February 27, 2026

Billings Planning & Community Services
Atten: Wyeth Friday, AICP
316 N. 26th St., 5th Floor
Billings, MT 59101

RE: Urban Planning Study Comments for the 48th and Hesper Map Amendment Request; Mullen Subdivision

IMEG #25002148.00

Dear: Wyeth Friday

IMEG Consultants Corp. received informal comments via email on February 18, 2026, from the Billings Planning Department. The purpose of this letter is to describe how the comments were handled.

The proposed subdivision shall now be classified as a Mixed Residential Planned Neighborhood (MR-PND). Neighborhood Mixed Use (NMU), NX-1, and N1 zones are proposed within the subdivision. Nineteen (19) NMU lots are proposed at intersection nodes due to land use allowances. As such, two (2) more accesses have been proposed along Hesper Road and S 48th Street W. Proposed uses of the NMU lots shall be offices, retail, or restaurants (without a drive-thru) on the ground level and proposed residential units on the second story, ranging from 4-8 units per building. A hotel on one of the lots is still proposed, but we are aware of the special review process. Twenty-five (25) NX-1 lots are proposed with 4-plex residential units, and Nineteen (19) N1 lots are proposed to have residential duplexes. Each residential zone is greater than 10% of the subdivision's net acreage, per City of Billings zoning requirements, Sec.27-802(D)(1).

The proposed time frame for the subdivision and annexation is as follows:

Phase	Estimated Activities	Target Timeline	Notes
Annexation Request	Submit petition and request to move into Zone 1	Target Timeline	Align with City's annual annexation map amendment cycle
Annexation Approval	Review and public hearings	Current	City Council consideration

Phase	Estimated Activities	Target Timeline	Notes
Preliminary Plat Submittal	Layout design, zoning request, environmental assessments	Spring 2026	May be submitted concurrently with annexation request
Utility Coordination	Final confirmation of utility availability to frontage	Summer 2026	Water and sewer infrastructure anticipated at site frontage
Infrastructure Design	Civil engineering, permitting, and construction planning	By Fall 2026	May begin prior to utility arrival
Phase 1 Construction	On-site grading, roads, and utility installation	Fall 2026 – Winter 2026	Assumes infrastructure is ready for connection
Vertical Construction	Homes, commercial buildings	Spring– Summer 2027	Begins as lots are completed and serviced
Subsequent Phases	Future phases depending on absorption	Fall 2027	Market-responsive phasing for remaining acreage

Two updated exhibits are attached with this letter. An exhibit of the proposed zoning within the subdivision and an updated phases of construction exhibit for the subdivision have been completed.

Enclosures:
Updated Urban Planning Study Report
Updated Conceptual Plan
Proposed Zoning Exhibit
Proposed Phasing of Construction Exhibit

Sincerely,

Mariah Lind

Mariah Lind

MLL/KLK/hsc
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Urban Planning Study for Mixed-Residential Planned Neighborhood Development - Major Subdivision

PREPARED IN ACCORDANCE WITH

CITY OF BILLINGS ANNEXATION POLICY

FOR

Mullen Subdivision
Billings, Montana

Applicant:

John Mullen
2139 Broadwater Ave, Suite G
Billings, Montana

Prepared By:

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Project: 25002148.0

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Executive Summary

This Urban Planning Study has been prepared in support of a proposed annexation request for a 52-acre portion of an 80-acre parent parcel located at the intersection of 48th Street West and Hesper Road in West Billings. The parent parcel, legally described as S22, T01 S, R25 E, Acres 80, W½NW, was recently divided through an agricultural exemption recorded with Yellowstone County in accordance with Montana subdivision law.

This exemption created the 52-acre tract as a legally distinct parcel for annexation. The property is owned by Jason Bernhardt, and the proposed development will be undertaken by John Mullen.

The subject property lies within the Urban Expansion Area as designated by the City of Billings 2023 Limits of Annexation Map and is adjacent to other developing parcels in the City's western growth corridor. This area is identified as a logical and serviceable location for future City development due to its proximity to expanding infrastructure, arterial road networks, and employment centers.

The proposed development is envisioned as a mixed-residential planned neighborhood development that balances housing, neighborhood-scale commercial, hospitality, and employment opportunities. The layout includes:

- NX-1 & N1: 138 residential units = 25 four-plex units, and 19 duplex units.
- Hotel site: one 60,000-square-foot building.
- NMU: Commercial uses = two story mixed-use buildings with ground-floor restaurants, retail space, and offices with 4 to 8-plex residential units on the second story.
- Parks and open space: internal green spaces and pedestrian connections to support neighborhood livability.

While the Urban Planning Study outlines general land use categories and conceptual lot layout, the specific building form, height, and density will be refined during the subdivision and site development review process. Final design elements such as multi-tenant configurations, parking layout, and architectural standards will be coordinated with City staff to ensure compliance with the anticipated zoning district and alignment with the City's evolving design expectations.

This land use program advances the primary goals of the 2016 City of Billings Growth Policy and the West Billings Neighborhood Plan, including:

- Compact and efficient growth that makes use of available infrastructure and reduces pressure for rural sprawl.
- Housing diversity that provides a mix of apartments, townhomes, and duplexes to meet a range of household needs.

- Economic vitality through neighborhood-serving restaurants, retail, offices, and a hotel that expand the local tax base and create employment opportunities.

- Multimodal connectivity and walkability by co-locating housing and services within a single development footprint.

Annexation of the 52-acre tract will allow the proposed development to proceed in a coordinated and serviceable manner, aligned with the City's long-range infrastructure and land use planning objectives. While the property is currently located within Zone 2 of the Limits of Annexation Map, it is anticipated to be considered for reclassification into Zone 1 during the Spring 2026 amendment cycle. Inclusion in Zone 1 would make the property eligible for municipal water and sewer service and enable the City to more directly guide future land use outcomes through zoning and subdivision review.

A location map, the current Limits of Annexation Map, and the proposed subdivision layout are included in the Appendix for reference.

Streets & Transportation

The 52-acre subject property is located at the intersection of 48th Street West and Hesper Road, placing it within a key transitional area between developed urban neighborhoods and planned future growth corridors in West Billings. The property benefits from direct access to two existing arterial and collector roadways and is positioned to accommodate future transportation infrastructure extensions envisioned in the City's long-range plans.

The project area lies within the Zone 2 Long Range Area of the 2023 Limits of Annexation Map, indicating its suitability for near-term inclusion in the urban boundary and supporting transportation investments. The project is also consistent with the 2023 Billings Urban Area Long Range Transportation Plan (LRTP), which emphasizes compact development and improved multimodal connectivity along arterial corridors.

Existing Transportation Network

- Hesper Road is classified as a principal arterial and provides east-west connectivity from Shiloh Road to South 56th Street West. It serves as a critical corridor for regional mobility and links existing and planned residential neighborhoods with major commercial and employment areas.

- 48th Street West is also classified as a principal arterial and functions as a key north-south corridor, connecting to King Avenue West and I-90 via South Frontage Road and Zoo Drive. While it currently serves a mix of residential and agricultural properties, it is planned for future urban upgrades consistent with the City's long-range transportation network.

- The property has direct frontage along both Hesper Road and 48th Street West, providing flexibility for multiple access points and supporting the implementation of an internal gridded street network that aligns with subdivision connectivity goals.

Proposed Transportation Improvements:

The proposed mixed-residential planned neighborhood development will incorporate a public street network, with future connection points to both Hesper Road and 48th Street West. These connections will support circulation efficiency, emergency access, and compliance with the 2024 City of Billings Subdivision Regulations, particularly Section 23-406 (Streets and Roads), which emphasizes conformance with adopted transportation plans and adequate access design.

- Street Classification and Design will be coordinated with the City Engineering Division to ensure compliance with local standards for right-of-way widths, sidewalk placement, boulevard design, and utility corridors.

- Internal Roadways will be designed to accommodate local vehicle traffic, pedestrian movement, and potential future transit stops. The project will also evaluate the feasibility of incorporating a minor collector loop to improve connectivity across the site.

- Pedestrian Infrastructure will include boulevard sidewalks and potential trail linkages to any future greenway systems or regional trail networks referenced in the *Bike and Trail Master Plan* and *Safe Routes to School Plan*.

Traffic Impact Considerations:

This preliminary traffic analysis provides an estimate of trip generation for the proposed 52-acre mixed-use subdivision located at the intersection of 48th Street West and Hesper Road in West Billings. The purpose of this assessment is to estimate potential traffic impacts under full build-out conditions, based on standard rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition.

Development Program Assumptions
The proposed development is assumed to include the following land uses:

- 19 duplex lots (38 units)

- 25 4-plex lots (100 units, townhome-style)

- 16 neighborhood mixed-use buildings with 8 apartments each (128 total units) above first-floor commercial

- 2 neighborhood mixed-use buildings with 4 apartments each (8 total units) above first-floor commercial

- 1 hotel (Lot 5) – 60,000 square feet, estimated 180 rooms

- General office, retail, or sit-down restaurant space included in the neighborhood mixed-use commercial footprint (sf estimated below)

These assumptions represent full build-out occupancy. Precise trip impacts will be refined through formal engineering and site planning phases.

Trip Generation Estimates
The following table summarizes estimated average daily trips based on ITE land use categories and standard trip generation rates.

Table 1: Trip Generation Estimates

Land Use	ITE Code	Quantity	Trip Rate	Estimated Daily Trips
Duplexes	210	38 units	9.44 trips / unit	359
Townhome-style 4-plexes	215	100 units	7.32 trips / unit	732
Mixed-Use Apartments 4-8 plexes	221	136 units	5.44 trips / unit	740
Mixed- Use Sit-Down Restaurant (in 6 bldgs)	932	60,000 sf	112.18 trips / 1,000 sf	6,761
Mixed-Use Office (in 6 bldgs)	710	60,000 sf	9.74 trips / 1,000 sf	585
Mixed Use Retail (in 6 bldgs)	820	46,000 sf	37.75 trips / 1,000 sf	1,737
Hotel (~180 rooms)	310	180 rooms	8.36 trips / room	1,505
Total Estimated Daily Trips	—	—	—	12,419

Table 2: Total Estimated Daily Trips

Category	Estimated Daily Trips
Residential (Duplexes, 4-plexes, Apartments)	1,831
Commercial (Office + Retail + Restaurants in mixed-use and stand-alone buildings)	9,083
Hotel (≈180 rooms)	1,505
Total	12,419 daily trips

Peak-Hour Method (planning-level)
Because the site is still in concept, we apply standard, conservative planning factors that reflect typical ITE patterns:

- Residential: AM ~8% of daily (outbound-heavy); PM ~10% of daily (inbound-heavy)
- Office: AM ~12% of daily (inbound-heavy); PM ~11% of daily (outbound-heavy)
- Restaurant (sit-down): AM ~3% of daily; PM ~12% of daily
  - Pass-by credit (planning): 44% for restaurants (net new = 56% of gross)
- Retail (shopping/inline): AM ~5% of daily; PM ~10% of daily
  - Pass-by credit (planning): 34% for retail (net new = 66% of gross)
- Hotel: AM ~8% of daily; PM ~8% of daily

Directional splits (typical):

- Residential: AM 20% in / 80% out; PM 65% in / 35% out
- Office: AM 80% in / 20% out; PM 20% in / 80% out
- Restaurant & Retail: assume roughly 50% in / 50% out at peak hours
- Hotel: AM 40% in / 60% out; PM 60% in / 40% out

Final traffic study can replace these with site-specific ITE 11th Ed. rates and local pass-by as warranted.

Peak-Hour Results (gross and net)
AM Peak Hour (approximate)

- Residential: 1,831 × 8% = 147 trips (29 in / 118 out)
- Office: 585 trips × 12% = 70 trips (14 in / 56 out)
- Restaurant (6,761 × 3% = 203 gross) → net with 44% pass-by: 203 × 0.56 = 114 trips (≈57 in / 57 out)
- Retail (1,737 × 5% = 87 gross) → net with 34% pass-by: 87 × 0.66 = 58 trips (≈29 in / 29 out)
- Hotel: (1,505 × 8%) = 120 trips (48 in / 72 out)

AM Total (net new): ~509 trips

PM Peak Hour (approximate)

- Residential: 1,831 × 10% = 183 trips (37 in / 146 out)
- Office (585 × 11%) = 65 trips (13 in / 52 out)
- Restaurant (6,761 × 12% = 811 gross) → net with 44% pass-by: 811 × 0.56 = 454 trips (227 in / 227 out)
- Retail (1,737 × 10% = 174 gross) → net with 34% pass-by: 174 × 0.66 = 115 trips (57 in / 58 out)
- Hotel: (1,505 × 8%) = 120 trips (72 in / 48 out)

PM Total (net new): ~937 trips

Access & Circulation
Access is expected to occur from both 48th Street West and Hesper Road, with internal roadways and intersections designed in accordance with City of Billings standards. A formal Traffic Impact Study (TIS) will be required during preliminary plat or site plan review, at which time:

- Trip distribution percentages will be assigned to surrounding roadways
- Intersection-level impacts will be evaluated
- Recommendations for turn lanes, access control, and signal warrants will be provided (if needed)

Conclusion
The updated traffic analysis for the proposed 52-acre proposed development demonstrates that projected daily and peak-hour trip generation is well within the capacity of the surrounding transportation network when paired with planned improvements. At full build-out, the project is expected to generate approximately 12,419 daily trips, with about 509 net new trips during the AM peak hour and 937 net new trips during the PM peak hour after accounting for pass-by traffic associated with retail and restaurant uses.

Residential uses contribute a steady but manageable share of daily and peak trips, while commercial and restaurant uses generate higher volumes that are concentrated during traditional evening hours. However, the project's mixed-use design promotes internal capture and shorter trip lengths, which will reduce pressure on external intersections compared to single-use suburban development.

The project's location within the City's planned growth area allows for integration with the Long Range Transportation Plan network improvements, ensuring that capacity enhancements along 48th Street West, Hesper Road, and nearby arterials will support the additional demand. Based on the land use mix, projected volumes, and City infrastructure planning, the proposed development can be accommodated without adverse impacts to traffic operations, provided that final subdivision and site plans incorporate standard access management, internal circulation, and multimodal connections.

Public Transit and Non-Motorized Modes:

The proposed development is within a reasonable distance of future MET Transit route extensions along arterial corridors such as King Avenue West and South Shiloh Road. Pedestrian and bicycle accommodations will be designed in conformance with the Complete Streets Policy and Neighborhood Bikeways Program, supporting the City's broader goals for livability and accessibility.

Stormwater Management

Site Topography and Drainage

The subject property generally slopes from the northwest to the southeast, with existing grade built up along the property's frontage at the intersection of 48th Street West and Hesper Road. This elevated frontage creates a gradual drainage pattern across the site, directing surface runoff toward the southeastern portion of the property.

This natural grading will influence both the stormwater management strategy and the design of the internal sewer and street networks. Final grading plans and drainage modeling will be developed during the subdivision design phase to ensure compliance with City of Billings

stormwater standards, including on-site detention, conveyance capacity, and outfall coordination with downstream infrastructure. Please see *Figure 4* in the Appendix.

Wastewater Service

This section outlines the assumptions used to estimate the projected water demand and wastewater generation for the proposed development. These assumptions are based on planning-level criteria established in the City of Billings Water and Wastewater Facilities Master Plan (2006), which was prepared by HDR, Inc., HKM, Inc., and JGA, Inc. The Master Plan provides a framework for analyzing utility impacts and system capacity needs for new developments located within the City's long-range growth areas.

Table 3: Water & Wastewater Estimations

Category	Assumption / Rate	Estimated Value	Unit	Notes
Estimated Population	—	630	persons	Based on 274 dwelling units
Persons per Dwelling Unit	2.3	2.3	persons/unit	City planning assumption
Average Day Water Demand	219	137,970	gpcd → gpd	630 × 219
Maximum Day Factor	2.20	2.20	multiplier	Planning factor
Maximum Day Water Demand	219 × 492 × 2.20	303,534	gpd	Residential maximum day
Average Day Wastewater Flow	100	63,000	gpcd → gpd	630 × 100
Max Month / Avg Month Factor	1.17	1.17	multiplier	Standard DEQ planning factor
Max Month Avg Wastewater Flow	100 × 492 × 1.17	73,710	gpd	Residential wastewater (planning)
Commercial Use Assumptions (Avg Day)	Hotel 60,000 sf @ 0.20 gpd/sf = 12,000 gpd; Restaurants 60,000 sf @ 0.20 = 12,000 gpd; Office 60,000 sf @ 0.10 = 6,000 gpd; Retail 46,000 sf @ 0.10 = 4,600 gpd	34,600	gpd	Reflects mixed-use bldgs (split office/restaurant/retail)
Commercial Max Day Factor	2.20	2.20	multiplier	Same as residential

Category	Assumption / Rate	Estimated Value	Unit	Notes
Commercial Max Day Water Demand	34,600 × 2.20	76,120	gpd	≈ 0.076 MGD
Peak Hour Factor (Water)	3.53	3.53	multiplier	For water system checks
Fire Flow Demand	~1,500–2,500	2,500 (est.)	gpm	Mixed-use w/ restaurants; final per City code

Sanitary Sewer

Sanitary sewer service for the proposed 52-acre mixed-use annexation area at the intersection of 48th Street West and Hesper Road will be provided by the City of Billings public sewer system. The development will connect to existing infrastructure located within the Hesper Road right-of-way.

The nearest point of connection is Sanitary Sewer Manhole 213-1, installed in 2009. This manhole is part of an 18-inch PVC gravity main that extends westward from Manhole 172-14, then transitions to an 8-inch PVC segment leading east to Manhole 172-15. These sanitary segments run directly along the frontage of the subject property and appear to support recent infrastructure improvements, potentially associated with the adjacent City of Billings Water Treatment Facility. As-built alignments, system capacity, and any future expansion plans will be confirmed through coordination with the City of Billings Engineering Division during the preliminary plat and engineering design phases.

Using the standard City planning assumption of 2.3 persons per dwelling unit, the projected residential population is:

274 units x 2.3 persons/ unit = 630.2 ~ 630 persons

Figure 1: Projected Residential Population

Preliminary wastewater demand for the proposed development has been estimated using the City's planning factors from the 2006 Water and Wastewater Facilities Master Plan. The project includes 274 residential dwelling units (duplexes, four-plexes, and apartments above commercial). Using 2.3 persons per unit, the estimated residential population is 630 persons. Applying a residential wastewater generation rate of 100 gpcd, the average day residential wastewater flow is 63,000 gpd. Using a max-month to average-day multiplier of 1.17, the maximum-month average-day residential flow is 73,710 gpd.

The commercial component consists of mixed-use buildings (ground-floor restaurants, offices, and retail), and one 60,000-sf hotel. Using planning factors of 0.20 gpd/sf for restaurant and hotel, and 0.10 gpd/sf for office and retail, the average day commercial wastewater flow is:

- Hotel (60,000 sf): 60,000 × 0.20 = 12,000 gpd

- Restaurants: 60,000sf × 0.20gpd/sf = 12,000 gpd
- Office: 60,000sf × 0.10gpd/sf = 6,000 gpd
- Retail: 46,000 sf × 0.10gpd/sf = 4,600 gpd

Total commercial average day flow = 34,600 gpd

Combining residential and commercial flows, the total average day wastewater flow for the development is 97,600 gpd, and the maximum-month average-day flow (residential MMAD + commercial AD) is 108,310 gpd. These planning-level estimates will be refined during detailed engineering design and coordination with the City of Billings Public Works Department to ensure system compatibility and appropriate service sizing.

Table 4: Total Projected Wastewater Flow

Land Use Category	Units / SF	Wastewater Generation Rate	Average Day Wastewater Flow (gpd)
Residential (274 units)	630 persons (2.3/person/unit)	100 gpcd	63,000
Hotel	60,000 sf	0.20 gpd/sf	12,000
Restaurants (Mixed-Use)	60,000 sf	0.20 gpd/sf	12,000
Office (Mixed-Use)	60,000 sf	0.10 gpd/sf	6,000
Retail (Mixed-Use)	46,000 sf	0.10 gpd/sf	4,600
Total Commercial	124,000 sf	—	34,600
TOTAL (Residential + Commercial)	—	—	97,600

These estimates will be further refined as part of the detailed engineering design and during the preliminary plat and subdivision review process. Coordination with the City of Billings Public Works Department will confirm infrastructure capacity, necessary system upgrades, and acceptable discharge rates for each development phase.

Inflow & Infiltration (I/I) Allowance:
To be determined during subdivision engineering design, based on City of Billings standards, pipe material, alignment lengths, and anticipated groundwater conditions. I/I is typically estimated at 15–25% of average flow or via a gpd/inch-diameter/mile formula depending on system configuration. Final sanitary sewer sizing, pipe routing, and manhole locations will be addressed in conjunction with preliminary plat submission and design coordination with City utility staff.

The development is anticipated to be served by a gravity sewer system, with no lift stations proposed at this time (TBD pending site grading and downstream capacity analysis). If necessary, pumping infrastructure will be designed to City standards and coordinated during subdivision review.

All sanitary sewer infrastructure will be constructed in accordance with the City of Billings Subdivision Regulations, Engineering Design Standards, and Montana DEQ Circular DEQ-4, as applicable. Coordination with the City Engineering Division and Public Works will ensure service availability and conformance with system planning.

Wastewater Treatment Capacity

The City of Billings operates a regional Water Reclamation Facility (WRF) with a current design capacity of 40 million gallons per day (MGD). Typical system loading averages around 26 MGD, leaving approximately 14 MGD of reserve capacity available for future growth. The proposed subdivision's wastewater contribution represents only a fraction of this reserve capacity and can be readily accommodated by the City's system.

The proposed 52-acre development will generate wastewater flows consistent with standard planning assumptions established by the City of Billings. Based on the development program which includes 274 residential units, a 60,000-square-foot hotel, and neighborhood mixed-use buildings, the total projected average day wastewater flow is approximately 97,600 gallons per day (gpd). Applying a standard maximum-month multiplier of 1.17 for residential uses, the maximum-month average day flow is estimated at 108,310 gpd.

The residential component accounts for the majority of demand, with a projected population of 630 residents generating 63,000 gpd based on a rate of 100 gallons per capita per day (gpcd). The commercial uses including hotel, restaurants, office, and retail generate a combined 34,600 gpd, reflecting a modest contribution relative to total demand.

These flow rates are well within the capacity of the City of Billings' Water Reclamation Facility (WRF), which is designed to handle 40 million gallons per day (MGD) and currently processes an average of approximately 26 MGD. The projected maximum contribution from the proposed development under 0.08 MGD represents less than 0.2 percent of the WRF's total capacity, indicating that sufficient treatment capacity exists to accommodate the project without adverse impact on system operations.

Given these projections, the City's wastewater treatment infrastructure has sufficient reserve capacity to serve the proposed annexation. Final flow projections will be refined during subdivision engineering and permitting, using fixture counts and City-accepted design standards. The proposed development can therefore be accommodated without the need for extraordinary off-site improvements or additional treatment expansion beyond what is already planned in the City's capital improvement program.

Conclusion
At full build-out, the proposed development is projected to generate approximately 97,600 gallons per day (gpd) of average daily wastewater flow and 108,310 gpd during maximum-month conditions. Residential uses account for the majority of demand, generating approximately 63,000 gpd. The commercial components including hotel, restaurant, office, and retail contribute the remaining 34,600 gpd, representing a modest share of overall system demand.

These results confirm that the City's existing wastewater infrastructure is more than adequate to serve the proposed development. No extraordinary improvements or treatment expansion are

anticipated beyond the City's established capital improvement programming. Final flow rates and infrastructure requirements will be refined during detailed subdivision design and utility coordination, but planning-level estimates clearly support that the annexation and associated development can be accommodated without adverse impacts to the City's wastewater system.

Wastewater Collection System

The proposed subdivision will be served by a newly constructed gravity wastewater collection system designed in accordance with City of Billings standards and Montana Department of Environmental Quality (DEQ) Circular DEQ-2 requirements. The system will be extended throughout the internal road network, with sewer mains located within dedicated public rights-of-way or utility easements. Each residential lot and neighborhood mixed-use lot will be provided with individual service laterals, and manholes will be placed at all intersections, changes in grade, and at intervals not exceeding 400 feet to allow for proper maintenance access.

Wastewater flow rates can be easily conveyed by an 8-inch gravity sewer main, which has a full-flow capacity of approximately 0.60 to 0.90 cfs depending on slope (typically 0.20% to 0.40%). Utilization of the pipe capacity would remain below 25 percent, providing a substantial margin of safety for long-term operation and future maintenance flexibility.

The collection system will discharge into the existing downstream City sanitary sewer network near the intersection of 48th Street West and Hesper Road, where adequate capacity is available. This alignment supports efficient service extension and avoids the need for lift stations or extraordinary improvements. Final tie-in locations and pipe sizing will be verified during detailed design and coordinated with the City of Billings Public Works Department to ensure compliance with long-range utility models and capital improvement planning.

Conclusion
The projected wastewater flows from the proposed subdivision are minimal relative to the capacity of standard City collection infrastructure. A conventional gravity sewer system with 8-inch mains is sufficient to serve the development, and downstream tie-ins are available within the planned urban service area. No unusual or extraordinary measures are required beyond standard subdivision infrastructure improvements.

Per DEQ-2, 8-inch diameter sewer mains constructed at the minimum allowable slope of 0.004 ft/ft can accommodate up to 270 gpm when flowing two-thirds full. Therefore, an 8-inch main would be adequate to serve the anticipated peak flow for the subject property, based on preliminary estimates. Final pipe sizing and layout will be determined upon completion of the subdivision design and engineering analysis.

All infrastructure will be designed and constructed in compliance with:

- Montana DEQ Circular DEQ-2
- City of Billings Engineering Design Standards
- City of Billings Subdivision Regulations

Solid Waste Management

Upon annexation, the proposed development will be served by the City of Billings Solid Waste Division, which operates under the Public Works Department. This division provides comprehensive waste management services, including residential and commercial garbage collection, yard waste pickup, and operation of the Billings Regional Landfill.

Residential Services: The City offers fully automated curbside garbage collection, utilizing standardized carts to ensure efficiency and cleanliness. Residents are expected to place their carts at the curb by 7:00 AM on their designated collection day. The City also provides a yard waste collection program from April through November, encouraging proper disposal of organic materials.

Recycling Services: While the City does not offer a curbside recycling program, it conducts monthly cardboard collection. The schedule is determined by the regular garbage collection day; for example, if your garbage is collected on Monday, cardboard is picked up on the first Monday of each month.

Commercial Services: For businesses within the development, the City provides commercial waste collection services. Additionally, private companies such as RoadRunner and MacKenzie Disposal Inc. offer tailored waste management solutions, including recycling and dumpster rentals, catering to various commercial needs.

Billings Regional Landfill: The landfill, located at 5240 Jellison Road, is the largest in Montana, spanning over 800 acres. It serves multiple counties and is designed with environmental safeguards, including synthetic liners and leachate collection systems, to prevent groundwater contamination. According to the City's Landfill Master Plan, this facility has a total projected capacity of 20 million tons and is anticipated to remain in active operation through 2042, assuming current regional growth rates.

Regulatory Compliance: All waste management activities comply with the Montana Department of Environmental Quality (DEQ) regulations, ensuring that solid waste facilities operate safely and sustainably.

Water Service

Water service for the proposed 52-acre annexation area located at 48th Street West and Hesper Road will be provided by the City of Billings municipal water system. The development is located within Pressure Zone 2, which currently serves surrounding residential and institutional areas.

A 12-inch PVC water main is installed on South Shiloh Road, south of Hesper Road, with the nearest fire hydrant identified as Hydrant #H172-15, installed in 2024. This infrastructure will serve as the primary water connection point for the proposed subdivision.

Based on preliminary discussions with City engineering staff during early coordination meetings, the City is planning to extend the water main west along Hesper Road, with a stub connection expected to be placed just past the eastern boundary of the subject property. This extension

would facilitate direct service into the proposed subdivision and support phased development within the site.

As of this study report, the final engineering design for the water main extension along Hesper Road is pending, and specific records and design plans will be requested from the City of Billings to verify the alignment, sizing, and pressure specifications associated with the planned extension.

The water service plan for the site will be designed to:

- Accommodate the projected domestic demand for a neighborhood mixed-use subdivision;
- Provide adequate fire protection via hydrant spacing and flow capacity in accordance with City Fire Code and DEQ Circular DEQ-1;
- Enable looped connections where feasible to ensure pressure stability and redundancy.

All water infrastructure design will comply with the City of Billings Engineering Design Standards, including pressure zone compatibility, main sizing, and fire flow requirements.

Table 5: Estimated Water Demands

Estimated Land Use	Total Pop.	Ave. Day Demand (gpd)	Ave. Day Water Demand (gpd)	Max. Day/Ave. Day Water Demand Ratio	Max. Day Water Demand (MGD)
Residential	630	219 / capita	137,970	2.2	0.304
Hotel (60,000 sf)	—	0.20 gpd/sf	12,000	2.2	0.026
Restaurants (60,000 sf)	—	0.20 gpd/sf	12,000	2.2	0.026
Office (60,000 sf)	—	0.10 gpd/sf	6,000	2.2	0.013
Retail (46,000 sf)	—	0.10 gpd/sf	4,600	2.2	0.010
Subtotal Commercial	—	—	34,600	—	0.075
Total	—	—	172,570	—	0.379

Treatment Capacity Analysis
This preliminary estimate demonstrates that the development's projected demand is within the available capacity identified in the 2006 Master Plan. Final system impacts will be evaluated further during subdivision review and utility extension design.

Additionally, the city has initiated the construction of a new West End Water Treatment Plant at 4374 Hesper Road, near the subject property. This facility is designed to bolster the city's water treatment capacity and resilience, particularly in response to increasing demand and the need

for maintenance flexibility of the existing plant. The new plant is scheduled to become operational in late 2026.

Parks and Recreation

The proposed annexation area is located within the Urban Expansion Area of West Billings and will support the City's growth objectives by contributing a well-balanced mix of residential and commercial uses.

In accordance with Section 6.4.3 of the City of Billings Subdivision Regulations, residential subdivisions are required to dedicate 11% of the gross area for parkland or provide equivalent cash-in-lieu contributions.

- Gross Area of Subdivision: 52 acres
- Required Parkland Dedication: 5.72 acres

The final parkland strategy—whether via on-site dedication or cash-in-lieu—will be coordinated with the Parks, Recreation, and Public Lands Department during subdivision review. Given the site's location within the underserved West End and near planned greenway corridors, the development presents an opportunity to contribute meaningfully to the City's open space and recreational network in alignment with the 2017 Parks and Recreation Master Plan.

In accordance with Section 6.4.3 of the City of Billings Subdivision Regulations, residential subdivisions are required to dedicate 11% of the gross area for public parkland, unless an alternative arrangement such as cash-in-lieu or a combination of both is approved. Given the proposed subdivision's gross area of 52 acres, the required parkland dedication equates to 5.72 acres. This requirement ensures that new development contributes to the City's goal of providing accessible recreational amenities for residents. The development team will coordinate with the Parks, Recreation, and Public Lands Department to determine whether the dedication will be satisfied through on-site land dedication, cash-in-lieu contribution, or a blended approach based on final subdivision design and community needs.

Public Safety

Police

Upon annexation, the proposed development would fall under the jurisdiction of the Billings Police Department (BPD). The BPD provides 24-hour service across approximately 41 square miles of the city, divided into four zones and nine patrol beats. The department operates with three main patrol shifts, each consisting of four 10-hour shifts, ensuring continuous coverage throughout the city.
As of early 2025, the BPD has a budgeted strength of 177 officers but is operating with 158 sworn personnel, indicating a shortfall of 19 officers. Despite this staffing challenge, the department has been proactive in addressing public safety concerns. Notably, the City Council approved the addition of eight more patrol officers, and the department is actively working to fill these positions.

In response to increasing demands and to improve service efficiency, the BPD has implemented several initiatives:

- Community Service Officers (CSOs): Introduced in early 2023, CSOs are civilian personnel who handle non-emergency calls, such as cold theft reports and traffic incidents. This program has significantly reduced wait times for non-urgent calls, allowing sworn officers to focus on higher-priority incidents.

- Selective Traffic Enforcement Program (STEP): Comprising four full-time officers and one sergeant, the STEP unit focuses on traffic law enforcement in problem areas, including school zones and high-accident locations. The program also conducts targeted DUI patrols during high-traffic events, contributing to safer roadways.

- Strategic Staffing Adjustments: The BPD is evaluating shift schedules and patrol deployment to better align with community needs. Recommendations include adjusting shift reporting times and reconsidering the practice of holding high-priority calls until a zone unit becomes available, aiming to reduce response times for critical incidents.

While specific beat assignments for the annexation area have not yet been determined, the development team is committed to coordinating with City staff and BPD leadership during the subdivision phase to support long-term service planning. Police coverage for the site will ultimately depend on final land use intensity, zoning, and the City's overall patrol deployment strategy.

Fire

Upon annexation, the proposed development would fall under the jurisdiction of the Billings Fire Department (BFD), which provides fire protection and emergency medical services (EMS) across approximately 90 square miles, encompassing both the City of Billings and the Billings Urban Fire Service Area (BUFSA).

Fire Station 7, located at 1501 54th Street West, is the closest station to the proposed development. Operational since December 21, 2007, Station 7 covers over 30 square miles, including the West End of Billings and the western BUFSA. The station is equipped with an engine, a reserve engine, and a brush truck, enabling it to respond effectively to both fire and EMS calls in the area.

Additionally, Fire Station 5, situated at 605 South 24th Street West, serves the broader West End and houses the BFD's Hazardous Materials Team. This station is equipped with specialized apparatus, including Engine 5, Tender 5, Brush 5, and Hammer 5, which includes a tow rig and a 25-foot enclosed Haz-Mat response trailer. The Haz-Mat Team is a regional response unit that collaborates with six other teams across Montana to manage hazardous materials incidents.

In 2023, the BFD responded to over 18,000 service calls, with 384 related to fires. The department also handled 473 calls through its Crisis Response Unit, a partnership with the Rimrock Foundation, addressing behavioral health emergencies. Recognizing the challenges posed by rapid urban growth, the BFD has been proactive in addressing staffing and resource needs. The department operates seven fire stations citywide, providing 24-hour coverage. However, recent discussions by the Billings City Council have highlighted budgetary constraints affecting emergency services, emphasizing the need for strategic planning to maintain effective operations.

To address this, the BFD has conceptually proposed a future Station 9, anticipated to be sited near the new water treatment plant to serve the expanding west Billings area. However, this station has not yet been constructed, and its timeline remains dependent on future capital planning. Given this context, the development team is open to discussing a proportional contribution to BUFSA or the City of Billings to support enhanced fire protection infrastructure for the area.

Public Schools

The proposed development lies within the jurisdiction of Billings Public Schools (BPS), Montana's largest school district, serving over 16,000 students across 28 schools. The district is structured into three main attendance areas: West High, Senior High, and Skyview High. Given the development's location in the West End, it falls under the West High attendance area.

Assigned Schools

Based on current school district boundaries, students residing in the proposed development would attend:

- Elementary School: Elder Grove Elementary School (1532 S 64th Street West)
- Middle School: Elder Grove Middle School (1540 S 64th Street West)
- High School: Billings West High School (2201 St. John's Avenue)

Elder Grove School District provides K–8 education at a modern, consolidated campus west of the city limits. The district has experienced steady enrollment growth in recent years and continues to expand its facilities and staffing to accommodate new residential development in the surrounding area.

Billings West High School is the largest high school in Montana, with a 2024 enrollment of approximately 2,163 students. It offers a comprehensive curriculum including Advanced Placement courses, career and technical education programs, and a wide range of extracurricular activities.

We will contact the Elder Grove School District to confirm current student-per-household multipliers used for enrollment projections. In the interim, our planning-level estimate assumes a rate of 0.50 students per dwelling unit, which is consistent with past subdivision impact assessments in the region and widely accepted as a conservative planning standard for K–12 public school enrollment.

Once the school district confirms their preferred calculation methodology, we will incorporate their feedback into the updated Urban Planning Study and revise the student impact estimate accordingly.

District Initiatives and Planning

To address the challenges of rapid growth, particularly in the West End, BPS has undertaken several initiatives:

- Redistricting Efforts: In response to overcrowding, especially in West End schools, BPS implemented boundary changes in Fall 2023 to better balance student populations across schools.

- West End Neighborhood Plan: The City of Billings and Yellowstone County are updating the 2001 West Billings Neighborhood Plan to guide future development, including educational infrastructure, in the West End.

- Adjusted School Calendar: Starting in the 2025-2026 school year, BPS will adopt a shorter school year of 173 days with longer school days. This change aims to provide additional time for teacher training and improve instructional quality.

Transportation and Accessibility

The City of Billings has developed Safe Routes to School plans, including walking route maps for each elementary school, to ensure student safety and promote active transportation. These plans will be considered in the development's design to facilitate safe and convenient access to schools.

Student Population Impacts of Proposed Development

The proposed development is anticipated to introduce a total of 274 residential units, consisting of 136 apartment units, 100 four-plex units, and 38 duplex units. Using the City of Billings' and School District 2 planning practice of approximately 0.30–0.35 students per dwelling unit, the project is projected to generate 81–131 new students at full build-out. This estimate provides a conservative planning range that accounts for variation in unit type and household demographics.

Distribution by School Level
Applying School District 2's historic enrollment ratios, these students are expected to be distributed approximately as follows:

- Elementary (K–5): 50% → 41–65 students

- Middle School (6–8): 25% → 20–33 students

- High School (9–12): 25% → 20–33 students

This distribution indicates the majority of students will be at the elementary level, with smaller but measurable impacts on the middle and high school systems.

Service Capacity and Planning Context
The subject property lies within School District 2, which serves the greater Billings area. The District has experienced steady enrollment growth over the past decade, particularly in the West Billings area, where substantial residential growth has occurred. The addition of 81-131 students from this subdivision represents a modest increase relative to the overall district enrollment of more than 16,000 students. However, it is recognized that localized impacts may occur at specific elementary attendance boundaries depending on the final assignment of the project area.

Fiscal Contribution
In addition to student population, the project will generate property tax revenues that directly support School District 2 operations and capital facilities. The mixed-residential planned neighborhood development further diversify the tax base, providing both residential and non-residential contributions. These revenues help offset the marginal service costs associated with additional students, ensuring that growth supports the fiscal health of the District.

Conclusion
The proposed subdivision is expected to yield 81-131 new students, primarily at the elementary level. This increase is manageable within the context of overall district enrollment, and the fiscal contributions generated by the development will assist in supporting educational services. Coordination with School District 2 during subdivision review and final platting will ensure enrollment impacts are monitored and that future capital planning can address localized needs.

Projected & Estimated Population

As of 2025, Billings, Montana, stands as the state's most populous city, with an estimated population of 123,290. This reflects a steady annual growth rate of approximately 0.99%, indicating a consistent upward trend in the city's population.

Looking ahead, projections suggest that Billings will continue to experience moderate growth. By 2030, the population is anticipated to reach approximately 127,000, assuming the current growth rate persists. This growth trajectory underscores the city's ongoing appeal and its role as a regional hub for commerce, education, and healthcare.

The proposed development, situated in the rapidly expanding West End of Billings, aligns with these growth trends. As the city continues to attract new residents, developments like this will play a crucial role in accommodating the increasing demand for housing and services.
In summary, the projected population growth of Billings supports the strategic importance of the proposed development, ensuring it meets the future needs of the community while contributing to the city's sustainable expansion.

Soils, Geology, and Topography

The subject property is underlain by a combination of loamy and clay loam soils typical of the Yellowstone Valley benchlands. The predominant soil type is Keiser silty clay loam, which comprises approximately two-thirds of the site. Keiser soils are very deep, well-drained soils that formed in alluvium on low terraces and hill slopes. They have gentle slopes of 0 to 1 percent, moderate permeability, and stable structure, making them suitable for a range of urban uses when properly engineered.

The second most common soil unit on the property is the Toluca and Wanetta clay loams, which together account for more than one-fifth of the site. These soils occur on broad, nearly level terraces with slopes ranging from 0 to 2 percent. Like the Keiser soils, they are very deep and well-drained, with favorable development characteristics. Smaller areas of Toluca clay loam and Wanetta gravelly loam are also mapped within the property, both of which exhibit similar characteristics with some variability in gravel content and drainage rates.

Minor inclusions across the property include Larim gravelly loam, Haverson loam, and Wanetta clay loam, along with a small area mapped as a gravel pit, reflecting the site's history of aggregate extraction. These units represent only a small fraction of the overall acreage but highlight the variability in subsurface conditions that may be encountered during construction.

Overall, the soils on the site are characterized as very deep, well-drained loams and clay loams with gentle slopes of 0 to 2 percent. Depth to groundwater is generally greater than 80 inches, and no restrictive layers are identified within typical construction depths. These characteristics provide favorable conditions for subdivision development, including building foundations, pavements, and underground utilities. Isolated gravelly or clay-rich pockets may require minor grading adjustments or subgrade conditioning during construction, but no significant limitations to development are anticipated.

Geology

The site is underlain by the Paleocene Fort Union Formation, which consists of interbedded sandstones, shales, and coal beds. This formation is geologically stable and does not pose significant seismic or subsidence hazards. There are no mapped fault lines or geologic hazards within or near the site, and the area is not subject to significant liquefaction or landslide risk.

Subsurface investigation during engineering design will confirm:

- Bedrock depth and type
- Groundwater table elevation (if applicable)
- Potential gravel or sandstone layers affecting utility trenching

Topography

The subject property exhibits a gradual slope from northwest to southeast, with the highest elevations near the intersection of 48th Street West and Hesper Road. The frontage has been built up slightly, and natural grade transitions downward toward the southeast corner of the site. This slope supports favorable drainage and provides natural grading opportunities for site planning and stormwater design. There are no known steep slopes or topographic constraints that would restrict development, though grading plans will be required to conform to City of Billings subdivision grading and drainage standards.

Effects of Urbanization on the Existing Environment

Urbanization, while driving economic growth and infrastructure development, can significantly impact the natural environment. Understanding these effects is crucial for sustainable planning and mitigation strategies.

Habitat Loss and Biodiversity Decline

Urban development is commonly associated with the loss and fragmentation of native habitats, which can displace wildlife and reduce ecosystem biodiversity. However, in the case of the subject property, the environmental impact on habitat and biodiversity is expected to be minimal.

The 52-acre site was historically used as a gravel pit and has been fully disturbed by past industrial activity. The surrounding area has also been characterized by gravel mining and urbanization for several decades, leaving the site ecologically fragmented and disconnected from any intact habitat corridors.

While the property has been visually reclaimed, with limited vegetative regrowth and some grass cover, it does not support high-quality native habitat. There are no known wetlands, riparian zones, or wildlife corridors on-site, and no species of concern have been identified through local or state biological inventories.

Therefore, urban development of this property is unlikely to contribute to any meaningful loss of biodiversity. In fact, conversion of the site into a planned mixed-use neighborhood with managed landscaping, tree planting, and stormwater treatment features may result in enhanced ecological value compared to the site's current condition.

Water Resource Depletion and Pollution

Urbanization typically increases impervious surfaces such as roads and buildings, which can reduce natural groundwater recharge and increase surface runoff. This runoff often carries pollutants into water bodies, degrading water quality and harming aquatic life. Additionally, the demand for water in urban areas can strain local water resources, leading to shortages and conflicts over water use.

However, the proposed development on the subject property will be designed to mitigate these impacts through comprehensive stormwater management strategies. The site will be graded with stormwater management and treatment in mind, incorporating features such as detention basins and hydrodynamic separators. These systems are effective in removing sediments, oils, and other pollutants from stormwater runoff before it enters the municipal drainage system.

Furthermore, the development will benefit from the new West End Water Treatment Plant, located at 4374 Hesper Road. Scheduled to be operational by the end of 2026, this state-of-the-art facility will enhance the city's capacity to meet increasing water demands and improve water quality for the growing population.

By integrating advanced stormwater treatment systems and aligning with the city's expanding water infrastructure, the development aims to minimize its impact on water resources and contribute to the sustainable growth of the area.

Air Pollution and Health Impacts

Urban development often leads to increased vehicle emissions and industrial activities, contributing to higher levels of air pollutants such as nitrogen oxides and particulate matter. These pollutants can cause respiratory issues, cardiovascular diseases, and other health problems among urban populations.

However, the proposed development on the subject property is designed with several mitigation strategies to minimize these impacts:

- Planned Urban Expansion: The proposed development is located adjacent to the existing city limits and within the City’s designated Urban Expansion Area. By directing growth to a location identified in the Limits of Annexation Map, the project supports the

City's goals of reducing outward sprawl and concentrating development where municipal services can be extended efficiently.

- Integration with Transportation Infrastructure: The development will connect to existing road networks and is in proximity to planned public transportation routes, promoting alternative modes of transportation and reducing reliance on personal vehicles.

- Green Infrastructure Implementation: The project will incorporate green spaces, tree planting, and landscaping features that can help absorb pollutants, provide shade, and improve overall air quality.

- Stormwater Management: As previously mentioned, the site will include stormwater management systems designed to reduce runoff and associated pollutants, which can also contribute to improved air quality by mitigating dust and particulate matter.

Urban Heat Island Effect

Urban areas often experience higher temperatures than surrounding rural regions due to the concentration of buildings and pavement that absorb and retain heat—a phenomenon known as the urban heat island effect. This can exacerbate heatwaves, increase energy consumption for cooling, and negatively affect human health.

However, the proposed development on the subject property is designed with several mitigation strategies to minimize these impacts:

- Urban Edge Growth Location: The project is located directly adjacent to the existing city limits and within the City's designated Urban Expansion Area. By focusing new housing and neighborhood commercial uses in this planned growth corridor, the development supports orderly expansion of municipal services and helps reduce the pressure for scattered, low-density development on the urban fringe.

- Integration of Green Infrastructure: The development will incorporate green spaces, tree planting, and landscaping features that can help absorb pollutants, provide shade, and improve overall air quality. These measures are effective in reducing surface and air temperatures through shading and evapotranspiration. Landscaping residential yards and adding parkland as required will help alleviate heat.

Increased Waste Generation

Urban development typically leads to higher volumes of solid waste, which, if not properly managed, can result in environmental pollution, attract disease vectors, and contribute to greenhouse gas emissions from decomposing organic waste.

However, the proposed development on the subject property is designed with several mitigation strategies to address these concerns:

- Integration with Existing Waste Management Infrastructure: The development will be serviced by the City of Billings' Solid Waste Division, which provides comprehensive garbage collection services for residential and commercial accounts.

- Proximity to Billings Regional Landfill: The site is located near the Billings Regional Landfill, the largest landfill in Montana, which receives over 350,000 tons of garbage per

year from five counties. The landfill is designed with environmental safeguards, including a synthetic liner and groundwater monitoring systems, to prevent contamination.

- Adherence to State Regulations: The development will comply with regulations set forth by the Montana Department of Environmental Quality (DEQ), which oversees solid waste facilities and promotes waste reduction, recycling, and composting initiatives.

- Promotion of Recycling and Composting: In alignment with the Montana Integrated Waste Management Act, the development will encourage residents to participate in recycling and composting programs, thereby reducing the volume of waste sent to landfills.

Soil Degradation

Construction activities and increased surface runoff in urban areas can lead to soil erosion and degradation. The loss of fertile topsoil affects vegetation growth and can lead to sedimentation in waterways, impacting aquatic ecosystems.

However, the proposed development on the subject property is designed with several mitigation strategies to address these concerns:

- Erosion Control Measures: The project will implement erosion control measures such as silt fences, sediment basins, and fiber rolls to prevent soil displacement during construction.

- Stormwater Management Systems: The development will include stormwater management systems designed to reduce runoff and associated pollutants, thereby minimizing erosion and protecting water quality.

- Vegetative Stabilization: Post-construction, the site will be stabilized with native vegetation to enhance soil structure, reduce erosion, and support local biodiversity or city approved landscaping measures.

Climate Change Contribution

Urban areas are significant contributors to greenhouse gas (GHG) emissions due to energy consumption, transportation, and industrial activities. This contributes to global climate change, leading to more extreme weather events, sea-level rise, and other environmental challenges. However, the proposed development on the subject property is designed with several mitigation strategies to address these concerns:

- Energy-Efficient Building Design: The development will incorporate energy-efficient building practices, including high-performance insulation, energy-efficient windows, and the use of sustainable materials, to reduce energy consumption and associated GHG emissions.

- Sustainable Transportation Options: The development will promote sustainable transportation options by incorporating pedestrian-friendly infrastructure, bicycle lanes, and connectivity to public transit, thereby reducing vehicle emissions.

- Green Infrastructure Implementation: The project will include green spaces, tree planting, and landscaping features that can help sequester carbon dioxide, provide shade, and improve overall air quality.

Effects on Agriculture

Urbanization in Montana, particularly in rapidly expanding areas like the West End of Billings, presents challenges and opportunities for land use planning. The proposed 52-acre development site is located within Zone 2 of the City of Billings 2023 Limits of Annexation Map, an area specifically designated for near- to mid-term urban expansion based on infrastructure access and surrounding growth patterns.
The subject property is currently zoned Agricultural 10+ Acres (A) under Yellowstone County regulations. However, the site has no recent history of agricultural production and is not classified as prime farmland by the USDA Natural Resources Conservation Service. Historical aerial imagery confirms the entire property was previously operated as a gravel pit, and the land has since been reclaimed, with a grass cover reestablished across portions of the site. The topography, soil profile, and historical disturbance make the property unsuitable for agricultural use without significant reclamation and investment.

Moreover, the property is surrounded on multiple sides by urbanizing land uses:

- To the north and east lie other gravel pits and former extraction sites;
- To the southeast is the site of the new West End Water Treatment Plant, currently under construction and scheduled to be operational by Fall 2026;
- To the west and south are established residential subdivisions and supporting infrastructure.

Given these surroundings and the disturbed condition of the land itself, the proposed annexation and redevelopment will not result in the loss of viable agricultural land. Rather, it represents a logical and efficient reuse of a non-productive, previously industrial parcel within the City's designated growth boundary. The project supports compact, contiguous development and helps implement the West Billings Neighborhood Plan by directing growth inward and avoiding the premature conversion of agricultural land in rural areas.

Farmland Conversion and Regional Context

Statewide, Montana experienced a reduction of approximately 3.3 million acres of agricultural land between 2007 and 2017. Much of this reduction has occurred near growing urban centers, including Billings. However, the incremental conversion of small, non-prime, non-productive parcels—such as this 52-acre tract—represents a targeted and appropriate approach to accommodating growth within established planning boundaries.

The subject property is not classified as prime farmland by the USDA Natural Resources Conservation Service, and it has no recent history of agricultural use. In fact, the entire site was historically disturbed by gravel pit operations, and it has since been reclaimed to a limited degree, with some vegetative cover but no evidence of irrigation, cultivation, or livestock operations. The land lacks the soil quality, water access, and infrastructure needed to support viable agricultural production.

Moreover, the site is surrounded by existing subdivisions, gravel extraction sites, and the new West End Water Treatment Plant, further isolating it from any remaining productive agricultural landscapes in the area. As such, its development poses no threat to agricultural continuity or regional food systems.

The site's location within Zone 2 of the City's 2023 Limits of Annexation Map, and its proximity to existing and planned urban infrastructure, make it an ideal candidate for annexation. Redevelopment of this disturbed parcel will help fulfill City policy goals of:

- Reducing sprawl
- Consolidating infrastructure investments, and
- Protecting larger contiguous tracts of active farmland elsewhere in the county.

This project exemplifies responsible land conversion by prioritizing development on land that no longer serves an agricultural purpose and is surrounded by the urban fringe.

Economic and Resource Considerations

While agriculture plays a critical role in Montana's economy, with roughly 29,000 jobs tied to the sector, the annexation and development of this site are unlikely to meaningfully affect the region's agricultural productivity or economy due to the limited size and non-productive condition of the parcel.

Furthermore, this property lies within the BBWA (Billings Bench Water Association) canal influence area but does not appear to currently utilize irrigation or water rights for agricultural production. Future development will be designed to minimize disruption to adjacent ditch systems and respect canal easements, if applicable.

Policy Alignment

The proposed annexation and land use change:

- Align with the City's long-range planning vision for the West End;
- Support compact and contiguous urban growth;
- Avoid unnecessary loss of productive farmland by focusing development on already fragmented and underutilized land.

Existing and Potential Land Use

The subject property consists of approximately 52 acres located in the West End of Billings, near the intersection of 48th Street West and Hesper Road. It is currently zoned Agricultural 10+ Acres (A) under Yellowstone County zoning; however, the site has not functioned as productive agricultural land in recent decades.

Historical aerial imagery and land use records dating back to 1985 indicate that the site has long been surrounded by active and inactive gravel extraction operations. The subject property itself was historically used as a gravel pit, and while it now appears to have been partially or fully reclaimed—evidenced by the establishment of vegetative cover—it is unlikely to have viable agricultural potential without significant reconditioning. There is no evidence of active irrigation, cultivation, or crop rotation on-site in the available historical record.

Given this history and its location within the Zone 2 Long Range Area on the City of Billings Limits of Annexation Map, the site is well-positioned for future urban development. It is bordered on multiple sides by residential subdivisions, schools, and public infrastructure corridors. As such, the property represents a logical extension of the City's westward growth pattern—where agricultural preservation goals are not applicable due to prior disturbance and long-standing industrial use.

The proposed land use, Mixed-Residential Planned Neighborhood Development, aligns with the goals of the West Billings Plan and the City of Billings Growth Policy, which promote compact development, reintegration of underutilized land, and efficient extension of City services into previously annexed or industrial areas.

Historical Sites

The 52-acre subject property has no known historical or cultural significance based on local, state, or federal records. Historical imagery and land use patterns confirm that the entire site was previously utilized as a gravel extraction operation, a common land use throughout this portion of West Billings dating back several decades.

Due to the scale and intensity of excavation activities, any potential historical or archaeological features that may have once existed were removed during past mining operations. The site has since been reclaimed to a limited extent, with a reestablished vegetative surface, but remains characterized by previous ground disturbance, grading modifications, and imported fill.

Given the site's fully disturbed condition and lack of any remaining original land surface, it is not considered historically or archaeologically sensitive. There are no known historic structures, cultural resources, or SHPO-listed features associated with the subject property. As such, the site presents no impediments to development from a historical or cultural resource standpoint.

Preliminary Development Timeline

Table 6: Preliminary Development Timeline

Phase	Estimated Activities	Target Timeline	Notes
Annexation Request	Submit petition and request to move into Zone 1	Current	Align with City's annual annexation map amendment cycle
Annexation Approval	Review and public hearings	Spring 2026	City Council consideration

Phase	Estimated Activities	Target Timeline	Notes
Preliminary Plat Submittal	Layout design, zoning request, environmental assessments	Summer 2026	May be submitted concurrently with annexation request
Utility Coordination	Final confirmation of utility availability to frontage	By Fall 2026	Water and sewer infrastructure anticipated at site frontage
Infrastructure Design	Civil engineering, permitting, and construction planning	Fall 2026 – Winter 2026	May begin prior to utility arrival
Phase 1 Construction	On-site grading, roads, and utility installation	Spring–Summer 2027	Assumes infrastructure is ready for connection
Vertical Construction	Homes, commercial buildings	Fall 2027	Begins as lots are completed and serviced
Subsequent Phases	Future phases depending on absorption	2028 and beyond	Market-responsive phasing for remaining acreage

Capital Improvements

The proposed development will require the extension and construction of both public and private infrastructure to serve residential and commercial land uses. All capital improvements will be designed and constructed in accordance with the City of Billings Engineering Design Standards, the 2024 Subdivision Regulations, and Montana DEQ requirements.

Public Capital Improvements

The following off-site and on-site public infrastructure components are anticipated:

Water Infrastructure

- Connection to the City's future 12" water main anticipated to extend along Hesper Road
- On-site distribution system including looped water mains and fire hydrants
- Coordination with City Engineering and Public Works to verify capacity and pressure (Zone 2)

Sanitary Sewer Infrastructure

- Connection to the existing or extended gravity sewer main in Hesper Road
- On-site sewer main network sized for phased development
- DEQ-2-compliant system design including peak flow and I/I allowances

Stormwater Management

- Construction of stormwater detention or retention basins

- Integration of storm drain piping, curb inlets, and BMPs per DEQ and MS4 standards
- Erosion control and discharge coordination with downstream facilities (e.g., BBWA Canal)

Streets and Rights-of-Way

- Construction of local and collector streets within dedicated ROWs
- Curb, gutter, boulevard sidewalks, and street lighting
- Possible off-site improvements to Hesper Road or 48th Street West

Parkland and Open Space

- Either land dedication or cash-in-lieu as required by City regulations
- Integration of trails, landscaping, and shared public spaces

Private Capital Improvements

The development will also involve private improvements, which will be constructed and maintained by the developer, HOA, or individual lot owners:

- Internal water/sewer service lines to individual lots
- Utility trenching for electric, gas, and telecom (coordinated with utility providers)
- Private stormwater facilities (if applicable to site layout)
- Fencing, signage, and neighborhood entrance features

Funding and Phasing

Capital improvements will be funded by the developer, with the potential for:

- System development charges and tap fees payable to the City
- Cost-sharing agreements for regional infrastructure
- Private financing or HOA assessments for ongoing maintenance of common facilities

Methods of Funding for Public Improvements

The City of Billings is actively expanding infrastructure in the West End to accommodate anticipated growth. Key funding mechanisms for these public improvements include:

Municipal Capital Investment

- West End Water Treatment Plant: The City is constructing a new water treatment facility at 4374 Hesper Road, with a projected completion date in 2026. This $68 million project

is the largest public works undertaking in the city's history and is funded through municipal capital investment.

State and Federal Grants

- Infrastructure Investment and Jobs Act (IIJA): The City is leveraging funds from the IIJA to support transportation and infrastructure projects, including those in the West End.

Utility Enterprise Funds

- Water and Sewer Rates: The City utilizes revenue from water and sewer utility rates to fund maintenance and expansion of these services. Notably, no rate increases are proposed for residential water, wastewater, garbage, and street maintenance for the upcoming budget year starting July 1, 2025.

Developer Contributions

- System Development Charges (SDCs): Developers are required to pay SDCs to offset the cost of new infrastructure necessitated by their projects.

- Infrastructure Improvements: Developers may be responsible for constructing certain infrastructure components, such as roads and utility extensions, as part of their development agreements.

Tax Increment Financing (TIF)

- Urban Renewal Districts: The City may utilize TIF in designated urban renewal districts to fund public improvements by capturing the incremental increase in property tax revenues resulting from new development.

These funding methods collectively support the ongoing infrastructure expansion in the West End, ensuring that public improvements keep pace with development demands.

Annexation Justification Summary

This Urban Planning Study supports the annexation of the 52-acre property located at the intersection of 48th Street West and Hesper Road into the City of Billings. The site lies within the Zone 2 Long Range Area of the City's 2023 Limits of Annexation Map and represents a logical, infrastructure-supported expansion of the urban boundary. The following evaluation is based on the six criteria required under the City's Annexation Policy and is intended to support inclusion in Zone 1 during the Fall 2025 map amendment cycle.

Distance from Existing City Services and Response Times

- The property is located within one-quarter mile of existing or planned utility lines, including a 12" water main and sanitary sewer extensions along Hesper Road.

- The site is less than 2 miles from Fire Station 7 and falls within Police Beat 2, both of which serve the West End with 24/7 response.

- Stormwater infrastructure is available at Shiloh Road, and regional drainage patterns flow southeast, which aligns with stormwater design standards for the area.

- Solid waste services, including curbside collection and access to the Billings Regional Landfill, are already provided in adjacent subdivisions and can be easily extended.

Capacity and Location of Existing Facilities and Future Upgrades

- The City is currently constructing the West End Water Treatment Plant, located just east of the property. Scheduled to be operational by Fall 2026, it will directly serve this site with high-capacity potable water.

- The Billings Public Works Department has confirmed that both water and sewer infrastructure is expected to reach the frontage of this property by Fall 2026.

- The development will connect to planned public systems with no need for interim or temporary facilities.

- Nearby schools (Arrowhead Elementary, Will James Middle, and Billings West High) currently serve this portion of the West End and are included in the Billings Public Schools redistricting and capital planning framework.

Cost of City Services

- All capital improvements required for development—water, sewer, storm drainage, streets, sidewalks, and utilities—will be constructed at no cost to the City.

- The developer will pay all required System Development Charges (SDCs) and connection fees.

- Ongoing services such as trash collection, road maintenance, and public safety response will be offset by new property tax revenue from developed lots.
- The site does not contain any existing residents or City-owned infrastructure that would require relocation, retrofitting, or transitional service support.

Effect on Existing Residents

- The subject property is currently vacant and was historically used as a gravel pit, meaning it has not functioned as agricultural land in recent decades and is fully disturbed.

- It is bordered by urban land uses, including schools, utility corridors, and residential neighborhoods. Development of this parcel would represent a logical continuation of existing growth patterns and would utilize existing infrastructure networks rather than contributing to scattered or leapfrog development.

- The proposed land use (mixed residential and neighborhood commercial) is compatible with surrounding zoning and will complete an urbanized gap in the City's western edge.

- Traffic, noise, and drainage impacts will be mitigated through subdivision design and reviewed in accordance with the City's 2024 Subdivision Regulations.

Conformance with Adopted Plans

The project aligns with the following adopted plans and policies:

- *2016 City of Billings Growth Policy:* Supports compact, infrastructure-efficient growth, housing choice, and fiscally responsible development.

- *West Billings Neighborhood Plan:* Identifies this location as suitable for urban development, with a mix of residential and supporting commercial uses that complement surrounding neighborhoods and anticipated growth patterns.

- *Capital Improvements Plan (CIP):* Coordinates with scheduled utility expansions including the West End Water Treatment Plant.

- *2023 Long Range Transportation Plan (LRTP):* Access is provided via arterial (Hesper Road) and collector (48th Street West) corridors, which are slated for multimodal enhancements.
- *2023 Parks and Recreation Master Plan:* Future subdivision phases will either dedicate land or pay cash-in-lieu to support neighborhood-level parkland and trails.

- *2023 Limits of Annexation Map:* Site is in Zone 2 and directly adjacent to Zone 1; proposed annexation reflects continuity of City services and existing development pattern.

Developer Contributions

- The developer will fully fund all infrastructure improvements, including any required off-site connections, road improvements, and internal public utilities.
- System Development Charges will be paid to the City at the time of permit issuance.

- Parkland dedication or cash-in-lieu contributions will be provided as required by City code at the time of subdivision approval.

- The project will include trail, sidewalk, and boulevard connectivity, supporting the City's Complete Streets policy and neighborhood livability objectives.

Summary Statement

Annexing the 52-acre property into the City of Billings represents a logical, well-timed, and infrastructure-aligned extension of the urban boundary. The project is compatible with adopted planning documents, imposes no cost burden on the City, leverages existing and planned utilities, and contributes to the broader goal of compact and connected growth on the West End. Based on the six required criteria, this annexation request is well-supported and should be favorably considered for inclusion in Zone 1 during the Spring 2026 map amendment cycle.

Appendix

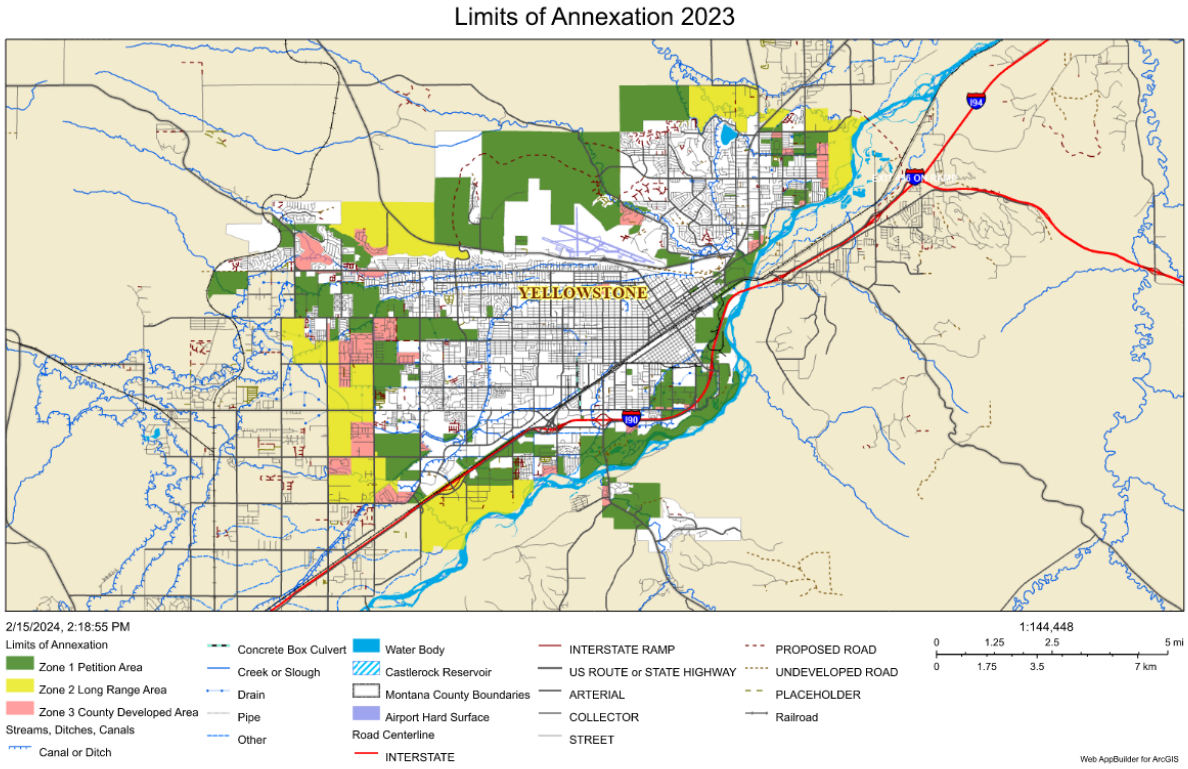

Figure 2: Limits of Annexation Map

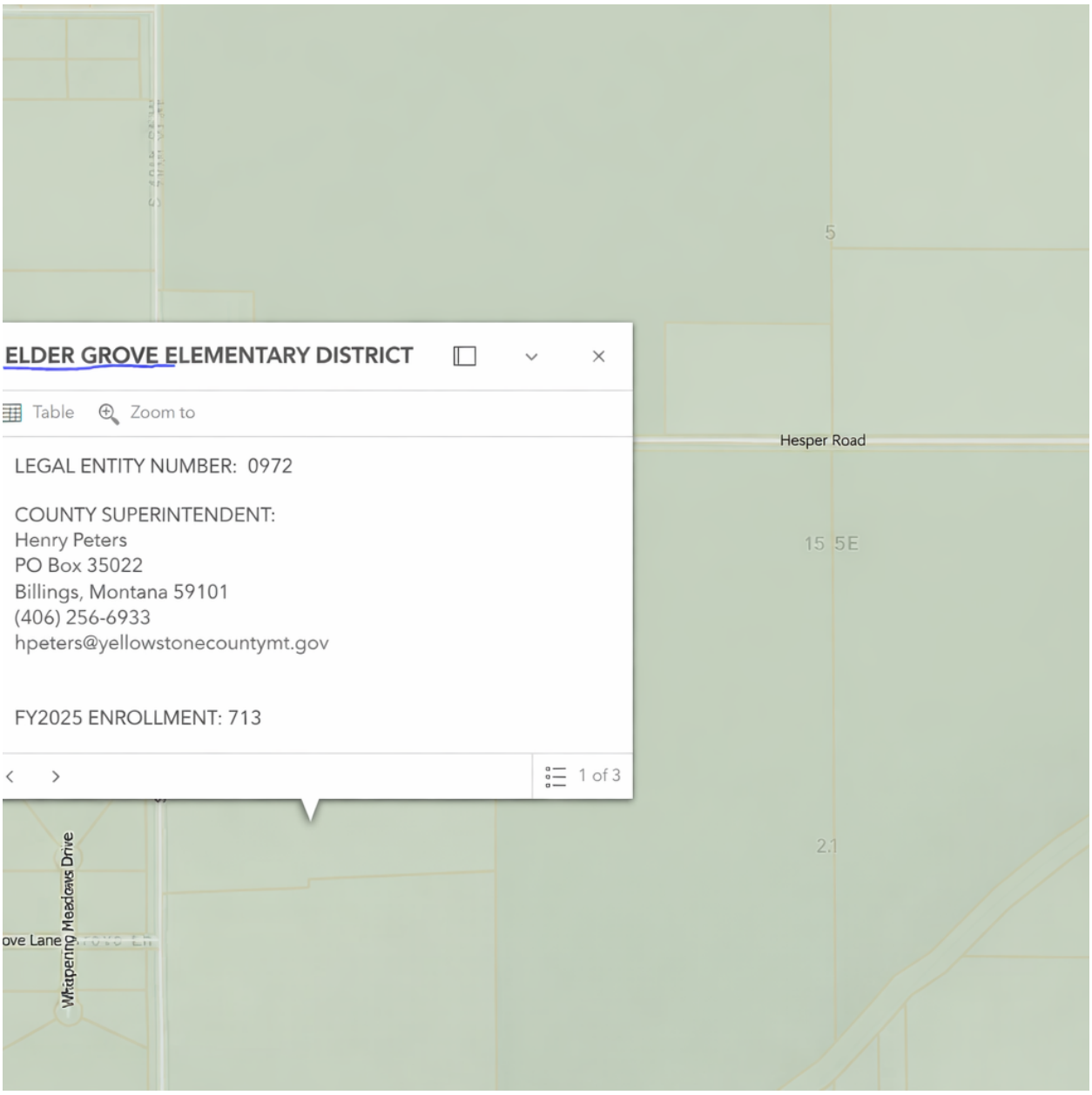

Figure 3: School District Map

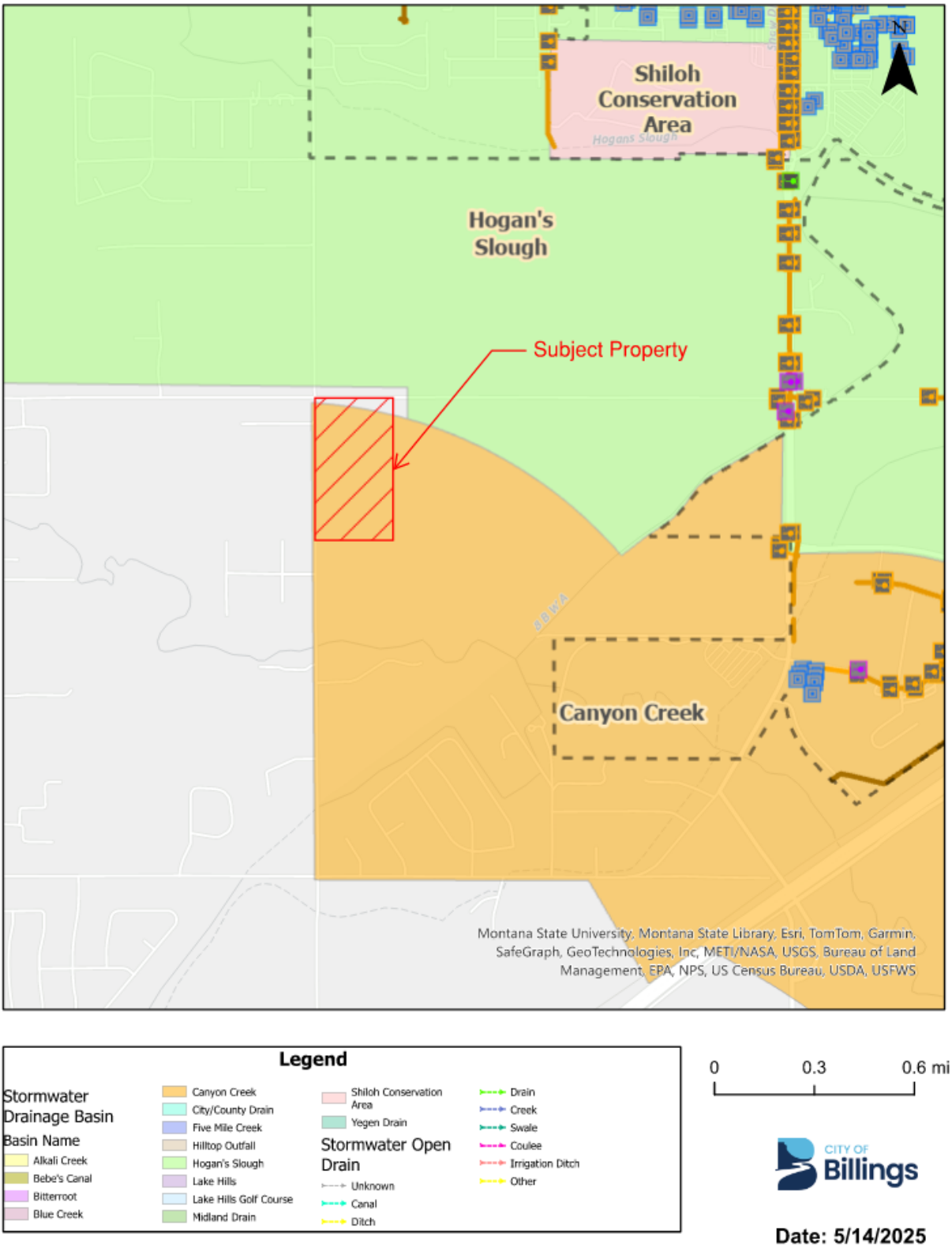

Figure 4: Stormwater Basin Map

FUTURE WATER STUB OUT EXTENT

48TH STREET WEST STORAGE

SANITARY SEWER EXTENT

(P) 8" SANITARY SEWER MAIN

(E) 8" SANITARY SEWER MAIN

FUTURE CIP WATER MAIN EXTENSION– SCHEDULED FOR 2026

KNIFE RIVER FACILITY APPROACH

HESPER ROAD

(E) SEWER MANHOLE (TYP.)

REBECCA SUBD.

48TH STREET WEST

PROPOSED MAJOR SUBDIVISION 52 ACRE MIXED COMMERCIAL AND RESIDENTIAL USE

CITY OF BILLINGS (NEW 2025) WATER TREATMENT PLANT

CITY OF BILLINGS PROPERTY

(E) 12" WATER MAIN

SHILOH ROAD

UNNAMED DITCH (NO DISCHARGE)

COUNTY COMMERCIAL

(P) SUBDIVISION BOUNDARY

BILLINGS BENCH WATER ASSOCIATION

CANYON CREEK

CANYON CREEK

SUMMER LANE

200 0 200 400

LEGEND

(E)	EXISTING
(P)	PROPOSED
	PROPERTY LINE
	ADJOINING PROPERTY
	ADJOINING PROPERTY
	ADJOINING PROPERTY
	ADJOINING PROPERTY
	FLOW ARROW
	COUNTY ZONE 2

VICINITY MAP
NOT TO SCALE

REVISIONS

No.	DESCRIPTION	DATE

IMEG
PH: 406.248.9000
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550 N. 31ST STREET
SUITE 111
BILLINGS, MT 59101

48TH/HESPER SUBDIVISION
BILLINGS MONTANA

OVERALL CONCEPT PLAN

IMEG Project No: 25002148

File Name: 25002148-EXH4.dwg

Field Book No:

Drawn By: GW

Checked By: KK

Date: 2/26/2026

EXH1

Sheet 1 of 3

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REVISIONS

No.	DESCRIPTION	DATE

IMEG
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IMEG Project No:	25002148
File Name:	25002148-EXH4.dwg
Field Book No:	
Drawn By:	GW
Checked By:	DG
Date:	2/26/2026

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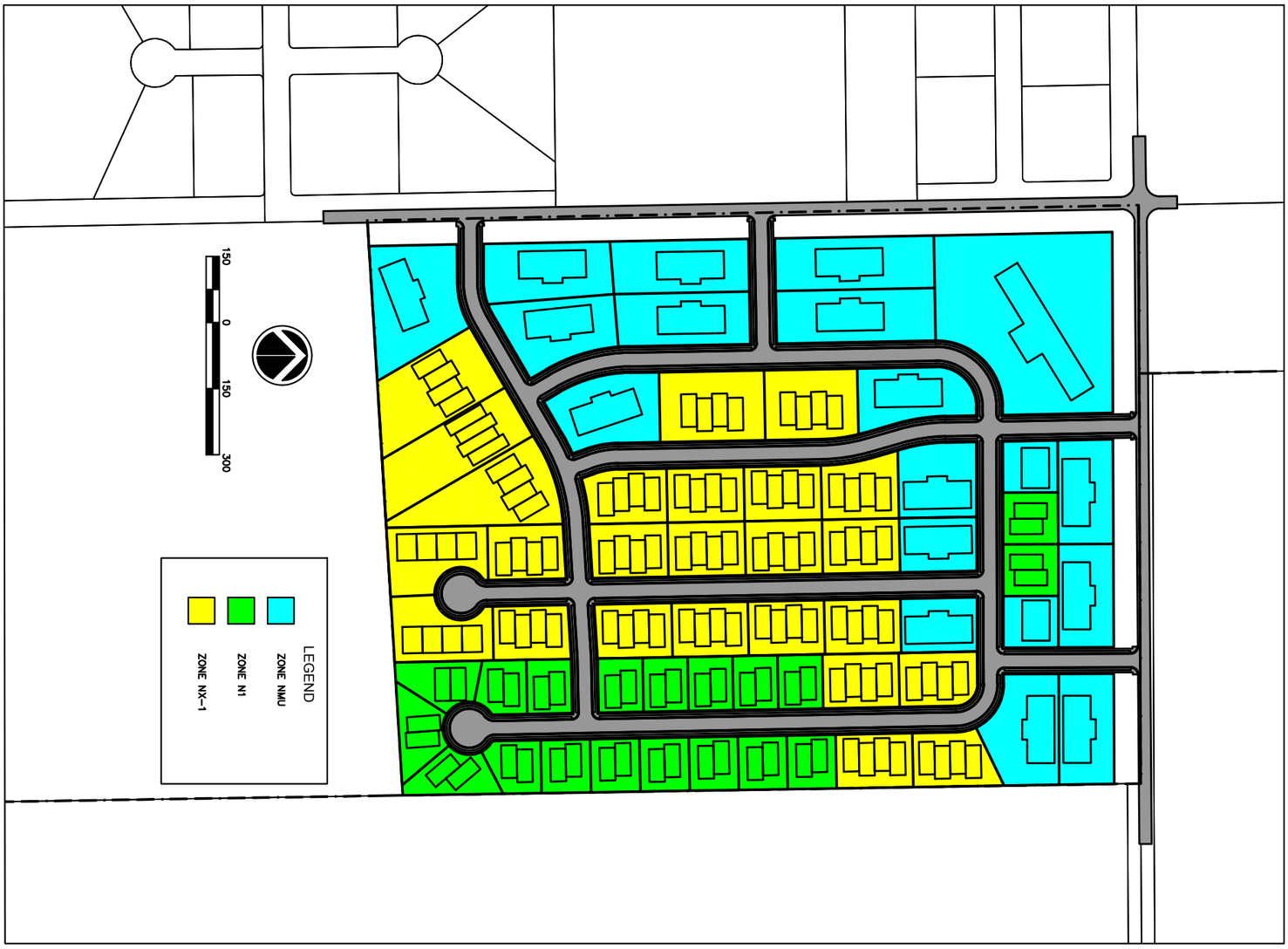

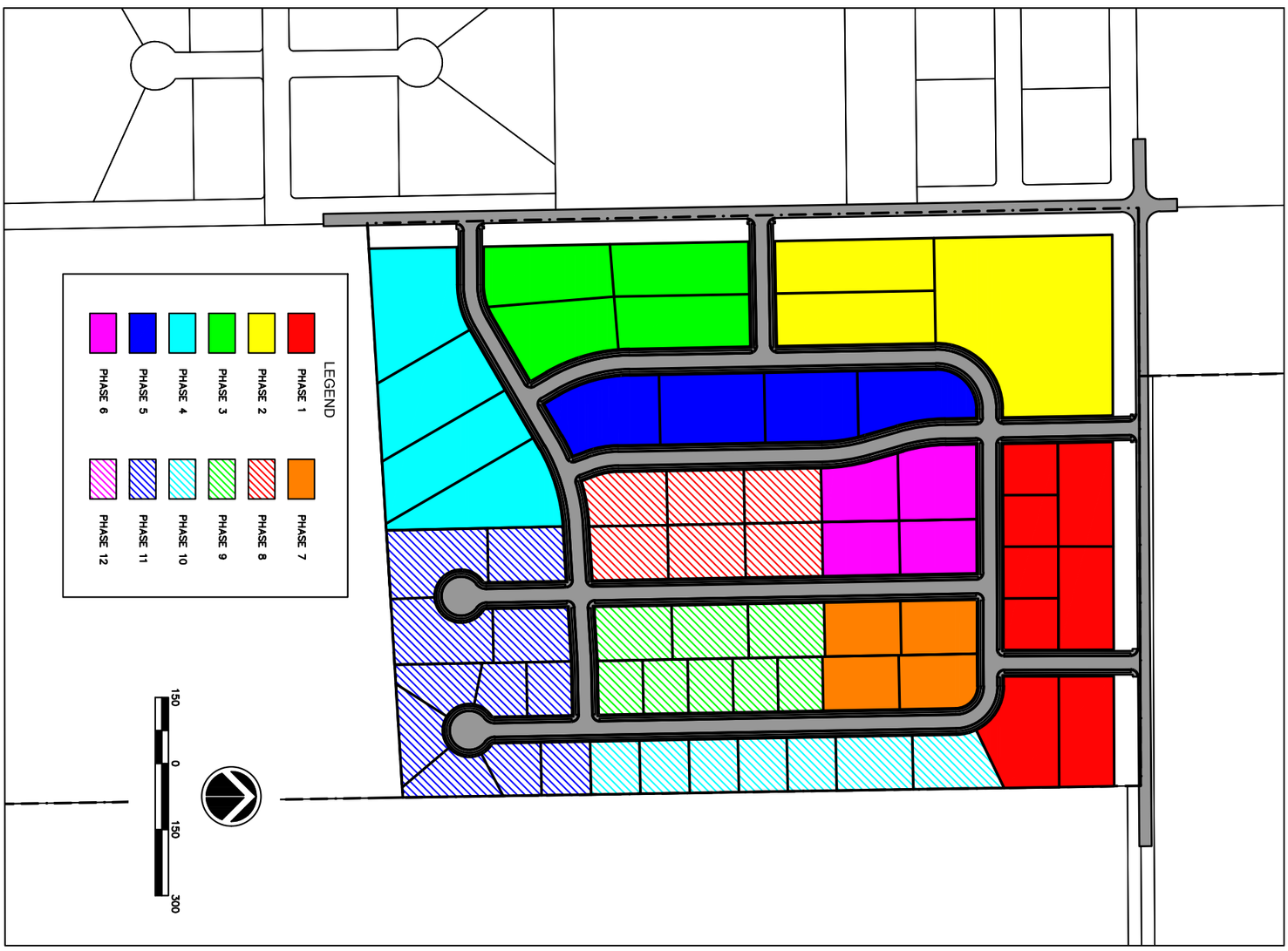

48TH/HESPER SUBDIVISION

BILLINGS MONTANA

ZONE/PHASE CONCEPT PLAN

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REVISIONS

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IMEG Project No: 25002148

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Date: 2/26/2026

EXH3

Sheet 3 of 3