

## BROOKWOOD PARKWAY URBAN RESERVE AREA

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Total Acres	53	Parcel Acres	39
Gross Vacant Buildable Acres	32	Net Vacant Buildable Acres	24

### General Description (see attached map)

The Brookwood Parkway Urban Reserve Area is a very small area on the north side of Hillsboro located at the Brookwood Parkway/Highway 26 Interchange. The UGB forms the boundary on the eastern, southern and western sides and Highway 26 forms the edge to the north. Access to the area is provided by NW Meek Road, NW Oak Drive and NW Birch Ave.

### Parcelization, Building Values, Development Pattern (see attached aerial photo)

This very small reserve area contains 24 parcels, eight of which are smaller than one acre, four are greater than two acres and only one is greater than five acres. The area contains rural residences on small lots, the North Hillsboro Congregation of Jehovah’s Witnesses Church, the Lin Tara Sunset Kennel and no agricultural activities. Overall, 20 of the 24 parcels have improvements with a median value of \$132,285.

## GOAL 14 LOCATIONAL FACTORS

### Efficient accommodation of identified land needs

This very small reserve area is almost entirely built out with rural residences on lots less than two acres in size. There are four vacant parcels that total 3.8 acres. Even with redevelopment of the existing parcels with residences, this area is able to accommodate a very small portion of a residential land need.

### Orderly and economic provision of public facilities and services

#### Sanitary Sewer Services

Capacity of existing facilities to serve areas already inside the UGB

The City of Hillsboro provides sanitary sewer services that feed into the regional sanitary sewer system operated by Clean Water Services (CWS). CWS provides wastewater treatment through the Rock Creek Waste Water Treatment Plant and there is adequate capacity to meet current UGB needs.

### Capacity of existing facilities to serve areas proposed for addition to the UGB

There is a sewer connection available in NE Brookwood Parkway; however, based on existing topography, a pump station may be needed to use the connection. As another alternative, the City of Hillsboro noted that they are requiring an adjacent development to construct a sewer line in an easement through their property to serve the reserve area. This line would connect to an existing 24-inch sewer in NE Huffman Road. Depending on the type of industrial development that happens in the area, the 24-inch sewer line could be sufficient, or it may not have enough available capacity and therefore require upsizing.

### Impacts to existing facilities that serve nearby areas already inside the UGB

A very small number of new dwelling units would be accommodated in this very small reserve area, thus future impacts are relatively small. New wastewater mains and laterals will be provided by the development community. The amount of any upsizing that would be needed, while unlikely, is not known at this time.

## Water Distribution Services

### Capacity of existing facilities to serve areas already inside the UGB

Water is supplied to the areas already inside the UGB by the City of Hillsboro and there is adequate capacity to serve those areas.

### Capacity of existing facilities to serve areas proposed for addition to the UGB

Hillsboro indicated there is adequate water supply to serve the reserve area. The estimated average daily demand generated by the development of the reserve area is approximately 0.2 MG.

### Impacts to existing facilities that serve nearby areas already inside the UGB

Connections to existing water lines are available in NE Brookwood Parkway and NE Starr Blvd. The City of Hillsboro noted they are considering a future storage tank north of Hwy 26 that would serve the adjacent Jackson Employment area as well as the reserve area. If that occurred a waterline would need to be bored under Hwy 26. New water mains and laterals within the reserve area will be developer funded. The amount of any upsizing that would be needed is unknown at this time.

## Water Costs

Water piping/storage/pumping costs	Cost (in millions)
12" and smaller	\$0.73
Storage/pumping	\$0.32
<b>Total</b>	<b>\$1.05</b>

## Storm Sewer Services

### Capacity of existing facilities to serve areas already inside the UGB

There is no indication of capacity issues with existing stormwater facilities that serve the land inside the UGB.

### Capacity of existing facilities to serve areas proposed for addition to the UGB

Stormwater will be conveyed, treated, and disposed of within the reserve area, therefore, it is not anticipated that existing facilities would be utilized.

### Impacts to existing facilities that serve nearby areas already inside the UGB

Stormwater will be conveyed, treated, and disposed of within the reserve area; therefore, no impacts to existing facilities are anticipated.

### Storm sewer conveyance and water quality/detention costs for roadways

Conveyance & water quality/detention costs	Cost (in millions)
Conveyance	\$0.48
Water quality/detention	\$0.52
<b>Total</b>	<b>\$1.0</b>

## Transportation Services

### Capacity of existing facilities to serve areas already inside the UGB

**Roadway:** Most of the roads in Hillsboro have an acceptable volume/capacity ratio (<0.9) for the 2015 pm peak. Three road sections have a congested volume/capacity ratio (<1.0): E Main Street east of NW Brookwood Parkway in both directions and highway 26 east bound at NW Cornelius Pass Road and NW 185<sup>th</sup> Ave. A few road sections in nearby unincorporated Washington County also have a congested volume/capacity ratio (<1.0): SW Farmington Road between 198<sup>th</sup> Ave and SW Kinnaman Road in both directions, SW Tualatin Valley Highway (TV Highway) east of SW 198<sup>th</sup> Ave westbound, SW TV Highway east of SW 185<sup>th</sup> Ave in both directions, and SW TV Highway west of SW 170<sup>th</sup> Ave in both directions. The following road sections have a severely congested volume/capacity ratio (>1.0): W Baseline at SW 197<sup>th</sup> Ave westbound, NE Evergreen Road east of NW Jackson School Road westbound and SW TV Highway east of SW 170<sup>th</sup> Ave in both directions.

High injury corridors for automobiles include: SW/SE Baseline Road, W/E Main Street, S/N 1<sup>st</sup> Ave, NE Cornell Road, SW TV Highway, SE Winter Bridge Road, SW/SE/NE Brookwood Parkway and NW Evergreen Road. High injury corridors for bikes include: NW 185<sup>th</sup> Ave, SW TV Highway, SW 209<sup>th</sup> Ave, and SW/SE Oak Street to SE 10<sup>th</sup> Ave. High injury corridors for pedestrians include SE Baseline Street, SW TV Highway, and NE Century Boulevard between W Baseline Road and NE Cornell Road.

**Transit:** Seven TriMet bus routes provide service to Hillsboro or nearby unincorporated Washington County, mainly along the arterial streets in the central portion of the city, focusing on the Hillsboro and Tanasbourne-Amber Glen Regional Centers, the Orenco Town Center and employment areas. There is no transit service to the southern and northern portions of the city. The MAX Light Rail Blue Line stops at nine stations within Hillsboro.

**Bike:** Hillsboro has over 54 miles of dedicated bike lanes, 6.5 miles of established bikeways and numerous streets considered bike friendly that together create a fairly well connected system that is focused mostly in the central portion of the city and the regional centers. In addition there are some local trails that provide key connections to the greater bike network.

**Pedestrian:** A large proportion of the residential neighborhoods in Hillsboro have sidewalks although there are significant pockets that do not. The Hillsboro Regional Center is mostly served by sidewalks with the exception of the industrial area south of TV Highway. The other employment areas are fairly well served by sidewalks and trails such as the Rock Creek Trail provide additional pedestrian opportunities.

#### Capacity of existing facilities to serve areas proposed for addition to the UGB

**Roadway:** The roads in Hillsboro near the reserve area have an acceptable volume/capacity ratio (<0.9) for the 2015 pm peak. Highway 26 eastbound at NW Cornelius Pass Road has a congested volume/capacity ratio.

**Transit:** The closest transit stop to the reserve area is  $\frac{3}{4}$  mile south on NE Evergreen Road via NE Brookwood Parkway for TriMet bus route 46 that travels between North Hillsboro and the Hillsboro Transit Center.

**Bike:** There is a dedicated bike lane on NW Jacobsen Road, north of the Highway 26 Interchange that is 700 feet from the reserve area. This bike lane extends east through an employment area to NW Cornelius Pass Road. A bike lane extends south from NW Jacobsen Road on SE Century Boulevard then east on NE Wagon Drive to provide access to Liberty High School and ultimately the Rock Creek Trail that extends east for over three miles. There is a dedicated bike lane on NE Huffman Road that is 1,700 feet south of the reserve area that runs through an employment area and connects to the Gordon Faber Recreation Complex via NE Bennett Street. This bike lane continues south on NE Century Boulevard to connect with numerous other bike facilities.

**Pedestrian:** Sidewalks on NE Brookwood Parkway connect the reserve area to employment areas to the east on NE Huffman Road and to the south of NE Evergreen Road.

#### Impacts to existing facilities that serve nearby areas already inside the UGB

**Roadway:** NE Brookwood Parkway, NE Starr Boulevard and NW Meek Road would be expected to see additional traffic from urbanization of the reserve area although any increase would be minimal give the extremely small size of the reserve. Highway 26 would also most likely see a small amount of additional traffic that would not impact the congestion level eastbound at NW Cornelius Pass Road.

**Transit:** TriMet bus route 46 may see a small increase in use, but the  $\frac{3}{4}$  mile distance to the closest transit stop on NE Evergreen Road will hinder much of the potential increase in ridership. See transit analysis below.

**Bike:** The dedicated bike lane on NW Jacobsen Road may see a small amount of additional use, especially if the 700 foot gap over Highway 26 is improved as this bike lane connects to an extensive system that extends for miles. The same is true for the dedicated bike lane on NE Huffman Road as long as the 1,700 foot gap on NE Brookwood Parkway is completed.

**Pedestrian:** The sidewalks on NE Brookwood Parkway may see additional use as they connect to employment areas to the east and south, although any increase would be small. The sidewalks that extend to the transit stop may also see a small increase in use.

Need for new transportation facilities and costs (see attached transportation map)

No additional transportation facilities are needed.

Provision of public transit service

TriMet evaluated the reserve area for providing transit service. TriMet could provide services to the reserve area although there is no guarantee of service. Actual service depends on the level of development in the expansion area and in the corridors leading to the reserve area. Service could be provided at 30 minute headways for all day service by a new line from the Orenco Light Rail Station. This new line will provide service to the North Hillsboro Industrial Area with three additional buses at a capital cost of \$1,200,000 (recurs every 16 years). Annual service cost is \$1,528,000 and grows 2% per year.

Prior to land being included in the UGB a more detailed concept plan, consistent with the requirements of Metro's Urban Growth Management Functional Plan Title 11, is required. This concept plan process will develop more refined public facility and service needs and cost estimates.

## **Comparative environmental, energy, economic and social consequences (ESEE analysis)**

### **Environmental**

Waible Gulch flows in a southerly direction through the northwest corner of the reserve area for 1,120 feet. The stream flows through both open land and a small wooded section of a residential lot and is located within the floodplain. There is riparian habitat associated with the stream and there are no wetlands identified in the reserve area. The stream isolates a small corner of the reserve area, however since the land to the west is within the UGB this isolated corner can be accessed from the west resulting in no need to provide a stream crossing for connectivity. Given the increased protection levels for streams, habitat areas and floodplains within the UGB and the ability to provide access from the west to the isolated corner, urbanization of the area can occur with minimal impact to this stream corridor and habitat areas.

## **Energy, Economic & Social**

It is expected that urbanization of the reserve area will result in new housing replacing the existing rural residences. Although the small amount of vacant land and the small parcel sizes may slow the redevelopment process. This small rural enclave is adjacent to Highway 26 and has vacant land inside the UGB to the west, south and east that will eventually urbanize, thereby possibly eroding the rural lifestyle feel prior to urbanization of the reserve area. The additional traffic generated through urbanization will be negligible and would not contribute negative energy impacts. Directly to the west is a significant area of land inside the UGB that is designated for employment use but is currently undeveloped. Once this area is developed, it may provide additional employment opportunities which could reduce VMT for current and future residents. The area contains no agricultural activities so there is no economic loss from existing agricultural uses. Overall this reserve area has low economic, social and energy consequences from urbanization.

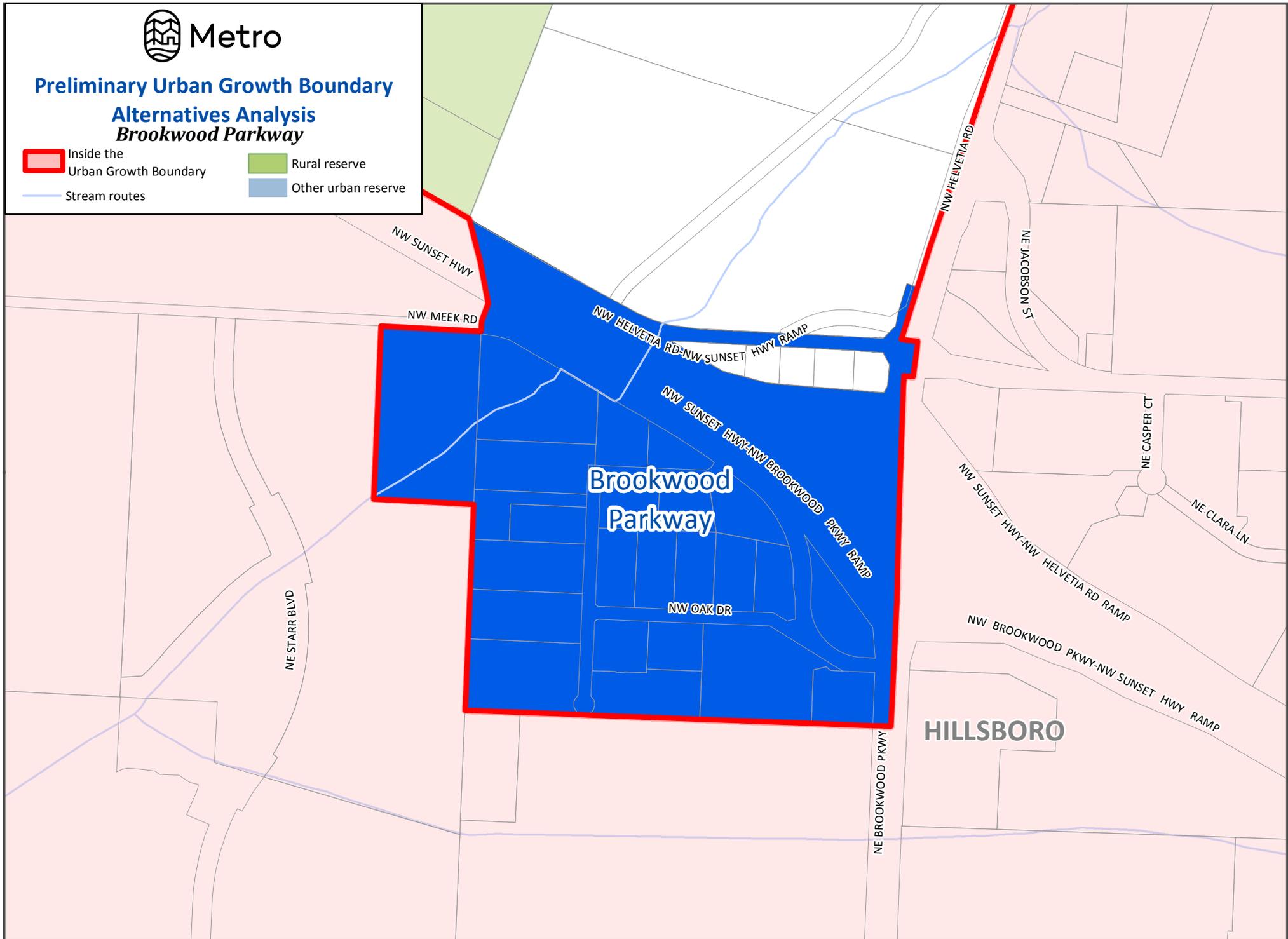
### **Compatibility of proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB (see attached resource land map)**

Farm and forest land borders the reserve area to the north across Highway 26. This large block of Exclusive Farm Use (EFU) zoned land extends north for a number of miles. This land is mostly in field crop production; however the 300 foot plus Highway 26 right-of-way and the Waible Gulch stream corridor provide an adequate buffer between the reserve area and these agricultural activities. Thus, the proposed urban uses have high compatibility with the extensive nearby agricultural activities occurring on the farm land to the north.



# Preliminary Urban Growth Boundary Alternatives Analysis Brookwood Parkway

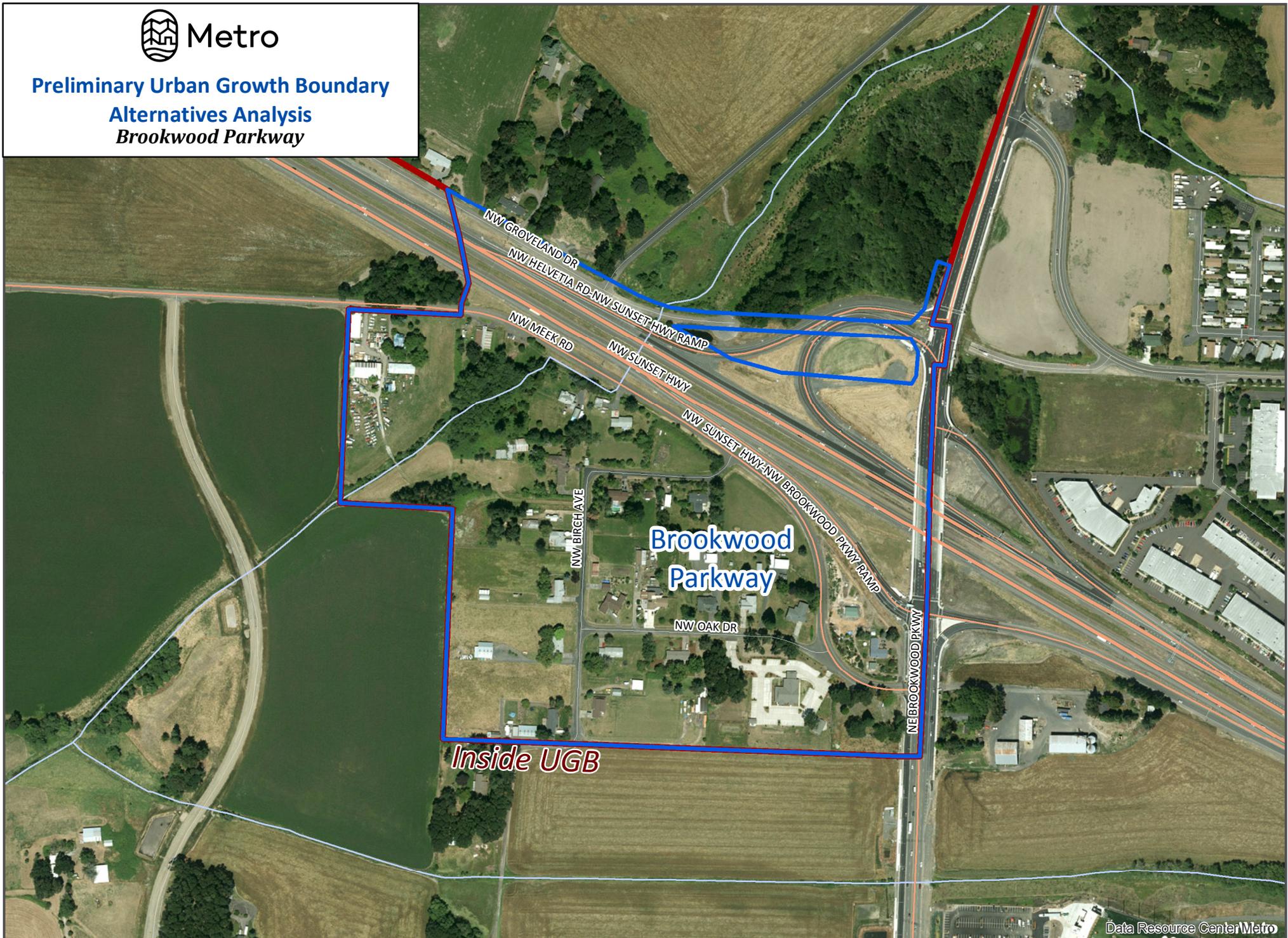
- Inside the Urban Growth Boundary
- Rural reserve
- Other urban reserve
- Stream routes



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**Preliminary Urban Growth Boundary  
Alternatives Analysis  
Brookwood Parkway**



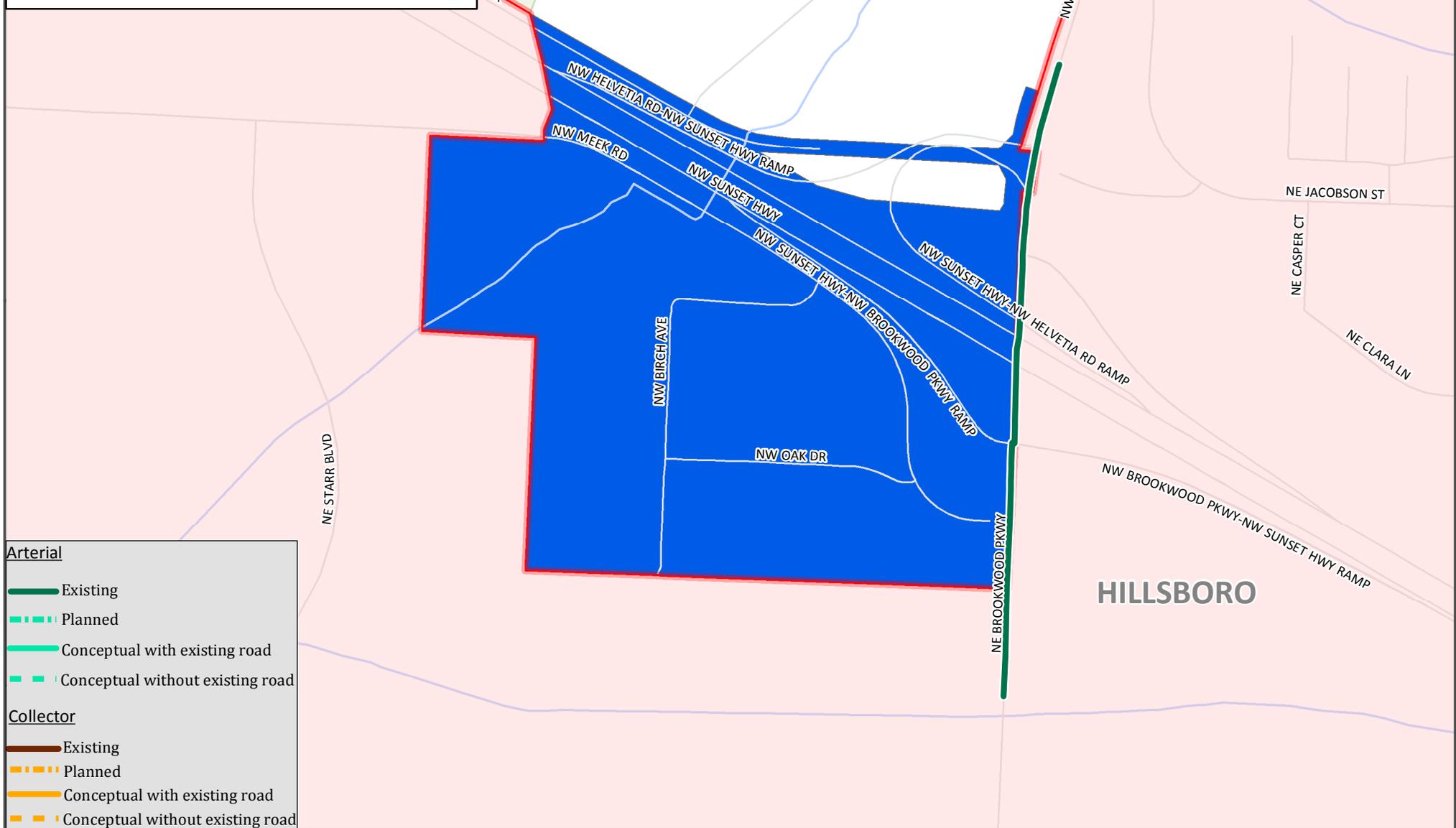
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**Preliminary Urban Growth Boundary  
Transportation Analysis  
Brookwood Parkway**

- Inside the Urban Growth Boundary
- Rural reserve
- Other urban reserve
- Stream routes



**HILLSBORO**

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**Preliminary Urban Growth Boundary  
Alternatives Analysis  
Resource Land  
Brookwood Parkway**

