BILLINGS AIRPORT ROAD & MAIN STREET Concept

TECHNICAL MEMORANDUM

Date: September 30, 2015

Project #: 18460

To: Wade Salyards, PE (Montana Department of Transportation)

From: Brett Korporaal, Jacqueline Gulczynski, and Andy Daleiden, PE

Project: Airport Rd/Main St – Billings, CM 1099(102), UPN 8718000

Subject: Environmental Scan

The purpose of this memorandum is to identify potential environmental constraints within the study area to inform the development and evaluation of alternatives during the concept phase, and for future insights as this project moves into final design. **This environmental scan is not meant to be used as or substituted for a comprehensive environmental investigation.** If improvement options are forwarded from this study into project development, an analysis for compliance with the National and Montana Environmental Policy Acts (NEPA and MEPA) will be completed as part of the Montana Department of Transportation (MDT) project development process. Information provided in this report may be forwarded into the NEPA/MEPA process at that time. Detailed findings of the environmental scan are documented in this memorandum, which includes the following:

- Introduction
- Land Use and Zoning
- Parks and Recreation Areas
- Cultural and historical Resources
- Socioeconomics and Environmental Justice
- Known/Suspected Hazardous Materials
- Air Quality
- Threatened/Endangered Species
- Soil and Geology
- Noise
- Wetlands
- Surface Water, Groundwater, and Floodplains
- Permits Required

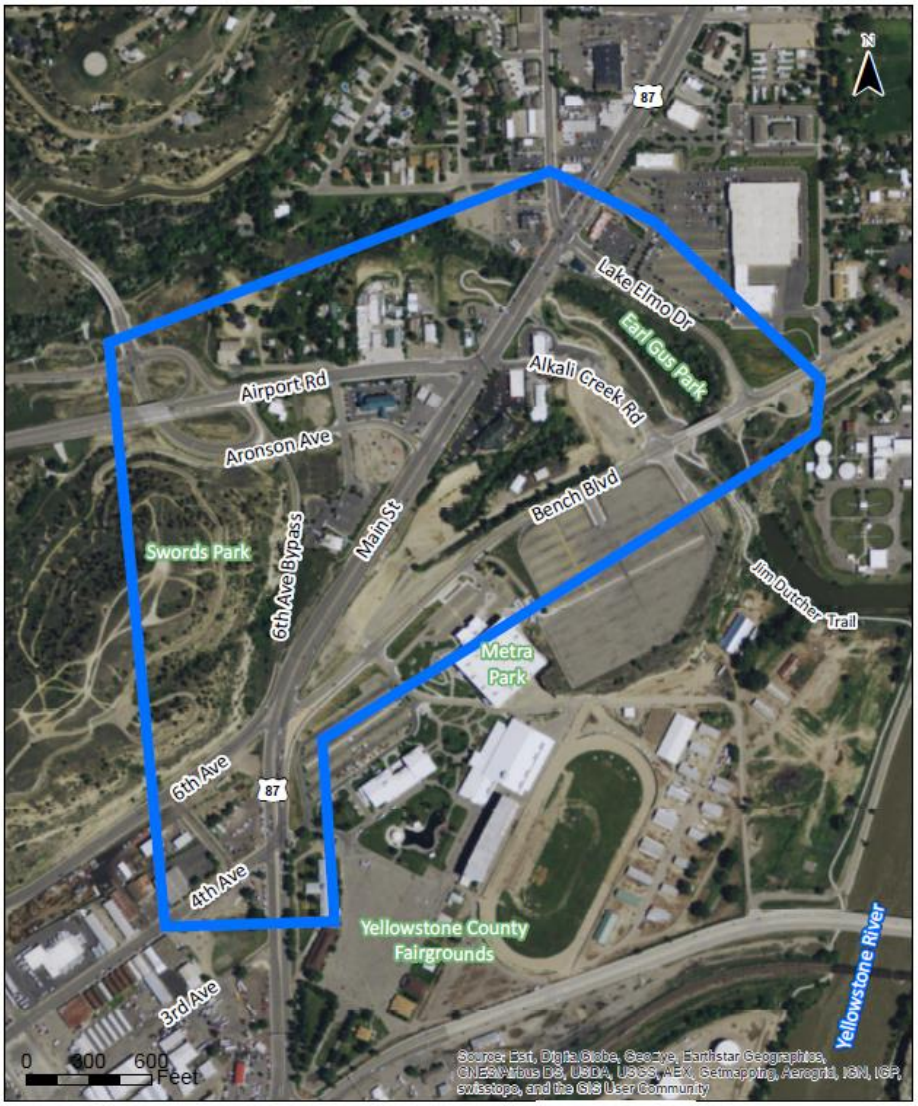
Introduction

MDT has kicked off a transportation study for the Airport Road and Main Street intersection in Billings, MT. This study will investigate transportation alternatives to improve operations and safety for all users in the study area. This project consists of two phases. Phase 1 is the transportation study to identify the proposed project for design and construction, Phase 2 would include design and construction of the project.

The Airport Road and Main Street intersection is located 2 miles northeast of downtown Billings, just north of Rimrock Auto Arena at MetraPark. The intersection's location is a critical junction for freight

routes along Airport Road and Main Street corridors. The intersection is located on the Camino Real International Trade Corridor that connects Canada, United States, and Mexico. In addition to carrying high volumes of freight vehicles, Main Street and Airport Road serve as principal arterials that connect recreation, residential neighborhoods (Heights West and East), low density commercial, and light industrial land uses with downtown Billings and Interstate 90. Exhibit 1 highlights the study area.

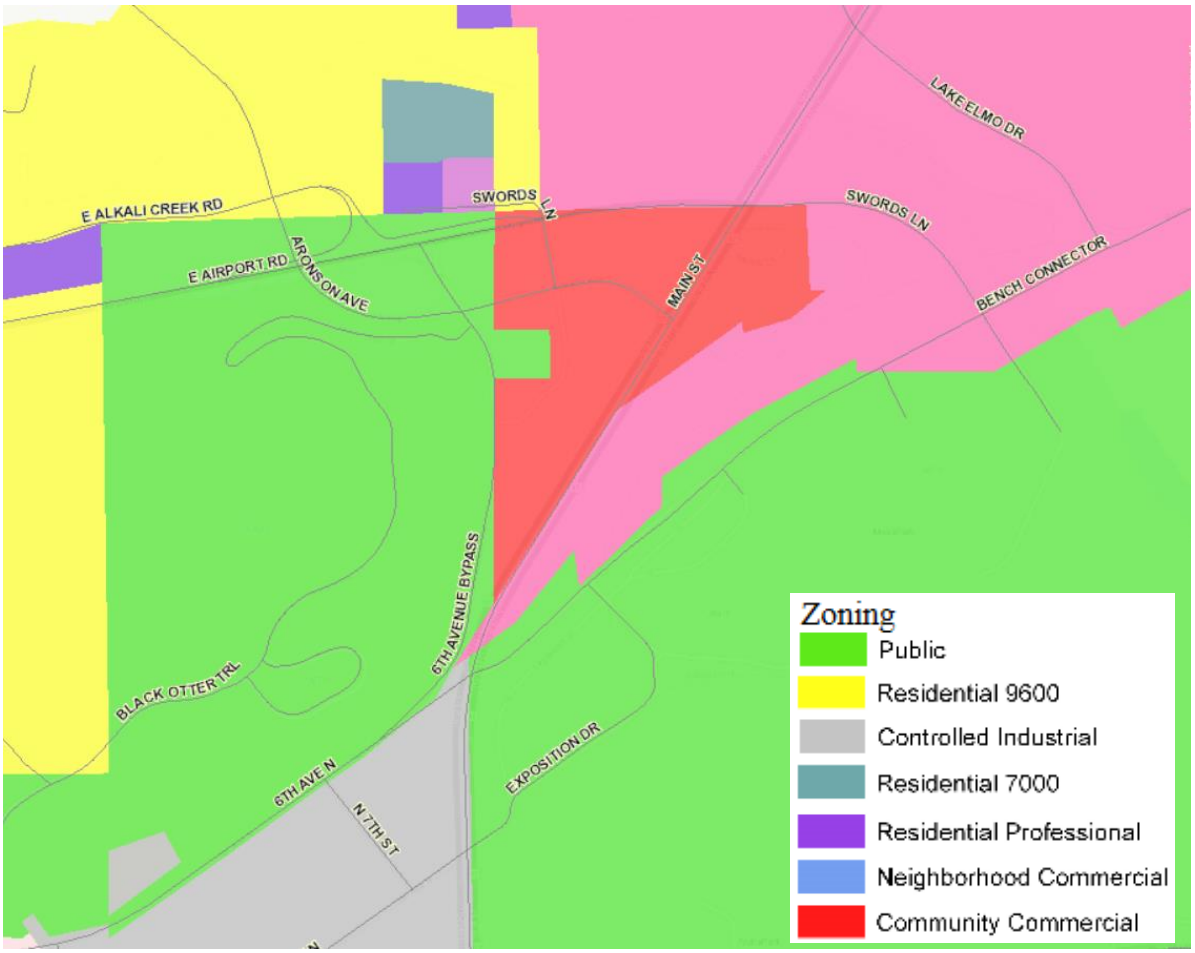
Exhibit 1. Study Area



Land Use and Zoning

The majority of the study area is located within the city limits of Billings, MT; however, MetraPark and the Yellowstone County Fairgrounds are both owned by the County. The existing zoning within the study area is a mix of industrial, public, highway and community commercial, and residential. Exhibit 2 illustrates the existing zoning for the study area (Reference 1).

Exhibit 2. Existing Land Use and Zoning



Source: Yellowstone County; http://www.co.yellowstone.mt.gov/mapping/webgis.asp, June 2015.

There are several restaurants, gas stations, and hotels near the intersection of Airport Road and Main Street. The southeast region of the study area is occupied by MetraPark and the Yellowstone County Fairgrounds. This entertainment and trade center facility hosts a wide variety of events (e.g. concerts, rodeos, sporting games, trade shows) throughout the year. The northern region of the study area is occupied by commercial and residential uses. The southwest region of the study area includes the Swords Rimrock Park, which has a mix of multiuse trails and points of interest.

Parks and Recreation Areas

Exhibit 3 illustrates the location of parks and recreation areas in the study area.

Swords Park, owned by the City of Billings is a 60-acre natural area park located in the southwest region of the study area. The park provides trails for hiking and biking as well as views of downtown Billings and the Yellowstone River. The entrance to Swords Park is serviced by Aronson Avenue on the west side of the study area. Swords Park is a Section 4(f) property (Reference – Billings-Airport Road

Environmental Assessment, MT (009); CN 4743, October 2005). For reference, Section 4(f) properties are publicly owned parks, recreation areas, or wildlife and waterfowl refuges of national, state, or local significance, and historic resources eligible for listing on the National Register of Historic Places or are locally significant.

Exhibit 3. Existing Parks and Recreation Areas

Source: Google Maps (2015). [Airport Rd/Main St, Billings, Montana] [Street Map]. Retrieved from https://www.google.com/maps/place/Billings,+Mt/@45.8012038,-108.4796361,1092m/data=!3m1!1e3!4m2!3m1!1s0x53486f8888fa9d97:0x373556d4f179b550!6m1!1e1.

Earl Guss Park, owned by Yellowstone County, is located in the northeast region of the study area. The park provides open space in an urban setting. The Alkali Creek Trails traverses through the park providing another area for hiking and biking and viewing wildlife. Earl Guss Park is a Section 4(f) property (Reference – Bench Boulevard-Billings, MT 1036(1) Categorical Exclusion Concurrence Request, September 27, 2010.).

MetraPark, owned by Yellowstone County, is an entertainment and trade center hosting events throughout the year. It contains an arena, exhibition buildings, grandstand with entertainment and athletic facilities, and an extensive network of paved circulation roads, access roads, and parking

areas. The building and parking lot are located in the southeast region of the study area. MetraPark is a Section 4(f) property (Reference – Bench Boulevard-Billings, MT 1036(1) Categorical Exclusion Concurrence Request, September 27, 2010.).

The National Land and Water Conservation Fund Act (LWCFA), or Section 6(f) was created to help protect and preserve outdoor recreational assets. "Section 6(f) of the Land and Water Conservation Act requires that the conversion of lands or facilities acquired with Land and Water Conservation Act funds be coordinated with the Department of Interior." (Reference 2) According to the LWCFA, the study area does not contain land that receives funding from the Land and Water Conservation Act.

Cultural and Historic Resources

Three historical sites are located in the study area and described in Table 1. *Attachment A includes the full list of historical sites in Billings, Montana.*

Table 1. Historical Properties

Property	Address	City	Listing Date	Smithsonian Number	National Register Reference Number	Site Type
Black Otter Trail	Black Otter Trail	Billings	1/5/2007	24YL1551	06001224	Trail/Road
Boothill Cemetery	North of Billings	Billings	4/17/1979	24YL0755	79001428	Cemetery
Larry's Overlook	SE Quadrant of Airport Rd/Main St Intersection	Billings	3/21/2003	24YL608	-	Rock Shelter and Pictographs

Source: National Register of Historic Places in Montana.

Two of the nationally registered historical properties are located within close proximity to the Airport Road/Main Street intersection. The Boothill Cemetery is located approximately two tenths of a mile southwest of the intersection, while Larry's Overlook is located in the southeast quadrant of the intersection.

There are also two cultural buildings in the study area: Rainbow Dance School and MetraPark. Rainbow Dance School is located on Swords Lane, in an isolated location. MetraPark is an entertainment and trade center facility located on Main Street in the southeast region of the study area.

Socioeconomics and Environmental Justice

Table 2, on the next page, shows data from the 2010 U.S. Census Bureau population, housing, income, and poverty data for the City of Billings, Yellowstone County, and State.

The population of Billings is 89,847 which accounts for approximately 70 percent of the County's population. Billings has less housing units per person than Yellowstone County. This may indicate more single family homes in the city in comparison to the county. Both the median income and per capita income are fairly consistent throughout the state, county, and city. The poverty line for the City and County are lower than the State. *Attachment B includes the U.S. Census data.*

There are a small number of single family homes in the study area. Most of the homes appear to be on the northwest section of the study area.

Table 2. Socioeconomic Characteristics for Montana, Yellowstone County, and City of Billings

Area	Population	Housing Units	Median Household Income	Per Capita Income	Persons Below Poverty Line (%)
Montana	989,415	485,771	$46,230	$25,373	15.2
Yellowstone County	147,975	64,883	$51,342	$27,761	12.3
City of Billings	104,170	46,317	$46,317	$27,544	14.1

Source: U.S. Census Bureau, Washington D.C., 2010.

Table 3 provides the demographic data provided by the U.S. Census Bureau for Montana, Yellowstone County, and the City of Billings.

Table 3. Demographic Data for Montana, Yellowstone County, and City of Billings

Area	White	Black/ African American	American Indian & Alaskan Indian	Asian	Native Hawaiian or other Pacific Islander	Hispanic or Latino
Montana	**89.5%**	**0.6%**	**6.5%**	**0.8%**	**0.1%**	**3.3%**
Yellowstone County	**91.5%**	**0.8%**	**4.3%**	**0.7%**	**0.1%**	**5.1%**
City of Billings	**89.6%**	**0.8%**	**4.4%**	**0.7%**	**0.1%**	**5.2%**

Source: U.S. Census Bureau, Washington D.C., 2010.

Known/Suspected Hazardous Materials

The Environmental Protection Agency (EPA) has created a map that is used to determine possible hazardous material locations throughout the country. There were five facilities within the study area that were identified by the EPA. Table 4 summarizes these facilities which are also detailed in Montana's Department of Environmental Quality *Hazardous Waste Handlers Report*. Out of the five identified sites, only three remain active. *Attachment C includes detailed information on these potentially hazardous sites, documented in the Hazardous Waste Handlers Report.*

Table 4. EPA Identified Potential Hazardous Materials

Name	Address	Description	Status
Knife River Billings - Sword Park Trail	Top of Rimrock, Billing MT	ICIS-NPDES NON-MAJOR	Inactive
CMG Construction - Alkali Creek Multi Use Path	Main St along Alkali Creek, Billings, MT	ICIS-NPDES NON-MAJOR	Inactive
Rehbein Enterprises - Aronson Bypass Trail at Swords Park	Alkali Creek Rd & Aronson Ave, Billings, MT	ICIS-NPDES NON-MAJOR	Active
Conocophillips Co Glacier Dist Office	Hwy 87 E, Billings, MT	Petroleum Stations, Pipeline Transportation of Petroleum Products	Active
Pacific Recycling Billings	777 4th Ave. Billings, MT	Recyclable Materials Wholesaler, Scrap and Waste Materials	Active

Source: Montana Department of Environmental Quality, Hazardous Waste Handlers Report, May 31, 2015.

The Montana Department of Environmental Quality (MDEQ) maintains a database of both active and closed Underground Storage Tanks (UST) and Leaking Underground Storage Tanks (LUST) across the state. The study area includes three (3) underground storage tank sites, which are located on the southwest corner of Airport Road and Main Street (236 Main St. Billings, MT). All of the tanks are active and referenced by facility ID 5608904. The tanks were last inspected on February 27, 2015.

There are hazardous waste handlers identified within the study area. According to the location indicated in the MDEQ database, the sites are Conocophillips Co Glacier District Office and Pacific Recycling Billings. Both locations are located in the southern area of the study area. Pacific Recycling Billings is located on 4th Street and Conocophillips is located on the corner of 4th Street and Main Street.

Air Quality

The EPA establishes regulatory requirements and various ambient air quality standards. Between the years 1978-2002 Billings was classified as a nonattainment area for Carbon Monoxide (CO) by the EPA (Reference 3). Nonattainment areas are those that have air quality worse than the National Ambient

Air Quality Standards (NAAQS). According to the Billings Urban Area Long Range Transportation Plan (LRTP), the City of Billings is currently listed as a "limited maintenance plan" attainment area for CO, and is therefore meeting the NAAQS standards for CO. However, the City of Billings is classified as a nonattainment area for Sulfur Dioxide (SO2) according to the 2010 Sulfur Dioxide Standards created by the EPA (Reference 4). While the City has been actively working to lift the nonattainment and referencing the consistent decrease in SO2 levels, the EPA has not complied. The city claims the high levels of SO2 are because of there are 7 main industrial sources of SO2 in the county. The nonattainment requires the city to have stricter control. If federal funds are used for design and/or construction, an air quality screening analysis and documentation process may be required to address air quality for the proposed project.

Construction of the proposed alternatives may cause short-term impacts to air quality in the study area. Dust created from demolition, clearing and grubbing, cut-and-fill operations, and road construction can all cause PM10 emissions. Heavy duty diesel engines used during construction can cause Fine Particulate Matter (PM2.5), CO, and Greenhouse Gas emissions.

Threatened/Endangered Species

The U.S. Fish & Wildlife Service (USFWS) has identified the species listed in Table 5 as endangered, threatened, protected, and candidate species of plants and wildlife in Yellowstone County.

Table 5. Threatened and Endangered Species in Yellowstone County

Species (Scientific Name)	Status
Black-footed Ferret (*Mustela nigripes*)	Listed Endangered
Whooping Crane (*Grus americana*)	Listed Endangered
Red Knot (*Calidirs canutus rufa*)	Listed Threatened
Greater Sage-Grouse (*Centrocercus urophasianus*)	Candidate
Sprague's Pipit (*Anthus spragueii*)	Candidate

Source: United States Department of the Interior – Fish and Wildlife Services, Endangered Species Act, April 2015.

Soil and Geology

A soils report from the U.S. Geological Survey Web Soil Survey database shown in Exhibit 4 reveals the soil types in the project area. There are a large variety of soils and none are classified as Prime or Unique Farmland within the project area. Prime Farmland is defined by the Department of Agriculture as "land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses. It could be cultivated land, pastureland, forestland, or other land, but it is not urban or built-up land or water areas" (Reference 5). *Attachment D includes a list of the soil types within the study area.*

Exhibit 4. Soil Survey of Study Area

Source: United States Department of Agriculture, http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

Montana is known for its seismic activity. While the majority of the fault lines are on the western half of the state, Billings experienced its first recorded earthquake in 2014. While it was only a 2.2 magnitude earthquake, design considerations should be made for seismic activity (Reference 6).

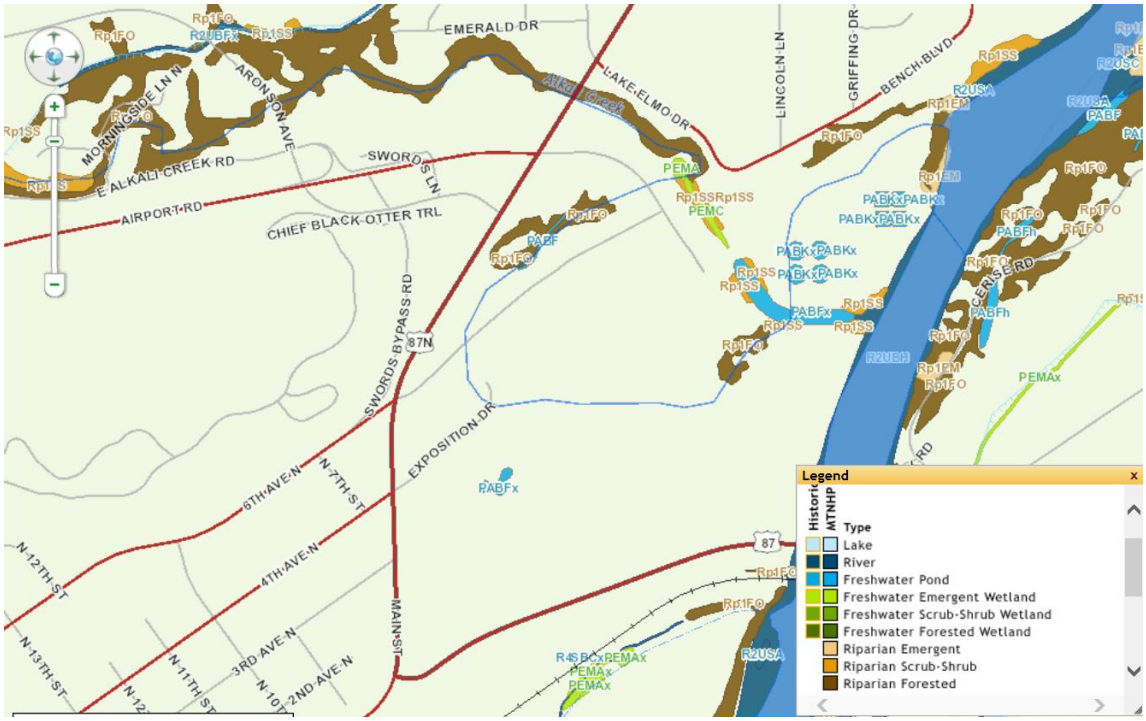
Noise

Swords Park is classified as an Activity Level A under the Noise Abatement Criteria described in the *MDT Noise Analysis and Abatement Policy*. Activity Level A is described as "lands on which serenity and quietness are of extraordinary significance and serve an important public need" (Reference 7). A noise study may be necessary if the alternative design options disturb Swords Park.

Wetlands

The study area includes multiple natural water sources. Alkali Creek flows through Earl Gus Park and into the Yellowstone River. Exhibit 5 illustrates the creek and wetlands areas within the study area.

Exhibit 5. Natural Heritage Map Viewer of Wetlands within the Study Area



Source: Montana Natural Heritage Program, http://mtnhp.org/mapviewer/?t=8.

Surface Water, Groundwater, and Floodplains

Exhibit 6 illustrates that several small ponds are located throughout the study area; however, the only classified surface water in the area is Alkali Creek.

Exhibit 6. Floodplain for Study Area

Source: Yellowstone County; http://www.co.yellowstone.mt.gov/mapping/webgis.asp, June 2015.

Billings is positioned on the alluvial valley of the Yellowstone River. The river flows just east of the project area. The alluvial deposits are generally the source of groundwater for the city. Most of the wells in the city range from 10 to 20 feet deep. Since the project area is in close proximity to the river, the water table is high. Groundwater recharge for alluvial valley comes from precipitation, irrigation, and irrigation from canal leakage (Reference 8).

The Federal Emergency Management Agency (FEMA) released the Executive Order 11988: Floodplain Management in 1977. It requires "federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative." The order requires agencies to avoid building in floodplains unless absolutely necessary. The floodplain for the study area is illustrated in Exhibit 6. *Attachment E contains the full Executive Order 11988: Floodplain Management.*

Permits Required

This project is currently in the study phase. Therefore, no permits are required at this time. However, future construction of the selected alternative is likely to require several permits, including a floodplain permit for Yellowstone County, Clean Water Act 404 permit from the USACE, and Air Quality and Hazardous Material permits from the MDEQ. The final permit list will be based on the type of project, project timing, source of funding, and other items that might require additional permitting.

If you have any questions, please contact Andy Daleiden via email at adaleiden@kittelson.com or by phone at 208.338.2683.

References

1. "Yellowstone County WebGIS." Montana GIS Department, 2009-2014. Web. <http%3A%2F%2Fwww.co.yellowstone.mt.gov%2Fmapping%2Fwebgis.asp>.
2. "Land and Water Conservation Fund." 69 (2008): n. pag. National Park Service. PDF.
3. "Primary National Ambient Air Quality." (2011): n. pag. Environmental Protection Agency, 22 June 2010. PDF.
4. "Summary Nonattainment Area Population Exposure Report | Green Book | US EPA." *Green Book*. Environmental Protection Agency, 30 Jan. 2015. Web. <http://www.epa.gov/airquality/greenbook/popexp.html>.
5. "Prime Farmlands." Natural Resources Conservation Services, n.d. Web. <http%3A%2F%2Fwww.nrcs.usda.gov%2Fwps%2Fportal%2Fnrcs%2Fdetailfull%2Fpr%2Fsoils%2F%3Fcid%3Dnrcs141p2_037285>.
6. "Recent Earthquake Near Billings, Montana, United States." *Earthquakes in Billings, Montana, United States*. U.S. Geological Survey, n.d. Web. <http://earthquaketrack.com/us-mt-billings/recent>.
7. Montana Department of Transportation. *Traffic Noise Analysis and Abatement Policy*. Helena: Environmental Service Bureau, 27 Apr. 2011. PDF.
8. Mulder, Rick, and Christian Schmidt. "Groundwater, Surface Water, and Sediment Monitoring for Pesticides and Nitrate in Billings, Montana." (n.d.): n. pag. Montana Department of Agriculture, Apr. 2011. Web.

Attachment A City of Billings' Historical Sites

Property Name	Address	City	Listing Date	Smithsonian Number	NR reference number	Property Type	Associated Multiple Properties Document
Acme Building	109-111 N Broadway	Billings	11/9/2005	24YL1620	05001279	Building	
Armour Cold Storage	1 S Broadway	Billings	7/7/2004	24YL1583	04000670	Building	
Babcock Theatre Building	2nd Ave North and Broadway	Billings	4/9/2013	24YL1880	13000153	Building	
Billings Chamber of Commerce	303 N 27th St	Billings	1/20/1972	24YL0259	72000739	Building	
Billings Historic District	Roughly bounded by N. 23rd and N. 25th Sts. 1st and Montana Aves.	Billings	3/13/1979	24YL0752	09001427	District	
Billings Old Town Historic District	Generally bounded by Montana Ave on the N; S 26th on the E; 1st Ave S on the S; and S 30th St on the W	Billings	9/16/2010	24YL1856	10000753	District	
Billings Townsite Historic District (Boundary Increase)	2600(2528),2604-2606,2608,2610-2614, and 2624 Montana Ave.	Billings	4/21/2006	24YL0752	06000333	District	
Billings West Side School	415 Broadwater Ave	Billings	3/20/2002	24YL0196	02000214	Building	
Black Otter Trail	Black Otter Trail	Billings	1/5/2007	24YL1580	06001224	District	
Boothill Cemetery	N of Billings	Billings	4/17/1979	24YL0755	79001428	District	

Dude Rancher Lodge	415 N. 29th St.	Billings	7/22/2010	24YL1732	10000489	Building	
Electric Building	113-115 Broadway	Billings	3/1/2002	24YL1539	02000105	Building	
Fire House No 2	201 E. 30th St	Billings	2/29/1980	24YL0261	80002436	Building	
Garfield School	3212 1st Ave. South	Billings	10/3/2012	24YL1612	12000830	Building	
Hoskins Basin Archeological District	Address Restricted	Billings	11/20/1974	24YL1031	47001100	District	
L&L Building	2624 Minnesota Ave.	Billings	12/19/2008	24YL0699	08001227	Building	
Masonic Temple	2806 Third Ave N	Billings	4/17/1986	24YL0260	86000847	Building	
Moss, Preston B., House	Address Restricted	Billings	4/30/1982	24YL0263	82003181	Building	
North, Austin, House	622 N 29th St.	Billings	11/23/1977	24YL0258	77000822	Building	
Northern Hotel	19 North Broadway	Billings	6/12/2103	24YL1849	13000369	Building	
O'Donnell, D., House	105 Clark Ave	Billings	11/23/1977	24YL0265	77000823	Building	
Oliver Building	2702 Montana Ave.	Billings	12/19/2008	24YL0700	08001228	Building	
Parmly Billings Memorial Library	2822 Montana Ave	Billings	10/26/1972	24YL0075	72000740	Building	
Pictograph Cave	7 mi SE of Billings in Indian Caves Park	Billings	10/15/1966	24YL0001	66000439	District	NHL
Prescott Commons	Rimrock Rd	Billings	4/30/1982	24YL0264	82003182	Building	
Ruth, Harold and Marion, Residence	111 Emerald Drive	Billings	6/21/07	24YL1630	07000578	Building	

US Post Office and Courthouse	2602 First Ave N.	Billings	3/14/1986	24YL0754	86000678	Building	US Post Offices in Montana 1900—1941
Yegen, Christian, House	208 S 35th St.	Billings	10/1/1979	24YL0262	79003779	Building	
Yegen, Peter, House	209 S 35th St.	Billings	4/16/1980	24YL0266	80002437	Building	

MONTANA CULTURAL RESOURCES INFORMATION SYSTEM FORM

Form No. 1 **Locational Information**

1.1 Smithsonian Number: 24YL608 **1.2 Field Designation:** Larry's Overlook **1.3 County:** Yellowstone

1.4 Township/Range/Section: T1N, R26E, Section 27, SW ¼ SW ¼ NW ¼ SE ¼

1.5 UTM Coordinates: Zone 12, 696151mE, 5075043mN

1.6 Property Type/Types: Rock shelter and pictographs.

1.7 Recording Status: Mapped, photographed (2003). Reportedly tested (1972).

1.8 Administrative Surface Ownership: Unknown

1.9 Mineral Ownership:

1.10 Project Name: 6th Ave – Bench Boulevard

1.11 General Narrative Description of Property:

The site consists of a shallow sandstone overhang along a cliff face along the north bank of Alkali Creek approximately 1/3 mile upstream from its confluence with the Yellowstone River. The site reportedly contains two pictographs and a petroglyph (Loendorf 1972). These have faded over the past thirty years, now visible only as red stains on the cliff wall. The course of Alkali Creek has shifted closer to the rock shelter, the floor of which now is quite marshy.

1.12 Map Reference: Billings East, Montana 7.5' Quad Map

1.13 City, Town: Billings, Montana

1.14 Narrative of Access: From the northeast end of the Metra parking lot drop into coulee north of Metra and proceed west along north edge. County shops are located on the south of the creek. The site is located along sandstone cliffs north of the creek, below a hotel. The fence line from the original site map is no longer extant, but a fence post at the site remains.

MONTANA CULTURAL RESOURCES INFORMATION SYSTEM FORM

Form No. 2 **Environmental Setting**

2.1 Geographic Setting: Sandstone rimrock **Site No.:** 24YL407

2.2 Elevation: 3188 ft above sea level

2.3 View Aspect: southwest

2.4 Major River Drainage: Yellowstone River

2.5 Minor Drainage: Alkali Creek

2.6 Available Water Sources: Yellowstone River

2.7 Vegetation-Regional: Needle-and-thread grass, blue grama grass, western wheatgrass, broom snakeweed, sagebrush, yucca, juniper, cottonwood.

2.8 Vegetation-Local: grasses, sedges, willows, and weeds.

2.9 Sediments Deposition: Loam and sandy loam at the base of the rimrock, which is composed of Cretaceous Eagle Sandstone

2.10 Surface Visibility/Season of Survey: 10% / Spring

2.11 Other Factors Pertaining to Site:

MONTANA CULTURAL RESOURCES INFORMATION SYSTEM FORM

Form No. 3 Assessment, Recording Management Documentation

3.1 Condition/Integrity **Site No.:** 24YL608
Pictographs are in poor condition

3.2 Evaluation: Does this property meet National Register criteria for eligibility?
Yes [ ] No [ ]

3.3 Evaluation Procedure/Justification:

Unknown. The site has reportedly received archaeolgical testing, but there is no documentation regarding the results. It appears unlikely that the site is eligible.

3.4 Recommendations:

3.5 Site Located By: **Date:**

3.6 Site Recorded By: **Date:**

3.7 Site Form Update and Revision By: Patrick Walker-Kuntz **Date:** 3/21/2003

3.8 Federal or State Permit No.:

3.9 Publication(s)/Report Where Site is Described:
Walker-Kuntz, Patrick
2003 *Sixth Ave North to Bench Boulevard Cultural Resource Inventory Report.* Field Research Services for Morrison-Maierle, Inc. Billings, Montana.

3.10 Artifact Repository:

3.11 Field Notes/Maps/Photo Repository:

3.12 Photo and Accession Numbers:

*****************FOR SHPO USE ONLY*****************

Management Data: **Formal Determination of Eligibility:**
_____**Undetermined** **Date:**_____
_____**Formally determined ineligible for NRHP** **Date:**_____
_____**Formal consensus determination, eligible for NRHP** **Date:**_____
_____**Listed on NRHP** **Date:**_____

Updated Management Information:_____ **Date:**_____

MONTANA CULTURAL RESOURCES INFORMATION SYSTEM FORM

Form No. 4 **Prehistoric Site Description** **Site No.:** 24YL608

4.1 Site Dimensions:

_____ **Estimated** _____ **Measured**

4.2 Feature Descriptions:

See 1.11

Amateur archaeologists from Billings initially discovered site 24YL608 in 1970. This small rock shelter and pictograph site was revisited in 1972 by Dr. Larry Loendorf, then at the University of North Dakota (Loendorf 1972). The site was subsequently tested by the UND crew, but no report was produced (Sharrock 1974). The site boundaries of the site were apparently extended by Heidenreich in 1977, resulting in a designation of 24YL608a (the original site) and 24YL608b (Heidenreich 1978). Heidenreich test excavated 24YL608b, but the results and recommendations were somewhat contentious (Heidenreich 1990). This portion of the site no longer exists due to commercial development.

4.3 Artifact Descriptions/Collections:

Unknown

4.4 Subsurface Testing: Loendorf 1972. Heidenriech 1978

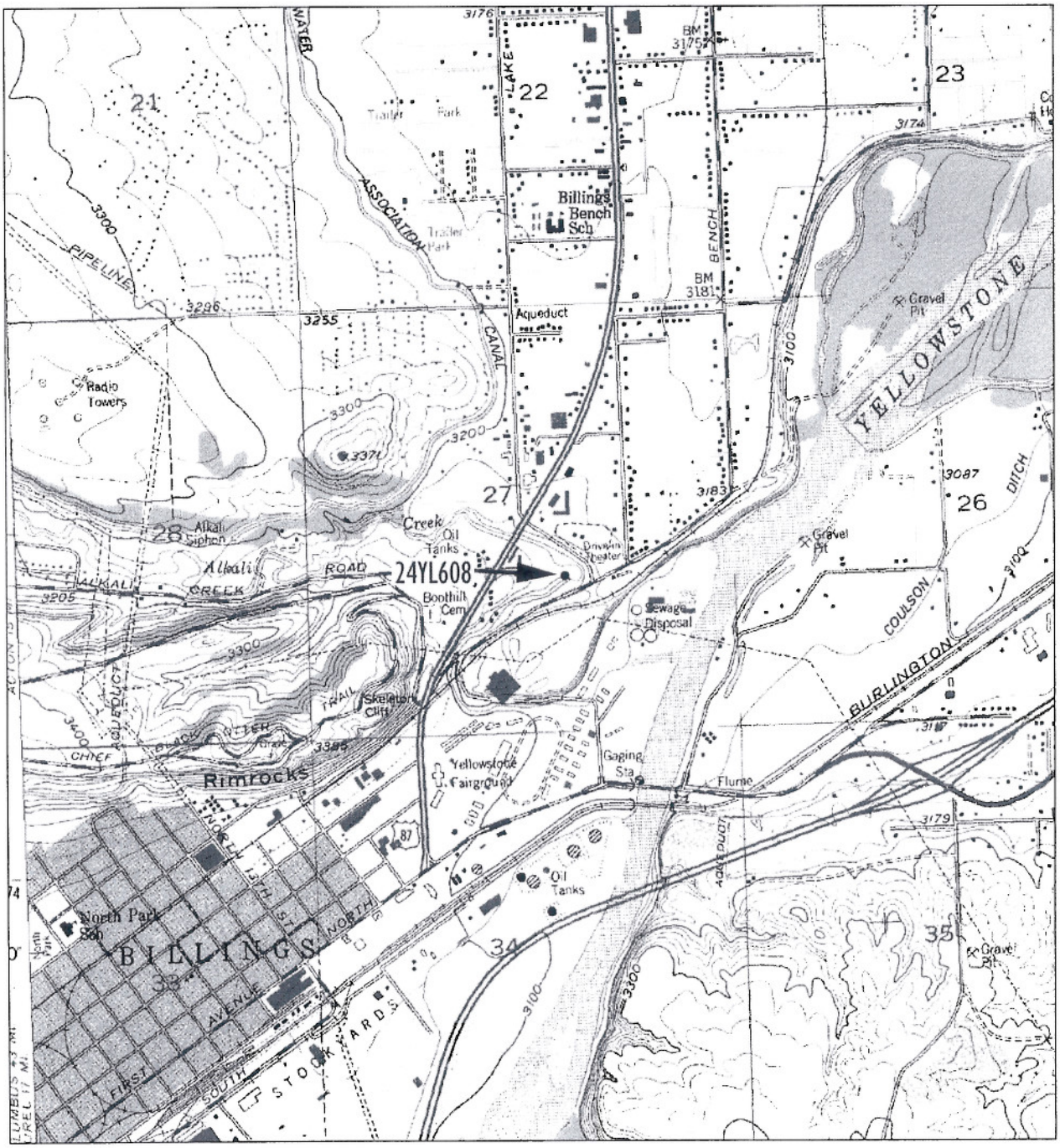
4.5 Cultural/Temporal Classification:

Assessment based on:

4.6 Site Function/Interpretation:

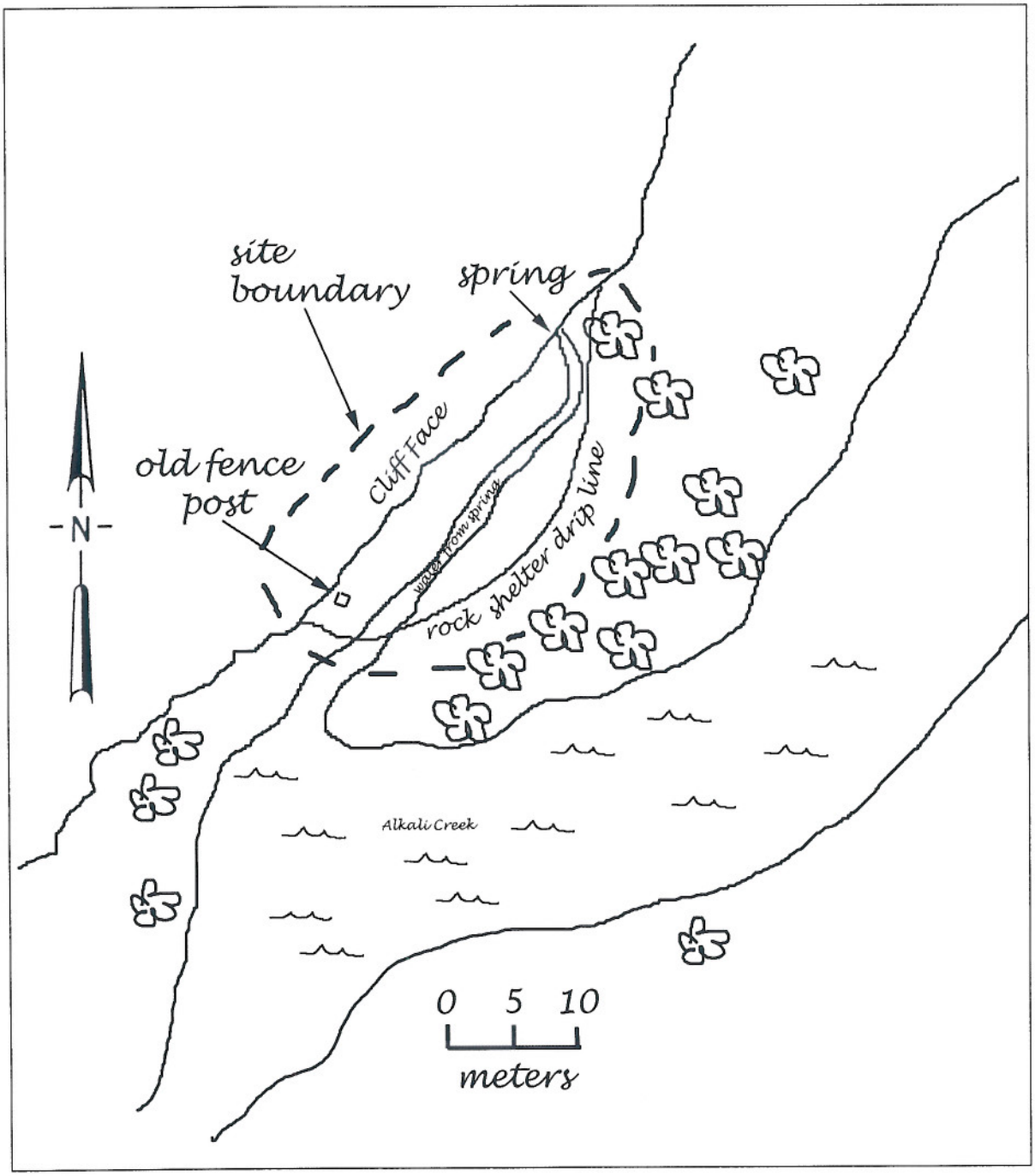
Form No. 6 **Topographic Map** **Site No.:** 24YL608

MONTANA CULTURAL RESOURCES INFORMATION SYSTEM FORM



MONTANA CULTURAL RESOURCES INFORMATION SYSTEM FORM

Form No. 7 **Site Sketch Map** **Site No.:** 24YL608



Legend

Map Drawn By PWK

Scale

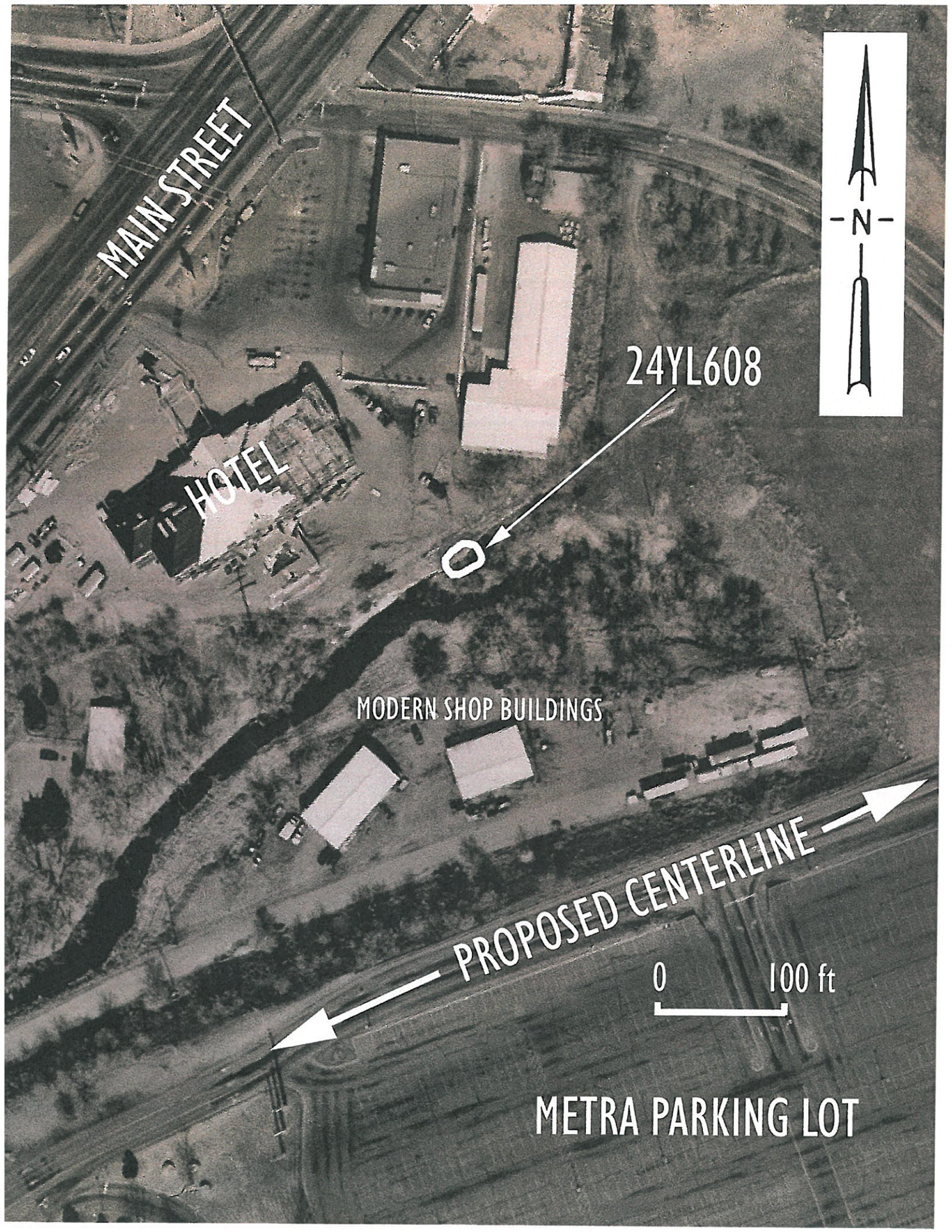
Date 3/21/2003

MONTANA CULTURAL RESOURCES INFORMATION SYSTEM FORM

SITE OVERVIEW

View to the west

View to the east


MAIN STREET
N
24YL608
HOTEL
MODERN SHOP BUILDINGS
PROPOSED CENTERLINE
0
100 ft
METRA PARKING LOT

Attachment B U.S. Census Bureau Data 2010

Montana

Want more? **Browse data sets for Montana**

People QuickFacts	Montana	USA
Population, 2014 estimate	1,023,579	318,857,056
Population, 2013 estimate	1,014,864	316,497,531
Population, 2010 (April 1) estimates base	989,417	308,758,105
Population, percent change - April 1, 2010 to July 1, 2014	3.5%	3.3%
Population, percent change - April 1, 2010 to July 1, 2013	2.6%	2.5%
Population, 2010	989,415	308,745,538
Persons under 5 years, percent, 2013	6.0%	6.3%
Persons under 18 years, percent, 2013	22.1%	23.3%
Persons 65 years and over, percent, 2013	16.2%	14.1%
Female persons, percent, 2013	49.8%	50.8%
White alone, percent, 2013 (a)	89.5%	77.7%
Black or African American alone, percent, 2013 (a)	0.6%	13.2%
American Indian and Alaska Native alone, percent, 2013 (a)	6.5%	1.2%
Asian alone, percent, 2013 (a)	0.8%	5.3%
Native Hawaiian and Other Pacific Islander alone, percent, 2013 (a)	0.1%	0.2%
Two or More Races, percent, 2013	2.5%	2.4%
Hispanic or Latino, percent, 2013 (b)	3.3%	17.1%
White alone, not Hispanic or Latino, percent, 2013	87.0%	62.6%
Living in same house 1 year & over, percent, 2009-2013	83.6%	84.9%
Foreign born persons, percent, 2009-2013	2.0%	12.9%
Language other than English spoken at home, pct age 5+, 2009-2013	4.4%	20.7%
High school graduate or higher, percent of persons age 25+, 2009-2013	92.1%	86.0%
Bachelor's degree or higher, percent of persons age 25+, 2009-2013	28.7%	28.8%
Veterans, 2009-2013	94,404	21,263,779
Mean travel time to work (minutes), workers age 16+, 2009-2013	18.0	25.5
Housing units, 2013	485,771	132,802,859
Homeownership rate, 2009-2013	68.3%	64.9%

Housing units in multi-unit structures, percent, 2009-2013	16.8%	26.0%
Median value of owner-occupied housing units, 2009-2013	$184,200	$176,700
Households, 2009-2013	405,525	115,610,216
Persons per household, 2009-2013	2.39	2.63
Per capita money income in past 12 months (2013 dollars), 2009-2013	$25,373	$28,155
Median household income, 2009-2013	$46,230	$53,046
Persons below poverty level, percent, 2009-2013	15.2%	15.4%

Business QuickFacts	**Montana**	**USA**
Private nonfarm establishments, 2013	36,529[1]	7,488,353
Private nonfarm employment, 2013	350,196[1]	118,266,253
Private nonfarm employment, percent change, 2012-2013	1.8%[1]	2.0%
Nonemployer establishments, 2012	84,767	22,735,915

Total number of firms, 2007	114,398	27,092,908
Black-owned firms, percent, 2007	0.2%	7.1%
American Indian- and Alaska Native-owned firms, percent, 2007	2.0%	0.9%
Asian-owned firms, percent, 2007	0.6%	5.7%
Native Hawaiian and Other Pacific Islander-owned firms, percent, 2007	S	0.1%
Hispanic-owned firms, percent, 2007	1.0%	8.3%
Women-owned firms, percent, 2007	24.6%	28.8%

Manufacturers shipments, 2007 ($1000)	10,638,145	5,319,456,312
Merchant wholesaler sales, 2007 ($1000)	8,202,782	4,174,286,516
Retail sales, 2007 ($1000)	14,686,854	3,917,663,456
Retail sales per capita, 2007	$15,343	$12,990
Accommodation and food services sales, 2007 ($1000)	2,079,426	613,795,732
Building permits, 2013	4,854	990,822

Geography QuickFacts	**Montana**	**USA**
Land area in square miles, 2010	145,545.80	3,531,905.43
Persons per square mile, 2010	6.8	87.4
FIPS Code	30	

Yellowstone County, Montana

Want more? **Browse data sets for Yellowstone County**

People QuickFacts	Yellowstone County	Montana
Population, 2014 estimate	155,634	1,023,579
Population, 2013 estimate	154,060	1,014,864
Population, 2010 (April 1) estimates base	147,975	989,417
Population, percent change - April 1, 2010 to July 1, 2014	5.2%	3.5%
Population, percent change - April 1, 2010 to July 1, 2013	4.1%	2.6%
Population, 2010	147,972	989,415
Persons under 5 years, percent, 2013	6.5%	6.0%
Persons under 18 years, percent, 2013	23.6%	22.1%
Persons 65 years and over, percent, 2013	15.0%	16.2%
Female persons, percent, 2013	51.0%	49.8%
White alone, percent, 2013 (a)	91.5%	89.5%
Black or African American alone, percent, 2013 (a)	0.8%	0.6%
American Indian and Alaska Native alone, percent, 2013 (a)	4.3%	6.5%
Asian alone, percent, 2013 (a)	0.7%	0.8%
Native Hawaiian and Other Pacific Islander alone, percent, 2013 (a)	0.1%	0.1%
Two or More Races, percent, 2013	2.7%	2.5%
Hispanic or Latino, percent, 2013 (b)	5.1%	3.3%
White alone, not Hispanic or Latino, percent, 2013	87.4%	87.0%
Living in same house 1 year & over, percent, 2009-2013	82.7%	83.6%
Foreign born persons, percent, 2009-2013	1.7%	2.0%
Language other than English spoken at home, pct age 5+, 2009-2013	4.0%	4.4%
High school graduate or higher, percent of persons age 25+, 2009-2013	92.3%	92.1%
Bachelor's degree or higher, percent of persons age 25+, 2009-2013	28.7%	28.7%
Veterans, 2009-2013	13,513	94,404
Mean travel time to work (minutes), workers age 16+, 2009-2013	19.0	18.0
Housing units, 2013	64,883	485,771

Homeownership rate, 2009-2013	68.8%	68.3%
Housing units in multi-unit structures, percent, 2009-2013	19.9%	16.8%
Median value of owner-occupied housing units, 2009-2013	$181,500	$184,200
Households, 2009-2013	61,023	405,525
Persons per household, 2009-2013	2.40	2.39
Per capita money income in past 12 months (2013 dollars), 2009-2013	$27,761	$25,373
Median household income, 2009-2013	$51,342	$46,230
Persons below poverty level, percent, 2009-2013	12.3%	15.2%

Business QuickFacts	**Yellowstone County**	**Montana**
Private nonfarm establishments, 2013	5,521	36,529[1]
Private nonfarm employment, 2013	68,676	350,196[1]
Private nonfarm employment, percent change, 2012-2013	3.1%	1.8%[1]
Nonemployer establishments, 2012	11,195	84,767
Total number of firms, 2007	15,726	114,398
Black-owned firms, percent, 2007	0.4%	0.2%
American Indian- and Alaska Native-owned firms, percent, 2007	2.0%	2.0%
Asian-owned firms, percent, 2007	0.8%	0.6%
Native Hawaiian and Other Pacific Islander-owned firms, percent, 2007	F	S
Hispanic-owned firms, percent, 2007	S	1.0%
Women-owned firms, percent, 2007	25.0%	24.6%
Manufacturers shipments, 2007 ($1000)	5,739,955	10,638,145
Merchant wholesaler sales, 2007 ($1000)	2,772,504	8,202,782
Retail sales, 2007 ($1000)	2,840,723	14,686,854
Retail sales per capita, 2007	$20,284	$15,343
Accommodation and food services sales, 2007 ($1000)	361,729	2,079,426
Building permits, 2013	2,097	4,854

Geography QuickFacts	**Yellowstone County**	**Montana**
Land area in square miles, 2010	2,633.29	145,545.80
Persons per square mile, 2010	56.2	6.8
FIPS Code	111	30
Metropolitan or Micropolitan Statistical Area	Billings, MT Metro Area	

Billings (city), Montana

Want more? **Browse data sets for Billings (city)**

People QuickFacts	Billings	Montana
Population, 2013 estimate	109,059	1,014,864
Population, 2010 (April 1) estimates base	104,190	989,417
Population, percent change - April 1, 2010 to July 1, 2013	4.7%	2.6%
Population, 2010	104,170	989,415
Persons under 5 years, percent, 2010	7.0%	6.3%
Persons under 18 years, percent, 2010	22.6%	22.6%
Persons 65 years and over, percent, 2010	15.0%	14.8%
Female persons, percent, 2010	51.7%	49.8%
White alone, percent, 2010 (a)	89.6%	89.4%
Black or African American alone, percent, 2010 (a)	0.8%	0.4%
American Indian and Alaska Native alone, percent, 2010 (a)	4.4%	6.3%
Asian alone, percent, 2010 (a)	0.7%	0.6%
Native Hawaiian and Other Pacific Islander alone, percent, 2010 (a)	0.1%	0.1%
Two or More Races, percent, 2010	2.9%	2.5%
Hispanic or Latino, percent, 2010 (b)	5.2%	2.9%
White alone, not Hispanic or Latino, percent, 2010	86.9%	87.8%
Living in same house 1 year & over, percent, 2009-2013	80.0%	83.6%
Foreign born persons, percent, 2009-2013	1.8%	2.0%
Language other than English spoken at home, pct age 5+, 2009-2013	4.4%	4.4%
High school graduate or higher, percent of persons age 25+, 2009-2013	92.7%	92.1%
Bachelor's degree or higher, percent of persons age 25+, 2009-2013	30.5%	28.7%
Veterans, 2009-2013	9,530	94,404
Mean travel time to work (minutes), workers age 16+, 2009-2013	17.3	18.0
Housing units, 2010	46,317	482,825
Homeownership rate, 2009-2013	63.3%	68.3%
Housing units in multi-unit structures, percent, 2009-2013	25.8%	16.8%
Median value of owner-occupied housing units,	$180,900	$184,200

2009-2013		
Households, 2009-2013	44,134	405,525
Persons per household, 2009-2013	2.33	2.39
Per capita money income in past 12 months (2013 dollars), 2009-2013	$27,544	$25,373
Median household income, 2009-2013	$48,908	$46,230
Persons below poverty level, percent, 2009-2013	14.1%	15.2%

Business QuickFacts	**Billings**	**Montana**
Total number of firms, 2007	11,697	114,398
Black-owned firms, percent, 2007	0.5%	0.2%
American Indian- and Alaska Native-owned firms, percent, 2007	1.7%	2.0%
Asian-owned firms, percent, 2007	1.0%	0.6%
Native Hawaiian and Other Pacific Islander-owned firms, percent, 2007	F	S
Hispanic-owned firms, percent, 2007	S	1.0%
Women-owned firms, percent, 2007	26.7%	24.6%

Manufacturers shipments, 2007 ($1000)	D	10,638,145
Merchant wholesaler sales, 2007 ($1000)	2,225,969	8,202,782
Retail sales, 2007 ($1000)	2,406,272	14,686,854
Retail sales per capita, 2007	$23,638	$15,343
Accommodation and food services sales, 2007 ($1000)	335,832	2,079,426

Geography QuickFacts	**Billings**	**Montana**
Land area in square miles, 2010	43.41	145,545.80
Persons per square mile, 2010	2,399.5	6.8
FIPS Code	06550	30
Counties	Yellowstone County	

Attachment C Potentially Hazardous Sites

Hazardous Waste Handlers Report

EPA ID Number: MT0000000356

Facility Name: PACIFIC RECYCLING BILLINGS

Report Last Updated: 05/31/2015

I. Owner and/or Operator Information

Owner(s):	PACIFIC RECYCLING BILLINGS
	MONTANA RAIL LINK INC
Operator(s):	PACIFIC RECYCLING BILLINGS
	MONTANA RAIL LINK INC

II. Facility Location

Address:	777 4TH AVE N, BILLINGS 59101	**Latitude:**	45.7968
County:	YELLOWSTONE	**Longitude:**	-108.4837

III. Other Business Information

NAICS Code	Description
42393	Recyclable Material Merchant Wholesalers

Other Business Names Used at this Location as noted in DEQ CEDARS database

PACIFIC RECYCLING BILLINGS

IV. Hazardous Waste Generation

Current Status	Active
Generator Classification	Large Quantity Generator
Last Reporting Year	1996
Hazardous Waste Amount Generated in Last Reporting Year (Tons)	984

Hazardous Waste Code	Waste Description

D008 LEAD

V. Hazardous Waste Permit Or Equivalent

Has a Hazardous Waste Permit or equivalent Enforcement Order been issued to this facility

NO

VI. Report Explanation

Data for each report is taken from the hazardous waste handler section of DEQ's CEDARS database. This dataset contains information provided by the handlers during registration and annual waste generation reporting. This data is maintained and updated by the Hazardous Waste Section of the Waste and Underground Tank Management Bureau of DEQ's Permitting and Compliance Division and should only be used for planning purposes. More detailed, hardcopy information and reports are available from the Hazardous Waste Section and may be viewed or obtained during regular business hours. Data found in these reports is updated the first of every month.

Facility Information

- *EPA ID Number* - A unique code assigned to each generator, transporter, and treatment, storage, or disposal facility to facilitate identification and tracking of chemicals or hazardous waste.
- *Facility Name* - The current name of the business.

Owner and/or Operator Information

- *Owner* - Current facility owner or owners.
- *Operator* - Current facility operator or operators.

Facility Location

- Address, county, and geographic location of the facility.

Other Business Information

- *North American Industry Classification System (NAICS)* - The industry type as defined in the NAICS classification system for manufacturing establishments.
- *Other Business Names Used at this Location* - former businesses located at this facility address which reported hazardous waste generation activities to DEQ.

Hazardous Waste Generation Activities

- *Status*
    - Active - handler is generating hazardous waste at the facility
    - Inactive - handler is not currently generating hazardous waste at the facility
    - Closed - handler is out of business and no longer generating hazardous waste
- *Generator Classification*
    - Small Quantity - generates between 220 pounds and 2,200 pounds (100 kg and 1,000 kg) of non-acute hazardous waste or no more than 2.2 pounds (1 kg) of acute hazardous waste in a given month

    - Large Quantity - generates more than 2,200 pounds (1,000 kg) of non-acute hazardous waste or more than 2.2 pounds (1 kg) of acute hazardous waste in a given month
    - Conditionally Exempt Small Quantity - generates less than 220 pounds (100 kg) of non-acute hazardous waste or no more than 2.2 pounds of acute hazardous waste in a given month.
    - Non-Generators - facilities that did not handle or generate hazardous waste during the latest reporting year, are closing, or going to an inactive status
- *Last Reporting Year* - the latest year in which the handler submitted an annual hazardous waste generation report.
- *Hazardous Waste Amount Generated in Last Reporting Year (Tons)* - the amount, in tons, of hazardous waste the handler generated at this facility during the last reporting year.
- *Hazardous Waste Types Generated in Last Reporting Year* - hazardous waste types are derived from hazardous waste codes and descriptions in 40 CFR 261 Subpart B Criteria for Identifying the Characteristics of Hazardous Waste and for Listing Hazardous Waste.

<u>Hazardous Waste Permit or Equivalent</u>

- *Yes* - the site is required to have a hazardous waste permit or other enforcement mechanism to operate or maintain post-closure care of a hazardous waste management unit and conduct facility-wide corrective action.
- *No* - the site does not require a hazardous waste permit or other enforcement mechanism.

**For more information, please contact the Montana DEQ Hazardous Waste Section at 406-444-5300

Hazardous Waste Handlers Report

EPA ID Number: MTD081128589

Facility Name: CONOCOPHILLIPS CO GLACIER DIST OFFICE

Report Last Updated: 05/31/2015

New Search View Data in Map

I. Owner and/or Operator Information

Owner(s):	PHILLIPS 66 PIPELINE LLC
	PHILLIPS 66 COMPANY
Operator(s):	PHILLIPS 66 PIPELINE LLC
	PHILLIPS 66 COMPANY

II. Facility Location

Address:	338 HWY 87 E, BILLINGS 59101	**Latitude:**	45.7971
County:	YELLOWSTONE	**Longitude:**	-108.481

III. Other Business Information

NAICS Code	Description
42271	Petroleum Bulk Stations and Terminals

Other Business Names Used at this Location as noted in DEQ CEDARS database

CONOCO PIPELINE CO BILLINGS
CONOCO PIPELINE GLACIER OFFICE BILLINGS
CONOCOPHILLIPS CO GLACIER DIST OFFICE
PHILLIPS 66 PIPELINE LLC BILLINGS STATION
PHILLIPS 66 PIPELINE LLC YELLOWSTONE SEMINOE PUMP STATION

IV. Hazardous Waste Generation

Current Status	Active
Generator Classification	Large Quantity Generator
Last Reporting Year	2012

Hazardous Waste Amount Generated in Last Reporting Year (Tons)	14.74

Hazardous Waste Code	**Waste Description**
D008	LEAD

V. Hazardous Waste Permit Or Equivalent

Has a Hazardous Waste Permit or equivalent Enforcement Order been issued to this facility

NO

VI. Report Explanation

Data for each report is taken from the hazardous waste handler section of DEQ's CEDARS database. This dataset contains information provided by the handlers during registration and annual waste generation reporting. This data is maintained and updated by the Hazardous Waste Section of the Waste and Underground Tank Management Bureau of DEQ's Permitting and Compliance Division and should only be used for planning purposes. More detailed, hardcopy information and reports are available from the Hazardous Waste Section and may be viewed or obtained during regular business hours. Data found in these reports is updated the first of every month.

Facility Information

- *EPA ID Number* - A unique code assigned to each generator, transporter, and treatment, storage, or disposal facility to facilitate identification and tracking of chemicals or hazardous waste.
- *Facility Name* - The current name of the business.

Owner and/or Operator Information

- *Owner* - Current facility owner or owners.
- *Operator* - Current facility operator or operators.

Facility Location

- Address, county, and geographic location of the facility.

Other Business Information

- *North American Industry Classification System (NAICS)* - The industry type as defined in the NAICS classification system for manufacturing establishments.
- *Other Business Names Used at this Location* - former businesses located at this facility address which reported hazardous waste generation activities to DEQ.

Hazardous Waste Generation Activities

- *Status*
  - Active - handler is generating hazardous waste at the facility
  - Inactive - handler is not currently generating hazardous waste at the facility
  - Closed - handler is out of business and no longer generating hazardous waste

- *Generator Classification*
    - Small Quantity - generates between 220 pounds and 2,200 pounds (100 kg and 1,000 kg) of non-acute hazardous waste or no more than 2.2 pounds (1 kg) of acute hazardous waste in a given month
    - Large Quantity - generates more than 2,200 pounds (1,000 kg) of non-acute hazardous waste or more than 2.2 pounds (1 kg) of acute hazardous waste in a given month
    - Conditionally Exempt Small Quantity - generates less than 220 pounds (100 kg) of non-acute hazardous waste or no more than 2.2 pounds of acute hazardous waste in a given month.
    - Non-Generators - facilities that did not handle or generate hazardous waste during the latest reporting year, are closing, or going to an inactive status
- *Last Reporting Year* - the latest year in which the handler submitted an annual hazardous waste generation report.
- *Hazardous Waste Amount Generated in Last Reporting Year (Tons)* - the amount, in tons, of hazardous waste the handler generated at this facility during the last reporting year.
- *Hazardous Waste Types Generated in Last Reporting Year* - hazardous waste types are derived from hazardous waste codes and descriptions in 40 CFR 261 Subpart B Criteria for Identifying the Characteristics of Hazardous Waste and for Listing Hazardous Waste.

<u>Hazardous Waste Permit or Equivalent</u>

- *Yes* - the site is required to have a hazardous waste permit or other enforcement mechanism to operate or maintain post-closure care of a hazardous waste management unit and conduct facility-wide corrective action.
- *No* - the site does not require a hazardous waste permit or other enforcement mechanism.

**For more information, please contact the Montana DEQ Hazardous Waste Section at 406-444-5300

CMG CONSTRUCTION - ALKALI CREEK ROAD MAINTENANCE AND SLOPE RECONST CERCLIS SITE

EPA Identifier:
110041936091
CERCLIS ID: 110041936091
Location:
45.806751251221, -
108.50701141357

Address:
E ALKALI CREEK RD
BILLINGS, MT

Create Date: 31-AUG-10
Update Date: 07-FEB-13

SIC Codes: 1611, 1794
SIC Descriptions:
EXCAVATION WORK, HIGHWAY AND STREET CONSTRUCTION, EXCEPT ELEVATED HIGHWAYS
Programs: {NPDES}
Program Interests:
ICIS-NPDES NON-MAJOR

SWORDS PARK PATH PROJECT CERCLIS SITE

EPA Identifier:
110024877640
CERCLIS ID: 110024877640
Location:
45.801944, -108.531944

Address:
T1N R26E S30 SE
BILLINGS, MT

Create Date: 23-JUN-06
Update Date: 07-FEB-13

SIC Codes: 1611
SIC Descriptions:
HIGHWAY AND STREET CONSTRUCTION, EXCEPT ELEVATED HIGHWAYS
Programs: {NPDES,PCS}
Program Interests:
ICIS-NPDES NON-MAJOR, NPDES NON-

Attachment D Study Area Soil Types

Soil Types within the Study Area

Map Unit Symbol	Map Unit Name
285F	Blacksheep, dry Cabbart, dry-Rock outcrop complex, 8 to 60 percent slopes
Mo	McRae loam, 4 to 7 percent slopes
Mn	McRae loam, 0 to 1 percent slopes
UL	Urban land
Ld	Lambert soils, 7 to 35 percent slopes
Hm	Haverson and Lohmiller soils, channeled, 0 to 35 percent slopes
Hs	Hilly, gravelly land
GP	Gravel pit
Hd	Haverson silty clay loam, 0 to 1 percent slopes

Source: United States Department of Agriculture

Attachment E Executive Order 11988: Floodplain Management

Executive Order 11988: Floodplain Management

This page is about Executive Order 11988: Floodplain Management.

Executive Order 11988 requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative.

Description and Intent

Executive Order 11988 requires federal agencies to avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of flood plains and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative. In accomplishing this objective, "each agency shall provide leadership and shall take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by flood plains in carrying out its responsibilities" for the following actions:

- acquiring, managing, and disposing of federal lands and facilities;
- providing federally-undertaken, financed, or assisted construction and improvements;
- conducting federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulation, and licensing activities.

Summary of Requirements

The guidelines address an eight-step process that agencies should carry out as part of their decision-making on projects that have potential impacts to or within the floodplain. The eight steps, which are summarized below, reflect the decision-making process required in Section 2(a) of the Order.

1. Determine if a proposed action is in the base floodplain (that area which has a one percent or greater chance of flooding in any given year).
2. Conduct early public review, including public notice.
3. Identify and evaluate practicable alternatives to locating in the base floodplain, including alterative sites outside of the floodplain.
4. Identify impacts of the proposed action.

5. If impacts cannot be avoided, develop measures to minimize the impacts and restore and preserve the floodplain, as appropriate.
6. Reevaluate alternatives.
7. Present the findings and a public explanation.
8. Implement the action.

Among a number of things, the Interagency Task Force on Floodplain Management clarified the EO with respect to development in flood plains, emphasizing the requirement for agencies to select alternative sites for projects outside the flood plains, if practicable, and to develop measures to mitigate unavoidable impacts.