both sides of the street, and are similar in width to the local street standards in the 1997 TSP (32 foot pavement width with parking on both sides, and 24 feet with parking on one side). Unlike the 1997 TSP standards, the "traditional" standards incorporate a parkway strip, which is really preferred given the frequency of driveways along local streets, and the difficulty of meeting ADA (Americans for Disabilities Act) maximum grade requirements with attached sidewalks at driveways. The local street standards also include a standard for commercial/industrial streets, with a wider pavement section provided given the higher number of trucks being accommodated on such streets. The 1997 TSP did not distinguish between local residential and commercial/industrial street standards.

Rural Arterial - The proposed rural arterial cross section is similar to that in the 1997 TSP, except that eight foot shoulders are identified as the standard as opposed to 6-8 feet.

Rural Collector - The proposed rural collector cross section is the same as that in the 1997 TSP.

Rural Local Road - The proposed rural local road cross section is similar to that in the 1997 TSP, except that a possible shoulder widening up to four feet (as opposed to two feet) is identified.

Intersection Curb Returns

One street standard not addressed in the 1997 Hermiston TSP is the required size of curb returns at urban street intersections. This is critical so as to provide for adequate turning movements for certain vehicles, yet at the same time not make intersections too large such that pedestrian crossings can be facilitated. Table 5 identifies a minimum curb return radius for the lowest

street classification of two intersecting streets. Minimum curb returns vary from 15 feet for local street intersections, to 30 feet for major arterial intersections.

Table 5
Minimum Curb Return Radii (Feet)
Edge of Pavement/Curb

Lowest Street Classification of Two Intersecting Streets	Minimum Curb Return Radius
Major Arterial	30 feet
Minor Arterial	30 feet
Major Collector	25 feet
Minor Collector	25 feet
Local Residential Street	15 feet
Local Commercial/Industrial Street	30 feet

Access Management Standards

Access management standards are needed to ensure both the safety and efficiency of traffic flow for vehicles traveling on the roadway system. Managing the access of roadways benefits the overall roadway system by increasing safety, increasing capacity, and reducing travel times. Controlling access must not become too restrictive, however, as to prohibit local businesses and home owners deserved access to the roadway system. Overall, access management must balance the needs of through traffic, local traffic, and pedestrians/bicycles on a particular roadway. By the nature of Hermiston's proposed roadway functional classification system, arterials require the highest access management standards, while collectors and local street require less restrictive access management standards.

Table 6 identifies the minimum access spacing standards for different street classifications in Hermiston. For the two state highways through the City (Highways 395 and 207), the access spacing standards included in the new 1999 Oregon Highway Plan apply. Still at issue which should be addressed as part of the development of the final Highway 395 North Access Management Plan is if sections of Highway 395 and 207 would qualify as a designated Special Transportation Area (Highway 395) or Urban Business Area (Highway 207) where reduced access spacing standards could be applied. There is also an access standard variation process

identified in the State Highway Plan that the City of Hermiston could pursue if the identified spacing standards on these two facilities are considered to be excessive, and STA and/or UBA classifications are not approved. For the other arterial, collector, and local streets in the City, a graduating reduced set of spacing standards are proposed.

Table 6
Proposed Access Spacing Standards

Roadway Functional Classification	Area ¹	Minimum Spacing			
		Traffic Signals (miles)	Public Intersections (feet)	Private Driveways (feet)	Median Opening (feet)
Major Arterial - State Highway (Highway 395)	Urban	1/2	990 (40-45 mph) 770 (30-35 mph)	990 (40-45 mph) 770 (30-35 mph)	990 770 300
	STA	1/4	300	175	300
Minor Arterial- State Highway (Highway 207)	Urban	1/2	750 (40/45 mph) 600 (30/35 mph)	750 (40/45 mph) 600 (30/35 mph)	750 600 630 425 350
	UBA	1/4	630 (40/45 mph) 425 (30/35 mph) 350 (≤ 25 mph)	630 (40/45 mph) 425 (30/35 mph) 350 (≤ 25 mph)	630 425 350
Other Minor Arterial	All	1/4	400	250	NA
Major Collector	All	1/4	300	150	NA
Minor Collector	All	1/4	200	100	NA
Local Residential Street	All	NA	150	50	NA
Local Commercial/Industrial Street	All	NA	150	50	NA

Notes: 1. "Urban" refers to "Urban Other" category in the 1999 Oregon Highway Plan.
"STA" refers to inside a designated Special Transportation Area, per the 1999 Oregon Highway Plan (assumed to be if established the Hermiston central business district area).
"UBA" refers to "Urban Business Area" category in the 1999 Oregon Highway Plan.
"All" refers to all street segments inside the Hermiston urban growth boundary.
NA - Not applicable

SPECIFIC PROJECTS

Roadway

Figure 5 and Table 7 identify 18 different road improvement projects over the next 20 years in the Hermiston area. The projects include roadway widening and intersection channelization and

traffic control improvements. The projects are identified into short-term, mid-term, and long-term need, similar to how road improvements were prioritized in the 1997 TSP. An alternate prioritization scheme would be 0-5 years for short-term, 6-10 years for mid-term, and 11-20 years for long-term, pending estimated funding availability (the subject of a separate technical memorandum). Most of the identified roadway projects were in the 1997 TSP, and for these, the costs have been increased from those presented in the TSP document by 10% to reflect existing (1999) dollars. The estimated total cost of the roadway improvements is \$26.464 million in existing dollars.

Pedestrian/Bicycle

Tables 8 and 9 identify the updated cost for different pedestrian and bicycle facility improvements. The project list is similar to that identified in the 1997 TSP, with the addition of off-street pathways identified in the Hermiston Parks and Recreation Plan, which were not addressed in the 1997 TSP. The pedestrian facility improvements - adding sidewalks to at least one side of all arterial and collector streets, and the new off-street pathways along the Umatilla River, the Union Pacific Railroad, and Hermiston Ditch, are estimated to cost \$2.743 million in existing dollars. The bicycle facility improvements - adding bike lanes on streets that are not shown to be widened in the roadway improvements are estimated to cost \$946,000 in existing dollars. Both the pedestrian and bicycle project costs were increased by 10% from the cost estimates in the 1997 TSP to reflect 1999 conditions.

Table 7
Recommended 20-Year Street Improvement Projects

Location	Project Description	Priority	Cost (Existing \$)	Potential Funding Source
Improvement 1 11th Street and Hermiston Avenue	Signalization/intersection rechannelization	Near-term	\$240,000	STIP
Improvement 2 1st Street Highland Avenue Intersection	Signalization	Near-term	\$200,000	GF, STIP
Improvement 3 11th Street at Highland Avenue Intersection	Add left turn lanes	Near-term	\$230,000	STIP
Improvement 4 Construction of the Umatilla River Bridge along Punkin Center Road	Bridge construction and street upgrade	Near-term	\$6,300,000	Special
Improvement 5 East 4th Street Extension from Elm Avenue to Theater Lane	Street extension/signal at Elm Avenue	Near-term	\$1,254,000	STIP, SDC
Improvement 6 East 4th Street Extension from Theater Lane to Punkin Center Road	Street extension	Mid-term	\$1,495,000	STIP, SDC
Improvement 7 East 4th Street/Highland Avenue Intersection	Signalization	Mid-term	\$200,000	STIP
Improvement 8 Upgrade Elm Ave from East 4th Street to Diagonal Road	Widening to ODOT standard	Mid-term	\$1,000,000	STIP
Improvement 9 Improvement Elm Avenue/Diagonal Road Intersection	Intersection reconfiguration/signal or roundabout	Mid-term	\$1,320,000	STIP, County
Improvement 10 Improve West 11th Street adjacent to hospital	Widening to ODOT standard	Mid-term	\$120,000	STIP
Improvement 11 Improve Elm Avenue near hospital	Widening	Mid-term	\$210,000	STIP

Table 7 (continued)
Recommended 20-Year Street Improvement Projects

Location	Project Description	Priority	Cost (Existing \$)	Potential Funding Source
Improvement 12 Improve Elm Avenue/ Umatilla River Road Intersection	Turn lanes/signal modification	Mid-term	\$300,000	STIP
Improvement 13 Improve West 11th Street north of Highland Avenue	Widening to ODOT standard	Mid-term	\$250,000	STIP
Improvement 14 1st Place and Hermiston Avenue intersection	Intersection rechannelization/new signal	Mid-term	\$950,000	STIP
Improvement 15 East 10th Street upgrade from Columbia Drive to Elm Avenue	Widening	Long-term	\$2,800,000	STIP
Improvement 16 East 10th Street upgrade form Elm Avenue to Punkin Center Road	Widening	Long-term	\$2,800,000	STIP
Improvement 17 Upgrade Theater Lane from Highway 395 east to 10th Street	Widening	Long-term	\$2,400,000	STIP
Improvement 18 Upgrade Umatilla River Road between Elm Avenue and Hermiston Avenue	Widening	Long-term	\$1,495,000	STIP
Improvement 19 Improve Hwy. 395/ Port Drive intersection	New signal	Long-term	\$150,000	STIP
Improvement 20 Upgrade 1st Street from Hermiston Avenue to Highland Avenue	Widening	Long-term	\$750,000	STIP
Improvement 21 Upgrade Umatilla River Road from Elm Avenue to Punkin Center Road	Widening	Long-term	\$1,000,000	STIP
Improvement 22 Upgrade 1st Street/Hermiston-Hinkle Road from Highland Avenue to Feedville Road	Widening	Long-term	\$1,000,000	STIP
Total			\$26,464,000	

Note: Potential funding sources include the following:
STIP - State Transportation Improvement Program (ODOT)
GF - City of Hermiston General Fund
SDC - City of Hermiston Transportation System Development Charge
Special - Special funding authorization from U.S. Government

TEP - Transportation Enhancement Program
LID - Local Improvement District
County - Umatilla County

Table 8
Recommended 20-Year Pedestrian Projects

Location	Project Description	Priority	Cost (Existing \$)	Potential Funding Source
Hwy. 395 (Theater Lane to SE Port Drive)	Sidewalk repair, curb ramps, driveway management and refuge islands (four lanes)	Near-term	\$25,000	STIP, TEP
East 4th Street (Elm Avenue to Highland Avenue)	Sidewalk infill, 28 curb ramps	Near-term	\$59,000	GF, SDC, LID
East Main Street (East 7th Street to East 10th Street)	Sidewalks	Near-term	\$140,000	GF, SDC, LID
East 10th Street (Elm Avenue to Highland Avenue)	Sidewalk infill	Near-term	\$205,000	GF, SDC, LID
Umatilla River Trail (Elm to Highland Avenues)	Off-street pathway on east side of river for pedestrians and bicycles	Near-term	\$650,000	TEP
Highland Avenue (SW 11th Street to SE 5th Street)	Sidewalk infill	Mid-term	\$14,000	GF, SDC, LID
Hermiston Avenue (West 11th Street to 1st Place)	Sidewalk infill, 36 curb ramps	Mid-term	\$56,000	GF, SDC, LID
1st Street (Hermiston Avenue to Highland Avenue)	Sidewalk infill, 10 curb ramps	Mid-term	\$57,000	GF, SDC, LID
Orchard Avenue (West 11th Street to Highway 395)	Sidewalk infill, 18 curb ramps	Mid-term	\$75,000	STIP
Elm Avenue (West 7th Street to Highway 395)	Sidewalks	Mid-term	\$123,000	GF, SDC, LID
Diagonal Road (Main Street to NE 10th Street)	Sidewalks	Mid-term	\$140,000	GF, SDC, LID
West 11th Street (Linda Avenue to Joseph Avenue)	Sidewalk infill	Mid-term	\$179,000	GF, SDC, LID
1st Place (Elm Avenue to Hermiston Avenue)	Sidewalks	Long-term	\$154,000	GF, SDC, LID
Jennie Avenue (1st Place to NE 4th Street)	Sidewalks	Long-term	\$129,000	GF, SDC, LID,
1st Street (Highland Avenue to SE 4th Street Ext.)	Sidewalk infill with curbs, 18 curb ramps	Long-term	\$137,000	GF, SDC, LID

Table 8 (continued)
Recommended 20-Year Pedestrian Projects

Location	Project Description	Priority	Cost (Existing \$)	Potential Funding Source
Pathway Along Union Pacific Railroad (Elm Ave. To south of Highland Ave.)	Off-street pathway for pedestrians and bicycles	Long-term	\$400,000	TEP, GF
Hermiston Ditch Pathway (E. 4th Street to E. 10th Street)	Off-street pathway for pedestrians and bicycles	Long-term	\$200,000	TEP, GF
Total			\$2,743,000	

Note: Potential funding sources include the following:
STIP - State Transportation Improvement Program (ODOT)
TEP - Transportation Enhancement Program (ODOT)
GF - City of Hermiston General Fund
SDC - City of Hermiston Transportation System Development Charge
LID - Local Improvement District

Table 9
Recommended 20-Year Bicycle Projects

Location	Project Description	Priority	Cost (Existing \$)	Potential Funding Source
West 11th Street (Elm Avenue to Highland Avenue)	Stripe bike lanes (6B-11-11-6B north of Linda Ave., 7P-6B-12-12-6B south of Linda Ave.)	Near-term	\$4,600	STIP
Hurlbur Avenue (Highway 395 to East 4th Street)	Stripe bike lanes (5B-11-11-5B-8P)	Mid-term	\$1,200	GF,SDC
East 4th Street (Main Street to Highway 395)	Stripe bike lanes (6P-4.5B-10-10-4.5B north of Highland Ave., 7P-4.5B-10-10-4.5B-7P) south of Highland Ave.	Mid-term	\$2,300	STIP
Orchard Avenue (SW 11th Street to SW 7th Avenue)	Stripe bike lanes (7P-5B-10-10-5B)	Mid-term	\$2,300	GF,SDC
Orchard Avenue (SW 7th Street to Highway 395)	Stripe bike lanes (7P-5B-12-12-6B)	Mid-term	\$2,300	GF, SDC
East 4th Street (Elm Avenue to Main Street)	Stripe bike lanes (6B-11-11-6B)	Mid-term	\$2,900	STIP,GF, SDC
Elm Avenue (West 7th Street to Highway 395)	Stripe bike lanes (street width varies; widen west of RR tracks for 800 ft from 21 to at least 34 ft) (6B-11-11-6B)	Mid-term	\$28,600	STIP,GF, SDC
1st Place (Elm Avenue to Hermiston Avenue)	Widen from 24 to 34 ft with 6-ft shoulders, repave, and stripe for shoulders (6Sh-11-11-6Sh)	Mid-term	\$171,000	GF, SDC
East 10th Street (Elm Avenue to Highland Avenue)	Widen 34 ft (from 26, 20 and 32-ft segments) and stripe 6-ft bike lanes (6B-11-11-6B)	Mid-term	\$217,000	GF, SDC
Hermiston Avenue (West 11th Street to 1st Place)	Stripe bike lanes (7P-5B-12-12-6B) west of 8th St.	Long-term	\$4,200	GF, SDC
Diagonal Road (NE 7th Street to NE 10th Street)	Stripe bike lanes (5.5B-11-11-5.5B)	Long-term	\$2,700	GF, SDC
NE 10th Street (Theater Lane to Elm Avenue)	Widen from 22 to 32 ft with 5-ft shoulder (wider if >2000 ADT), and stripe for shoulders (5Sh-11-11-5Sh)	Long-term	\$99,300	GF, SDC

Table 9 (continued)
Recommended 20-Year Bicycle Projects

Location	Project Description	Priority	Cost (Existing \$)	Potential Funding Source
Theater Lane (NW Geer Road to NE 7th Street Alignment)	Widen from 22 to 32 ft with 5-ft shoulders (wider if >2000 ADT), and stripe for shoulders (5Sh-11-11-5Sh)	Long-term	\$175,000	GF, SDC
Highland Avenue (Umatilla River to SW 11th Avenue)	Widen from 28 to 34 ft with 6-ft shoulders, repave, and stripe for bike lanes (5B-12-12-5B) Shoulder/Bike Lane	Long-term	\$223,000	GF, SDC
Total			\$946,000	

Note: Potential funding sources include the following:
STIP - State Transportation Improvement Program (ODOT)
TEP - Transportation Enhancement Program (ODOT)
GF - City of Hermiston General Fund
SDC - City of Hermiston Transportation System Development Charge
LID - Local Improvement District

Planning Department
180 NE 2nd Street
Hermiston, OR 97838
Phone: (541) 567-5521
Fax: (541) 567-5530
E-Mail: planning@hermiston.or.us

To: Mayor and City Council
From: Steven E. Sokolowski, City Planner *SS*
Subject: Amendment to the Hermiston Transportation System Plan - South Hermiston Local Access and Circulation Plan
Date: July 17, 2000

HERMISTON TRANSPORTATION SYSTEM PLAN AMENDMENT

INTRODUCTION

This memorandum summarizes the proposed amendment to the City of Hermiston Transportation System Plan that implements the recently completed South Hermiston Local Access and Circulation Plan. The proposed amendment was developed to supplement the various plan maps, street standards, and improvement projects previously identified in the December 1999 Hermiston TSP Implementation Study prepared by Kittelson and Associates, Inc., which resulted in an updated transportation system plan for the City of Hermiston.

South Hermiston Access and Circulation Plan

The South Hermiston Access and Circulation Plan was a joint planning effort undertaken by the City of Hermiston and ODOT in December of 1999. Through a series of technical correspondence and meetings, future access connections and roadway alignments were identified to provide for the safe and efficient movement of vehicles, pedestrians, and bicyclists within the area bounded by SE Hinkle Road, SE 9th Street, SE Highland Avenue, and SE Airport Way.

PROPOSED TSP AMENDMENT/CHANGES TO MODAL PLANS

The most recent changes to the City of Hermiston's Transportation System Plan were adopted in December of 1999. At that time, the South Hermiston Access and Circulation Plan was not yet completed and so was not included in the amendments. Now that the access and circulation plan has been agreed to by the City and ODOT, it is imperative that the material be incorporated into the City's TSP to ensure that it is fully implemented as local development activities continue.

To fully implement the access and circulation plan, it will be necessary to supplement the City TSP's Roadway Functional Classification and Traffic Signal Plan, Pedestrian Facility Plan, and Bicycle Facility Plan. The following changes to the City's Transportation System Plan are recommended to ensure the South Hermiston Access and Circulation Plan is properly developed.

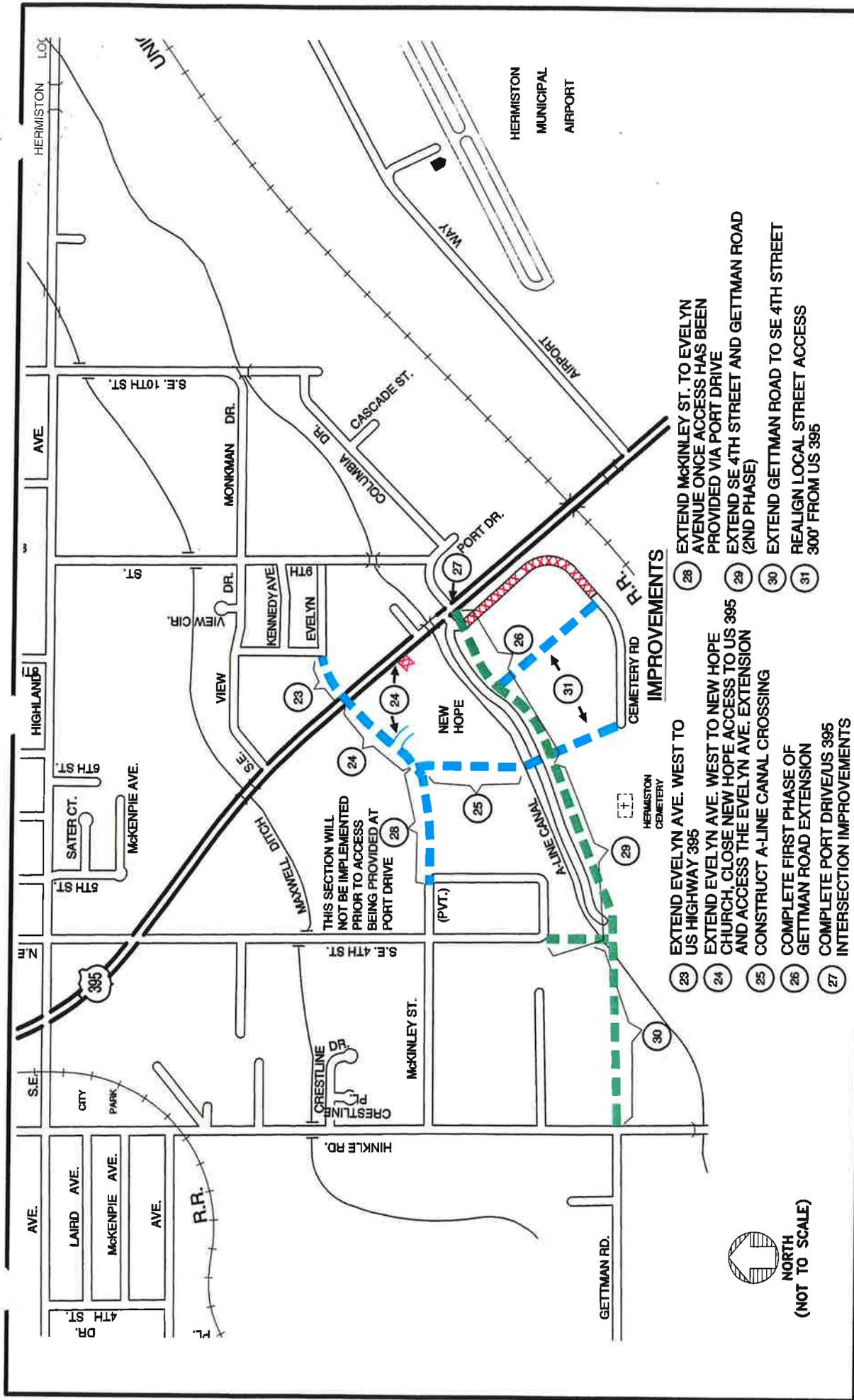
Functional Classification and Traffic Signal Plan

Figure 1 illustrates the updated Functional Classification Plan and Traffic Signal Plan for the City of Hermiston. With two exceptions identified in the Area of Special Concern, Figure 1 is identical to the plan identified in the December 1999 TSP update (Figure 1 of the December 1999 Update Memorandum prepared by Kittelson and Associates, Inc.). The two changes to the currently adopted Functional Classification Plan are:

1. Classification of the Gettman Road Extension as an Urban Minor Collector between U.S. Highway 395 and SE Hermiston-Hinkle Road.
2. Classification of the SE 4th Street as an Urban Minor Collector between U.S. Highway 395 and the Gettman Road Extension.

The new Gettman Road Extension and SE 4th Street are expected to enhance local access and roadway connectivity in the area that they serve. Gettman Road (west of Hermiston-Hinkle Road) and Port Avenue are both currently classified as Urban Minor Collectors in the City's TSP. It is thus appropriate to provide continuity in road function and design by classifying the new roadway segment as an Urban Minor Collector as well. Similarly, SE 4th Street provides connectivity between an Urban Major Arterial (U.S. Highway 395) and an Urban Minor Collector (Gettman Road) and thus serves a collector role.

The enhanced connectivity opportunities offered by the expanded roadway network should also address more regional needs by reducing congestion at the intersection of Highway 395/SE 4th Street. Both SE Fourth Street and Hermiston-Hinkle Road provide north-south access into Hermiston and offer attractive routes to and from the downtown area. However, there is not an available east-west connection south of Highland Avenue, requiring significant out-of-direction travel. As an example, vehicles at Highway 395/Port Drive have to travel north to Highland Avenue and then south on SE 4th Street or SE Hermiston-Hinkle Road. The proposed circulation system addresses this issue by developing a network of east-west roadways that provides critical links.



Pedestrian Facility Plan

The proposed Pedestrian Facility Plan, which illustrates those arterial and collector street segments that currently do not have a sidewalk on either side of a given street, is shown in Figure 2. With two exceptions, this figure is identical to the plan identified in the December 1999 TSP update (Figure 3 of the December 1999 Update Memorandum prepared by Kittelson and Associates, Inc.). The two changes to the currently adopted Pedestrian Facility Improvement plan are:

1. Provision of sidewalk facilities on the Gettman Road Extension between U.S. Highway 395 and SE Hinkle Road as per the Urban Minor Collector Road Standards identified in the TSP.
2. Provision of sidewalk facilities on SE 4th Street between Highway 395 and the Gettman Road Extension as per the Urban Minor Collector Road Standards identified in the TSP.

Bicycle Facility Plan

The proposed Bicycle Facility Plan, which illustrates all the designated bike lanes or routes in the City, is shown in Figure 3. This figure is identical to the plan identified in the December 1999 TSP update (Figure 4 of the December 1999 Update Memorandum prepared by Kittelson and Associates, Inc.), with two exceptions. The two changes to the currently adopted Bicycle Facility Improvement Plan are:

1. Provision of on-street bike lanes on the Gettman Road Extension between U.S. Highway 395 and SE Hinkle Road as per the Urban Minor Collector Road Standards identified in the TSP.
2. Provision of an on-street bike route along SE 4th Street between U.S. Highway 395 and the Gettman Road Extension as per the Urban Minor Collector Road Standards identified in the TSP.

South Hermiston Study Area

Recognizing the unique transportation needs of the sub-area identified in the South Hermiston Access and Circulation Study, system changes were developed to serve the local access needs of existing developments while also providing network connections that support future growth. Each of the identified system treatments is intended to further promote connectivity in south Hermiston while ensuring safe and efficient operations on the existing facilities and preserving the integrity of the U.S. Highway 395 corridor.

Transportation Improvement Projects

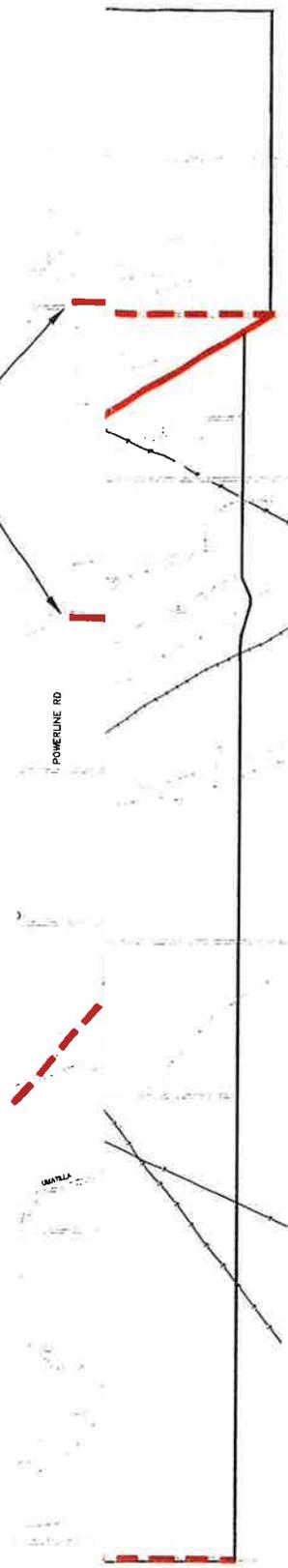
The December 1999 TSP update identified a refined list of 22 street system improvements for the 20-year planning horizon. As a result of the consensus achieved through the South Hermiston Access and Circulation Plan, nine additional roadway improvement projects have been identified.

All of these additional improvements are contained within the South Hermiston Study Area and are summarized in Figures 4 and 5 as well as in Table 1. The projects listed in Table 1 and the corresponding figures include construction of new roadways and extension of existing facilities to provide better connectivity, implementation of access management measures, and traffic control improvements. It should be noted that the order of projects in Figure 4 does not reflect a prioritized ranking, though Figure 5 presents the South Hermiston Study Area projects in the order that they should be implemented. Scheduling of the South Hermiston Study Area projects is discussed in detail later in this letter.

The additional projects are expected to be implemented gradually over a 20-year planning horizon in conjunction with local development activities and so have been categorized as short-term, mid-term, and long-term needs. The City of Hermiston and ODOT have developed an implementation order for the projects to ensure that they are constructed such that the Evelyn Avenue/Highway 395 intersection does not become overburdened prior to the initial development of the westside circulation system (which will allow traffic from the Evelyn Avenue Extension to access the Port Drive/Highway 395 intersection via the "A" Line Canal crossing and the initial extension of Gettman Road).



NOTE: NEW UMATILLA RIVER
BRIDGE CROSSING ON EITHER
PUNKIN CENTER RD. OR ELM AVE.



LEGEND

- URBAN MAJOR ARTERIAL
- URBAN MINOR ARTERIAL
- URBAN MAJOR COLLECTOR
- URBAN MINOR COLLECTOR
- RURAL ARTERIAL
- RURAL COLLECTOR
- TRAFFIC SIGNAL
- STUDY AREA BOUNDARY
- UGB
- CITY LIMITS
- SOUTH HERMISTON STUDY AREA

**T CLASSIFICATIONS AND
C SIGNAL PLAN
00 UPDATE**

ON TSP AMENDMENT
ON, OREGON

FIGURE

1





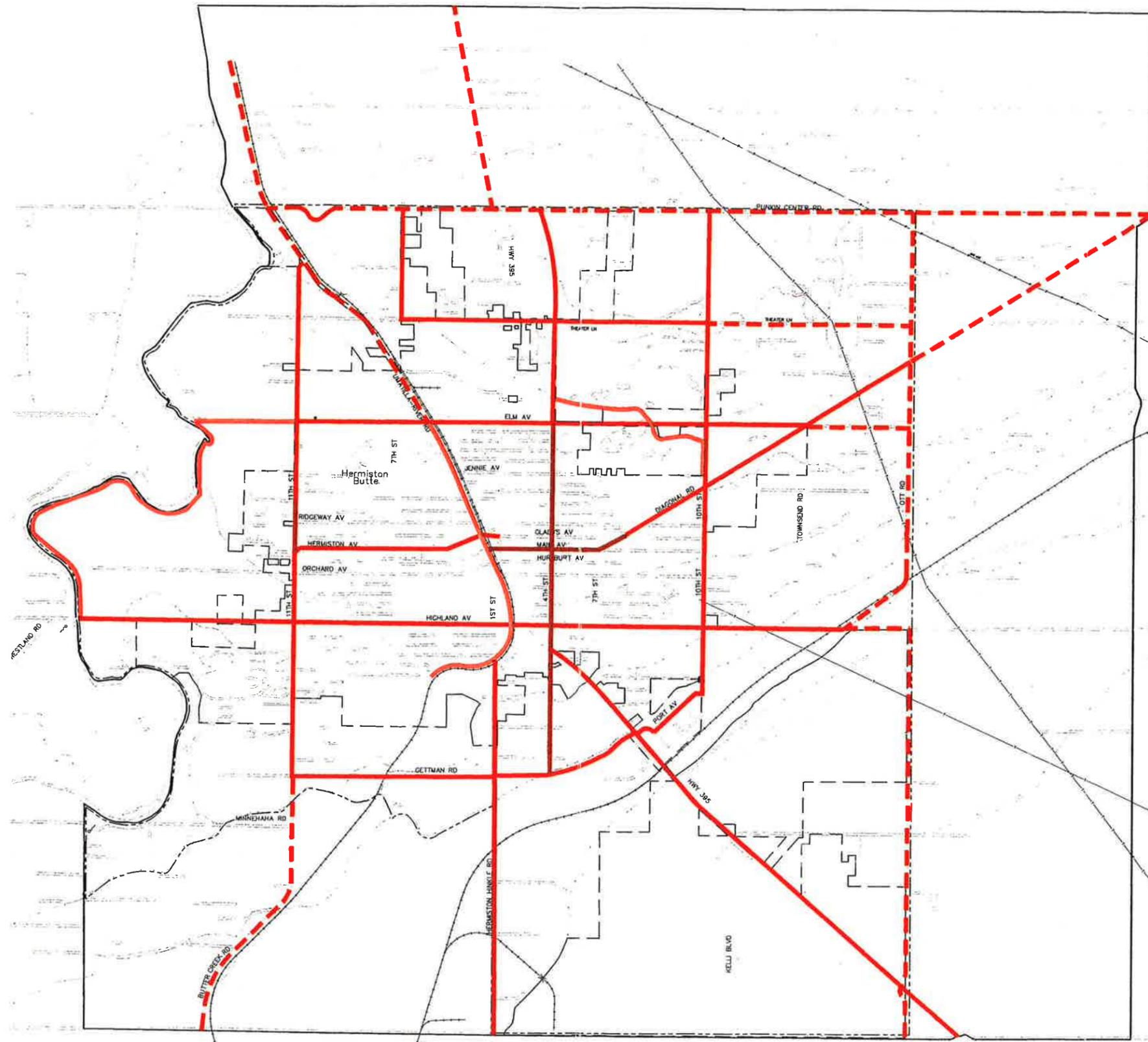
LEGEND

-  PROPOSED SIDEWALK IMPROVEMENTS (Urban Arterials & Collectors)
-  PROPOSED OFF-STREET PATHWAY IMPROVEMENTS
-  STUDY AREA BOUNDARY
-  UGB
-  CITY LIMITS

TRIAN FACILITY PLAN 2000 UPDATE

N TSP AMENDMENT
N, OREGON

FIGURE	
2	



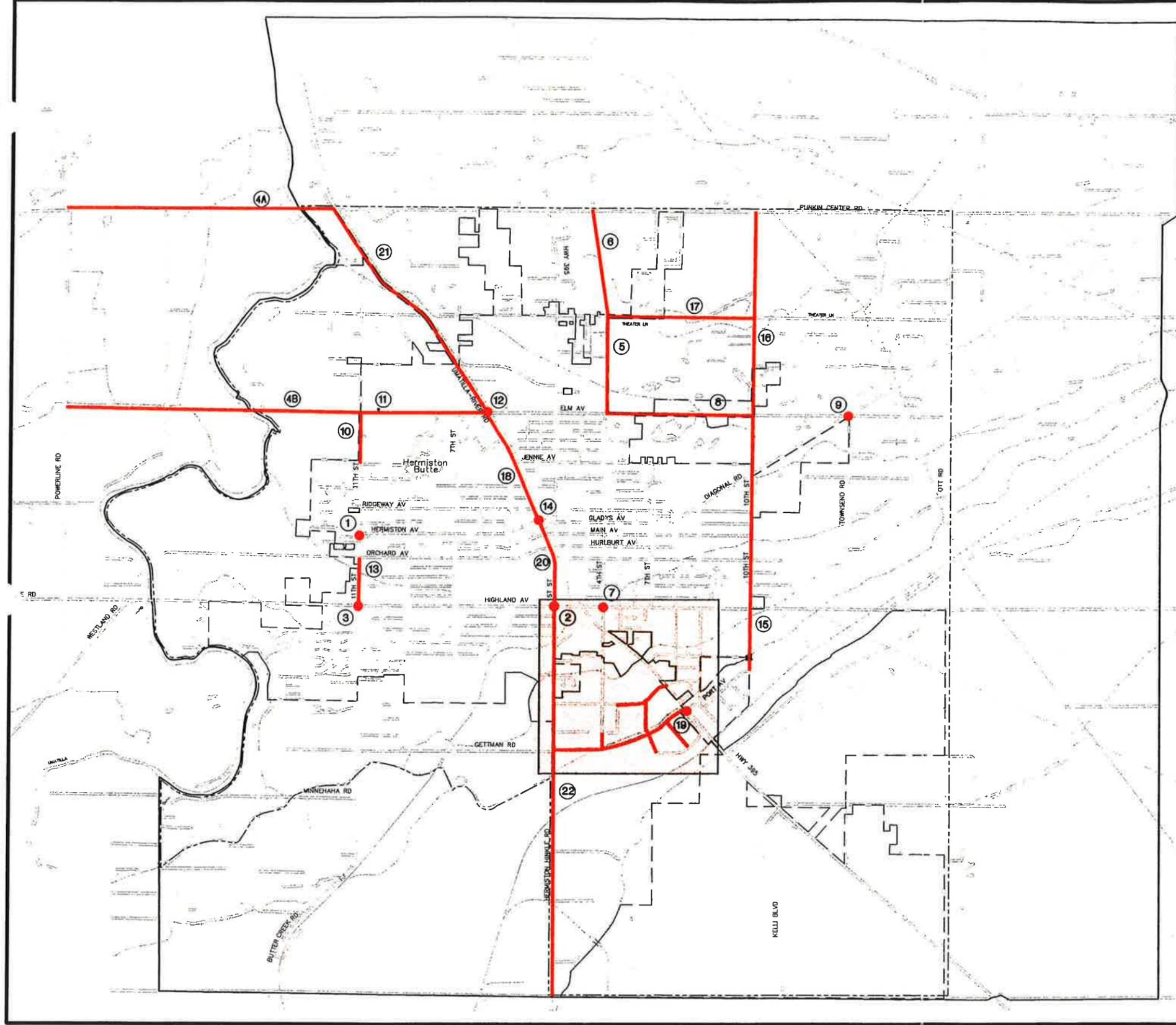
LEGEND

-  ON-STREET BIKE LANE
-  SHOULDER BIKEWAYS
-  ON-STREET BIKE ROUTE
-  OFF-STREET PATHWAY
-  STUDY AREA BOUNDARY
-  UGB
-  CITY LIMITS

**BICYCLE FACILITY PLAN
MAY 2000 UPDATE**

HERMISTON TSP AMENDMENT
HERMISTON, OREGON
MAY 2000

FIGURE
3 



- ① Improve West 11th St./Hermiston Ave. Intersection (New Traffic Signal, Intersection Rechannelization)
- ② Improve West 1st St./Highland Ave. Intersection (New Traffic Signal)
- ③ Improve Highland Ave./West 11th St. Intersection (Reconfigure Turn Lanes)
- ④A Option 1: Construct Bridge Across Umatilla River and Connect with Punkin Center Rd.
- ④B Option 2: Construct Bridge Across Umatilla River and Connect with Elm Ave.
- ⑤ Extend 4th St. from Elm Ave to Punkin Center Rd. (Include New Signal at Elm Ave.)
- ⑥ Extend 4th St. from Theater Lane to Punkin Center Rd.
- ⑦ Improve West 4th St./Highland Ave. Intersection (New Traffic Signal)
- ⑧ Improve Elm Ave. from East 4th St. to Diagonal Rd (Widen to 3 Lanes)
- ⑨ Elm Ave./Diagonal Rd. Intersection Improvements
- ⑩ Improve West 11th St. Adjacent to Good Samaritan Hospital (Widen to 3 Lanes)
- ⑪ Improve Elm Ave. from West 11th St. to Umatilla River Rd.
- ⑫ Improve Elm Ave./Umatilla River Rd. Intersection (Signal Modified, Add Left Turn Lanes)
- ⑬ Improve West 11th St., north of Highland Ave. (Widen to 3 Lanes)
- ⑭ Improve 1st Place/Hermiston Ave. Intersection (Add Traffic Signal, Intersection Rechannelization)
- ⑮ Improve 10th St. from Columbia Dr. to Elm Ave.
- ⑯ Improve and Relocate 10th St. from Elm Ave. to Punkin Center Rd.
- ⑰ Theater Lane Upgrade from Highway 395 to East 10th St.
- ⑱ Upgrade Umatilla River Rd from Hermiston Ave. to Elm Ave.
- ⑲ Improve Highway 395/Port Ave. Intersection (New Traffic Signal)
- ⑳ Upgrade 1st St. from Hermiston Ave. to Highland Ave.
- ㉑ Upgrade Umatilla River Road from Elm Ave. to Punkin Center Rd.
- ㉒ Upgrade 1st St./Hermiston-Hinkle Rd. from Highland Ave. to Feedville Rd.
- ⑳-32 See Figure 5, Area of Special Concern

LEGEND

- IMPROVEMENT LOCATIONS
- STUDY AREA BOUNDARY
- - - UGB
- - - CITY LIMITS
- ▭ SOUTH HERMISTON STUDY AREA

**REFINED STREET SYSTEM IMPROVEMENTS
MAY 2000 UPDATE**

HERMISTON TSP AMENDMENT HERMISTON, OREGON MAY 2000	FIGURE 4	
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Table 1

**Recommended 20-Year Street Improvement Projects
 South Hermiston Study Area**

Improvement	Project Description	Priority	Cost (Yr. 2000 \$)	Potential Funding Source
23	Extend Evelyn Avenue west to US Highway 395.	Near-term	\$55,000	GF, SDC, TEP, LID, AMG, LSN, PDF
24	Extend Evelyn Avenue from US Highway 395 to the westerly property line of the New Hope Church, close the existing New Hope Church site-access driveway on US 395, and provide access to the church via the Evelyn Avenue extension.	Near-term	\$150,000	PDF
25	Construct the north-south "A" Line Canal crossing along the westerly property line of New Hope Church.	Near-term	\$280,000	GF, SDC, TEP, LID, AMG, LSN, PDF
26	Construct the Gettman Road extension (Phase 1) between the "A" Line Canal crossing and US Highway 395.	Near-term	\$395,000	GF, SDC, TEP, LID, AMG, LSN, PDF
27	Complete necessary geometric improvements at the Port Drive/Highway 395 intersection to accommodate full turning movements (i.e., horizontal and vertical alignment modifications).	Near-term	\$200,000	GF, SDC, TEP, LID, AMG, LSN, PDF

South Hermiston Local Access and Circulation Plan
 Staff Report
 Page 12

28	Extend McKinley Street to Evelyn Avenue following the completion of Phases "23" through "27".	Mid-term	\$200,000	PDF
29	Relocate the local access connection to Cemetery Road approximately 300 feet or more west of US Highway 395.	Mid-term	\$380,000	GF, SDC, TEP, LID, AMG, LSN, PDF
30	Extend SE 4th Street to Gettman Road and construct Gettman Road (Phase 2) between SE 4th Street and the north-south "A" Line Canal crossing.	Mid-term	\$245,000	LSN, GF, LID
31	Extend Gettman Road from Hinkle Road to SE 4th Street (Phase 3).	Long-term	\$215,000	LSN

Note: Potential funding sources include the following:

- STIP – State Transportation Improvement Program (ODOT)
- AMG – Access Management Grant
- GF – City of Hermiston General Fund
- LID – Local Improvement District
- SDC – City of Hermiston Transportation System Development Charge
- County – Umatilla County
- TEP – Transportation Enhancement Program
- LSN – Local Street Network
- PDF – Private Development Funds

Special - Special funding authorization from U.S. Government

As indicated in Table 1, the estimated total cost of the additional roadway improvements is approximately \$2.1 million in existing (year 2000) dollars. The total cost of the entire roadway improvement program is estimated at \$29.4 million with these improvements (assuming three percent inflation between the 1999 cost estimates and the year 2000 cost estimates).

It should be noted that the cost estimate provided in Table 1 includes the recommended bicycle and pedestrian system improvements on the southern portion of SE 4th Street and SE Gettman Road (between US Highway 395 and SW 1st Street) as the pedestrian and bicycle amenities are assumed to be included in the estimated

roadway construction costs. The additional cost to infill sidewalks along SE 4th Street between US Highway 395 and the existing southern terminus of the road is \$56,000. This project brings the total cost for recommended 20-year pedestrian improvement projects to approximately \$2.9 million (again assuming three percent inflation between the 1999 cost estimates and the year 2000 cost estimates).

The order of implementing the South Hermiston Study Area projects #23 through #31 and conditions surrounding that implementation were developed jointly by the City of Hermiston and ODOT to ensure the integrity of the Highway 395 corridor as well as local access and circulation and is outlined in the following bullet points.

Implementation Requirements

The eastside Evelyn Avenue connection can be constructed now upon agreement with the City of Hermiston of all conditions and the issuance of a permit.

The westside Evelyn Avenue connection can be constructed upon agreement with the City of Hermiston on all conditions on a phased basis. This phasing is shown graphically in Figure 5 and is listed below:

- 55,000 1. (Improvement #23) Extension of Evelyn Avenue west to the New Hope Church westerly property line.
- 150,000 2. (Improvement #24) Closure of the New Hope Church access to Highway 395 with new access developed to the west of Evelyn Avenue extension identified in #1 above.
- 280,000 3. (Improvement #25) North-South crossing of the "A" Line Canal westerly of the New Hope Church property connection to #1 above.
- 395,000 4. (Improvement #26) Connection between #3 above and the Port Drive intersection requiring approximately 300 feet of new street along the "A" Line Canal.
- 200,000 5. (Improvement #27) Improvements to the Port Drive intersection allowing the westerly movement of traffic along the "A" Line Canal to the west property line of the New Hope Church, then north to the westerly extension of Evelyn Avenue.
- 200,000 6. (Improvement #28) Extension of the West Evelyn Avenue Extension (#1 above) to a connection with McKinley Street.
- 200,000 to 300,000 7. (Improvement #19) Signalization of the Port Drive/Highway 395 intersection when traffic signal warrants merit installation.
- 380,000 8. (Improvement #29) Westerly extension of a new roadway along the canal from the New Hope Church west property line to the extension of SE 4th Street, including connection to SE 4th Street.

- 245,000 9. (Improvement #30) Easterly extension of Gettman Road from Hinkle Road to SE 4th Street.
- 215,000 10. (Improvement #31) Local access to Cemetery Road realigned 300 feet or more from U.S. Highway 395.

The reservations of access along Highway 395 between Highland Avenue and Port Drive that currently serve undeveloped properties should be closed. All access to these properties should be via an off-system street. Once agreement is reached on these closures, the actual closure will occur when properties are developed.

The reservations of access that currently serve developed properties will be allowed until the times these properties redevelop.

For the church property being developed at this time on the west side of Highway 395, as soon as the westerly extension of Evelyn Avenue is completed to the west property line of the church, the church's access will be reconnected to this street. Their highway access will then be closed.

The next signalized intersection on U.S. Highway 395 south of 4th Street will be the Port/Cemetery Road intersection.

Potential traffic conflict conditions at the Evelyn Street and 395 intersection will be alleviated by improvements to the Port Drive and Highway 395 intersection. These improvements together with street extensions from Port Drive to the westerly extension of Evelyn Avenue at the northwest corner of the church, prior to connection of west Evelyn Avenue with McKinley Street, will ensure intersection modifications will be implemented at Port Drive.

DRAFT FINDINGS

Subject to the comments and considerations of the public hearing, the following findings are presented:

Goal 1 and Policy 1. Citizen Involvement. The City will insure that citizens have an adequate opportunity to be involved in all phases of the planning process.

1. Public notice requirements have been met by publication in the local newspaper. No objections were received as a result of those publications.

Goal 2 and Policy 3. Intergovernmental Coordination. The City of Hermiston will facilitate intergovernmental coordination so that decisions affecting local, state, and federal planning and development actions in the Hermiston area are rendered in an efficient and consistent manner.

2. The notice of proposed amendment was sent to the Department of Land Conservation and Development on May 24, 2000, more than 45 days prior to the first evidentiary hearing in accord with Oregon Administrative Rules, Chapter 660, Division 18. The notice to DLCD listed Umatilla County and the Oregon Department of Transportation as affected agencies. To date, no comments or objections have been received as a result of that mailing.
3. The South Hermiston Access and Circulation Plan was a joint planning effort undertaken by the City of Hermiston and ODOT in December of 1999. Through a series of technical correspondence and meetings, future access connections and roadway alignments were identified to provide for the safe and efficient movement of vehicles, pedestrians, and bicyclists within the area bounded by SE Hinkle Road, SE 9th Street, SE Highland Avenue, and SE Airport Way. Now that the access and circulation plan has been agreed to by the City and ODOT, it is imperative that the material be incorporated into the City's TSP to ensure that it is fully implemented as local development activities continue.

Goal 12 and Policy 30. Transportation. The City of Hermiston will promote a balanced well-integrated local transportation system which provides safe, convenient and energy-efficient access, and facilitates the movement of commodities.

4. The City of Hermiston is required to adopt a Transportation System Plan (TSP) and related amendments to the Hermiston Comprehensive Plan and implementing ordinances to comply with the requirements of the Transportation Planning Rule (OAR 660, Division 12).
5. The 1997 Hermiston Transportation System Plan (TSP), the 1999 TSP Update, and the 2000 TSP Amendment (proposed South Hermiston Local Access and Circulation Plan amendment) will guide transportation planning within Hermiston's urban growth boundary (UGB) for the next 20 years. The 2000 TSP Amendment will be incorporated into the City of Hermiston TSP. The City of Hermiston TSP serves as the transportation element of the Hermiston Comprehensive Plan and the City will base its transportation policies, actions and investments on the adopted TSP.

6. To fully implement the access and circulation plan, it will be necessary to supplement the City TSP's Roadway Functional Classification and Traffic Signal Plan, Pedestrian Facility Plan, and Bicycle Facility Plan. The following changes to the City's Transportation System Plan are recommended to ensure the South Hermiston Access and Circulation Plan is properly developed.
7. The new Gettman Road Extension and SE 4th Street are expected to enhance local access and roadway connectivity in the area that they serve. The enhanced connectivity opportunities offered by the expanded roadway network should also address more regional needs by reducing congestion at the intersection of Highway 395/SE 4th Street.

PLANNING COMMISSION ACTION

Following a public hearing on July 12, 2000, the planning commission recommended that the city council adopt the 2000 amendment to the Transportation System Plan through the implementation of the South Hermiston Local Access and Circulation Plan.

RECOMMENDED CITY COUNCIL ACTION

Staff recommends that the city council accept the planning commission recommendation and adopt the 2000 amendment to the Transportation System Plan based on the findings of fact. Staff also recommends that the city council adopt Ordinance No. 2019 which amends the TSP through the implementation of the South Hermiston Local Access and Circulation Plan.

ORDINANCE NO. 2019

AN ORDINANCE AMENDING THE HERMISTON TRANSPORTATION SYSTEM PLAN THROUGH THE ADOPTION OF THE SOUTH HERMISTON LOCAL ACCESS AND CIRCULATION PLAN AND DECLARING AN EMERGENCY.

WHEREAS, the Hermiston Planning Commission held a public hearing on July 12, 2000 to receive public testimony and consider an amendment to the Hermiston Transportation System Plan, and

WHEREAS, the Hermiston City Council held a public hearing on July 24, 2000 to receive public testimony and consider an amendment to the Hermiston Transportation System Plan, and

WHEREAS, notice of the Planning Commission and City Council hearings was provided to the Department of Land Conservation and Development and published in a newspaper of general circulation in accordance with statutory requirements and local ordinance requirements for notice of legislative amendments, now therefore

THE CITY OF HERMISTON DOES ORDAIN AS FOLLOWS:

SECTION 1. The 1999 Hermiston Transportation System Plan is hereby amended to include the South Hermiston Local Access and Circulation Plan (SHLACP).

SECTION 2. The May 23, 2000 Hermiston Transportation System Plan Amendment submitted by Kittelson & Associates Inc. is attached as Exhibit A and is incorporated herein by reference.

SECTION 3. Inasmuch as it is necessary for the health, safety, comfort and convenience of the people of the City of Hermiston that the SHLACP for Evelyn Avenue east of HWY 395 have immediate effect, an emergency is hereby declared to exist, and that portion of SHLACP for Evelyn Avenue east of HWY 395 as adopted by this ordinance shall be in full force and effect from and after passage and approval of this ordinance.

SECTION 4. That portion of SHLACP inside the Urban and Urbanizable area of the UGB shall be referred to Umatilla County for co-adoption.

PASSED by the Common Council this 24th day of July, 2000.
SIGNED by the Mayor this 24th day of July, 2000.

MAYOR

ATTEST:

CITY RECORDER

AFFIDAVIT OF POSTING

STATE OF OREGON)
) ss.
County of Umatilla)

I, Robert D. Irby, being first duly sworn, depose and say that I am the duly appointed and acting City Recorder for the City of Hermiston, Umatilla County, Oregon.

That at least two business days before the first reading of Ordinance No. 2019, I posted a written notice at Hermiston City Hall, 180 N.E. 2nd Street, Hermiston, Oregon, that a copy of Ordinance No. 2019 was then and there available for public inspection in the office of the City Recorder.

That I provided each Council member with a copy of said ordinance before the first reading of said ordinance.

Robert D. Irby, City Recorder

Subscribed and sworn to or affirmed before me this 24th day of July, 2000.

Notary Public for Oregon
My Commission Expires: _____

ORDINANCE NO. 2070

AN ORDINANCE AMENDING THE HERMISTON TRANSPORTATION SYSTEM PLAN THROUGH THE ADOPTION OF THE US 395 CORRIDOR REFINEMENT PLAN.

WHEREAS, the City of Hermiston adopted a Transportation System Plan (TSP) and related amendments to the Hermiston Comprehensive Plan and implementing ordinances to comply with the Transportation Planning Rule (OAR 660, Division 12) in December, 1999; and

WHEREAS, the City of Hermiston adopted an amendment to the TSP to implement the South Hermiston Local Access and Circulation Plan in July, 2000; and

WHEREAS, the factual base for the Hermiston TSP is contained in the text of the TSP and will not be repeated here; and

WHEREAS, the Oregon Department of Transportation has proposed to construct a planted median barrier on Highway 395 from SE Kelli Blvd to E Feedville Road; and

WHEREAS, to mitigate the effects of the proposed planted median, a circulation plan is needed for future roadways to the east and west of Highway 395 south of SE Port Drive; and

WHEREAS, four public workshops were conducted to solicit on the proposed access and circulation plan for the south Hermiston area; and

WHEREAS, the Hermiston Planning Commission held public hearings on March 12, 2003 and May 14, 2003 to receive public testimony and consider amendments to the Hermiston TSP; and

WHEREAS, the Hermiston City Council held a public hearing on May 19, 2003 to receive public testimony and consider amendments to the Hermiston TSP; and

WHEREAS, notice of the Planning Commission and City Council hearings was provided to the Department of Land Conservation and Development and published in a newspaper of general circulation in accordance with statutory requirements and local ordinance requirements for notice of legislative amendments; now therefore

THE CITY OF HERMISTON DOES ORDAIN AS FOLLOWS:

SECTION 1. The 1999 Hermiston Transportation System Plan is hereby amended to include the US 395 Corridor Refinement Plan.

SECTION 2. The January 17, 2003 Hermiston Transportation System Plan Amendment submitted by Kittelson & Associates is attached as Exhibit A and is incorporated herein by reference.

SECTION 3. That portion of the amendment areas inside the Urban and Urbanizable areas of the UGB shall be referred to Umatilla County for co-adoption.

SECTION 4. The effective date of this ordinance shall be the thirtieth day after enactment.

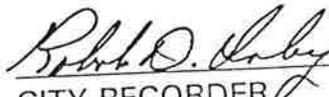
First reading in full on the 19th day of May, 2003.

PASSED by the Common Council this 9th day of June 2003.

SIGNED by the Mayor this 9th day of June, 2003.


MAYOR

ATTEST:


CITY RECORDER

**EXHIBIT "A"
TO
ORDINANCE NO.2070**

Section 1

**Proposed
Transportation
System Plan
Amendments**



KITTELSON & ASSOCIATES, INC.

TRANSPORTATION PLANNING/TRAFFIC ENGINEERING

610 SW ALDER, SUITE 700 • PORTLAND, OR 97205 • (503) 228-5230 • FAX (503) 273-8169

MEMORANDUM

Date: January 17, 2003

Project #: 5504

To: Ed Brookshier, City of Hermiston
Teresa Penninger, ODOT Region 5

cc: Planning Project Team Members

From: Marc Butorac, P.E., P.T.O.E.
Matt Hughart, AICP

Project: US 395 (Port Drive to Feedville Road) Corridor Refinement Plan

Subject: Hermiston Transportation System Plan and US 395 North Corridor Plan Amendment

INTRODUCTION

In July 2000, the Oregon Department of Transportation's (ODOT) *US 395 North Corridor Plan* was adopted by the Oregon Transportation Commission. As part of this plan, a raised median was recommended along a portion of US 395 (Kelli Boulevard to Rosalyn Drive) to enhance the long-term travel safety and provide better access management. Thus, the *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec.* median project was placed on the Statewide Transportation Improvement Plan (STIP) and funded for the 2002-2003 fiscal year.

While the *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec.* STIP median project meets the objective of the *US 395 North Corridor Plan*, the City of Hermiston Transportation System Plan (TSP) has not been expanded to address the local access and circulation needs within the City of Hermiston's Urban Growth Boundary south of Port Drive. As a result, this area does not have an established or planned street network capable of supporting a highly access-controlled corridor. Based on this concern and the aesthetics of the raised median on US 395, the City of Hermiston requested that a refinement study be completed prior to the implementation of the median project. This project became known as the *US 395 (Port Drive to Feedville Road) Corridor Refinement Plan*. The overall goal of the refinement study is to develop a long-term circulation and corridor preservation strategy that will allow economic development based on quality development principles within the City of Hermiston Urban Growth Boundary, while maintaining the integrity and safety of the US 395 corridor.

This memorandum contains proposed amendments to the City of Hermiston Transportation System Plan that implements the work completed as part of the *US 395 (Port Drive to Feedville Road) Corridor Refinement Plan*. The proposed amendment was developed to directly

supplement the various plan maps, street standards, and improvement projects previously identified in the May 2000 Transportation System Plan amendment that resulted in an updated transportation system plan for the City of Hermiston. The information in this memorandum is also intended to supplement and update ODOT's July 2000 *US 395 North Corridor Plan*. These plans will either be referred to or directly incorporated into the next published update of this plan.

US 395 (PORT DRIVE TO FEEDVILLE ROAD) CORRIDOR REFINEMENT PLAN

The US 395 (Port Drive to Feedville Road) Corridor Refinement Plan has been funded jointly by the City of Hermiston and the Oregon Department of Transportation to address the overall management direction established by the *US 395 North Corridor Plan* and the short- and long-term access and circulation issues raised as part of the ongoing *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec. STIP* median project. Through a series of technical correspondence and meetings, future highway access and roadway alignments were identified to provide for the safe and efficient movement of vehicles, pedestrians, and bicyclists within the area bounded by Port Drive, Hermiston-Hinkle Road, Feedville Road, and Ott Road.

PROPOSED TSP AMENDMENT/CHANGES TO MODAL PLANS

The last major update/modification to the City of Hermiston's Transportation System Plan was completed in May 2000. At that time, TSP amendments were adopted to implement elements of a sub-area plan known as the South Hermiston Access and Circulation Plan. Similar to this last update, an expanded set of access, circulation, pedestrian, and bicycle plans have been developed by the City, ODOT, and interested citizen stakeholders throughout the duration of the *US 395 (Port Drive to Feedville Road) Corridor Refinement Plan*. To ensure the elements of these plans are carried out, the material will need to be incorporated into the City's Transportation System Plan, the *US 395 North Corridor Plan*, and the Umatilla County Transportation System Plan.

To fully implement the modified access and circulation plans, it will be necessary to supplement the following elements to the City of Hermiston's Transportation System Plan:

- Street Classifications and Traffic Signal Plan,
- Pedestrian Facility Plan,
- Bicycle Facility Plan, and
- Project Implementation Plan.

The following sections highlight the proposed changes to the City's TSP. The transportation components presented in these sections were developed to address the requirements of Oregon's Transportation Planning Rule (TPR). These recommendations have been developed in accordance with the findings presented in Technical Memorandums #1, #2, and #3, the interests of local citizen stakeholders and business owners, and City of Hermiston/ODOT staff.

Functional Classification and Traffic Signal Plan

The Hermiston Functional Classification and Traffic Signal Plan reflects the anticipated operational and circulation needs of the City and provides guidance on how to best facilitate that

travel through the TSP horizon year. Figure 1 illustrates the proposed updated Street Classifications and Traffic Signal Plan for the City of Hermiston. This plan is identical to the plan identified in the May 2000 TSP update (Figure 1 of the May 2000 Proposed Transportation System Plan Amendment prepared by Kittelson & Associates, Inc.), with the exception of the additional roadway alignments and traffic signals developed as part of the *US 395 (Port Drive to Feedville Road) Corridor Refinement Plan*. A detailed description of these functional classification and signal components as they relate to the Functional Classification and Traffic Signal Plan are provided in the separate section of this memorandum titled "US 395 Corridor Refinement Plan Study Area."

Pedestrian Facility Plan

Providing connections between major activity centers is a key objective of the Hermiston Pedestrian Facility Plan. For the US 395 Corridor Refinement study area, this network of pedestrian connections is important for the following reasons:

- serving shorter pedestrian trips between adjacent activity centers such as businesses, commercial establishments, and existing/future transit services;
- meeting the City of Hermiston's recreational needs; and
- providing non-motorized transportation alternatives.

Figure 2 illustrates the proposed Pedestrian Facility Plan. This plan illustrates those existing urban arterial and collector street segments that currently do not have a sidewalk on either side of a given street, as well as future roadway alignments that will be developed with sidewalk facilities. It should be noted that this plan is identical to the plan identified in the May 2000 TSP update (Figure 2 of the May 2000 Proposed Transportation System Plan Amendment prepared by Kittelson & Associates, Inc.), with the exception of the additional pedestrian elements created as part of the *US 395 (Port Drive to Feedville Road) Corridor Refinement Plan*.

The City of Hermiston's current street standards call for sidewalks to be provided along all new urban arterial, collector, and local streets. As development and redevelopment occurs, and as City funding permits, sidewalk gaps in the existing roadway system will be filled.

The desire to develop a multi-use pathway system carries forward into this TSP amendment. Of particular interest is a multi-use path along the west side of US 395 that could potentially link to the existing multi-use path in the City of Stanfield. To link this path to the remainder of the City of Hermiston, a multi-use path bridge crossing of the irrigation canal and railroad tracks running along the north side of the study area will be required. A further description of this pedestrian plan component as it relates to the Pedestrian Facility Plan is provided in the separate section of this report titled "US 395 Corridor Refinement Plan Study Area."

Bicycle Facility Plan

The bicycle plan establishes a network of bicycle lanes and routes that are designed to connect the City's bicycle trip generators. Figure 3 illustrates the proposed updated Bicycle Facility Plan for the city of Hermiston. This plan is also identical to the plan identified in the May 2000 TSP update (Figure 3 of the May 2000 Proposed Transportation System Plan Amendment prepared by

Kittelson & Associates, Inc.), with the exception of the additional elements created as part of the *US 395 (Port Drive to Feedville Road) Corridor Refinement Plan*. A detailed description of these bicycle components as they relate to the Bicycle Facility Plan are provided in the separate section of this report titled "US 395 Corridor Refinement Plan Study Area."

US 395 CORRIDOR REFINEMENT PLAN STUDY AREA

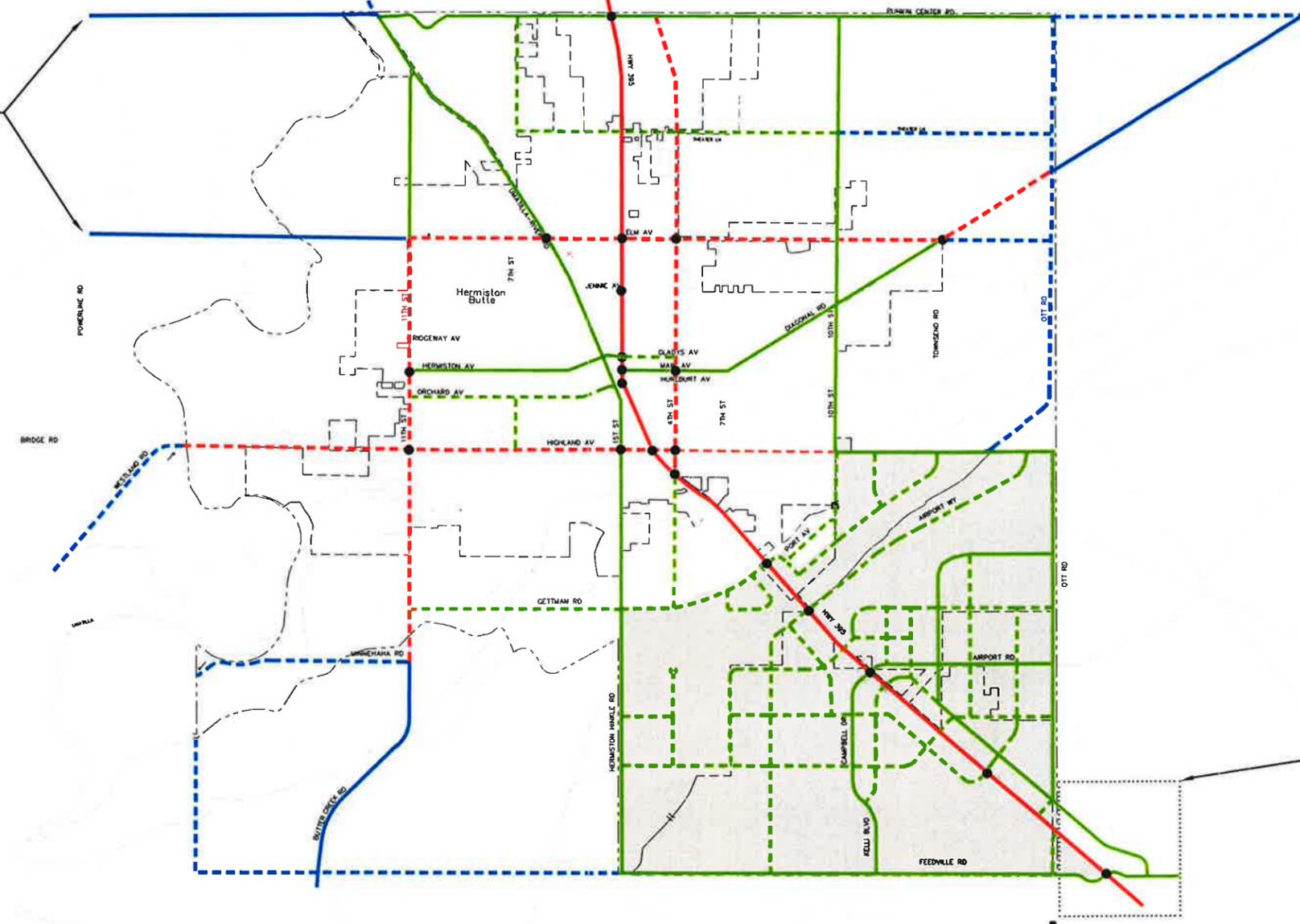
Recognizing the unique transportation needs of the study area defined in the US 395 Corridor Refinement Plan, transportation elements were developed to serve the local access needs of existing development while also providing future transportation (roadway, bicycle, and pedestrian) connections that support future growth. Each of the identified system treatments are intended to promote connectivity and efficient operations on the existing facilities while preserving the access integrity and safety of the US 395 corridor.

Transportation Improvement Projects

The May 2000 Transportation System Plan update identified nine additional roadway improvement projects for the 20-year planning horizon. These projects are summarized in Figures 4 and 5. As a result of consensus achieved through the *US 395 (Port Drive to Feedville Road) Corridor Refinement* planning efforts, twenty-two additional transportation improvement projects have been identified. These new improvements from the US 395 Corridor Refinement Plan are summarized in Figure 6 and Table 1. These projects include construction of new roadways and intersections, the extension of existing roadway corridors to provide better connectivity, implementation of access management measures as a result of the US 395 median project, and traffic control improvements. It should be noted that the order of projects listed in Table 1 do not reflect a prioritized ranking. Scheduling of the US 395 Corridor Refinement Study area projects is discussed in greater detail later in this memorandum.

The additional projects are expected to be implemented gradually over the planning horizon in conjunction with local development activities and so have been categorized as short-term, mid-term, and long-term needs.

NOTE: NEW UMATILLA RIVER
BRIDGE CROSSING ON EITHER
PUNKIN CENTER RD. OR ELM AVE.



NOTE: UPDATE SPECIFIC TO THE
US 395 NORTH CORRIDOR PLAN
AND UMATILLA COUNTY TSP

LEGEND

- URBAN MAJOR ARTERIAL
- - - URBAN MINOR ARTERIAL
- URBAN MAJOR COLLECTOR
- - - URBAN MINOR COLLECTOR
- RURAL ARTERIAL
- - - RURAL COLLECTOR
- TRAFFIC SIGNAL
- STUDY AREA BOUNDARY
- - - UGB
- CITY LIMITS
- US 395 CORRIDOR REFINEMENT STUDY AREA

NOTE: THE ALIGNMENT FOR FUTURE STREETS SHOULD BE
CONSIDERED CONCEPTUAL. THE INTERSECTIONS
AND THE STREET ALIGNMENTS MAY VARY DEPENDING
ON RIGHT-OF-WAY AND TOPOGRAPHIC CONSTRAINTS.

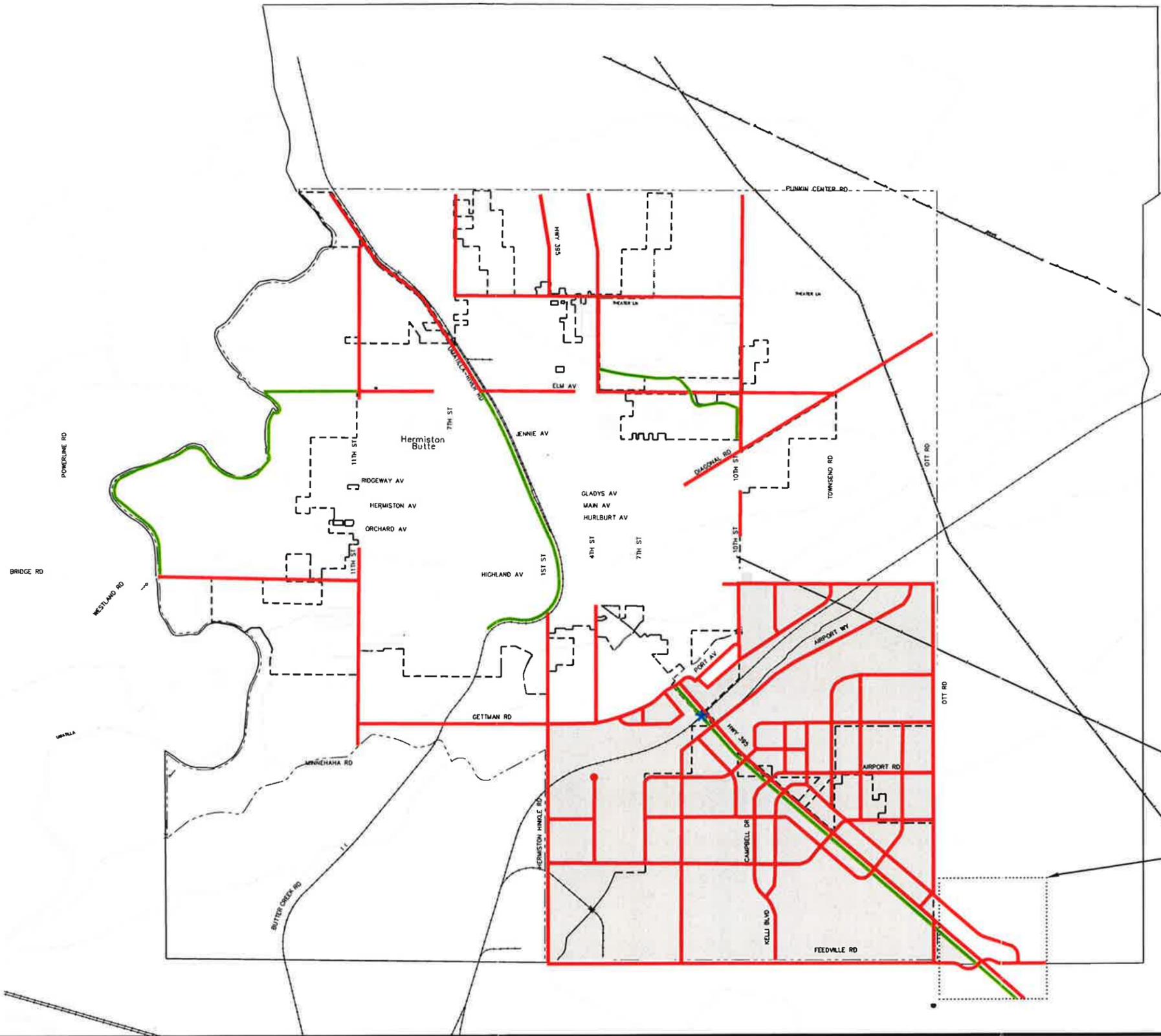
**STREET CLASSIFICATIONS AND
TRAFFIC SIGNAL PLAN
JANUARY 2003 UPDATE**

HERMISTON TSP AMENDMENT HERMISTON, OREGON JANUARY 2003	FIGURE 1	
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LEGEND

- PROPOSED SIDEWALK IMPROVEMENTS (Urban Arterials & Collectors)
- PROPOSED OFF-STREET (MULTI-USE) PATHWAY IMPROVEMENTS
- ★ FUTURE OFF-STREET (MULTI-USE) PATHWAY BRIDGE
- STUDY AREA BOUNDARY
- - - UGB
- · · CITY LIMITS
- US 395 CORRIDOR REFINEMENT STUDY AREA



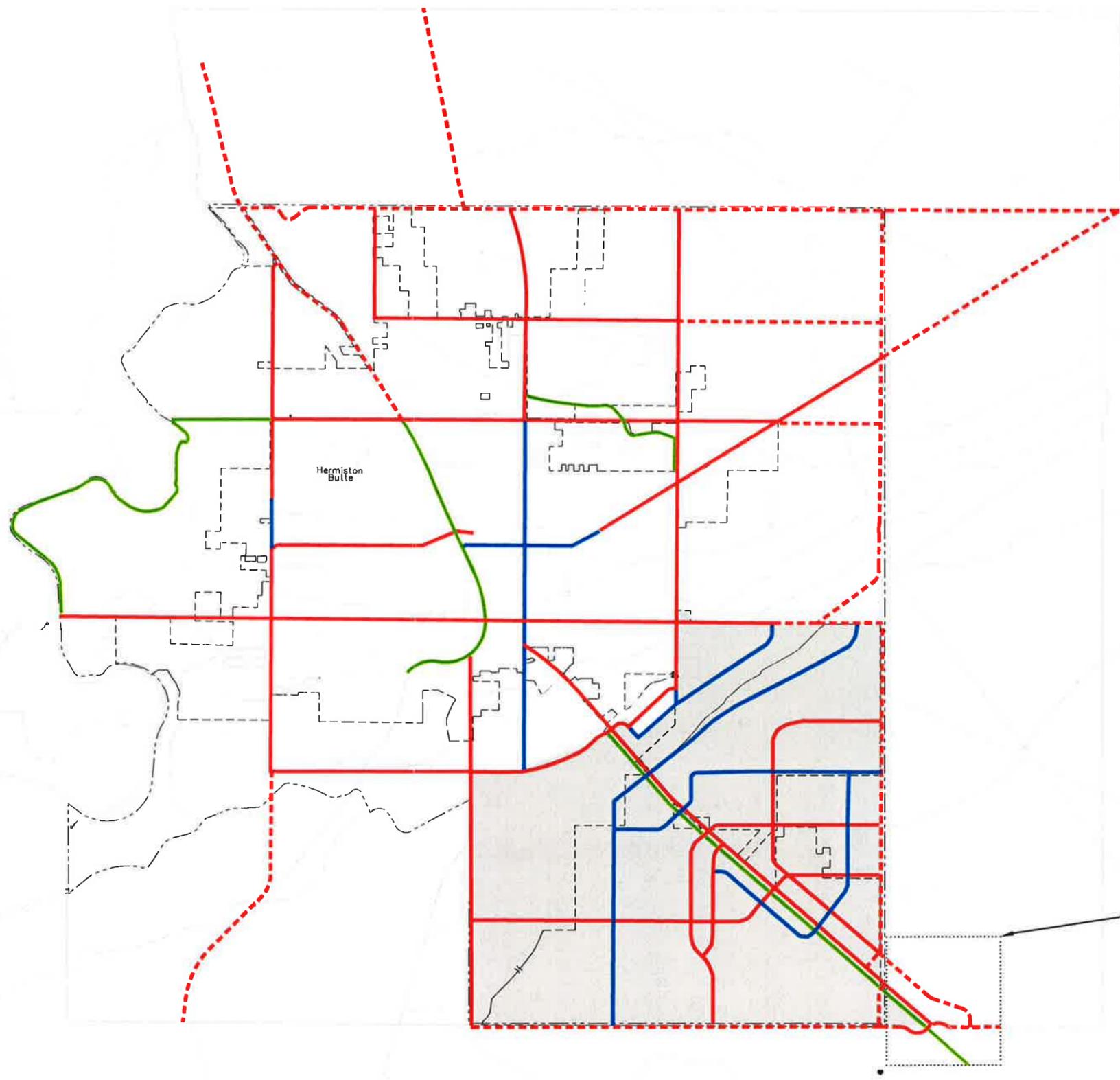
NOTE: UPDATE SPECIFIC TO THE US 395 NORTH CORRIDOR PLAN AND UMATILLA COUNTY TSP

**PEDESTRIAN FACILITY PLAN
JANUARY 2003 UPDATE**

HERMISTON TSP AMENDMENT
PROJECT LOCATION
HERMISTON, OREGON

FIGURE
2





LEGEND

- ON-STREET BIKE LANE
- - - SHOULDER BIKEWAYS
- ON-STREET BIKE ROUTE
- OFF-STREET (MULTI-USE) PATHWAY
- STUDY AREA BOUNDARY
- UGB
- CITY LIMITS
- US 395 CORRIDOR REFINEMENT STUDY AREA

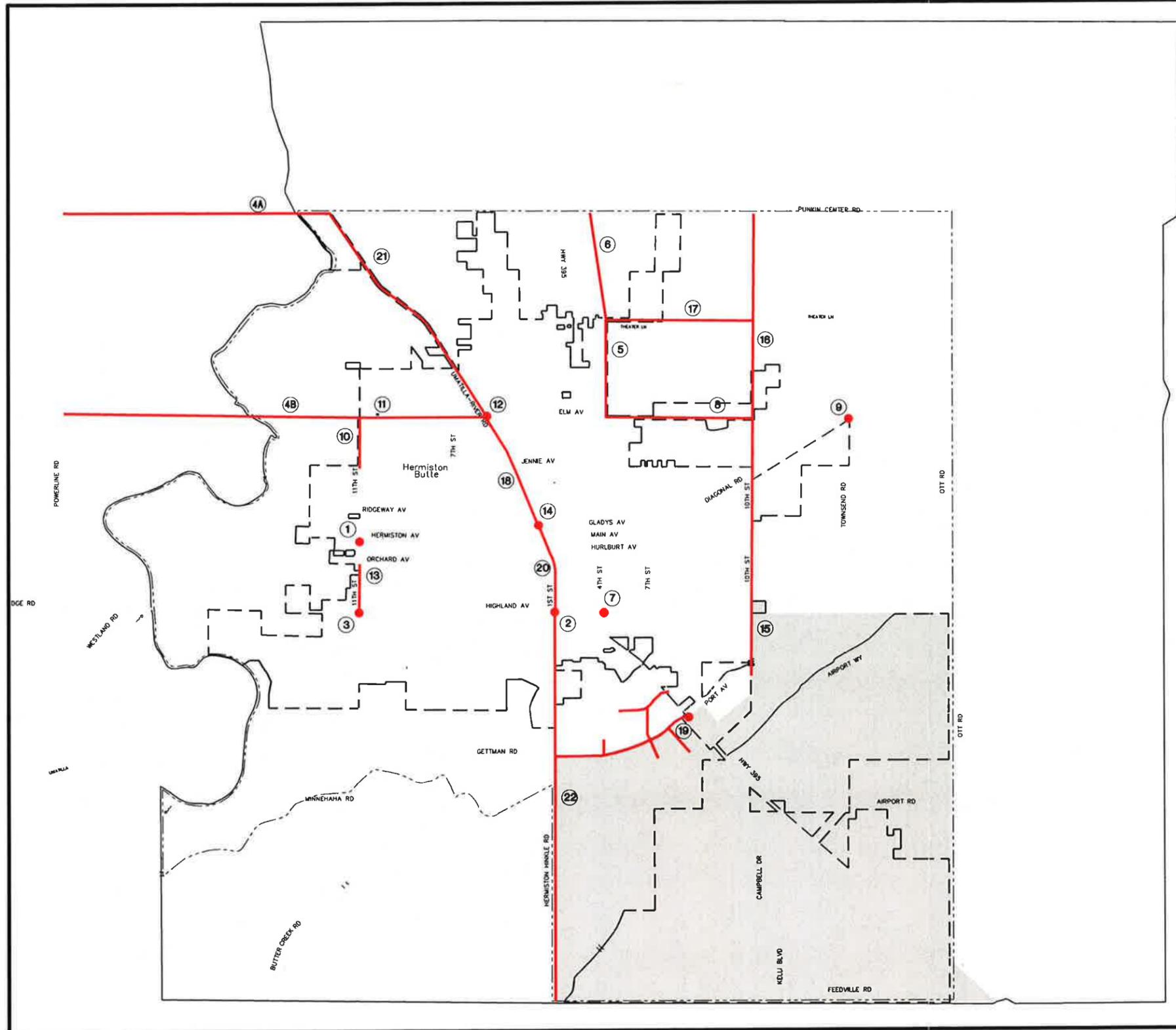
NOTE: UPDATE SPECIFIC TO THE
US 395 NORTH CORRIDOR PLAN
AND UMATILLA COUNTY TSP

**BICYCLE FACILITY PLAN
JANUARY 2003 UPDATE**

HERMISTON TSP AMENDMENT
HERMISTON, OREGON
JANUARY 2003

FIGURE
3





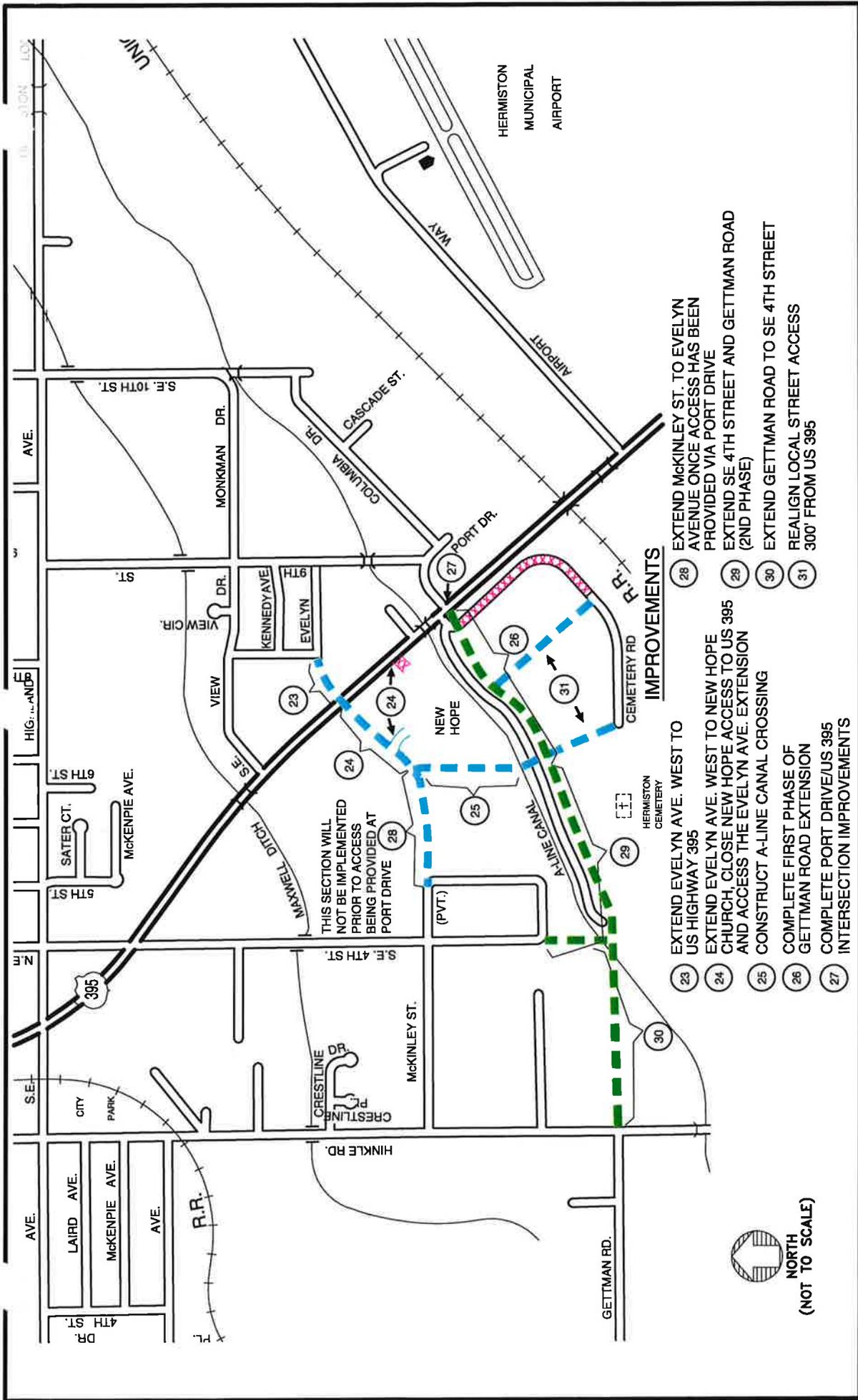
- ① Improve West 11th St./Hermiston Ave. Intersection (New Traffic Signal, Intersection Rechannalization)
- ② Improve West 1st St./Highland Ave. Intersection (New Traffic Signal)
- ③ Improve Highland Ave./West 11th St. Intersection (Reconfigure Turn Lanes)
- ④A Option 1: Construct Bridge Across Umatilla River and Connect with Punkin Center Rd.
- ④B Option 2: Construct Bridge Across Umatilla River and Connect with Elm Ave.
- ⑤ Extend 4th St. from Elm Ave to Punkin Center Rd. (Include New Signal at Elm Ave.)
- ⑥ Extend 4th St. from Theater Lane to Punkin Center Rd.
- ⑦ Improve West 4th St./Highland Ave. Intersection (New Traffic Signal)
- ⑧ Improve Elm Ave. from East 4th St. to Diagonal Rd (Widen to 3 Lanes)
- ⑨ Elm Ave./Diagonal Rd. Intersection Improvements
- ⑩ Improve West 11th St. Adjacent to Good Samaritan Hospital (Widen to 3 Lanes)
- ⑪ Improve Elm Ave. from West 11th St. to Umatilla River Rd.
- ⑫ Improve Elm Ave./Umatilla River Rd. Intersection (Signal Modified, Add Left Turn Lanes)
- ⑬ Improve West 11th St., north of Highland Ave. (Widen to 3 Lanes)
- ⑭ Improve 1st Place/Hermiston Ave. Intersection (Add Traffic Signal, Intersection Rechannalization)
- ⑮ Improve 10th St. from Columbia Dr. to Elm Ave.
- ⑯ Improve and Relocate 10th St. from Elm Ave. to Punkin Center Rd.
- ⑰ Theater Lane Upgrade from Highway 395 to East 10th St.
- ⑱ Upgrade Umatilla River Rd from Hermiston Ave. to Elm Ave.
- ⑲ Improve Highway 395/Port Ave. Intersection (New Traffic Signal)
- ⑳ Upgrade 1st St. from Hermiston Ave. to Highland Ave.
- ㉑ Upgrade Umatilla River Road from Elm Ave. to Punkin Center Rd.
- ㉒ Upgrade 1st St./Hermiston-Hinkle Rd. from Highland Ave. to Feedville Rd.
- ②③-③② See Figure 5, South Hermiston Study Area
- ③③-⑤⑤ See Figure 6, US 395 Corridor Street System Improvements

LEGEND

- IMPROVEMENT LOCATIONS
- STUDY AREA BOUNDARY
- - - UGB
- - - CITY LIMITS
- US 395 CORRIDOR REFINEMENT STUDY AREA

**REFINED STREET SYSTEM IMPROVEMENTS
JANUARY 2003 UPDATE**

HERMISTON TSP AMENDMENT HERMISTON, OREGON JANUARY 2003	FIGURE 4	
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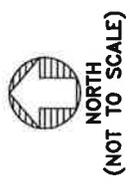
SOUTH HERMISTON STUDY AREA ACCESS AND CIRCULATION IMPROVEMENT PLAN MAY 2000 TSP UPDATE

HERMISTON TSP AMENDMENT
HERMISTON, OREGON
JANUARY 2003

FIGURE
5

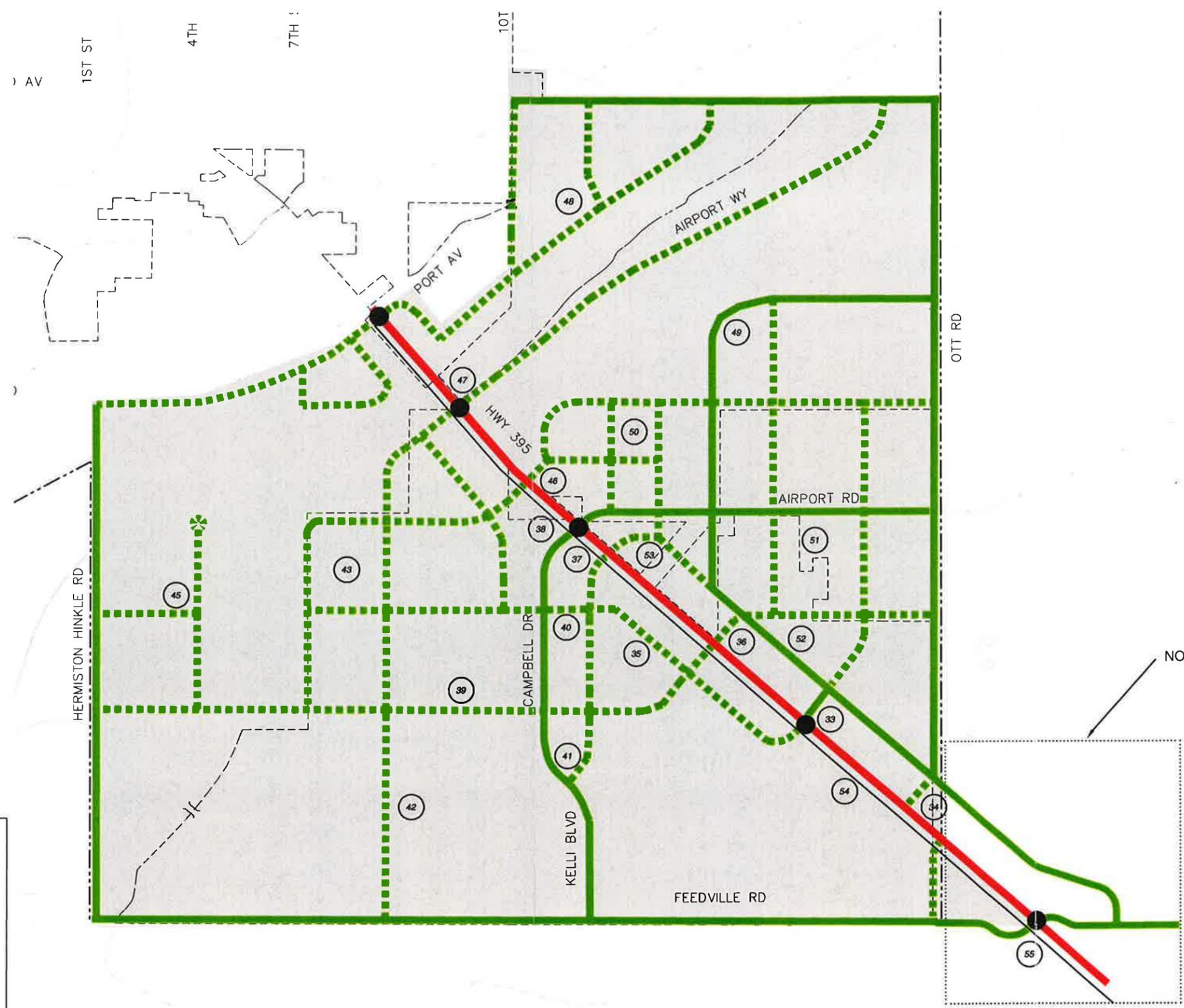
- IMPROVEMENTS**
- 23 EXTEND EVELYN AVE. WEST TO US HIGHWAY 395
 - 24 EXTEND EVELYN AVE. WEST TO NEW HOPE CHURCH. CLOSE NEW HOPE ACCESS TO US 395 AND ACCESS THE EVELYN AVE. EXTENSION
 - 25 CONSTRUCT A-LINE CANAL CROSSING
 - 26 COMPLETE FIRST PHASE OF GETTMAN ROAD EXTENSION
 - 27 COMPLETE PORT DRIVE/US 395 INTERSECTION IMPROVEMENTS
 - 28 EXTEND MCKINLEY ST. TO EVELYN AVENUE ONCE ACCESS HAS BEEN PROVIDED VIA PORT DRIVE
 - 28 EXTEND SE 4TH STREET AND GETTMAN ROAD (2ND PHASE)
 - 30 EXTEND GETTMAN ROAD TO SE 4TH STREET
 - 31 REALIGN LOCAL STREET ACCESS 300' FROM US 395

THIS SECTION WILL NOT BE IMPLEMENTED PRIOR TO ACCESS BEING PROVIDED AT PORT DRIVE



LEGEND

- NEW MINOR COLLECTOR
- NEW LOCAL STREET
- STREET CLOSURE



NOTE: UPDATE SPECIFIC TO THE US 395 NORTH CORRIDOR PLAN AND UMATILLA COUNTY TSP

LEGEND	
	URBAN MAJOR ARTERIAL
	URBAN MINOR ARTERIAL
	URBAN MAJOR COLLECTOR
	URBAN MINOR COLLECTOR
	TRAFFIC SIGNAL
	OFF-STREET (MULTI-USE) PATH
	UGB
	CITY LIMITS
	US 395 CORRIDOR REFINEMENT STUDY AREA

CORRESPONDS TO IMPROVEMENTS LISTED IN TABLE 1

US 395 CORRIDOR STREET SYSTEM IMPROVEMENTS JANUARY 2003 UPDATE

HERMISTON TSP AMENDMENT HERMISTON, OREGON JANUARY 2003	FIGURE 6	
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**Table 1
Recommended 20-Year Street Improvement Projects
US 395 Corridor Refinement Study Area**

Fig 6 Id #	Project Description	Priority	Estimated Cost (Yr. 2002 \$)	Potential Funding Source(s)
33	Provide a signalized access portal to US 395 (when warranted by a traffic engineering study) at the current Wal-Mart Distribution Center access to be served by a major collector roadway east of US 395 and a minor collector west of US 395.	Near-term	\$225,000	AMG, PDF, TEP, SDC, GF
34	Realign the north and south approaches to Ott Road such that they intersect US 395 at a complete 90-degree angle. The future intersections should be limited to right-in/right-out driveways to help preserve access management along the highway.	Mid-term, but not before improvements #33 and #52	\$550,000	AMG, PDF, TEP, SDC, GF
35	Develop a minor collector backage road that runs parallel to US 395 between Kelli Boulevard and the Wal-Mart Distribution Center truck access road.	Near-term, but not before improvements #33.	\$1,750,000	PDF, LID, GF
36	Re-construct a limited access right-in/right-out driveway to US 395 near the current Hermiston Foods driveway to be served by minor collector roadways on both sides of the highway.	Mid-term, following improvements #33, #35, & #52	\$25,000	AMG, TEP, SDC, PDF, STIP
37	Re-construct a limited access intersection (left-in/right-in/right-out) at the US 395/Kelli Boulevard intersection.	Mid-term, following the completion of improvements #33, #35, #38 & #40	\$25,000	AMG, TEP, SDC, PDF, STIP
38	Signalize the US 395/Campbell Drive/Airport Road intersection when warranted by a traffic engineering study.	Mid-term	\$225,000	STIP, PDF, LID, GF
39	Develop a minor collector roadway to facilitate east/west travel between Hermiston-Hinkle Road and US 395.	Long-term	\$5,375,000	PDF, LID, GF
40	Upon redevelopment of adjacent land parcels, develop a minor collector connection between Campbell Drive and Kelli Boulevard.	Mid-term	\$275,000	PDF, GF, LID
41	Extend Campbell Drive at major collector standards south and east to Kelli Boulevard (1 st Phase). Realign a portion of Kelli Boulevard so that it intersects the extension of Campbell Drive (2 nd Phase).	Long-term	\$1,075,000	GF, LID, TEP
42	Develop a minor collector roadway to facilitate north/south travel between US 395 and Feedville Road.	Long-term	\$3,700,000	PDF, LID, GF
43	Develop a series of minor collector roadways to ensure circulation and connectivity upon redevelopment of the large agriculture plots within the western study area.	Long-term	\$5,825,000	PDF, LID, GF

Fig 6 Id #	Project Description	Priority	Estimated Cost (Yr. 2002 \$)	Potential Funding Source(s)
44	#44 not used	-	-	-
45	Upon the redevelopment of the Hermiston Agriculture Experiment Station, provide a new minor collector roadway along the SE 4 th Street alignment. Upgrade and extend Experiment Station Road to this 4 th Street alignment.	Long-term	\$1,575,000	PDF, LID
46	Develop a full access intersection at US 395 to be served by a future extension of Able Drive. This intersection should be limited to a right-in/right-out/left-in access when warranted by a traffic engineering study.	Long-term, following the completion of improvements #43 & #47	\$225,000	STIP, AMG, PDF
47	Develop a signalized access intersection at the US 395/Airport Way intersection when warranted by a traffic engineering study.	Long-term, following completion of elements of Improvement #43	\$225,000	GF, SDC, TEP, PDF, STIP
48	Complete a minor collector roadway system upon redevelopment of the vacant land north of the airport, irrigation canal, and rail line.	Mid-term	\$3,150,000	PDF, SDC, LID, TEP
49	Develop a major collector roadway to facilitate north/south travel within the northeast quadrant of the US 395 Refinement Plan study area.	Mid-term	\$3,300,000	PDF, SDC, LID, TEP
50	Develop a series of minor collector roadways to facilitate circulation south of the Hermiston Airport.	Mid-term	\$3,375,000	PDF, SDC, LID, TEP
51	Develop a series of minor collector roadways to facilitate circulation within the northeast quadrant of the US 395 Refinement Plan study area.	Long-term	\$7,125,000	PDF, SDC, LID, TEP
52	Develop a major collector backage road between Kelli Boulevard and Ott Road.	Near-term	\$2,875,000	PDF, SDC, LID, TEP
53	Extend Kelli Boulevard east of US 395 to connect into a minor collector roadway network.	Near-term	\$1,100,000	PDF, SDC, LID
54	Develop a multi-use path along the west side of US 395. This path will require a bridge crossing over the feed canal and rail line.	Mid-term	\$450,000	GF, STIP, TEP
55	Signalize the US 395/Feedville Road intersection when warranted by a traffic engineering study. (Improvement specific to the US 395 North Corridor Plan)	Long-term	\$225,000	STIP

Note: Potential Funding Sources Include the Following:

- STIP - State Transportation Improvement Program (ODOT)
- GF - City of Hermiston General Fund
- SDC - City of Hermiston Transportation System Development Charge
- TEP - Transportation Enhancement Program
- PDF - Private Development Funds
- AMG - Access Management Grant
- LID - Local Improvement District
- County - Umatilla County
- LSN - Local Street Network

Implementation Requirements

The order of implementing the US 395 (Port Drive to Feedville Road) Corridor Refinement Plan projects were developed jointly by the City of Hermiston and ODOT to ensure the integrity of the US 395 corridor as well as local access and circulation. This implementation strategy is outlined in the following bullet points.

- Access improvements to US 395 will need to occur on an incremental basis depending upon the rate and location of new development.
 - The signalization of the US 395/Campbell Drive/Airport Road intersection (*Improvement #38*) in the near to mid-term will begin to shape future circulation patterns within the US 395 study area.
 - The signalization of the US 395/Wal-Mart Distribution Center driveway (*Improvement #33*) should occur when traffic signal warrants merit installation. The need for signalization will likely be facilitated by roadway *Improvements #35 and #52*.
 - *Improvement #36* will occur upon redevelopment of adjacent land parcels and the completion of *Improvements #35 and #52*.
 - The signalization of the US 395/Airport Way intersection (*Improvement #47*) will occur when upon the completion of future roadways associated with *Improvement #43* and when traffic signal warrants merit installation.
 - The future extension of Able Drive (*Improvement #46*) and its future intersection with US 395 should be limited to a right-in/right-out/left-in access upon the completion of *Improvements #43 and #47*.
 - The limited access modifications to the US 395/Kelli Boulevard (*Improvement #37*) should occur after completion of *Improvements #33, #35, #38, and #40*.
 - The limited access modifications to the US 395/Ott Road (*Improvement #34*) should occur after the completion of *Improvement #33 and #52*.
 - The signalization of US 395/Feedville Road (*Improvement #55*) should occur when traffic signal warrants merit installation. This is likely to be a long-term improvement that will be required upon the redevelopment of the large agricultural plots of the western US 395 study area. This improvement project is specific to the US 395 North Corridor Plan.
- The majority of the circulation roadways and necessary right-of-way can begin to be acquired and constructed upon the redevelopment of individual land parcels. Specific projects that should occur on a phased basis include the following:
 - To facilitate future circulation and access patterns, right-of-way and roadways associated with *Improvement #53* should begin to be acquired and constructed in the near term.
 - Future circulation roadways such as *Improvements #35 and #52* should occur upon the redevelopment of adjacent land parcels. These roadways will serve as

parallel roads to US 395 and will need to be planned in conjunction with future access opportunities to US 395 (*Improvements #33, #34, #36, #37 and #53*).

- *Improvement #40* should occur upon the redevelopment of adjacent land parcels to help facilitate access *Improvement #37*.
- *Improvement #41* should occur after signalization of the US 395/Campbell Drive intersection (*Improvement #38*) and the redevelopment of adjacent land parcels.

We trust that this memorandum adequately outlines the material proposed to be amended to the City of Hermiston's TSP and the *US 395 North Corridor Plan*. Should you have any questions or comments with respect to this information, please call us.

TRANSPORTATION
SYSTEM
PLAN
UPDATE



HERMISTON, OREGON

June 9, 2014

HERMISTON
TRANSPORTATION SYSTEM PLAN
UPDATE

HERMISTON, OREGON

JUNE 9, 2014



RENEWS 6/30/15



HERMISTON TRANSPORTATION SYSTEM PLAN UPDATE

1.0 OBJECTIVE

The objective of this document is to update the project list in the 2003 Hermiston Transportation System Plan (TSP). Three principal factors lead to the need for this update:

1. Ten of the top twenty-two projects in the 2003 TSP are complete and are no longer needed in the plan,
2. Land use changes and traffic growth years since plan adoption need to be reflected in the TSP, and
3. The TSP should reflect projected growth to the horizon year which is now 2033.

This report makes no changes in the goals, policies, standards, or modal plans in the 2003 TSP. This document identifies those projects which will be needed by the year 2034 to achieve the previously adopted policies. The 2003 Bicycle and Pedestrian Facility Plans remain fully in place. Also, the requirement to consider bicycle, pedestrian and transit improvements in all transportation projects is unchanged. This document is a supplement to, not a replacement of the 2003 TSP.

2.0 OVERVIEW

In developing recommendations, JRH Transportation Engineering (JRH) investigated all of the intersections of arterial–arterial, arterial–collector, and collector–collector streets in the City of Hermiston. Future volumes at each of these locations have been calculated using historical growth trends and likely development trip generation through the year 2033. The 2033 traffic volumes were then analyzed at each location to determine if they meet the mobility standards established in the 2003 TSP. Mitigation was proposed at all locations where the adopted mobility standard was not shown to be met. The mitigated intersections were then reexamined to see if they met mobility standards. If they did not, additional mitigation was added until the intersection would meet the mobility standards in 2033.



Crash histories at all locations were investigated to locate areas of safety concern. Locations where the crash rate exceeded one per million vehicles entering the intersection per year were identified for safety improvements.

3.0 BACKGROUND

This memorandum provides existing conditions and future year conditions for major roadways and intersections within Hermiston. This analysis evaluates roadways and intersections to determine which locations are projected to operate below adopted mobility standards by the end of the planning horizon. This memo identifies locations that will not meet mobility standards by the end of the planning horizon, identifies intersections with high crash rates, and locations that the City of Hermiston identified as having operational issues; followed by recommendations for improvements.

4.0 TRAFFIC VOLUME CALCULATIONS

4.1 Existing Traffic Volumes

To determine baseline traffic volumes, turning movement traffic counts were taken for major intersections within Hermiston during the years 2011-2012 in July, August, and October. “Major intersections” are those which have intersecting roadways of collector or higher classification and locations that were identified by the City of Hermiston and Oregon Department of Transportation (ODOT) as having a significant effect on the transportation system. These intersections are identified in Table 1.

4.2 Traffic Counts

Vehicle counts were taken at all of the studied intersections during the weekday PM peak period of 3:30-5:30 pm during July, August, and October. Previously taken vehicle counts at intersections in the area illustrated peak hours within that time frame, therefore this timeframe is appropriate. The vehicle counts are included in Appendix A.



Table 1: Studied Intersections

Intersections	
City of Hermiston Intersections	ODOT Intersections
Punkin Center Road at NE 4 th Street	Highway 395 at Punkin Center Road
NW 11 th Street at NW 1 st Place/Umatilla River Road	Highway 395 at Theater Lane
Theater Lane at NE 4 th Street	Highway 395 at Elm Avenue
W Elm Avenue at NW 1 st Place	Highway 395 at Jennie Avenue
E Elm Avenue at NE 4 th Street	Highway 395 at Gladys Avenue
E Elm Avenue at Diagonal Boulevard	Highway 395 at Main Street
Jennie Avenue at NE 4 th Street	Highway 395 at Hurlburt Avenue
Diagonal Boulevard at NE 10 th Street	Highway 395 at Highland Avenue
W Hermiston Avenue at SW 7 th Street	Highway 395 at SE 4 th Street
E Gladys Avenue at NE 4 th Street	Highway 395 at Kelli Boulevard
E Main Street at NE/SE 4 th Street	Highway 207/Elm Avenue at SW 11 th Street
E Main Street at NE/SE 7 th Street	Highway 207 at Hermiston Avenue
W Orchard Avenue at SW 7 th Street	Highway 207 at Orchard Avenue
W Orchard Avenue at N/S 1 st Street	Highway 207 at Feedville Road
E Hurlburt Avenue at SE 4 th Street	
W Highland Avenue at SW 11 th Street	
W Highland Avenue at SW 7 th Street	
W Highland Avenue at S 1 st Street	
E Highland Avenue at SE 4 th Street	
E Highland Avenue at SE 10 th Street	

4.3 Seasonal Adjustment

Intersection/roadway traffic analyses typically evaluate conditions during the peak month of travel for the study area. Traffic counts taken outside of the peak month are adjusted by applying a “seasonal adjustment factor” to better represent peak season traffic volumes. On Highway 395 there is an Automatic Traffic Recorder (ATR, Stanfield 30-019), located at milepost 8.70 Umatilla-Stanfield Highway No. 54; 0.12 miles northwest of Feedville Road. An evaluation into the previous five years of historical traffic data shows that August has the highest volume of traffic traveling along Highway 395. Turning movement counts taken outside the month of August are adjusted with a factor calculated by comparing the count month ATR data to the August ATR data. The seasonal adjustment calculations are included in Appendix B and the factors are listed in Table 2.



Table 2: Seasonal Adjustment Factors

ATR and Count Month	Seasonal Adjustment Factor
ATR: 30-019 Stanfield	
July	1.0335
August	1.000*
October	1.0528

*August is peak month and therefore has no factor applied to it.

The 2012 PM peak hour-peak season traffic volumes are illustrated in Figure 1 and provided in Appendix B. The weekday PM peak hour is the time period usually representative of worst case traffic conditions.

5.0 FUTURE YEAR VOLUMES

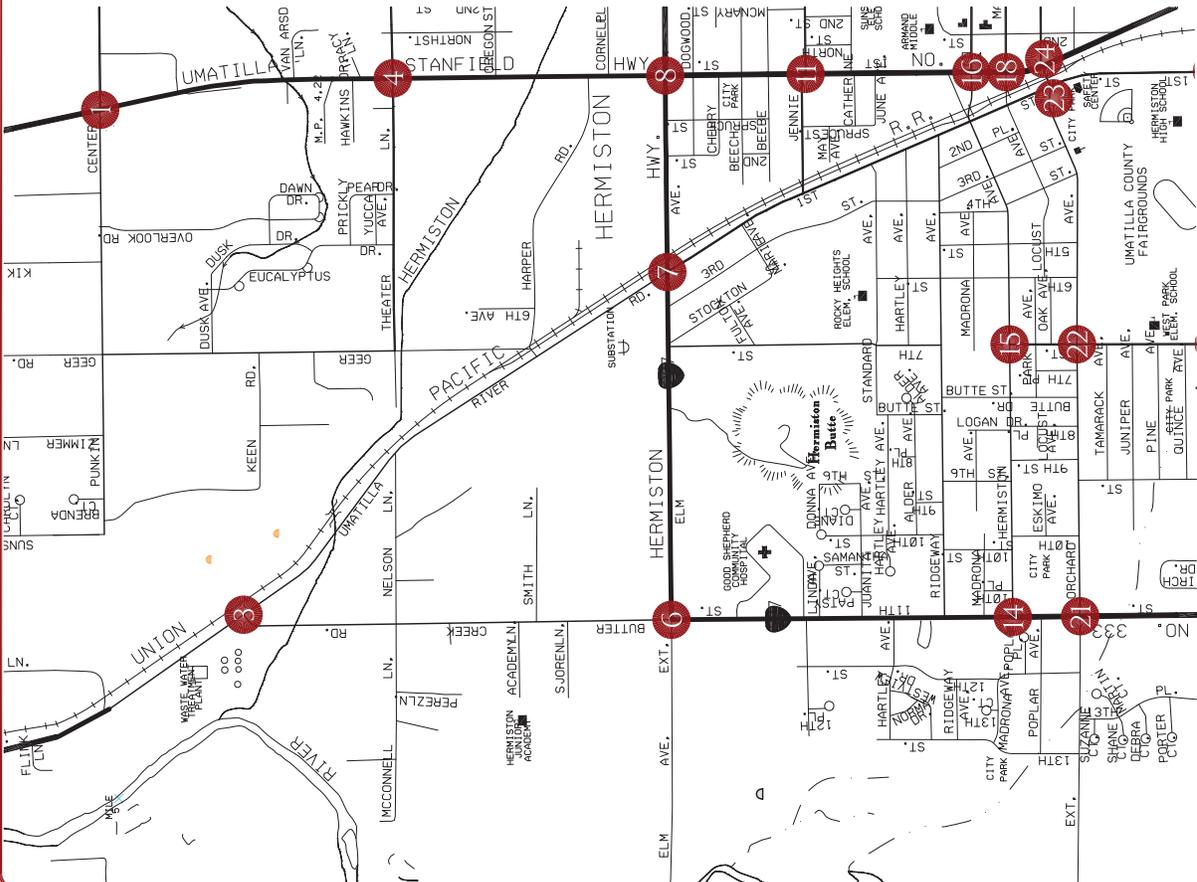
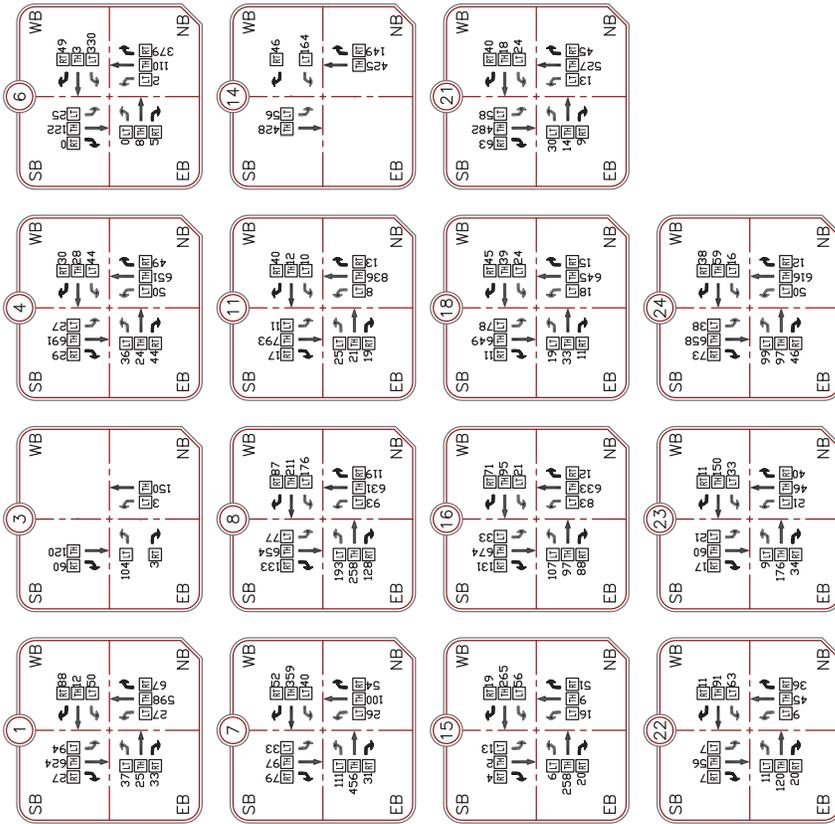
Traffic volumes projected at the end of the planning horizon, year 2033, are calculated by evaluating historical growth in the city, projected population growth trends, and build out of available buildable lands.

5.1 Highway 395 Growth

Projected background growth on Highway 395 due to factors external to Hermiston were calculated using the ODOT Future Volume Tables (FVT). The FVT were also examined to project the anticipated Highway 395 growth through the city. The ODOT FVT provide year 2009-2010 and projected year 2033 traffic volumes. An average yearly growth rate of 0.06% per year at the Stanfield recorder and 0.95% per year at MP 3.30 just north of the city was calculated using these values. The growth rate calculations are provided in Appendix C. The yearly growth rate of 1.0% was applied to the through movements on Highway 395 as background traffic growth entering the city.

5.2 Available Buildable Lands

An evaluation of the Hermiston Buildable Lands Inventory illustrates that there is a substantial amount of vacant commercial and industrially zoned land available within the Urban Growth Boundary (UGB). The current projected development trends do not support the assumption that all the buildable lands can be developed within the next 20 years. In coordination with the City of Hermiston, as a reasonable conservative estimate, approximately 30% of the commercial and industrial land capable of development is projected to be built out within the 20 year planning horizon.



HERMITON TSP UPDATE
HERMITON OREGON

FIGURE 1: YEAR 2012 PM PEAK HOUR TRAFFIC VOLUMES

● STUDIED INTERSECTIONS

IRH TRANSPORTATION ENGINEERING
4765 VILLAGE PLAZA (LOOR), SUITE 201
EUGENE, OREGON 97401 TEL: 541.682.1081
WWW.IRHEWC.COM



The acreage of buildable land within the UGB within the 20-year planning horizon is estimated at:

- Commercial Retail: 205 acres
- Commercial Office/Medical Office: 40 acres
- Commercial/Industrial: 900 acres
- Industrial: 210 acres
- Residential: 1075 acres

Appendix C includes a map illustrating the buildable lands within the UGB.

Commercial and Industrial Zoned Lots

There are approximately 245 acres of commercially zoned lots (commercial retail, commercial office and medical office) available for development. Most of the buildable commercial land is in the north and west sides of the City. The major roadways serving the commercial lands are Highway 395, Elm Street and 11th Street. Given land development code requirements for commercially zoned lots and the buildable potential of the lots, it is estimated that on average the commercial lots would generate 33 PM peak hour trips per acre of land. There will, of course, be some developments that generate more traffic per acre (fast food restaurants) and developments that generate less (specialty retail stores). The 33 trips per acre is a reasonable average number for this area.

There are approximately 210 acres of buildable industrial land and 900 acres of buildable commercial/industrial land. Most of the buildable commercial/industrial and industrial land is found within the southeast area of the city. These lots are accessible by Highway 395 and S. First Street. Traffic generated to these lots can be estimated using an ITE trip generation rate for the number of trips per acre at a typical rate of 7.96 trip/acre for industrial and 8.84 trips per acre for commercial.

Traffic estimated to be generated to the industrial and commercial lots during the PM peak hour are illustrated in Table 3.

Residentially Zoned Lots

The City Buildable Lands Inventory indicates that there are approximately 1075 vacant and developable residential acres which by code can allow up to 6000 single family and multiple family residential housing units. This estimation includes vacant parcels currently zoned for residential, uses which have not been platted, and those which have been platted and approved but not yet built. The City of Hermiston's buildable land inventory indicates that there is a need to



provide 2,354 homes within the city by the end of the planning horizon. The traffic analysis assumes that all 1075 buildable acres are built out by the end of the planning horizon to provide a conservative estimate of potential future traffic conditions.

The number of vehicle trips to these sites is estimated using the ITE Trip Generation rates for single family and multifamily homes. The number of trips to be generated by the residences during the PM peak hour is illustrated in Table 3.

Table 3: Trips From Built-Out of Buildable Vacant Lots

Land Use	Size	Trip Rate	PM Peak Hour Trips
Industrial	210 acres	7.96 trips/acre	2280
Commercial/Industrial	900 acres	8.84 trips/acre	7950
Commercial	245 acres	33 trips/acre	9265
Residential			
Single Family	2175 homes	1.01	2200
Multi Family	3830 homes	0.62	2375

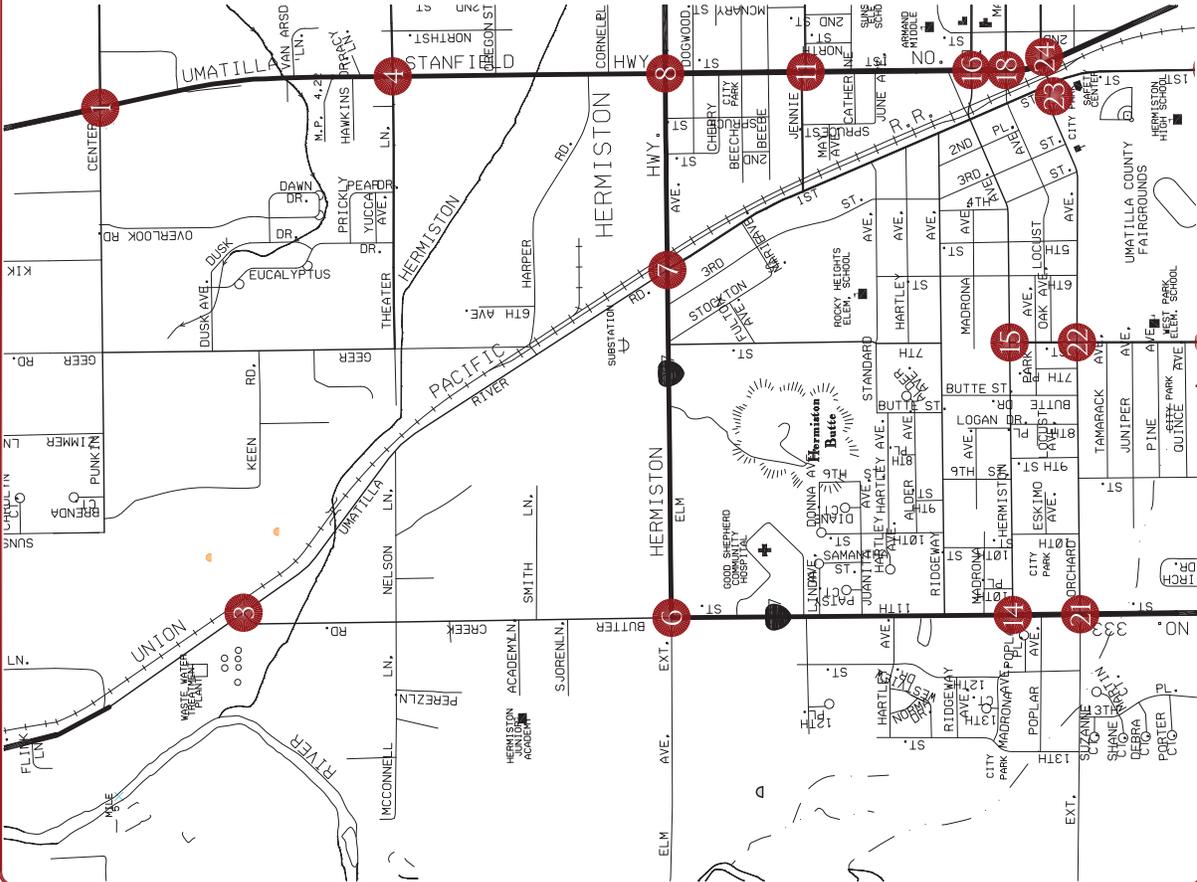
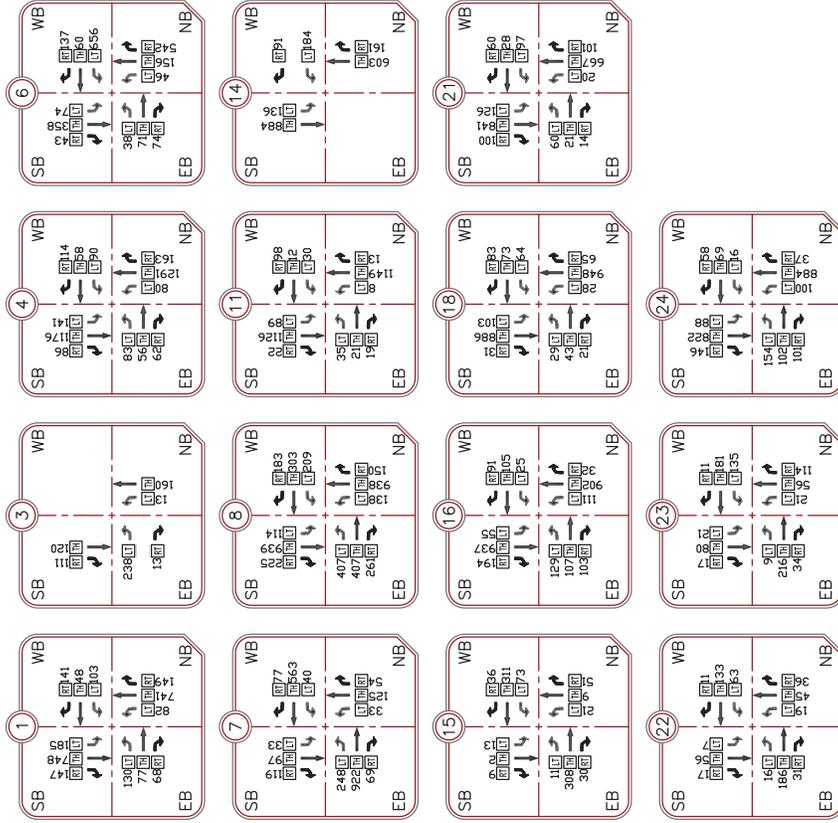
The trips illustrated in Table 3 are distributed throughout the city based on their origins and destinations (i.e. industrial lots to residential lots) using the existing roadway network.

The total of the background trips and developable lots trips are the basis for the Year 2033 Intersection Analysis to determine impacts and necessary mitigation. The year 2033 traffic volumes are illustrated in Figure 2.

6.0 EXISTING CONDITIONS AND FUTURE DEFICIENCIES

6.1 Intersection Levels of Service and V/C Ratios

Intersections along Highway 395 and Highway 207 are evaluated against mobility standards found in the Oregon Highway Plan (Policy 1F). ODOT uses this to measure the operation of state facilities. Highway 395 is identified as a Statewide Highway and a truck route; and one section is identified as a Special Transportation Area (STA). Highway 207 is a Regional Highway and a truck route. Mobility Standards are based upon the roadway designation, posted speed, and intersection control. ODOT uses a volume to capacity ratio (v/c) as a measure of operation. The v/c is a measure of the peak hour traffic volume using a facility to the maximum vehicles that can use the facility.



HERMISTON TSP UPDATE HERMISTON OREGON

FIGURE 2: YEAR 2033 PM PEAK
HOUR TRAFFIC VOLUMES

● STUDIED INTERSECTIONS

IRBT TRANSPORTATION ENGINEERING
4765 VILLAGE PLAZA (100'), SUITE 201
EUGENE, OREGON 97401 TEL 541.687.1081
WWW.IRBTWECOM



The City of Hermiston uses a Level of Service (LOS) rather than v/c to evaluate intersection operations. LOS is a measure of delay per vehicle per hour and is typically evaluated for peak-hour conditions. Delay is equated to a letter grade 'A' through 'F' with 'A' indicating the most desirable operation conditions and 'F' indicating a failing condition. The procedures for determining intersection LOS are defined in the Highway Capacity Manual and summarized below in Tables 4 and 5.

The mobility standard for the studied intersections is included in Table 6 for ODOT intersections and Table 7 for the City of Hermiston intersections. The existing and Year 2033 intersection operations are compared to the applicable mobility standard to determine if there is the potential for future deficiencies in the transportation system.

Table 4: HCM Level of Service Criteria for Unsignalized Intersections

Level of Service	Stopped Delay Per Vehicle (Seconds per Vehicle)
A	≤ 10.0
B	> 10.0 and ≤ 15.0
C	> 15.0 and ≤ 25.0
D	> 25.0 and ≤ 35.0
E	> 35.0 and ≤ 50.0
F	> 50.0

Table 5: HCM Level of Service Criteria for Signalized Intersections

Level of Service	Average Delay per Vehicle Per Hour (Seconds)
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80



Table 6: Intersection Mobility Standard-ODOT Intersections

Intersections	Mile Post	Segment Designation	Speed	Control	Mobility Standard (v/c)
Highway 395 at Punkin Center Road	3.79	NHS,FR,TR	45	Signal	0.75
Highway 395 at Theater Lane	4.33	NHS,FR,TR	45	Signal	0.75
Highway 395 at Elm Avenue	4.83	NHS,FR,TR	45	Signal	0.80
Highway 395 at Jennie Avenue	5.09	NHS,FR,TR	30	Signal	0.80
Highway 395 at Gladys Avenue	5.40	NHS,FR,TR	30	Signal	0.80
Highway 395 at Main Street	5.46	NHS,FR,TR	30	Signal	0.80
Highway 395 at Hurlburt Avenue	5.53	NHS,FR,TR	30	Signal	0.80
Highway 395 at Highland Avenue	5.87	NHS,FR,TR	30	Signal	0.80
Highway 395 at SE 4 th Street	6.03	NHS,FR,TR	30	Signal	0.80
Highway 395 at Kelli Boulevard	7.45	NHS,FR,TR	30	Signal	0.80
Highway 207/Elm Avenue at SW 11 th Street	7.95	TR	30	Stop	Uncontrolled Approach 0.85 Stopped Approach 0.90
Highway 207 at Hermiston Avenue	8.58	TR	30	Signal	0.85
Highway 207 at Orchard Avenue	8.70	TR	30	Stop	Uncontrolled Approach 0.85 Stopped Approach 0.90
Highway 207 at Highland Avenue	8.95	TR	30	Signal	0.85
Highway 207 at Feedville Road	10.82	TR	30	Stop	Uncontrolled Approach 0.85 Stopped Approach 0.90

NHS=National Highway System
 FR=State Freight Route
 TR=Federally Designated Truck Route



Table 7: Intersection Mobility Standards-Hermiston Intersections

Hermiston Intersections	Intersection Control	Mobility Standard (LOS)
Punkin Center Road at NE 4 th Street	Stop	D
NW 11th Street at NW 1 st Place/Umatilla River Road	Stop	D
Theater Lane at NE 4 th Street	Stop	D
W Elm Avenue at NW 1 st Place	Signal	D
E Elm Avenue at NE 4 th Street	Signal	D
E Elm Avenue at Diagonal Boulevard	Stop	D
Jennie Avenue at NE 4 th Street	Stop	D
Diagonal Boulevard at NE 10 th Street	Stop	D
W Hermiston Avenue at SW 7 th Street	Stop	D
E Gladys Avenue at NE 4 th Street	Stop	D
E Main Street at NE/SE 4 th Street	Signal	D
E Main Street at NE/SE 7 th Street	Stop	D
W Orchard Avenue at SW 7 th Street	Stop	D
W Orchard Avenue at N/S 1 st Street	Stop	D
E Hurlburt Avenue at SE 4 th Street	Stop	D
W Highland Avenue at SW 7 th Street	Stop	D
W Highland Avenue at S 1 st Street	Stop	D
E Highland Avenue at SE 4 th Street	Stop	D
E Highland Avenue at SE 10 th Street	Stop	D

EXISTING CONDITIONS, YEAR 2012

An intersection analysis was performed for all of the studied intersections for present day operating conditions. The analysis was performed using SYNCHRO software. The results of the analysis are provided in Tables 8 and 9 below. The Synchro outputs are provided in Appendix D.



Table 8: Intersection Operation Year 2012-ODOT Intersections

Intersections	Control	Mobility Standard (v/c)	Year 2012 Intersection Operation (v/c)
ODOT Intersections			
Highway 395 at Punkin Center Road	Signal	0.75	0.42
Highway 395 at Theater Lane	Signal	0.75	0.40
Highway 395 at Elm Avenue	Signal	0.80	0.74
Highway 395 at Jennie Avenue	Signal	0.80	0.48
Highway 395 at Gladys Avenue	Signal	0.80	0.55
Highway 395 at Main Street	Signal	0.80	0.47
Highway 395 at Hurlburt Avenue	Signal	0.80	0.48
Highway 395 at Highland Avenue	Signal	0.80	0.55
Highway 395 at SE 4 th Street	Signal	0.80	0.41
Highway 395 at Kelli Boulevard	Stop	Uncontrolled Approach 0.85 Stopped Approach 0.90	eastbound approach (stopped) 0.22 southbound approach (uncontrolled) 0.16
Highway 207/Elm Avenue at SW 11 th Street	Stop	Uncontrolled Approach 0.85 Stopped Approach 0.90	southbound approach (stopped) 0.80 westbound approach (uncontrolled) 0.24
Highway 207 at Hermiston Avenue	Signal	0.85	0.54
Highway 207 at Orchard Avenue	Stop	Uncontrolled Approach 0.85 Stopped Approach 0.90	westbound approach (stopped) 0.22 southbound approach (uncontrolled) 0.34
Highway 207 at Highland Avenue	Signal	0.85	0.54
Highway 207 at Feedville Road	Stop	Uncontrolled Approach 0.85 Stopped Approach 0.90	westbound approach (stopped) 0.26 southbound approach (uncontrolled) 0.13



Table 9: Intersection Operation Year 2012-Hermiston Intersections

Hermiston Intersections	Intersection Control*	Mobility Standard (LOS)	Year 2012 Intersection Operation (LOS)
Punkin Center Road at NE 4 th Street	Stop	D	B
NW 11th Street at NW 1 st Place/Umatilla River Road	Stop	D	B
Theater Lane at NE 4 th Street	Stop	D	A
W Elm Avenue at NW 1 st Place	Signal	D	B
E Elm Avenue at NE 4 th Street	Signal	D	A
E Elm Avenue at Diagonal Boulevard	Stop	D	C
Jennie Avenue at NE 4 th Street	Stop	D	A
Diagonal Boulevard at NE 10 th Street	Stop	D	B
W Hermiston Avenue at SW 7 th Street	Stop	D	C
E Gladys Avenue at NE 4 th Street	Stop	D	C
E Main Street at NE/SE 4 th Street	Signal	D	B
E Main Street at NE/SE 7 th Street/Diagonal Blvd	Stop	D	C
W Orchard Avenue at SW 7 th Street	Stop	D	A
W Orchard Avenue at N/S 1 st Street	Stop	D	C
E Hurlburt Avenue at SE 4 th Street	Stop	D	C
W Highland Avenue at SW 7 th Street	Stop	D	B
W Highland Avenue at S 1 st Street	Stop	D	B
E Highland Avenue at SE 4 th Street	Stop	D	B
E Highland Avenue at SE 10 th Street	Stop	D	B

***results reported for critical movement only**

FUTURE YEAR CONDITIONS, YEAR 2033

An intersection analysis was performed for all of the studied intersections for the future year operating conditions, Year 2033. The analysis was performed using SYNCHRO software. The results of the analysis are provided in Tables 10 and 11 below. The Synchro outputs are provided in Appendix E.



Table 10: Intersection Operation Year 2033-ODOT Intersections

Intersections	Control	Mobility Standard (v/c)	Year 2033 Intersection Operation (v/c)
ODOT Intersections			
Highway 395 at Punkin Center Road	Signal	0.75	0.67
Highway 395 at Theater Lane	Signal	0.75	0.80
Highway 395 at Elm Avenue	Signal	0.80	1.27
Highway 395 at Jennie Avenue	Signal	0.80	0.65
Highway 395 at Gladys Avenue	Signal	0.80	0.76
Highway 395 at Main Street	Signal	0.80	0.69
Highway 395 at Hurlburt Avenue	Signal	0.80	0.63
Highway 395 at Highland Avenue	Signal	0.80	0.72
Highway 395 at SE 4 th Street	Signal	0.80	0.62
Highway 395 at Kelli Boulevard	Signal	Uncontrolled Approach 0.85 Stopped Approach 0.90	eastbound approach (stopped) >2.0 southbound approach (uncontrolled) 0.23
Highway 207/Elm Avenue at SW 11 th Street	Stop	Uncontrolled Approach 0.85 Stopped Approach 0.90	southbound and northbound approach (stopped) >2.0 westbound approach (uncontrolled) 0.54
Highway 207 at Hermiston Avenue	Signal	0.85	0.76
Highway 207 at Orchard Avenue	Stop	Uncontrolled Approach 0.85 Stopped Approach 0.90	westbound approach (stopped) 1.08 southbound approach (uncontrolled) 0.58
Highway 207 at Highland Avenue	Signal	0.85	0.80
Highway 207 at Feedville Road	Stop	Uncontrolled Approach 0.85 Stopped Approach 0.90	westbound approach (stopped) 0.47 northbound approach (uncontrolled) 0.23



Table 11: Intersection Operation Year 2033-Hermiston Intersections

Hermiston Intersections	Intersection Control	Mobility Standard (LOS)	Year 2033 Intersection Operation (LOS)
Punkin Center Road at NE 4 th Street	Stop	D	C
NW 11 th Street at NW 1 st Place/Umatilla River Road	Stop	D	C
Theater Lane at NE 4 th Street	Stop	D	C
W Elm Avenue at NW 1 st Place	Signal	D	D
E Elm Avenue at NE 4 th Street	Signal	D	B
E Elm Avenue at Diagonal Boulevard	Stop	D	C
Jennie Avenue at NE 4 th Street	Stop	D	C
Diagonal Boulevard at NE 10 th Street	Stop	D	F
W Hermiston Avenue at SW 7 th Street	Stop	D	C
E Gladys Avenue at NE 4 th Street	Stop	D	D
E Main Street at NE/SE 4 th Street	Signal	D	B
E Main Street at NE/SE 7 th Street/Diagonal Blvd	Stop	D	F
W Orchard Avenue at SW 7 th Street	Stop	D	A
W Orchard Avenue at N/S 1 st Street	Stop	D	D
E Hurlburt Avenue at SE 4 th Street	Stop	D	D
W Highland Avenue at SW 7 th Street	Stop	D	C
W Highland Avenue at S 1 st Street	Stop	D	D
E Highland Avenue at SE 4 th Street	Stop	D	C
E Highland Avenue at SE 10 th Street	Stop	D	C

The following intersections are failing to operate at the mobility standard by the end of the planning horizon.

- Highway 395 at Theater Lane
- Highway 395 at Elm Avenue
- Highway 395 at Kelli Boulevard
- Highway 207/Elm Avenue at SW 11th Street
- Highway 207 at Orchard Avenue
- Diagonal Boulevard at NE 10th Street
- E Main Street at NE/SE 7th Street/Diagonal Blvd



Vehicle Crash Evaluation

Oregon Department of Motor Vehicles (DMV) provided crash data for the period from year 2007 through year 2011, shown in Table 12. The crash data represents only the crashes that were reported to the DMV.

Table 12: Crash Data 2007 to 2011

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE INJURED	TRUCKS	DRY SURFACE	WET SURFACE	DAY	DARK	INTER-SECTION
YEAR: 2011											
ANGLE	0	15	10	25	21	0	23	2	21	4	22
BACKING	0	0	7	7	0	0	7	0	7	0	2
FIXED / OTHER OBJECT	0	1	5	6	1	0	6	0	2	4	2
HEAD-ON	0	2	0	2	3	0	2	0	0	2	0
MISCELLANEOUS	0	1	0	1	1	0	0	1	1	0	1
PARKING MOVEMENTS	0	0	1	1	0	0	1	0	0	1	0
PEDESTRIAN	0	2	0	2	2	0	1	1	0	2	1
REAR-END	0	29	31	60	37	2	56	3	48	12	19
SIDESWIPE - MEETING	0	0	3	3	0	1	3	0	1	2	1
SIDESWIPE - OVERTAKING	0	1	7	8	4	1	7	1	4	4	0
TURNING MOVEMENTS	0	23	23	46	36	0	41	5	40	6	24
YEAR 2011 TOTAL	0	74	87	161	105	4	147	13	124	37	72
YEAR: 2010											
ANGLE	0	20	8	28	26	0	21	7	23	5	26
BACKING	0	0	2	2	0	0	2	0	2	0	1
FIXED / OTHER OBJECT	0	3	7	10	3	0	5	5	4	6	2
HEAD-ON	0	1	1	2	2	0	2	0	0	2	0
MISCELLANEOUS	0	0	1	1	0	0	1	0	0	1	1
NON-COLLISION	0	1	0	1	1	0	1	0	1	0	0
PARKING MOVEMENTS	0	1	0	1	3	0	1	0	1	0	0
PEDESTRIAN	0	2	0	2	2	0	2	0	0	2	2
REAR-END	0	24	30	54	35	3	48	6	47	7	34
SIDESWIPE - MEETING	0	0	5	5	0	0	4	1	3	2	3
SIDESWIPE - OVERTAKING	0	1	6	7	1	1	6	1	5	2	1



TURNING MOVEMENTS	0	10	31	41	11	1	35	6	33	8	23
YEAR 2010 TOTAL	0	63	91	154	84	5	128	26	119	35	93

COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE INJURED	TRUCKS	DRY SURFACE	WET SURFACE	DAY	DARK	INTER-SECTION
YEAR: 2009											
ANGLE	0	6	2	8	9	0	4	4	3	5	8
BACKING	0	2	5	7	3	1	7	0	5	2	3
FIXED / OTHER OBJECT	0	2	8	10	2	0	6	4	4	6	5
HEAD-ON	0	2	1	3	4	0	3	0	2	1	0
MISCELLANEOUS	0	1	1	2	1	0	2	0	0	2	0
PARKING MOVEMENTS	0	0	2	2	0	0	2	0	2	0	0
PEDESTRIAN	1	4	0	5	5	1	5	0	2	3	4
REAR-END	0	17	22	39	25	4	36	3	33	6	15
SIDESWIPE - MEETING	0	2	0	2	4	0	2	0	1	1	0
SIDESWIPE - OVERTAKING	0	0	5	5	0	1	4	1	3	2	0
TURNING MOVEMENTS	0	11	19	30	13	5	22	8	24	6	10
YEAR 2009 TOTAL	1	47	65	113	66	12	93	20	79	34	45

YEAR: 2008											
ANGLE	0	10	17	27	12	1	21	6	21	6	26
BACKING	0	0	4	4	0	0	3	1	3	1	1
FIXED / OTHER OBJECT	0	4	3	7	6	1	6	1	4	3	4
HEAD-ON	0	1	0	1	2	0	0	1	0	1	0
PARKING MOVEMENTS	0	0	2	2	0	0	2	0	1	1	0
PEDESTRIAN	1	2	0	3	2	1	2	1	2	1	1
REAR-END	0	24	25	49	29	3	38	11	35	14	17
SIDESWIPE - MEETING	0	1	0	1	2	0	1	0	1	0	0
SIDESWIPE - OVERTAKING	0	1	3	4	1	1	3	1	4	0	0
TURNING MOVEMENTS	0	14	24	38	20	1	36	2	32	6	25
YEAR 2008 TOTAL	1	57	78	136	74	8	112	24	103	33	74



COLLISION TYPE	FATAL CRASHES	NON-FATAL CRASHES	PROPERTY DAMAGE ONLY	TOTAL CRASHES	PEOPLE INJURED	TRUCKS	DRY SURFACE	WET SURFACE	DAY	DARK	INTER-SECTION
YEAR: 2007											
ANGLE	0	6	10	16	7	0	12	4	13	3	15
BACKING	0	1	2	3	1	0	3	0	2	1	0
FIXED / OTHER OBJECT	0	4	2	6	7	1	5	1	2	4	2
HEAD-ON	0	1	0	1	1	0	1	0	1	0	0
MISCELLANEOUS	0	0	1	1	0	0	0	1	0	1	0
NON-COLLISION	0	1	0	1	1	0	0	1	1	0	0
PARKING MOVEMENTS	0	0	3	3	0	1	3	0	1	2	0
REAR-END	0	24	24	48	38	2	42	5	37	11	19
SIDESWIPE - MEETING	0	0	1	1	0	0	1	0	1	0	1
SIDESWIPE - OVERTAKING	0	2	8	10	7	1	10	0	7	3	0
TURNING MOVEMENTS	0	22	27	49	33	4	42	6	44	5	24
YEAR 2007 TOTAL	0	61	78	139	95	9	119	18	109	30	61
FINAL TOTAL											
	2	302	399	703	424	38	599	101	534	169	345

Crash data from year 2007 to year 2011 for each of the studied intersections were evaluated to determine locations where the crash rates are high and would warrant safety improvements. Intersection crash rates are illustrated in Table 13. The crash data is included in Appendix F. Crash data is compared to a threshold rate of 1.0 crashes per million entering vehicles. Intersection crash rates nearing this threshold should be evaluated for safety improvements.



Table 13. Intersection Crash Rates

INTERSECTION	CRASH RATE*
Punkin Center Rd.@ Hwy 395/N. 1st St.	0.43
Nw 11th St. @ Nw 1st Pl./Umatilla River Rd.	0.25
Theater Ln. @ Hwy 395/N. 1st St.	0.26
Theater Ln. @ Ne 4th St.	0.16
W. Elm Ave. @ Nw 11th Ave.	0.62
W. Elm Ave. @ Nw 1st Pl	0.44
E./W. Elm Ave. @ Hwy 395/N. 1st St.	1.11
E. Elm Ave. @ Ne 4th St.	0.40
E. Elm Ave. @ Diagonal Blvd.	0.61
Jennie Ave. @ Ne 4th St.	0.10
Jennie Ave. @ Hwy 395/N. 1st St.	0.37
W. Hermiston Ave. @ Nw/Sw 11th Ave.	0.22
W. Hermiston Ave. @ Sw 7th Ave.	0.31
W. Hermiston Ave./E. Gladys Ave. @ Hwy 395/N. 1st St.	0.59
E. Gladys Ave. @ Ne 4th St.	0.70
E. Main St. @ Hwy 395/N 1st St.	0.92
E. Main St. @ Ne/Se 4th St.	0.23
E. Main St. @ Ne/Se 7th St.	0.35
W. Orchard Ave. @ Sw 11th Ave.	0.75
W. Orchard Ave. Ave. @ Sw 7th St.	0.23
W. Orchard Ave. @ N./S. 1st Pl.	0.35
W. Orchard Ave./W. Hurlburt Ave. @ Hwy 395/ N. 1st St.	0.46
E. Hurlburt Ave. @ Se 4th St.	0.38
W. Highland Ave. @ Sw 11th St.	0.48
W. Highland Ave. @ Sw 7th St.	0.29
W. Highland Ave. @ S. 1st St.	0.56
W. Highland Ave. @ Hwy 395/Umatilla-Stanfield Hwy	1.07
E. Highland Ave. @ Se 4th St.	0.35
E. Highland Ave. @ Se 10th St.	0.17
Se 4th St. @ Hwy 395/Umatilla-Stanfield Hwy	0.91
Kelli Blvd. @ Hwy 395/Umatilla-Stanfield Hwy	0.46
Feedville Rd. @ Hwy 207/Sw Butter Creek Rd.	0.49

* Crash rate=crashes per million entering vehicles per year



IMPROVEMENT PROJECTS

Intersections that will not meet mobility standards through the year 2033 are:

- Highway 395 at Theater Lane
- Highway 395 at Elm Avenue
- Highway 207/Elm Avenue at SW 11th Street
- Diagonal at NE 10th Street
- Highway 207 at 11th Avenue
- Main Street at NE/SE 7th Street/Diagonal Street
- Highway 207 at Orchard Street
- Highway 395 at Kelli Boulevard.

Intersections with a high crash rate (rate approaching or exceeding 1.0) between the year 2007 and 2011 are:

- Highway 395 at Elm Avenue
- Highway 395 at Main Street
- Highway 395 at Highland Avenue
- Highway 395 at 4th Street

Additionally the following intersections were identified as having pedestrian safety issues or other operational issues that the City would like to be addressed:

- Highway 207/Elm Avenue at SW 11th Street
- Highland Avenue at 1st Street
- Highway 207/Elm Avenue at SW 11th Street
- Orchard at 1st Street
- W Harper Road at NW Geer Road



IMPROVEMENTS FOR END OF PLANNING HORIZON- YEAR 2033

Those locations having safety, mobility or operations issues were examined more closely to determine appropriate measures needed to solve them. Table 14 identifies the improvements needed to address the issues uncovered.

Table 14: Year 2033 Recommended Improvements

Intersection	Type of Improvement	Recommended Improvement
Highway 395 at Theater Lane	Mobility	Add right turn pockets Revise signal timing to protective/permissive left turns
Highway 395 at Elm Avenue	Mobility Safety	Add right turn pockets, Second Eastbound Left, Second Eastbound Through Improve timing and pedestrian treatments
Highway 395 at Main Street	Safety	Improve timing along the downtown area, improve pedestrian treatments
Highway 395 at Highland Avenue	Safety	Improve timing along the downtown area, improve pedestrian treatments
Highway 395 at SE 4th Street	Safety	Improve timing along the downtown area, improve pedestrian treatments
Highway 395 at Kelli Boulevard	Mobility	Signalize Improve traffic flow by creating parallel roadways and other access points in the southeast area
Highway 207/Elm Avenue at SW 11th Street	Mobility Safety	Signalize Add left turn pockets
Highway 207 at Orchard Avenue	Mobility	Signalize
Diagonal Boulevard at NE 10th Street	Mobility	Signalize
E Main Street at NE/SE 7th Street	Mobility	Signalize or install a roundabout
W Orchard Avenue at N/S 1st Street	Operational	Possible signalization Improve traffic flow between 1st Street and Highway 395 Improve pedestrian treatments
W Highland Avenue at S 1st Street	Operational	Improve pedestrian safety, improve traffic flow Possible signalization
W Harper Road at W Geer Road	Operational	Realign Geer Road and Harper Road intersection to improve safety and traffic flow between this intersection and 1st Street



Table 14a: Long Term Projects Recommended for 2033 or Later

No.	Project Description
4A	Option 1: Construct Bridge Access Umatilla River and Connect with Punkin Center Rd.
4B	Option 2: Construct Bridge Across Umatilla River and Connect with Elm Ave.

Update of 2003 TSP Project List

The January 2003 TSP Update listed twenty-two projects projected to be needed during the 20-year planning horizon. Since that time, ten projects were completed and two were dropped. Table 15 and Figure 3 indicate the current status of the projects adopted in the 2003 plan.

Table 15: Update of Projects Recommended in January 2003 TSP

No.	Project Description	Status
1	Improve West 11th St./Hermiston Ave. Intersection (New Traffic Signal, Intersection Rechannelization)	Done
2	Improve West 1st St./Highland Ave. Intersection (New Traffic Signal)	New Priority List 5
3	Improve Highland Ave./West 11th St. Intersection (Reconfigure Turn Lanes)	Done
4A	Option 1: Construct Bridge Access Umatilla River and Connect with Punkin Center Rd.	Moved to Long Term Improvement
4B	Option 2: Construct Bridge Across Umatilla River and Connect with Elm Ave.	Moved to Long Term Improvement
5	Extend 4th St. from Elm Ave. to Punkin Center Rd. (Include New Signal at Elm Ave.)	Done
6	Extend 4th St. from Theater Lane to Punkin Center Rd.	Done
7	Improve West 4th St./Highland Ave. Intersection (New Traffic Signal)	Unprioritized List 23
8	Improve Elm Ave. from East 4th St. to Diagonal Rd. (Widen to 3 Lanes)	Done
9	Elm Ave./Diagonal Rd. Intersection Improvements	Done
10	Improve West 11th St. Adjacent to the Hospital (Widen to 3 Lanes)	Unprioritized List 24
11	Improve Elm Ave. from West 11th St. to Umatilla River Rd.	Done
12	Improve Elm Ave./Umatilla River Rd. Intersection (Signal Modified, Add Left Turn Lane)	Done
13	Improve West 11th St., north of Highland Ave. (Widen to 3 Lanes)	Done
14	Improve 1st Place/Hermiston Ave. Intersection (Add Traffic Signal, Intersection Rechannelization).	Done
15	Improve 10th St. from Columbia Dr. to Elm Ave.	Unprioritized List 15
16	Improve and Relocate 10th St. from Elm Ave. to Punkin Center Rd.	Unprioritized List 16
17	Theater Lane Upgrade from Highway 395 to East 10th St.	Unprioritized List 17



18	Upgrade Umatilla River Rd. from Hermiston Ave. to Elm Ave.	Unprioritized List 18
19	Improve Highway 395/Port Ave. Intersection (New Traffic Signal)	Unprioritized List 19
20	Upgrade 1st St. from Hermiston Ave. to Highland Ave.	Unprioritized List 20
21	Upgrade Umatilla River Road from Elm Ave. to Punkin Center Rd.	Unprioritized List 21
22	Upgrade 1st St./Hermiston-Hinkle Rd. from Highland Ave. to Feedville Rd.	Unprioritized List 22

Project Priority List

The remaining projects from the 2003 TSP and those identified by this study were reviewed by the City staff and by the Planning Commission. This review led to thirteen projects being placed in priority order. The remaining projects are listed numerically for identification purposes; however, they are not ranked relatively to each other.

The priority listing does not limit the sequence of project development. Transportation needs within a city change with the passage of time, as does the availability of funds to pay for them. This can result in projects appropriately being built out of the numerical list in the update.

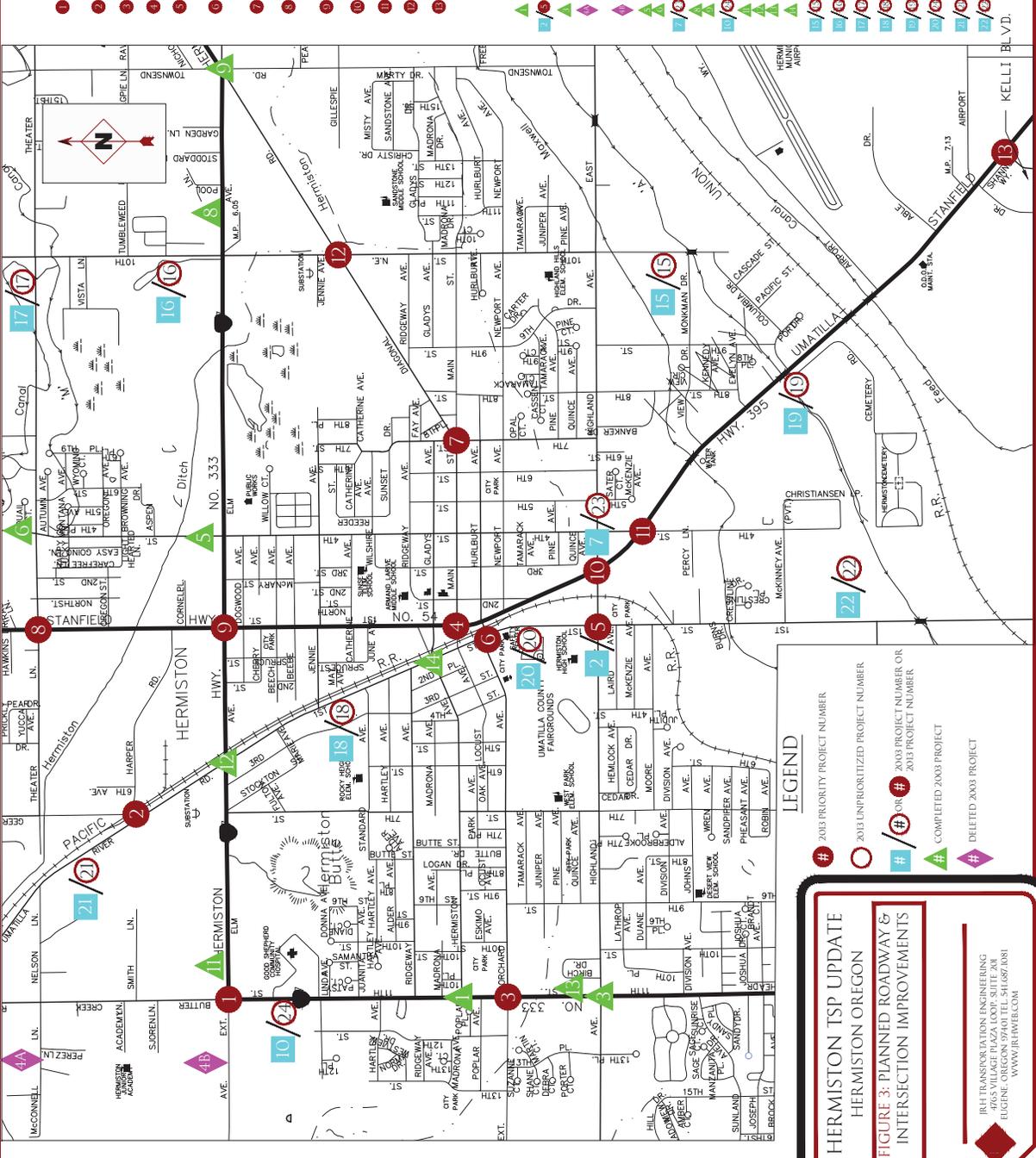
A word about project cost and sources to pay for it

Cost:

Table 16 lists the thirteen prioritized projects recommended for completion during the 20-year planning horizon along with their estimated 2014 costs. Table 17 provides the same information for the projects not yet prioritized. These estimates are order-of-magnitude costs and should be used with extreme caution. They have not been engineered so there are factors which can significantly impact project cost which are completely unknown. These include such topics as soil conditions, topography, hydraulics and environmental. The thirteen prioritized projects are estimated to cost \$5,288,000 in 2014 dollars, while the unprioritized projects will cost approximately an additional \$26,314,000.

Intersection	Recommended Improvement
Highway 207/Elm Avenue at NW 17 th Street	Signalize* Add turn pockets
W Harper Road at W Ger Road	Realign Ger Road and Harper Road intersection to improve safety and traffic flow between this intersection and Highway 395
Highway 207 at Orchard Avenue	Signalize*
Highway 395 at Main Street	Improve timing along the downtown area, improve pedestrian treatments
W Highland Avenue at S 1 st Street	Improve pedestrian safety, improve traffic flow
W Orchard Avenue at NS 1 st Street	Possible signalization* Improve traffic flow between 1 st Street and Street
E Main Street at NE SE 7 th Street	Improve pedestrian treatments
Highway 395 at Theater Lane	Signalize or install a roundabout* Recess signal timing to protective/permissive left turns
Highway 395 at Elm Avenue	Add turn lanes and through lanes Improve timing and pedestrian treatments
Highway 395 at Highland Avenue	Improve timing along the downtown area, improve pedestrian treatments
Highway 395 at SE 4 th Street	Improve timing along the downtown area, improve pedestrian treatments
Diagonal Boulevard at NE 10 th Street	Signalize or install a roundabout*
Highway 395 at Kell Boulevard	Signalize* Improve traffic flow by creating parallel roadways and other access points in the staff area

Project Description	Status
Improve West 11th St/Hermion Ave Intersection New Traffic Signal Intersection Reconfiguration	Done
Improve West 11th St/Highland Ave Intersection (New Traffic Signal)	Done
Improve Highland Ave/West 11th St Intersection (Reconfigure Turn Lanes)	Done
Option 1: Construct Bridge/Access Umatilla River and Connect with Funken Center Rd.	Term Improvement
Option 2: Construct Bridge Across Umatilla River and Connect with Elm Ave.	Moved to Long Term
Extend 4th St from Elm Ave to Funken Center Rd. (Install New Signal at Elm Ave)	Done
Extend 4th St from Theater Lane to Funken Center Rd.	Done
Improve West 4th St/Highland Ave Intersection (New Traffic Signal)	Unprioritized LH 23
Improve Elm Ave from East 4th St to Diagonal Rd. (Widen to 3 Lanes)	Done
Elm Ave Diagonal Rd Intersection Improvements	Done
Improve West 11th St. Adjacent to the Hospital (Widen to 3 Lanes)	Unprioritized LH 24
Improve Elm Ave from West 11th St to Umatilla River Rd.	Done
Improve Elm Ave Umatilla River Rd Intersection (Signal Modified, Add Left Turn Lane)	Done
Improve West 11th St, north of Highland Ave. (Widen to 3 Lanes)	Done
Realign Umatilla River, Intersection (Add Traffic Signal, Intersection Reconfiguration)	Done
Improve 10th St from Columbia Dr. to Elm Ave	Unprioritized LH 15
Improve and Rebuild 10th St from Elm Ave to Funken Center Rd.	Unprioritized LH 16
Theater Lane Upgrade from Highway 395 to East 10th St	Unprioritized LH 17
Upgrade Umatilla River Rd. from Hermion Ave. to Elm Ave	Unprioritized LH 18
Improve Highway 395/Port Ave Intersection (New Traffic Signal)	Unprioritized LH 19
Upgrade 14 th St from Hermion Ave. to Highland Ave	Unprioritized LH 20
Upgrade Umatilla River Road from Elm Ave. to Funken Center Rd.	Unprioritized LH 21
Upgrade 14 th St/Hermion-Highland Rd from Highland Ave. to Funken Rd.	Unprioritized LH 22



HERMISTON TSP UPDATE
HERMISTON OREGON

FIGURE 3: PLANNED ROADWAY & INTERSECTION IMPROVEMENTS

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Table 16: Prioritized Street System Improvement List

No.	Intersection	Recommended Improvement	Cost
1	Highway 207/Elm Avenue at SW 11 th Street	Signalize* Add left and/or right turn pockets	778,000
2	W Harper Road at W Geer Road	Realign Geer Road and Harper Road intersection to improve safety and traffic flow between this intersection and Highway 395	940,000
3	Highway 207 at Orchard Avenue	Signalize*	300,000
4	Highway 395 at Main Street	Improve timing along the downtown area, improve pedestrian treatments	50,000
5	W Highland Avenue at S 1 st Street	Improve pedestrian safety, improve traffic flow Possible signalization	300,000
6	W Orchard Avenue at N/S 1 st Street	Possible signalization* Improve traffic flow between 1 st Street and Highway 395 Improve pedestrian treatments	300,000
7	E Main Street at NE/SE 7 th Street	Signalize or install a roundabout*	300,000
8	Highway 395 at Theater Lane	Add right turn pockets Revise signal timing to protective/permissive left turns	478,000
9	Highway 395 at Elm Avenue	Add turn lanes and through lanes Improve timing and pedestrian treatments	1,442,000
10	Highway 395 at Highland Avenue	Improve timing along the downtown area, improve pedestrian treatments	50,000
11	Highway 395 at SE 4 th Street	Improve timing along the downtown area, improve pedestrian treatments	
12	Diagonal Boulevard at NE 10 th Street	Signalize or install a roundabout*	50,000
13	Highway 395 at Kelli Boulevard	Signalize* Improve traffic flow by creating parallel roadways and other access points in the southeast area	300,000
		TOTAL:	5,288,000

*Signalization improvements must meet signal warrants and those on State Highways must also obtain state traffic/roadway engineer approval.



Table 17: Unprioritized Street System Improvement List

No.	Project Description	Status	Cost
14	Not Used		0
15	10th St. from Columbia Dr. to Elm Ave.	Widening	5,820,000
16	10th St. from Elm Ave. to Punkin Center Rd.	Widening	5,820,000
17	Theater Lane from Highway 395 to East 10th St.	Widening	4,989,000
18	Umatilla River Rd. from Hermiston Ave. to Elm Ave.	Upgrade	3,108,000
19	Highway 395/Port Ave. Intersection	New Traffic Signal	312,000
20	1st St. from Hermiston Ave. to Highland Ave.	Widening	1,559,000
21	Umatilla River Road from Elm Ave. to Punkin Center Rd.	Widening	2,078,000
22	1st St./Hermiston-Hinkle Rd. from Highland Ave. to Feedville Rd.	Widening	2,078,000
23	West 4 th St./Highland Ave. Intersection	New Traffic Signal	300,000
24	West 11 th St. Adjacent to The Hospital	Widen to 3 Lanes	250,000
		TOTAL:	26,314,000

Tables 18 and 19 list the projects and projected costs for the South Hermiston Study Area and the US 395 Refinement Study Area. The South Area 2014 Project Costs are estimated at \$4,196,986 while the US 395 Refinement Area costs are estimate at \$84,494,000. Costs were calculated by using the original cost estimates and increasing them by an inflation rate of five percent per year. This is based on a judgment based weighted average of ODOT cost experience in Region 5. As with the 24 projects above, these are order of magnitude costs and should be used with caution.

Note: Projects 23 and 24 in Table 17 above, “Unprioritized Street System Improvement List” are not the same projects as Projects 23 and 24 in Table 18 below, “South Hermiston Study Area.”

Table 18: South Hermiston Study Area Access and Circulation Improvement Plan - May 2000 TSP Update – See Figure 4

No.	Project Description	Cost
23	Extend Evelyn Ave. west to US Highway 395.	109,000
24	Extend Evelyn Ave. west to New Hope Church, close New Hope access to US 395 and access the Evelyn Ave. Extension	296,986
25	Construct A-Line Canal Crossing	554,000
26	Complete 1First Phase of Gettman Road Extension	782,000
27	Complete Port Drive/US 395 Intersection improvements	396,000
28	Extend McKinley St. to Evelyn Avenue once access has been provided via Port Drive	396,000
29	Extend SE 4th Street and Gettman Road (2nd Phase)	752,000



30	Extend Gettman Road to SE 4th Street	485,000
31	Realign local street access 300' from US 395	426,000
	TOTAL	4,196,986

As of the preparation of this update in 2014, none of the improvements listed in Table 18 above or Table 19 below have been constructed. As with most transportation improvements, construction begins when developments which place greater demands on the transportation infrastructure occur. Future development in the south Hermiston area will determine the appropriate timing for construction of these improvements. Inclusion in the plan is not a guarantee of funding.

**Table 19: Recommended 20-Year Street Improvement Projects
US 395 Corridor Refinement Study Area – See Figure 5**

No.	Project Description	Cost
33	Provide a signalized access portal to US 395 (when warranted by a traffic engineering study) at the current Wal-Mart Distribution Center access to be served by a major collector roadway east of US 395 and a minor collector west of US 395.	445,000
34	Realign the north and south approaches to Ott Road such that they intersect US 395 at a complete 90-degree angle. The future intersections should be limited to right-in/right-out driveways to help preserve access management along the Highway.	1,089,000
35	Develop a minor collector backage road that runs parallel to US 395 between Kelli Boulevard and the Wal-Mart Distribution Center truck access road.	3,465,000
36	Re-construct a limited access right-in/right-out driveway to US 395 near the current Hermiston Foods driveway to be served by minor collector roadways on both sides of the highway.	50,000
37	Re-construct a limited access intersection (left-in/right-in/right-out) at the US 395/Kelli Boulevard Intersection.	50,000
38	Signalize the US 395/Campbell Drive/Airport Road Intersection when warranted by a traffic engineering study.	446,000
39	Develop a minor collector roadway to facilitate east/west travel between Hermiston-Hinkle Road and US 395.	10,642,000
40	Upon redevelopment of adjacent land parcels, develop a minor collector connection between Campbell Drive and Kelli Boulevard.	545,000
41	Extend Campbell Drive at major collector standards south and east to Kelli Boulevard (1st Phase). Realign a portion of Kelli Boulevard so that it Intersects the extension of Campbell Drive (2nd Phase).	2,128,000
42	Develop a minor collector roadway to facilitate north/south travel between US 395 and Feedville Road.	7,326,000
43	Develop a series of minor collector roadways to ensure circulation and connectivity upon redevelopment of the large agriculture plots within the western study area.	11,533,000
44	#44 not used.	0
45	Upon the redevelopment of the Hermiston Agriculture Experiment Station, provide a new	



	minor collector roadway along the SE 4th Street alignment. Upgrade and extend Experiment Station Road to this 4th Street alignment.	3,118,000
46	Develop a full access Intersection at US 395 to be served by a future extension of Able Drive. This Intersection should be limited to a right-in/right-out/left-in access when warranted by a traffic engineering study.	445,500
47	Develop a signalized access Intersection at the US 395 Airport Way Intersection when warranted by a traffic engineering study.	445,500
48	Develop a major collector roadway system upon redevelopment of the vacant land north of the airport, Irrigation canal, and rail line.	6,237,000
49	Develop a major collector roadway to facilitate north/south travel within the northeast quadrant of the US 395 Refinement Plan study area.	6,534,000
50	Develop a series of minor collector roadways to facilitate circulation south of the Hermiston Airport.	6,682,000
51	Develop a series of minor collector roadways to facilitate circulation within the northeast quadrant of the US 395 Refinement Plan study area.	14,107,000
52	Develop a major collector backage road between Kelli Boulevard and Ott Road.	5,692,000
53	Extend Kelli Boulevard east of US 395 to connect into a minor collector roadway network.	2,178,000
54	Develop a multi-use path along the west side of US 395. This path will require a bridge crossing over the feed canal and rail line.	891,000
55	Signalize the US 395/Feedville Road Intersection when warranted by a traffic engineering study. (Improvement specific to the US 395 North Corridor Plan)	445,000
	TOTAL:	84,494,000

Revenue sources:

Finding the means for paying for public projects is often a difficult job. There are a number of potential sources which might be considered. These include the State Transportation Improvement Program (STIP). This is primarily generated by fuel taxes, weight, mile fees and vehicle registration fees. The money in the STIP is allocated by the State Transportation Commission with input from regional Area Transportation Commissions (ACTs), city and county governments and the general public.

- **Fuel Tax and Vehicle Registration Fees:**
 A portion of all state gasoline and vehicle registration fees is sent directly to local jurisdictions. Although this amount at current tax levels is not large, it can be used for roadway improvements. Many jurisdictions have added a local tax to increase this revenue.
- **Ear-Marked Federal Funds:**
 Although this source is subject to large fluctuations, having a good relationship with local members of Congress can help develop this source.



- **Safety Funds (SF):**
ODOT has a separate safety fund which can be used to fund projects at high accident locations for projects to reduce accident potential.
- **System Development Charges (SDC):**
System Development Charges can be used to pay for projects needed to accommodate growth. These are usually based on the trip generation expected from a particular development. These are often favored by developers who need road projects to ensure the success of their land use development. These are generally paid at the same time as a building permit is issued, as the new owner of a piece of property pays and not the developer.
- **Local Improvement Districts (LID):**
These are districts that assess themselves for the cost of improvements. They tend to be favored by developers who intend to own property rather than sell it. LIDs are generally paid as a property tax assessment by the owners over 10 or 20 years. As a tax, the annual amount can usually be deducted from income taxes each year. This contrasts with SDCs which usually affect the basis of building improvement. These can usually be deducted as depreciation over a 30-year period. LIDs can be created for areas that are fully developed, while SDSs are usually paid as building permit fees.
- **Developer Financed:**
Individual projects may have impacts on the transportation system. That must be mitigated. Under both state and city rules, mitigation can often be required before development.

Project Opportunities

In addition to the studied intersection and roadway improvements listed in Tables 14 through 19, the city has identified several long term priorities which will enhance the overall transportation system both locally and regionally. These projects are not necessarily location specific or may be projects presently being developed in conjunction with other agencies. However, it is prudent to include these projects in the plan for support for future transportation improvements.



Table 20: Project Opportunities – Future Transportation Improvements

Project	Recommended Improvement
US 395/Orchard Avenue Area	Improve existing lane configurations, multi-modal access, traffic control and geometric characteristics to accommodate growth patterns and needs within the area.
Hermiston Downtown Urban Renewal Area	Implement urban renewal planned street improvements, features could include wider sidewalks, enhanced pedestrian crossing, landscaping and other measures.
Hermiston Loop and Oxbow Trail/Enhance Trail Crossings of Highway 207	Network of bicycle and pedestrian trails, including highway crossing treatments which connect and extend trail facilities.
Transit Amenities	Transit stop improvements, including but not limited to, more visible transit stop signs, kiosks with regional route information, benches, shelters and lighting.
Implement Transportation Demand Management Measures (TDM)	Implement TDM measures, including supporting carpools, vanpools to major employers through education and provision of park and ride facilities.
Eastern Oregon Trade and Event Center (Ott Road)	Develop and extend local streets to accommodate active transportation modes and other improvements to support events.



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