

GOOCH HILL WEST NEIGHBORHOOD PLAN

SECTION 1: INTENT, PURPOSE AND SCOPE OF THE PLAN

1.0: Purpose of the Neighborhood Plan: Several property owners within the area south of Huffine Lane, between Lynx Lane and Gooch Hill Road, have initiated a planning process to help guide future growth and development within the area. They have taken this step in response to Gallatin County policy and support as incorporated in the Growth Policy Implementation Program recently adopted by the County Commission.

Most of them are long-time owners and County residents who have witnessed the development of nearby properties and overall growth pressures in the Bozeman area. They wish to cooperate in the definition of a “*neighborhood plan*” as the foundation for appropriate future subdivision. Their goal is to evolve a preferred plan for future land use, consistent with the County Growth Policy and relevant regulations, to achieve greater predictability about future development. As stated in the Growth Policy (Section 4,2) “*Neighborhood plans and zoning districts are intended to provide more specific guidance relative to land use designations*”.

The Plan will be implemented over the next several years by individual land owners who choose to develop their properties consistent with its framework goals, objectives and policies.

1.1: Neighborhood Plan Jurisdictional Area: As described in Exhibit 1, the area for the Gooch Hill West (GHW) Neighborhood Plan is bounded in the north by Huffine Lane, on the east by Gooch Hill Road south to Stucky Road, thence west to the Gallatin County/ Bozeman Area Zoning District Boundary, thence south to the south boundary of the former Sales Ranch property, thence west and north along the Ranch boundary to Beatty Road, thence north to Elk Lane, thence east to Lynx Lane, and thence north to Huffine Lane.

Exhibit 4 shows that the western two-thirds of the GHW Plan Area abut the Gallatin County/Bozeman Area Zoning District. The remainder of the Plan Area abutting Gooch Hill Road is already in the District.

The total area includes approximately 994 acres, including both developed and undeveloped parcels.

1.2: Plan Vision: The Gooch Hill West Planning Area will evolve into a planned community of residential neighborhoods and business park/retail service uses, developed within a connected framework of arterial streets, planned open space/trails and other public facilities such as parks, schools, and fire protection. Each neighborhood is expected to fit within this overall framework, while creating a compatible variety of residential densities, market prices and architectural styles.

Given the many property ownerships within the Plan area, future growth and development will occur by increments. As each owner decides to develop his or her land, individual applications for subdivision review will be submitted. Accordingly, the Plan recognizes this incremental implementation. All future development will be subject to the availability of adequate infrastructure for water, wastewater treatment and planned arterial roads; and development impacts will be mitigated as required by relevant regulations.

1.3: Relationship to Gallatin County Growth Policy: The current Growth Policy was adopted “*to provide comprehensive, long-range guidance relative to the growth and development*” of Gallatin County in compliance with Montana statutes (76-1 MCA). As such, it is a statement of County-wide goals and policies.

The Land Use Diagram (Exhibit 2) describes generalized “*...current land uses, with an eye focused on the future. This diagram is not a zoning map. Instead, it is a visual representation of trends to date, how the Country has grown and how we might expect it to keep growing*” (Chapter 10).

The diagram shows that the GHW Plan Area is between the Four Corners “Unincorporated Communities” designation and the Bozeman “Incorporated Cities with Urban Areas” designation; and abuts U.S. Hwy 191. Clearly, it is in the logical path of growth.

Section 4.3 of the Growth Policy specifically addresses the use of neighborhood plans as a means of implementation:

“A neighborhood plan is intended to be the ‘growth policy’ for a specific neighborhood or geographic area. Although a neighborhood plan is not a zoning district, it is intended to provide greater specificity for development within a certain defined area. A neighborhood plan adopted pursuant to 76-1 Part 6 MCA, and in conformance with the Growth Policy may take advantage of the simplified development review process.”

Accordingly, once approved by the County Commission, the Gooch Hill West Neighborhood Plan will amend the County Growth Policy and define future land use within the Plan Area as a “growth area” of Gallatin County.

The GHW Plan will help implement the County Growth Policy by describing future land use and related infrastructure at a neighborhood plan level of detail. Based upon the public participation discussion, the implementation of planned arterial highways will be defined during the pending update of the Greater Bozeman Area Transportation Plan Update. Section 5 describes the process for implementation of additional infrastructure for water, wastewater treatment and trails/parks/open space.

Goals are “*statements of purpose that define a significant intent of the Growth policy, reflecting the long-term desires of the county and its citizens*”. Policies “*state strategies or techniques to achieve each goal and ultimately towards achieving the intent of the Growth Policy*”.

The GHW Plan's conformance with key goals and policies of the County Growth Policy is abstracted and summarized below. (Growth Policy text is shown in bold italics.)

GOAL 3.1: PROTECT WATER QUALITY:

Policies: *Encourage multi-user or public water and wastewater treatment systems.*

The Plan will incorporate utilization and potential expansion of service capacities of the Rae Water & Sewer District (as available) to serve new development.

Encourage development to mitigate adverse impacts on rivers, streams, wetlands and riparian areas.

Existing wetland areas will be delineated according to Corps of Engineers criteria. The Middle Creek flood zone will be analyzed and defined according to floodplain management regulations. Appropriate areas of the flood plain will be utilized as a community park, with trail connections via the open space system.

GOAL 3.2: ASSURE SUSTAINED WATER QUANTITY:

Policies: *Encourage development to assess both the immediate and long-term cumulative impacts on water quantity.*

Water will be provided thru the Rae Water & Sewer District, an existing public water system.

GOAL 3.3: CONSERVE IMPORTANT HABITAT:

Policies: *Encourage development to conserve important habitat.*

The GHW Neighborhood Plan will incorporate open space corridors along the Farmers Canal and Middle Creek.

GOAL 3.4: PROTECT AIR QUALITY:

Policies: *Encourage development to protect air quality and reduce particulate matter.*

The future open space/trail system of interconnected residential neighborhoods, parks, and employment uses will reduce dependence on vehicles; thus reducing air pollution.

GOAL 3.6: CONSERVE OPEN SPACE:

Policies: Encourage development to preserve open space by dedication of parks, habitat, recreation open space and trails; with private ownership and maintenance.

The Plan’s open space framework of parks and trails will comply with this policy.

GOAL 3.7: ENCOURAGE RESIDENTIAL DEVELOPMENT IN AREAS PLANNED OR ZONED FOR RESIDENTIAL USE:

Policies: Encourage the use of neighborhood plans and 201 zoning districts for planning residential areas.

The GHW Neighborhood Plan is consistent with this policy.

Encourage commercial and mixed development adjacent to existing developed land to prevent sprawl.

The GHW Plan lies between existing developed lands, adjacent U.S. 191, in the logical path of growth.

GOAL 3.8: LOCATE COMMERCIAL AND LIGHT INDUSTRIAL DEVELOPMENT IN AREAS PLANNED OR ZONED FOR THAT USEAGE:

Policies: Neighborhood plans should address commercial and light industrial uses. Prevent the encroachment of industrial uses into residential areas.

The Plan incorporates a “business corridor” separated from U.S. 191 by a landscaped frontage road to facilitate access. Potential commercial and business park/ light industrial uses will provide job opportunities to community residents and reduce travel.

The corridor will be buffered by appropriate landscaping from the residential neighborhoods to the south.

GOAL 3.12: PROVIDE A SAFE AND EFFICIENT TRANSPORTATION SYSTEM:

Policies: *Encourage development to provide coordinated circulation patterns. Encourage development to coordinated proposed new roads with both existing and planned road, taking into consideration current, proposed and future circulation and development patterns.*

The Draft GHW Plan reflects the “Greater Bozeman Area Transportation Plan-2001 Update” as adopted by the County Commission.

GOAL 3.13: PROVIDE FOR LOCAL SERVICES AND PUBLIC FACILITIES:

Policies: *Encourage multi-user, public water and wastewater treatment systems. Support expansion of existing municipal and private urban service systems.*

(See response to Goal 3.2.)

Encourage development to provide fire protection and medical emergency services.

The Plan accommodates provision of community fire protection and other necessary public services.

Encourage development to provide rights-of-way to support future growth.

The Plan calls for dedication of future right-of-way consistent with adopted transportation and circulation plans on a cost/benefit basis as new development is proposed.

GOAL 3.15: PRESERVE PRODUCTIVE FARM AND RANCH LANDS:

Policies: *Promote development adjacent to or within cities, unincorporated communities, and other areas planned for such development where public facilities and infrastructure are available and away from areas used exclusively for agriculture.*

The GHW Plan area abuts existing public water and wastewater facilities that can be expanded to serve future development in a

safe and cost-effective manner. This capacity can absorb growth pressures that might otherwise seek to develop more appropriate agricultural lands.

1.5: Public Outreach and Participation: The planning team led by Warren Vaughan (County Planning); R. Dale Beland AIA, AICP, (Planning Consultant); and Mike Stenberg, P.E., (Hyalite Engineers); organized an outreach process to encourage participation by the interested public. Meeting notices were mailed by County staff to all landowners and interested citizens for each meeting. Meeting notes and agendas were maintained on the County Planning Department web site.

A series of five public meetings were held at Monforton School and the County Courthouse during a three-month period. More than 96 persons attended these meetings. (See Section 6 for meeting agendas and attendance rosters.)

In addition, the team met several times with the RAE Subdivision County Water & Sewer District # 313 staff to discuss service capacities. On September 20, 2006; they met with the District's Board of Directors to describe the GHW Plan, its objectives and relationship to District facilities. The Board agreed to work with the landowners to accommodate future growth whereby future demand requiring district/ facilities expansion would be served without additional cost to existing users.

The Draft Neighborhood Plan will be made available for public review on the County website.

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SECTION 2: NEIGHBORHOOD ANALYSIS

2.1: Demographic and Housing Data: Current population and housing data can be estimated by reviewing available aerial photography and other sources. Exhibit 1 shows that most of the 994-acre Plan Area is currently vacant. The majority of existing homes are located along the western edge of Gooch Hill Road. The approximate total of 18 dwelling units contains an estimated population of about 40 (using 2.24 persons/d.u. per 2005 Census data).

2.2: Existing Land Use: The major land components of the Plan Area consist of several long-standing private ownerships. These include:

1. Brenden Ranch parcels south of Huffine Lane (between Lynx Lane and the Gallatin County/ Bozeman Area Zoning District) and north of the Elk Lane alignment;
2. Sales Ranch parcels south of the Brenden Ranch to the south Plan boundary, including the Middle Creek Minor Subdivision;
3. The Sales parcel abutting Elk Lane and Cobb Hill Road;
4. Haugen parcels between the zoning district boundary and Gooch Hill Road; and
5. Several smaller parcels along the west side of Gooch Hill Road.

In general, the large parcels have been farmed and smaller parcels have accommodated rural residences and small businesses. Recent development along Huffine Road includes the Ferguson Industrial Park that will adjoin existing business/ light industrial uses.

2.3: Current Land Use policy and Zoning: Per Exhibit 3, the Gallatin County/ Bozeman Area “Future Land Use Plan” describes the east half of Section 17 of the Plan Area as “Moderate Intensity Developments”. The northwesterly quarter section of Section 17 and abutting Plan area to the west are within the Gallatin County/ Bozeman Area planning jurisdiction and are shown as “Agricultural/ Rural Residential Transitional Area”.

Current zoning is illustrated in Exhibit 4. The zoning pattern varies from “Light Manufacturing” abutting Huffine Lane through Neighborhood Service commercial and Residential Medium Density to Agriculture Suburban in the south half of the zoned area.

2.4 Environmental Characteristics*: Preliminary investigations and research have provided information on the existing environmental characteristics of the GHW Plan Area. This baseline data will be refined by more detailed investigation at the time of future development applications.

2.4.1: Watercourses: The Plan Area contains two significant watercourses along with various agricultural ditches. Middle Creek (also known as Hyalite Creek) is a tributary to the East Gallatin River and runs through the west side of the Area. This creek is planned to be protected and preserved by designating park and/or open space along the stream corridor/ floodplain.

The Farmers Canal runs across the southeast corner of the Area and is used for agricultural purposes. The riparian area associated with Farmers Canal is also planned to be preserved and designated as open space. There are various ditches previously used for agricultural irrigation. All active watercourses will be maintained.

2.4.2: Floodplain: The Federal Emergency Management Agency (FEMA) has published floodplain maps delineating the floodplain associated with the major rivers in the Bozeman area. Although Middle Creek has not been studied by FEMA, there is a potential associated floodplain. Based upon soil maps and aerial photography, the location of the Middle Creek floodplain was approximated and displayed in Exhibit 5.

As mentioned above, the area surrounding Middle Creek is planned to be designated as open space and park area; therefore, any potential flood hazards will be mitigated.

(Note: This section incorporates material researched and drafted by Hyalite Engineers, PLCC).

A floodplain study has not been conducted at this time because of the proposed park land designation surrounding Middle Creek. As development progresses, it will be necessary to perform a flood analysis of the creek. Investigation for flooding potential from irrigation ditches will also be reviewed at the time of future development applications.

2.4.3: Wetlands: Four general concentrations of wetlands exist onsite as shown on Exhibit 6. This exhibit displays the wetland and riparian areas as designated by the Gallatin Local Water Quality District as well as background infrared photography to illustrate lush and moist areas. (Note- The large red area in the center of the exhibit is not a wetland, but rather an irrigated field.)

The first two concentrations of wetlands occur along the major watercourses: Middle Creek stream corridor and the Farmer's Canal. The Middle Creek stream corridor is planned to be designated as an open space park area, and as a result, disturbance of wetlands along this corridor will be minimized. No changes to the existing Farmers Canal are proposed.

The third wetlands area is located to the west of Middle Creek on the western edge of the Plan Area. As development extends to this area, the wetlands will either be avoided or properly mitigated. The final area to contain wetlands is near the north Area boundary. These wetlands are located adjacent to Huffine Lane and have been recently delineated on a preliminary plat for a minor subdivision.

Wetlands may also be found along various agricultural ditches located throughout the Plan Area. All wetlands will be delineated and surveyed for an accurate wetland assessment prior to development.

2.4.4: Groundwater Depth and Flow: Groundwater depth and flow direction are factors during the design and determination of degradation effects of a wastewater distribution system. High groundwater could extend the wastewater permitting process and may affect structural aspects of future development.

Exhibit 7 shows the groundwater flow direction to be North 27°33'36" West and the hydraulic gradient to be 0.01345 ft/ft., as well as the approximate groundwater depths within the Plan Area. These depths were determined by the NRCS soil data associated with soil types. NRCS published Table K1 (Water Features) that lists the approximate depths of the groundwater typically found with different soil classifications.

Groundwater depths range from one foot to greater than six feet below ground surface. However, the majority of the Area has depths to groundwater greater than six feet. From visual inspection and surrounding development, groundwater does not appear to be a limiting factor. As future development occurs, groundwater depths will be more accurately determined as appropriate.

2.4.5: Soil Types and Limitations: The Natural Resources Conservation Service (NRCS) has documented 12 different soil types (mostly silt loams and loams) within the Plan Area as shown on Exhibit 8. These soil types are distinguished by many different characteristics including physical properties, engineering properties and water features.

As described in this exhibit, a large percentage of the Plan Area is classified as soil type 53B. This soil is defined by the NRCS as Amsterdam Silt Loam and can be described as a deep, well drained soil that is generally located on stream terraces. This soil can have somewhat limited permeability, and this will be considered when a wastewater disposal system is to be installed as part of future development. Preliminary investigation indicates this soil will be suitable for building construction and should not be a limiting factor for typical construction.

2.4.6: Wildlife Habitat: Most of the Area is currently open agricultural land that does not accommodate substantial vegetation to support larger animals such as deer, bear, elk etc. The animals that will be affected more by future development are rodents such as ground squirrels and other small animals.

The proximity of Huffine Lane, which is classified as a principal arterial by the Montana Department of Transportation (MDT), presents a hazard for wildlife. Although the Area

is not critical to the preservation of wildlife habitat or fish population, a natural corridor for wildlife does exist along Middle Creek, which will be protected as permanent open space. No critical or endangered species are known to inhabit the Plan Area.

2.5: Community Effects: This section of the GHW Plan describes potential effects of future development. These effects or impacts include water supply, wastewater treatment, traffic and transportation system, cultural resources, and schools. This background analysis provides the basis for identification of potential mitigation as part of the GHW Plan implementation.

2.5.1: Water: The RAE County Subdivision Water & Sewer District # 313 serves existing developments to the east of the Plan Area. In response to new/ proposed developments (Ferguson Commercial and Falcon Hollow), the District has expanded its service boundaries. These developments will install and construct water infrastructure to the west side of Gooch Hill Road, which can be expanded to serve the Plan Area.

Such improvements increase the capacity of the District sufficient to accommodate the above developments, but not to serve the entire GHW Plan Area at potential buildout. Therefore, future development will require extension of District boundaries and expansion of capacity via construction of new system facilities.

2.5.1.1: Existing Water Service Conditions: Currently, the District's water system consists of five water supply wells and a water distribution system which includes 4, 6, and 8- inch water mains. All of the existing wells pump directly into the distribution system, maintaining a minimum system pressure. The total water supply from the existing wells is 565 gallons per minute (gpm). The following table lists the existing water supply wells (well locations are shown on Exhibit 10):

<u>Well</u>	<u>Flow</u>
Laundry	125 gpm
Clubhouse	130 gpm
Subdivision	70 gpm
Meadowbrook	130 gpm
Falcon Hollow	110 gpm
Total Firm Capacity=	565 gpm

There are approximately 277 residences connected to the system at this time, with an additional 56 residences already approved for connection (Meadowbrook Subdivision), bringing the total to 333 connections. The area to be served by the existing public water supply is shown in Exhibit 9.

2.5.1.2: Flows from Known Uses: The current estimated water use for the District is 325 gpm needed for a peak hour. This includes the Meadowbrook Subdivision (which is near build-out) that was approved for connection to the District. As stated above, the total water supply from the existing wells is 565 gpm. The District is capable of servicing the Ferguson Commercial project and Phase I of the Falcon Hollow project, but is not able to handle any significant development beyond that.

2.5.1.3: Demand from Undeveloped Area: The demand from the GHW Plan Area will be determined can only be estimated at this time given the nature of the Land Use Plan. All future development demand will be concurrent with the availability of service from the District. Such development will require coordination and connection with its existing and planned capacities.

The flows generated from the GHW Plan Area will not include property located west of Middle Creek. This area will be served by individual wells, due to the lower elevations, potential for lower density development, and the need to cross Middle Creek with a water main if the District was extended.

2.4.1.4: Future Improvements: The District is currently planning to expand their water system to improve capacity within the District's existing boundaries.

Improvements include the proposed construction of a 500,000-1,000,000 gallon storage reservoir as shown in Exhibit 10. The District is also proposing to upsize some water mains to more efficiently distribute water and increase fire flow capabilities.

Future development in the GHW Plan Area will be dependent upon expansion of the District boundaries, new public water supply wells, and installation of new water mains. The Board of Directors of the District has expressed interest in future system coordination with landowners within the GHW Plan Area as a means of fulfilling their public service mission.

2.5.2. Wastewater Treatment: The RAE Water & Sewer District's treatment plant and wastewater effluent disposal galleries sewer system currently treats the wastewater generated by the developments located on the east side of the Plan Area.

There are recent improvements that have been proposed with the above mentioned developments. The Ferguson Commercial project has planned to install a gravity collection system on their property to convey sewage to a centralized raw-sewage lift station. This lift station would then provide transport of raw sewage back to the District's wastewater treatment plant. This infrastructure was designed to accommodate future growth of the District, including areas within the GHW Plan.

The Plan calls for eventual expansion of the District's sewer service. The limits of the expansion shall be the same as the water service limits; the area west of Middle Creek will be excluded from the District due to lower elevations, lesser densities, and the necessity to cross Middle Creek. The Plan includes a new site for infiltration galleries and increased pump size in the raw sewage lift station to accommodate higher flows.

2.5.2.1: Existing Wastewater Treatment Conditions:

The District's wastewater treatment and disposal system presently consists of a centralized gravity collection system with conveyance to a raw sewage lift station

(located in the King Arthur Trailer Park) that transports wastewater to a newly constructed SBR wastewater treatment plant. Exhibit 10 describes the District’s existing facilities.

The current system capacity of the District’s wastewater treatment plant is 200,000 gallons per day (gpd) with storm flows up to 250,000 gpd. The existing treatment plant is receiving approximately 140,000 gpd at this time including infiltration and inflow (I&I). The District operator has stated that the District will be working on replacing some manholes, service lines, etc. this year to reduce the amount of I&I into the system which will increase the available treatment capacity for future development.

2.5.2.2: Estimated Future Flows from Known Uses: Three developments within the GHW Plan Area are currently being proposed to be added to the District-Ferguson Commercial, Falcon Hollow, and Vinger Development. The following estimated flows will be generated by these developments:

<u>Project</u>	<u>Average Daily Flow (ADF)</u>
Ferguson Commercial	13,000 gpd
Falcon Hollow	76,800 gpd
Vinger Development	<u>14,300 gpd</u>

Total Estimated ADF = 104,100 gpd

2.5.2.3: Estimated Future Flows in Undeveloped Areas: The wastewater generated from the GHW Plan Area will be dependent on the type of land use, the density of such use and the area of the development. The Plan is based upon incremental development review concurrent with expansion of service capacity to meet new demands.

2.5.2.4: Future System Expansion: Planned sewer improvements have been initiated by the Ferguson Commercial project. It is proposed to install a gravity collection system within the Ferguson project boundaries that can be extended

into the Plan Area to convey sewage to a centralized raw-sewage lift station. The lift station will then transport wastewater directly to the District's treatment and disposal facilities. The proposed sewer mains have been designed to allow connection of future development. The District operator requested that this be investigated to reduce numerous lift stations from future developments and limit the operation and maintenance burden of the District as a whole.

The topography of the site allows for gravity lines throughout the majority of the Plan Area to convey sewage to the lift station installed on the Ferguson Commercial site. The gravity and sewer force mains have been sized to serve the Plan Area.

As the GHW Plan Area develops, it will be necessary to further expand the collection and conveyance capacity of the wastewater treatment system. The existing wastewater treatment plant can be expanded rather easily to treat wastewater; however, the current wastewater effluent disposal system (infiltration galleries) will not be sufficient and there is not enough space to add more galleries at the current location. Accordingly, Exhibit 9 shows the proposed location of the future infiltration galleries to serve GHW development.

2.5.3: Storm Water Management: Storm water runoff will be controlled throughout the construction phases and after the completion of future development in accordance to the regulations in MDEQ 8. During construction, control measures such as silt fences, straw bales, and diversion ditches will be installed as necessary to avoid erosion problems and additional runoff reaching surface waters.

After each construction phase is complete, it will be necessary to control the excess runoff that is generated by the greater percentage of impervious area. A detailed storm drainage plan will be completed for submittal to the MDEQ when the actual development process starts. This plan shall specify erosion control measures such as drainage basins, grading, detention/retention ponds, ditches, seeding plans and anything else that may be necessary for successfully controlling post-development stormwater runoff on the site.

2.5.4: Transportation System: As more development occurs in the Gallatin Valley, the need for a more organized and efficient transportation system becomes critical. The Greater Bozeman Area Transportation Plan (GBATP) is the foundation for transportation and circulation infrastructure improvements planned in the central area of the County. The GHW Plan incorporates the arterial road alignments and other relevant factors because it is adopted County policy. (Please refer to Exhibit 11.)

The following sections discuss the current traffic conditions and the future needs in the area. Topics such as Level of Service, traffic signals, planned improvements and trip generation are discussed. (Please refer to the list of references for traffic data sources.)

2.5.4.1: Existing Conditions and Adjacent Roadways: Huffine Lane bounds the Plan Area on the north. It is a five-lane roadway with two lanes in each direction and a two-way-left-turn-lane (TWLTL), and is classified as a principal arterial by the GBATP. Huffine Lane has a speed limit of 65 miles per hour (MPH) throughout the Area and provides connectivity between areas outside of Bozeman such as Four Corners, Big Sky, Yellowstone National Park and the city of Bozeman.

Based on a 2004 traffic study done by Marvin & Associates (M&A) for the Falcon Hollow Subdivision, Huffine Lane carried 16,500 Average Daily Trips (ADT) west of Gooch Hill Road and 18,000 ADT east of Gooch Hill Road.

The Huffine Lane Corridor Study – Phase 1, and conversations with Rob Buckvich at the Montana Department of Transportation (MDT), indicate that the state will not support any more approaches than what is defined in the above mentioned study. Currently there are 10 moveable legal approaches on the south side of Huffine Lane between Love Lane and Gooch Hill Road. An approach directly across from Love Lane on the south side of Huffine Lane will be supported by the MDT. Some of the alternatives described below in Section 2.4.4.3 actually support the removal of existing approaches to allow for smoother

traffic flow on Huffine Lane. (Please refer to Section 2.4.4.3 below for more information regarding the alternative analysis done on Huffine Lane.)

Gooch Hill Road bounds the Plan Area on the east-- a two-lane roadway classified as a minor arterial by GBATP. Gooch Hill Road is primarily used for residential and agricultural access. The intersection of Gooch Hill Road and Huffine Lane is controlled with stop signs located on the northbound and southbound approaches.

Based on the same 2004 M&A reference report, Gooch Hill Road had an ADT of 3500 vehicles per day (vpd) south of Huffine Lane and less than 100 vpd north of Huffine Lane. In 2001, M&A completed a different traffic study for the Meadowbrook Estates Subdivision where they investigated the intersection of Gooch Hill Road and Huffine Lane. They investigated this intersection again in 2004 when they completed the study for Falcon Hollow Subdivision. The most notable change between the two studies was the significant increase in left turns (to the west) from Gooch Hill onto Huffine Lane. This reflects significant development in the Four Corners area, and beyond.

Level of Service (LOS) is used as a way to classify the operational conditions of an intersection. LOS ranges from "A" to "F"; "A" being optimal conditions and "F" being failure of the system. Overall, a LOS of "D" is considered acceptable intersection conditions. It was determined in the M&A 2004 study that the intersection of Huffine Lane and Gooch Hill Road has an LOS of "D" in the morning peak hour and "F" in the evening peak hour.

Love Lane intersects Huffine Lane to the north of the Plan Area, but within the proposed east/west boundaries. As a two-lane roadway, it is classified as a principal arterial by the GBATP and serves residential, agricultural, and commercial uses north of Huffine Lane.

Stucky Road is a two lane roadway classified as a principal arterial by GBATP. It is currently unpaved and only exists from Gooch Hill Road to South 19th Avenue.

The Huffine Lane Corridor Study by the MDT specified the factored ADT on Huffine Lane cross-streets as displayed in the following table:

Location	Date of Count	MDT Monthly Factor	Factored Volume (vpd)
Gooch Hill Rd S. of Huffine	Monday, 4/05/04	0.98	3,133
Huffine W. of Gooch Hill Rd	Wednesday, 4/07/04	0.98	18,641
Love Lane N. of Huffine	Monday, 4/05/04	0.98	713
Lynx Lane S. of Huffine	Monday, 4/05/04	0.98	413
Huffine W. of Lynx Lane	Wednesday, 4/07/04	0.98	18,408

The following table illustrates the Level of Service (LOS) of four intersections within (or just outside) the Plan Area along the Huffine Lane corridor. This table was defined by the Huffine Lane Corridor Study in 2005 and the existing LOS values are an average taken of the morning, noon, and evening peak hours and all the turning lanes.

Location	Existing LOS	Future LOS (2025)
Cobb Hill Road	A	F
Lynx Lane	A	F
Love Lane	A	B (signal)

If signals or intersections improvements are not implemented before the year 2025, intersection failure is predicted.

2.5.4.2: Traffic Generation: Estimation of potential impacts related to future development will be dependent on actual development. Trips generated by proposed subdivision will be estimated using factors identified in *Trip Generation, 7th Edition* as published by the Institute of Transportation Engineers.

2.5.4.3: Proposed Future Developments: As the responsible public agency, the Montana Department of Transportation (MDOT) plans to add more traffic signals along the Huffine Lane corridor. They have determined the criteria for half-mile spacing between traffic signals to maintain a steady traffic flow. With the following anticipated additional signals at the following intersections, travel speeds will decrease to 35-45 mph along the Huffine Lane corridor with the expectation of improved traffic safety: Cobb Hill Road, Love Lane, Gooch Hill Road and Fowler Lane.

If signals become required every quarter mile, it may be necessary to implement one-way traffic lanes to keep traffic progression efficient.

Phase 2 Technical Report of the Huffine Lane Corridor Study by the Montana Department of Transportation describes three alternatives for improvements in the Huffine Lane Corridor:

Alternative 1: Enhanced TWLTL: A Two Way Left Turn Lane (TWLTL) currently exists on Huffine Lane, but this alternative includes adding a raised median at key intersections, adding right-turn deceleration and acceleration lanes, possibly consolidating existing accesses onto Huffine Lane, and limiting new access points. This alternative is the worst for safety concerns but the most effective for property access and snow removal.

Alternative 2: Raised Median, Full Turning Movements Allowed Every Half Mile, Directional Turning Movements Allowed at Quarter Mile: This alternative implements a raised median with traffic signals at half mile minimum spacing. Un-signalized turning movements will be allowed every quarter mile. Alternative #2 will allow right turn only accesses onto Huffine Lane, but if a property has alternative access to the corridor, the alternative will be implemented instead of direct access. This alternative falls in the middle as far as safety concerns and

efficient property access. It is an inefficient alternative for snow removal procedures.

Alternative 3: Raised Median, Full Turning Movements Allowed Every Half Mile, Only Right-Ins and Right-Outs Allowed at Intervening Intersections;

This alternative implements a raised median with traffic signals at ½ mile minimum spacing. Alternative 3 will allow right turn only accesses onto Huffine Lane, but if a property has alternative access to the corridor, the alternative will be implemented instead of direct access. This alternative is superior from a safety standpoint, but property access and snow removal efficiency are poor.

If Alternative 2 or 3 were adopted, this would mean fewer approaches directly onto Huffine Lane, possibly eliminating some existing driveways and business approaches.

Love Lane: The GBATP 2001 Update specifies a future need for Love Lane to be extended to the south to eventually merge into Gooch Hill Road. If this improvement is implemented, it would create a four-way intersection with Huffine Lane and eventually a four-way intersection with Stucky Road (see below for Stucky Road future improvements). The intersection of Love Lane and Stucky Road would be within the GHW plan boundary.

The following improvements were specified by Manjunathan Kumar, E.I., in the Gallatin County Transportation Infrastructure Assessment and Recommendations Report:

Cottonwood Road: Pavement improvements are planned on Cottonwood Road from Huffine Lane to South 19th Avenue. It is anticipated that the north/south section of Cottonwood Road will be converted to a three-lane urban arterial from Stucky Road to Valley Center Road.

Stucky Road: The 2.5 mile stretch of Stucky Road that is currently gravel is planned for paving within the FY 2006. The GBATP specifies the future need for

Stucky Road to be extended to the west to connect with Elk Lane and Cobb Hill Road. It is planned to intersect Love Lane within the Plan Area boundaries.

Cobb Hill Road: Cobb Hill Road paving and widening is planned for the one mile section from Beatty Road to Gallatin Road during summer 2006.

Beatty Road: The bridge on Beatty Road is in poor condition, does not meet fire truck requirements, and is scheduled to be repaired in FY 2006.

Gooch Hill Road: Gooch Hill Road will be widened from Huffine Lane to Chapman Road. If Love Lane is improved in accordance with the GBATP, there is a potential for a new intersection of Love Lane and Gooch Hill Road south of the GHW Area.

2.5.4.4: Plan Improvements: A significant aspect of the GHW Plan is the connection of Stucky Road to Elk Lane and the extension of Love Lane south to connect with Stucky Road. This infrastructure improvement will not only provide access to the Plan Area, but will provide another travel route from Bozeman to Four Corners taking some traffic off Huffine Lane. Initial investigation shows this improvement to be feasible and desirable.

The GBATP shows the extension of Stucky Road and Love Lane as a future need. (Exhibit 11 describes proposed improvements as defined in the above mentioned plan.) The plan recognizes the need for a more efficient transportation system on the west side of Bozeman due to the high rate of development in the area. The GHW Plan incorporates these future improvements to reflect adopted County transportation policy.

In order to extend Stucky Road, it will be necessary to obtain easements from property owners that will be affected by this improvement. Possible alternative alignments are shown on Exhibit 11A.

2.5.5: Parks/Trails and Open Space: There are currently no trails in the Plan Area. However, the definition and provision of a major open space/ trails is a major strategy of the Plan. As defined in Section 3.1.1, the Plan preserves and protects the Middle Creek floodplain as passive open space and wildlife habitat. It also calls for the dedication and improvement of a large community park to be centrally located and accessible throughout the Area via a trail system.

2.5.6: Historical/Cultural Resources: Scott Carpenter, InteResources Planning, Inc., has compiled an historical background study for the Plan Area. The study found one recorded historical site called the Byron Plum Homestead, previously located along the eastern portion of the Huffine Lane frontage. The study concluded there is potential for more undocumented cultural resources within the Plan Area, which could be investigated by a Level I Cultural Resources Inventory prior to future development. (The complete report is available in Section 7.)

2.5.7: Schools: The GHW Plan Area contains two different elementary school districts- Bozeman Elementary District and Monforton Elementary School District. The boundary between the two lies between Sections 17 and 18 and between Sections 19 and 20. (Please refer to Exhibit 1 for section labeling.) The Bozeman High school District includes the entire Area.

2.5.8: Housing Resources: Within the context of Gallatin County or the Gallatin Valley, the Plan Area is not a significant provider of housing resources. Most existing homes are single-family detached residences on parcels larger than one acre.

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SECTION 3: PLAN GOALS & POLICIES

1.0: Relationship to Neighborhood Vision: As described in Section 1.2, the Plan is centered on the concept of a planned community—a community of residential neighborhoods and business park/retail service uses—to be developed within a connected framework of arterial streets; planned open space/trails; and public facilities such as parks, schools and fire protection.

1.1: Goals & Policies: The basic Plan includes several components that help define the Neighborhood Plan goals and policies. (Goals are defined as statements of purpose that define a significant intent of the Plan. Policies describe consistent strategies to help achieve each goal.)

Goal 1: Create a sustainable, planned community within the Plan Area.

- Policy 1.1: Build a land use mix that provides a range of homes, job opportunities, and retail services to meet the needs of the community.
- Policy 1.2: Demonstrate consistency of future development proposals with concurrent expansion of required water and wastewater treatment capacity.
- Policy 1.3: Work with RAE County Subdivision Water & Sewer District # 313 to expand service capacity to assure adequate water supply and wastewater treatment by means of incremental improvements coordinated with new demand, without increasing cost to existing customers.

- Policy 1.4: Encourage individual property owners to work together to plan phased development consistent with availability of improvements to infrastructure.
- Policy 1.5: Require “connectivity “of residential neighborhoods throughout the Plan Area as new subdivisions are planned.
- Policy 1.6: Incorporate bicycle and pedestrian trails to reduce dependency on vehicles within the Plan Area and to provide access to future schools, parks and other community facilities.
- Policy 1.7: Implement a “community core” to accommodate public facilities (potential schools, community park, fire protection facility, wastewater effluent infiltration galleries, et al) to serve the Plan Area.
- Policy 1.8: Encourage future development to participate on a “fair share basis” in the dedication of land for community parks, schools, fire protection facilities and open space/ trails.

Goal 2: Establish a framework of arterial roads, trails and open space to guide future growth.

- Policy 2.1: Implement the adopted arterial road plan as future development occurs.
- Policy 2.2: Define the open space system to include a passive park along the Middle Creek corridor (protecting the natural vegetation and riparian resources); an active recreation community park in the core area; open space buffers along the Farmers Canal,

between the residential and business park neighborhoods, and along the Huffine Lane (I-191) frontage.

Policy 2.3: Implement a system of pedestrian and bicycle trails to facilitate circulation between (and within) residential neighborhoods, parks/open space, commercial areas and the community core.

1.2: Implementation of Plan Goals & Policies: Given the large size of the GHW Plan Area and the need to accommodate change over many years, the implementation of the Plan will be dependent on the following factors:

- Market conditions and demand for new homes and business opportunities;
- Decisions of individual property owners to propose development of their land;
- Availability of necessary infrastructure such as water/ wastewater treatment and roads;
- Applicable State of Montana and Gallatin County regulations, and
- The Gallatin County Growth Policy.

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SECTION 4: LAND USE PLAN/ INFRASTRUCTURE

4.1: Overview of Land Use Concept: The size of the Plan Area and the multiplicity of private property ownerships within it, require a land use concept to serve as the basis for future land use decisions consistent with Plan goals and strategies. Accordingly, the Future Land Use Map (Exhibit 4-A) illustrates general land use classifications (based on property ownerships) and their relationship to existing major arterial roads and natural land features.

The basis elements of the Land Use Map include the following:

- Implementation of GHW Plan Goal 1 to develop a sustainable, planned community (Section 3.1.1) with a compatible mixture of residential and business park uses and community facilities within an open space/parks/trail system;
- Recognition of the existing pattern of highway-compatible light industrial/ service/ retail commercial along the Huffine Corridor (I 191);
- Respect for major natural features such as the Middle Creek floodplain; and
- Responsible future development tied to infrastructure capacity.

The Future Land Use Map shows these elements in graphic form. A textual description includes the following:

4.1: Huffine Road Business Corridor: As noted above, the Huffine frontage of the Plan Area will accommodate future development of a mixed-use light industrial/ business corridor. The corridor will be separated from the Huffine Lane ROW by a landscaped buffer and frontage road to provide a better streetscape and more convenient and safer access to new development. This buffer will approximate 100 feet, including the frontage road width.

The potential north/south depth of this corridor is expected to reach 2600 feet in order to provide adequate space for planned business park development.

The anticipated land use mix will include a wide range of light industrial and commercial uses, such as research laboratories, warehousing, restaurants, medical clinics, health clubs, offices, banks, plant nurseries, hotels et al. All such development in the Huffine Corridor must demonstrate compatibility with existing and future uses. It is also expected that some land owners will propose mixed retail/residential projects where floors above industrial or commercial uses are designed to house residents who prefer this lifestyle.

The southerly border of the Huffine Corridor will include a landscaped trail to provide a buffer for the area to the south. The buffer should be designed to accommodate a Class II trail width of 25 feet.

4.2: Residential Neighborhoods: The bulk of the Plan Area is expected to develop over time as a series of planned residential neighborhoods with a mixture of housing types and densities. Those neighborhoods within the former Sales Ranch area, adjacent the Middle Creek Floodplain, will continue the existing pattern of low density residential lots (per Middle Creek Phase 1A Subdivision). Future residential development to the north will reflect the medium densities of recent projects such as Falcon Hollow Major Subdivision.

These neighborhoods will be planned and developed as increments based upon land owner decisions and the availability of infrastructure (See Section 5 for Plan implementation). Key design factors will include connectivity of local streets and trails so that bicycle and pedestrian access is feasible and convenient.

4.3: Community Core: In order to support necessary educational, shopping, cultural, public facilities and open space needs of the GHW Plan Area, a Community Core or Center is included in the Plan. This Core is shown in the Future Land Use Plan as an

area of approximately 25 to 30 acres. Potential uses within the Core include appropriate commercial uses, a future elementary school site, a fire protection/ EMS facility, a central community park, a community center for inter-neighborhood events, and a wastewater effluent infiltration site.

4.4: Middle Creek Floodplain/Park: Middle Creek is the dominant natural feature within the Plan Area, and will be protected as a major natural park. The floodplain will be delineated and the abutting fringe area will be improved as necessary to accommodate a pedestrian trail.

4.5: Parks, Trails and Open Space: The GHW Plan supports the concept of a planned open space system that links significant open space features and parks with appropriate trails. Land owners and developers will be encouraged to pool their parkland dedications in lieu of fragmented, individual dedications based on a strict application of subdivision standards. For example, a centralized community park in the Community Core could be consolidated by dedication agreements among several developers. The resulting park would be more useable, more functional and more effectively maintained.

The implementation of this open space system will require cooperation and creativity among many land owners. However, the public outreach process that evolved the GHW Plan Draft emphasized the desirability of this concept. Many participating land owners have expressed their support.

4.2: Circulation Plan: The Plan Area will be served by new arterial roads as included in the “Greater Bozeman Area Transportation Plan 2001 Update” (GBATP) and its pending update. The planned extensions of Stucky Road east of Gooch Hill Road and Love Lane south of Huffine Lane are significant circulation projects that are needed to serve the greater community. They are parts of the future road system necessary to assure adequate transportation efficiency and to avoid congestion. Exhibit 10 describes future arterial road right-of-way corridors needed in the vicinity of the Plan Area. (See

Exhibit 11-6 of the GBATP). Stucky Road is listed as a “future principal arterial” with a required right-of-way (ROW) of 110 feet. Love Lane (south of Huffine Lane) is shown as a “future minor arterial” with a required ROW of 100 feet.

More precise road alignments for the future extension of these major roads through the Plan Area received great attention and discussion during the GHW Neighborhood Plan process. Several property owners expressed concern about impacts that may affect their existing homes and future development. For example, homeowners on Elk Lane (west end of future Stucky Road extension) have houses and other structures close to the existing ROW. Widening of this ROW and increased traffic will affect them. Likewise, owners of property near the intersection of Gooch Hill Road and Stucky anticipate impacts. The owner of property south of Huffine and east of Lynx Lane has similar concerns. Clearly, more detailed study is appropriate and necessary to guide future road improvements.

Therefore, the GHW Plan shows a series of potential alternative alignments for both Study Road and Love Lane (Exhibit 11-A) and recommends that they be incorporated in the GBATP Update for further study and refinement.

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SECTION 5: PLAN IMPLEMENTATION

5.1: Status of the GHW Neighborhood Plan: Once adopted by the County Commission, after public hearings and recommendation of the County Planning Board, the Gooch Hill West Neighborhood Plan will become a part of the Gallatin County Growth Policy. The adoption of the Plan will amend the County Growth Policy for the Plan Area. As such, it will provide greater detail and direction for the future of the Plan Area, and define it as a growth area for future development. As described in Section 1.3, the GHW Neighborhood Plan conforms to the Growth Policy.

5.2: Use of the GHW Plan: In future years, property owners within the Plan Area may choose to develop their land and submit applications for subdivision review. They will make this decision within the guidelines of the Plan. Their applications will be evaluated by staff and advisory agencies with respect to consistency with the adopted Plan. Each application will be expected to conform to the basic land use pattern, adopted arterial street alignments, and other basic components of the Plan or propose amendments to the Plan. Some flexibility is expected as future conditions change, but major changes may require Plan amendment to maintain the integrity and consistency of the Neighborhood Plan.

Conformance to the Plan will improve predictability and allow efficiency of review by reducing the need for basic environmental and community impact information.

5.3: Concurrence of Proposed Development with Infrastructure Capacity: The scale of the Plan and the many separate property ownerships within the Plan Area do not accommodate specific definition of proposed infrastructure improvements to serve new development. Instead, a more appropriate strategy is defined:

Concurrence of new and/or expanded infrastructure components to serve proposed development.

“Concurrence” means that the impacts of new development can be mitigated by availability of new capacity for roads, water service, wastewater treatment, etc. Such needed capacity becomes “available” when the necessary infrastructure (roads, water wells, wastewater treatment facilities, et al) are EITHER physically present and connectable to the new development OR such infrastructure improvements are committed/ bonded and approval of new development will be conditioned upon their completion and connection.

5.3.1: Water and Sewer: Partnership with the Rae Water & Sewer District will involve on-going discussions and incremental agreements to expand the District boundaries and facilities. The Plan incorporates the goal of avoiding any additional cost to existing users within the District as new facilities are planned and constructed. Each proposed subdivision will either individually or in association with other land owners obtain agreement from the District for new water and sewer capacity required to meet development needs. Such impacts will be mitigated in this manner.

5.3.2: Arterial Roads: The extension of rights-of-way and construction of new arterial roads to serve the Plan Area will be subject to analysis and decisions evolving from the pending update of the Greater Bozeman Area Transportation Plan. Exact alignments, scheduling of improvements and proposed financing are also subject to this transportation plan update.

It is the intent of the GHW Plan that the cost of all arterial road improvements be shared among those land owners/developers and the public that benefit.

5.3.3: Trails, Parks and Open Space: Implementation of the planned system of pedestrian trails. Parks and open space will also be implemented incrementally.

Section 4 of this Plan describes the framework of the Trails/ Parks/ Open Space system. Land owner/ developers are encouraged to cooperate and to consolidate their proposed improvements to this system based upon a cost /benefit basis.

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