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# **MEMORANDUM**

Date: March 12, 2012

To: Caleb Hood, Project Manager

From: Kristen McCoy

Subject: Existing Studies Review

cc: Susan Graham Project Number: 314-2554-036

Project Name: South Meridian Future Land Use Map Update

The City of Meridian is considering the best long term solution for the South Meridian area. The project area is approximately nine square miles, between I-84 and Lake Hazel Road and McDermott to roughly Linder Road (Figure 1). The properties in this area are currently included in Meridian's Area of City Impact, but most properties have the land use designation of a "Future Planning and Referral Area." To prepare for future development and annexation into the City, a comprehensive plan future land use amendment is being investigated with City land use designations.

Prior to developing the vision and goals for South Meridian, it is important to understand current conditions in the area, including existing land use policies, plans, development commitments, environmental constraints, property and land ownership, and infrastructure opportunities and constraints. This memo summarizes the applicable observations, opportunities, and constraints obtained through reviewing the following documents:

- Airport/Overland Road Corridor Study
- Ten Mile Road Corridor Study
- South Meridian Plan
- South Meridian Transportation Plan
- ACHD Countywide Roundabout Study
- Ada County Zoning Map
- Canyon County Zoning Map
- Meridian Comprehensive Plan
- Nampa Comprehensive Plan
- Kuna Comprehensive Plan
- Meridian Water & Sewer Master Plans (\*\*see separate memo for more detail on infrastructure\*\*)
- ACHD Draft Capital Improvement Plan
- ACHD Draft "B" Five Year Work Plan
- Valley Regional Transit Valley Connect Plan
- 2035 Communities in Motion
- ACHD Bicycle Master Plan
- Meridian Pathways Master Plan
- ACHD Pedestrian/Bike Transition Plan
- ACHD Livable Street Design Guidelines

#### LAND USE

The South Meridian Planning Area is located in unincorporated Ada County, within the City of Meridian's Area of Impact. The area borders unincorporated Canyon County to the west, City of Kuna to the south, and existing City of Meridian limits to the north and east. The 2009 City's Future Land Map designates adjacent land uses as low and medium density residential to the east and mixed employment and commercial near Ten Mile Road and I-84. The Ten Mile Interchange Specific Area Plan (adopted in 2007), identified land use recommendations for nearly 2,400 acres to the north and west of the South Meridian planning area. Of this acreage, just over 300 acres are designated for mixed use commercial, residential and lifestyle center, and more than 900 acres of employment, including industrial uses. Rounding out the area is 800 acres of residential with the remaining in parks, open space, and right of way.

Current Ada County zoning in the Planning Area is primarily Rural Urban Transition (RUT), which, per County Code:

- Provides standards and regulations for the development of property within areas of city impact, consistent with the goals and policies of the applicable city comprehensive plan;
- Allows agriculture and rural residential uses to continue within areas of city impact until urban public facilities are extended;
- Provides design standards that shall permit redevelopment of property to higher densities when urban public facilities are extended; and
- Limits new agricultural uses within the areas of city impact to those that shall not significantly impact nearby urbanizing areas with noise, odor, dust, or other nuisances normally related to more intensive farm uses, such as livestock confinement facilities with three hundred one (301) or more animal units. This article, however, shall in no way preclude the continued use of properties within these areas for agriculture.

A few areas at the north end of the Planning Area, near I-84, are zoned R-1, which allows for one dwelling unit per acre.

West of the Planning Area is unincorporated Canyon County, and within the City of Nampa's Area of Impact. Current Canyon County Zoning west of McDermott is zoned rural residential. The City of Nampa's Comprehensive Plan designations for that area include agricultural between I-84 and Stamm, residential between Stamm and Powerline, and agricultural south of Powerline. The Comprehensive Plan also identifies a future Idaho Power substation at the corner of McDermott and Victory.

The city of Kuna recently annexed over 230 acres north of Lake Hazel Road, between Linder and Ten Mile Roads. The current City of Kuna Comprehensive Plan identifies the area between Lake Hazel and Amity Roads, within the entire South Meridian Planning Area, as Kuna's "planning" area (different from the Area of Impact) with a rural residential land use designation. The area south of Lake Hazel includes agricultural and low density land uses.

### **Development Commitments**

There are currently two preliminary plats within the study area. One, located at the southwest corner of Amity & Linder, is a 19.5 acre site submitted in 2011 for Bridgepoint Church. The other, located northwest of the Ten Mile and Overland intersection is a 6.8 acre site submitted in 2011 for two residential lots under the name "Barletta" Subdivision. There are also a handful of existing, developed subdivisions within the planning area (Figure 2).

## **Property and Land Ownership**

There are currently approximately 730 parcels within the project area. Meridian School District owns a 66 acre parcel at the northeast corner of Amity and Ten Mile Road. There are no other publicly-owned lands within the study area at this time (i.e. parks, emergency services, etc.).

#### TRANSPORTATION

The primary roadways within the Planning Area are vital to the connectivity of not only the Planning Area, but also the region. Because the Planning Area is centrally located, between Nampa, Kuna, Meridian, and Boise, an efficient and planned roadway system is necessary to bring homes and businesses to the area.

The current ACHD Master Street Map classifies Black Cat, Linder, Victory, Amity, and Ten Mile as residential arterials. Lake Hazel is classified as a residential mobility arterial and McDermott is a mobility arterial. COMPASS' 2035 Function Classification classifies Ten Mile, Amity, and Lake Hazel as principal arterials, Victory, Black Cat and Linder as minor arterials, and McDermott as an expressway. North of the Planning Area (I-84), SH-16 will be extended as an expressway connecting I-84 to SH 44, in the general vicinity of McDermott Road. Design for the first segment of the SH-16 expressway, from SH 44 to US 20/26 is currently underway with construction likely in the next few years. Completing the design and construction for the expressway to I-84 is not likely within the next 20 years. Plans to continue the expressway south of I-84 have not been finalized, nor funded. However, it is likely that at some point in the long-term future, the SH-16 expressway will continue south through the South Meridian Planning Area, near the existing McDermott Road alignment.

In addition, a future east-west corridor (Airport/Overland Road) is planned between Ten Mile and Garrity Boulevard in the City of Nampa. This corridor, planned to be 3-4 lanes is anticipated to accommodate up to 28,000 vehicles per day by the year 2035.

COMPASS' 2035 Communities in Motion (CIM) is the regional long-range transportation plan for Ada and Canyon Counties. The plan describes each corridor within the region, its importance to, characteristics, recommended improvements, opportunities, past, current, or programmed improvements, as well as desired improvements to meet the anticipated demand of the community. The list below summarizes COMPASS' description of each corridor within the Planning Area.

#### Ten Mile Road:

- Purpose/Function- Provides north-south mobility in Meridian and a connection to Kuna. Planned to be a primary north-south corridor into the future. Links high-growth areas of Meridian & Kuna.
- Improvements- CIM identified Ten Mile Road from Lake Hazel to Chinden as a funded project, widening from 2 to 5 lanes. It also identified widening south of Lake Hazel, to Kuna, as a recommended, unfunded improvement.

## **Black Cat Road:**

- Purpose/Function- Serves as a minor north-south arterial between McDermott Road and Ten Mile Road.
- Improvements- CIM did not identify any funded improvements for Black Cat through 2035. CIM identified a widening project as an unfunded improvement north of the Planning Area (north of I-84).

## **McDermott Road:**

- Purpose/Function- Provides vital north-south travel and access to Ada and Canyon Counties. With its connection to the proposed SH-16 extension, McDermott Road has potential as a future expressway; and is planned as such between SH-44 and Kuna-Mora Road.
- Improvements- CIM identified funded investments which include improvements much farther north than the Planning Area boundary. However, identified unfunded improvements include conducting a study for the corridor as an expressway, establishing rights-of-way needs, developing an access management plan, and widening from Lake Hazel to I-84 from 2 to 5 lanes, including a railroad overpass at Hubbard.

#### Linder Road:

- Purpose/Function- Serves as a "reliever" for Ten Mile and Meridian Road.
- Improvements- CIM identified funded improvements which are located south of the Planning Area.
  Identified unfunded improvements include widening between Kuna-Mora and Ustick Road, including an I-84 overpass.

## Lake Hazel Road

- Purpose/Function- Provides a southern route alternative to I-84 and a connection from unincorporated Ada County to Boise (Maple Grove), with plans to extend to Gowen Road.
- Improvements- CIM identified unfunded improvements from Happy Valley Road in Nampa to Locust Grove in Meridian, including a railroad overpass.

## **Amity Avenue:**

- Purpose/Function- Connects Nampa with Boise (south of I-84). Also provides an alternative route to I-84, between Garrity and Meridian interchanges.
- Improvements- CIM identified a funded investment project along Amity, widening Southside to Cloverdale from 2 to 5 lanes.

In addition to the information COMPASS presents in CIM, ACHD also has programmed improvements to roadways within the Planning Area. In the Five Year Work Plan (Draft B), several projects were identified within the Planning Area, including:

- Ten Mile/Victory Interim Signal Widen intersection to add left turn lanes on all approaches; install interim signal
- Amity Road Bridge (1/2 mile east of McDermott) Replace and widen to five lanes
- Amity Road Bridge (1/4 mile east of Ten Mile) Replace and widen to five lanes
- Amity Road Bridge (700 feet east of McDermott) Replace and widen to five lanes
- Ten Mile; Victory to Overland Widen to five lanes with curb, gutter, and sidewalk
- Ten Mile/Amity intersection Install interim signal

ACHD is currently conducting a county-wide roundabout study to identify the intersections where roundabouts are feasible based on screening criteria. ACHD policy requires a roundabout to be considered for any intersection identified for improvement. This study will identify the roundabout locations to preserve adequate right-of-way. The outcomes of the study will be integrated into the Master Street Map to ensure appropriate right-of-way preservation. Based on the work completed to-date, the following recommendations were made:

Intersection	No Roundabout Recommended	Single-Lane Roundabout Recommended	Multi-Lane Roundabout Recommended	Dual-Lane Roundabout Recommended
McDermott / Overland*		•		
McDermott / Victory			•	
McDermott / Amity	•			
McDermott / Lake Hazel*			•	
Black Cat / Overland*			•	
Black Cat / Lamont*			•	
Black Cat / Victory*			•	

Intersection	No Roundabout Recommended	Single-Lane Roundabout Recommended	Multi-Lane Roundabout Recommended	Dual-Lane Roundabout Recommended	
Black Cat / Amity*			•		
Black Cat / Lake Hazel				•	
Ten Mile / Overland			•		
Ten Mile / Lamont*			•		
Ten Mile / Victory			•		
Ten Mile / Amity	•				
Ten Mile / Lake Hazel*				•	
Linder / Victory			•		
Linder / Amity			•		
Linder / Lake Hazel*				•	
* Intersections that need additional analysis to determine final configuration					

# **Roadway Typologies**

ACHD adopted the Livable Street Design Guide in 2009. The guide provides parameters for streets within Ada County. Each street typology outlines the context which the roadway is expected to be found, as well as the design details including cross section, travel and turn lane dimensions, bike lanes, sidewalks, landscape buffers, pedestrian zones, etc. Depending on the final, recommended land use scenario for South Meridian, and corresponding traffic demand, the appropriate street typologies will be determined for each arterial roadway within the study area. Determining the typologies now will help prepare for future right-of-way needs in the future.

## **Transit**

Valley Connect is a plan produced by Valley Regional Transit which establishes a vision of the comprehensive alternative transportation system needed, given the growth projections and regional and local road plans. In the South Meridian Planning Area, there are no existing transit services provided. However, corridors in the Area have been identified as future routes including:

- Kuna-Meridian route, which includes a park & ride lot in Kuna and would provide secondary service (pickups approximately every 30-60 minutes all day, with frequent stops) between Kuna and Meridian
- Overland route, which would provide primary service (pick-ups approximately every 15-30 minutes during the peak hours, and 30-60 minutes mid-day with frequent stops between Meridian
- Micron Employer Express route, which would operate every 30 minutes during peak times between South Meridian and Micron

#### **Bike & Pedestrian**

The ACHD Roadway to Bikeways Plan, adopted in 2009, was prepared to provide a vision, strategies and action items to improve conditions for bicycling in Ada County over the next fifty years. Specific to the South Meridian Planning Area, no specific route improvements were recommended. However, the needs identified in the report, were based on 2009 figures. Based on the land use scenarios determined through this study, bicycle facilities may be recommended. In addition, the street typologies determined in ACHD's Livable Street Design Guide may include bicycle and pedestrian facilities in the design standard.

ACHD Pedestrian-Bicycle Transition Plan (prepared in 2004) was intended to provide a comprehensive plan for the Ada County pedestrian and bicycle system. The goal of the Plan was to identify missing sections discouraging pedestrian travel and plan for well-connected sidewalks and full mobility and access. Specific to the South Meridian Planning Area, the Plan indicated there were no existing bicycle facilities, but note that bike lanes along Ten Mile Road (between I-84 and Victory) were planned within the next 10 years, and Ten Mile, south of Victory, and Amity between Ten Mile and Maple Growth are long-term priorities for bicycle lane improvements.

The City of Meridian's Parks & Pathways Master Plan indicated there are no existing pathways within the Planning Area. However, there are future pathways planned along irrigation canals and laterals. These will likely be primarily constructed through development, with small gaps supplemented by the City as necessary to complete the network.

#### **ENVIRONMENTAL**

Several irrigation canals and laterals lie within the project area, including the Ridenbaugh Canal, Calkins Lateral, Rawson Canal, Point Lateral, Mason Creek, Farr Lateral, and Ridenbaugh Hi-Line Canal. These irrigation facilities lie within the jurisdiction of three irrigation districts: Nampa Meridian, New York, and Boise-Kuna. The waterways currently serve irrigation water to the properties within the area. In the future, they can both provide irrigation water as well as possibly serve as amenity features and City pathway routes.

The US Fish and Wildlife Service's National Wetlands Inventory indicate there are no existing wetlands within the project area. The EPA Environmapper online tool was used to identify any possible hazardous material sites within the project area. Two sites were identified: The Dan Van Grouw Dairy (off of Black Cat, between Amity and Lake Hazel) and C. Wright Construction (west of Black Cat, just south of I-84). Because of the farming and agricultural history of the area, additional hazardous material sites may exist but not be reported. Upon development, it will be the responsibility of the property owner/developer to identify and mitigate any found hazardous material sites.

One of the significant environmental features within the South Meridian Planning Area is the presence of Prime Farmland. As shown in Figure 3, a significant amount of the area is classified as "Prime Farmland if irrigated." This land provides unique and necessary soils that, if irrigated, provide opportunity for natural food growth in the local market. However, this land is not protected from re-development.

There is one FEMA mapped floodplain within the project area, located along the Mason Creek Lateral between McDermott and Ten Mile Roads, south of Amity (Figure 4). Though this floodplain doesn't necessarily restrict development, it will involve additional requirements and permitting.

A portion of the area is located within IDEQ's Ada/Canyon Nitrate Priority Area for Groundwater (Figure 4). If septic systems are used in this area, the levels of nitrates in the groundwater will dictate the allowable development densities which could possibly range from 1-unit per 5-acres up to 1-unit per 2-acres.

## INFRASTRUCTURE OPPORTUNITIES AND CONSTRAINTS

Currently, there are no water or sewer services provided by the City of Meridian to the South Meridian Planning Area. The City's adopted Sewer Master Plan proposes adding three trunk lines south of I-84, which would serve the majority of the Planning Area. However, these extensions would be a substantial cost to the City to provide sewer to the majority of the planning area. Due to that, it appears that one of two courses of action appear most prudent.

- 1) Zone the area very low density (i.e. 1 unit per 5-120 acres) and utilize septic systems; or
- 2) Develop an agreement and utilize the City of Kuna's wastewater treatment plant for the southwest portion of the Planning Area. The distance required to pump sewage to the Kuna treatment plant does not appear to be any further than what is contemplated and required in the Meridian master plan. If an agreement is reached by both cities, it is likely the southwest portion of the Planning Area could be re-

developed, incorporated into the City of Meridian, and served by the City of Kuna's wastewater treatment plant, which could be immediately available and reduce capital expenses.

If urban densities are planned, public sewer systems will be required; higher densities are generally more economical because there is a larger population base to spread the capital and operational costs onto.

The City's draft Water Master Plan does not propose expanding current water services into the Planning Area in the near future. As with other areas in the City, the water system will be expanded "as needed" and as development occurs. Additional well sites will need to be evaluated and permitted after more concrete plans for the area are in place. The water system is not currently a constraint for the South Meridian Planning Area project.

#### **CONCLUSION**

The City of Meridian has been considering the best long-term solution for the South Meridian Planning Area for several years. Previous planning efforts resulted in a land use mix that had significant impacts on the roadways, water, sewer, and other public services, and the city stepped back to reconsider. At that time, it was officially labeled "Future Referral Area" on the City's Comprehensive Plan. Since that time, the economy and pace of development have slowed, but the new Ten Mile interchange has opened. These conditions have created the opportunity to revisit the area's land use designations in preparation for future development and growth in the area.

This plan is intended to provide long-range vision for South Meridian. The land use designations determined during this study will not mean development of the area within the next one to two, or even ten years. However, it's impossible to plan for future development without knowing what development is allowed within an area. Upon the outcome of this study, land use designations and the associated population densities will necessitate the need for services and infrastructure that likely are not included in current plans for the area. Once the recommended land use plan is determined, the City of Meridian will develop their strategy for providing water and sewer services, fire and police station demand, and park sites and pathway routes to serve the Planning Area. ACHD will determine the necessary improvements to the roadways that serve the area and future residents; Valley Regional Transit will identify possible transit routes; Meridian School District will identify future school needs and potentially site options.







