ENVIRONMENTAL ASSESSMENT

On an Application for an

OPENCUT MINING PERMIT

The Montana Department of Environmental Quality (DEQ) prepared this Environmental Assessment (EA) in accordance with requirements of the Montana Environmental Policy Act (MEPA). An EA functions to identify, disclose, and analyze the impacts of a proposed action. This document may disclose impacts that have no legislatively required mitigation measures, or over which there is no regulatory authority.

The state law that regulates gravel mining operations in Montana is the Opencut Mining Act. This law and the rules adopted thereunder place operational guidance and limitations on a project during its lifetime, and provide for the reclamation of land affected by opencut mining operations.

Local governments and other state agencies may have authority over different resources and activities under their regulations. Approval or denial of this Opencut Application will be based on a determination of whether or not the proposed operation complies with the Opencut Mining Act and the rules adopted thereunder. The DEQ approval of this application would not relieve the operator from the obligation to comply with any other applicable federal, state, or county statutes, regulations, or ordinances. The operator is responsible for obtaining any other permits, licenses, approvals, etc. that are required for any part of the proposed operation.

APPLICANT: Schellinger Construction Co.

COUNTY: Jefferson

SITE NAME: Pallister

DATE: January 2016

LOCATION: Section 32, T6N, R4W

PROPOSAL: The applicant proposes to permit a new, short-term gravel pit to mine, screen, crush, mill, stockpile, and transport 300,000 cubic yards of gravel from a 15.4-acre site located on the southern edge of Boulder, Montana. An asphalt plant would also be operated at the site.

A reclamation bond would be held by DEQ to ensure that final reclamation of the site to the uses of rangeland/pasture, seasonal pond, and industrial/commercial stockpile area. All of these uses presently exist on site. Reclamation would be completed by November 2020. This application contains all items required by the Opencut Mining Act and its implementing rules. Proponent commits to properly conducting opencut operations and would be legally bound by the permit.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	**POTENTIAL IMPACTS AND MITIGATION MEASURES**
1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:	The site is planar and flat, sloping slightly to the east. Portions of it have been altered by previous mining activity reclaimed to seasonal ponds. The site is situated on historic Boulder River floodplain deposits. The onsite soils consist primarily of Riverrun gravelly sandy loam, 0 to 2 percent slopes. The operator would replace 8 inches of soil and 0 inches of overburden. The site receives approximately 10 to 14 inches of precipitation per year. *Impacts:* An irreversible and irretrievable removal of gravel from the site would occur. A small impact to the quantity and quality of soils from salvaging, stockpiling, and resoiling activities also would occur, but this would not impair the capacity of the soils to support full reclamation. There are no unusual topographic, geologic, soil, or special reclamation considerations that would prevent reclamation success.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	**POTENTIAL IMPACTS AND MITIGATION MEASURES**
2. WATER QUALITY, QUANTITY AND DISTRIBUTION	The site is located on historic Boulder River floodplain. Portions of the modern floodplain (mapped as the 100-year floodplain) intersect the southern end of the proposed site. A floodplain permit was obtained from the local floodplain administration. Seasonal ponds and irrigation ditches exists onsite. Water would be used onsite for dust control, crushing, pug milling, and asphalt production. Water would be obtained from a source greater than 300 feet from the permit boundary. *Impacts:* The proposed activities would have a minimal effect on the quantity and quality of the surface and groundwater resources. *Cumulative:* Cumulative impacts on resources by this project would likely result in slightly higher water consumption in the long term given that the seasonal ponds are fed by irrigation ditches and the ponds will be larger than they are at present. However, this use is subject to appropriate water rights.
3. AIR QUALITY	Air quality standards are based upon the Clean Air Act of Montana and pursuant rules and are administered by the DEQ Air Resources Management Bureau (ARMB). Its program is approved by the Environmental Protection Agency (EPA). These rules and standards are designed to be protective of human health and the environment. Air quality permits would be required on the processing equipment before installment. Machinery, such as generators, crushers and asphalt plants, are individually permitted for allowable emissions. Best Available Control Technology (BACT) is the usual standard applied. Fugitive dust is that which blows off the pit floor, stockpiles, gravel roads, farm fields, etc. It is considered to be a nuisance but not harmful to health. *Impacts:* Air quality standards as set by the federal government and enforced by the ARMB would allow minimal detrimental air impacts.
4. VEGETATION COVER, QUANTITY AND QUALITY	There are no known rare or sensitive plants or cover types present in the site area. Onsite vegetation consists of crested wheatgrass, native wheatgrasses, cheatgrass, smooth brome, mullein, and minor cottonwood; and provides approximately 60-70% cover. The vegetation would be removed as soil is stripped and the site would be replanted with plant species compatible with the proposed reclaimed use. *Impacts:* No long term detrimental impacts to the vegetation would occur.
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:	Although the area is used primarily for pasture and aesthetic seasonal ponds, it also supports populations of deer, rodents, song birds, waterfowl, coyotes, foxes, raptors, insects and various other animal species. Population numbers for these species are not known. *Impacts:* The proposed mine is expected to temporarily displace some individual species and it is likely that the site would be re-inhabited following reclamation to similar habitat.
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:	The Montana Natural Heritage Program (MNHP) lists the following four species of concern in the vicinity of the site: **Bald eagle** (*Haliaeetus leucocephalus*) is a bird of prey found in North America that is most recognizable as the national bird and symbol of the United States of

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	**POTENTIAL IMPACTS AND MITIGATION MEASURES**
	America. This sea eagle has two known sub-species and forms a species pair with the white-tailed eagle. Its range includes most of Canada and Alaska, all of the contiguous United States and northern Mexico. It is found near large bodies of open water with an abundant food supply and old-growth trees for nesting. **Veery** *(Catharus fuscescens)* is an 18-cm long bird with a reddish brown dorsum, white belly, gray flanks, and a straight slim bill. They are a summer resident in Montana and generally inhabit damp, deciduous forests and riparian habitat. The Veery is a ground forager, with a diet including insects and fruit. **Little Brown Myotis** (*Myotis lucifugus*), also known as Little Brown Bat, has a cinnamon-buff to dark brown color above, and buffy to pale gray below. This species is resident year-round in Montana, but may be partially migratory because known winter aggregations are much smaller than the apparent size of summer populations. They are found in a variety of habitats across a large elevation gradient. They commonly forage over water and mostly feed on insects. They roost in attics, barns, bridges, snags, loose bark, and bat houses. These bats can live more than 30 years. Females have one young per year. **Hoary Bat** (*Lasiurus cinereus*) is a large lasurine (20 to 35 g) with long pointed wings and heavily-furred interfemoral membrane. Hoary Bat is the largest bat species found in Montana. Its dorsal pelage in is a mixture of browns and grays, tinges with white, giving the bat a frosted or hoary appearance. Hoary Bat is migratory and only a summer resident in Montana, and occupies forested areas. They are reported to favor moths but stomach contents of 7 individuals captured in Carter County revealed beetles, moths, true bugs, leafhoppers, lacewings and true flies. They are also carnivorous, and have been reported to attack, kill, and eat pipillistrel bats. *Impacts:* None of the listed species have been found on this site. Even if suitable habitat did exist on this site, the disturbance area would be small and large areas of similar or identical habitat surrounds the site. The possible impact to these species would be minimal.
7. HISTORICAL AND ARCHAEOLOGICAL SITES	The Montana State Historic Preservation Office (SHPO) was notified of the application. It reported that no sites have been discovered previously within the designated search locale. A pedestrian survey of the area by DEQ personnel did not reveal any artifacts or signs of occupation. No signs were evident at depth in the previously disturbed area. SHPO does not feel that a cultural resource inventory is warranted at this site at this time. *Impacts:* If during operations resources were to be discovered, activities would be temporarily moved to another area or halted until SHPO was contacted and the importance of the resources was determined.
8. SAGE GROUSE EXECUTIVE ORDER	The project would not be in core, general or connectivity sage grouse habitat, as designated by the Sage Grouse Habitat Conservation Program (Program) at: **http://sagegrouse.mt.gov.**
9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY	There are no unusual demands on land, water, air or energy anticipated as a result of this project. *Impacts:* Negligible impacts to land, water, air, or energy would occur.

IMPACTS ON THE HUMAN POPULATION	
RESOURCE	**POTENTIAL IMPACTS AND MITIGATION MEASURES**
10. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS	Jefferson County zoning clearance has been obtained. The site is not zoned.
11. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING	As seen on the aerial photo of the surrounding area, there are a few residences within 300 to 1,000 feet to the west. *Impact:* This commercial pit is being sited in this area because of the location of the resource in relation to a specific MDT project.
12. AESTHETICS	The site is located in a common pastureland area. There would be a temporary alteration of aesthetics while mining is under way. However, reclamation would return the area to a visually acceptable landscape. This project is considered to be short-term, i.e., planned to take four years to complete. Hours of operation would be Monday through Saturday, 7:00a.m. to 7:00p.m.
13. QUANTITY/ DISTRIBUTION OF EMPLOYMENT	Existing employees would mainly be utilized for this operation. There is low potential that this project would create a significant number of new jobs. *Impacts:* New employment opportunities would be limited.
14. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION	The acreage listed in the proposal would be taken out of rangeland/pasture use. Upon completion of mining, the land would be reclaimed to rangeland/pasture, seasonal ponds, and industrial/commercial stockpile area. *Impacts:* Pastureland production would be reduced as soil stripping and operations progress across the site. When the entire site is opened up for mining and mine-related activities, all pastureland activities would cease, but would be restored as the site is reclaimed.
15. LOCAL, STATE TAX BASE AND TAX REVENUES, PERSONAL AND COMMUNITY INCOME	Local, state and federal governments would be responsible for appraising the property, setting tax rates, collecting taxes, etc., from the companies, employees, or landowners benefitting from this operation. Following reclamation, it is assumed the tax base would revert to pre-mine levels.
16. DEMAND FOR GOVERNMENT SERVICES	Limited oversight by DEQ Opencut Program personnel would be conducted in concert with other area activity when in the vicinity.
17. HUMAN HEALTH AND SAFETY	Any industrial activity would increase the opportunities for accidental injury. There are agencies that require the Operator to implement specific safety measures. If followed there is no reason to believe that significant safety issues would be present.
18. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES	This activity would not inhibit the use of the identified resources.
19. NATIVE CULTURAL CONCERNS	*Impacts:* None identified.

20. Alternatives Considered:

A. Denial Alternative: The Department would deny an application that does not comply with the Act and Rules. No impacts to the natural or human environment would occur.

B. Approval Alternative: The Department would approve an application that complies with the Act and Rules. Impacts of this application are addressed in the body of the EA.

21. Public Involvement, Agencies, Groups or Individuals contacted: Montana State Historic Preservation Office, Montana Natural Heritage Program, Jefferson County Floodplain Administrator, Jefferson County Planning Department.

22. Other Governmental Agencies which May Have Overlapping or Sole Jurisdiction include, but may not be limited to: Jefferson County Commission or County Planning Department (zoning), Jefferson County Weed Control Board, MSHA and OSHA (worker safety), DEQ ARMB (air quality) and Water Protection Bureau (groundwater and surface water discharge; stormwater), DNRC (water rights), and MDT (road access).

23. Regulatory Impact on Private Property: The analysis done in response to the Private Property Assessment Act indicates no impact. The Department does not plan to deny the application or impose conditions that would restrict the use of private property so as to constitute a taking.

24. Magnitude and Significance of Potential Impacts: This proposal is not likely to create impacts of significance due to mitigation, restrictions, and oversight mandated by the Opencut Mining Act and pursuant rules and the Montana Clean Air Act.

25. Recommendation for Further Environmental Analysis: [ ] EIS [X] No Further Analysis

EA Prepared By: Bryan Allison (Name) Opencut Mining Program Environmental Specialist (Title)

EA Reviewed By: Chris Cronin (Name) Opencut Mining Program Supervisor (Title)

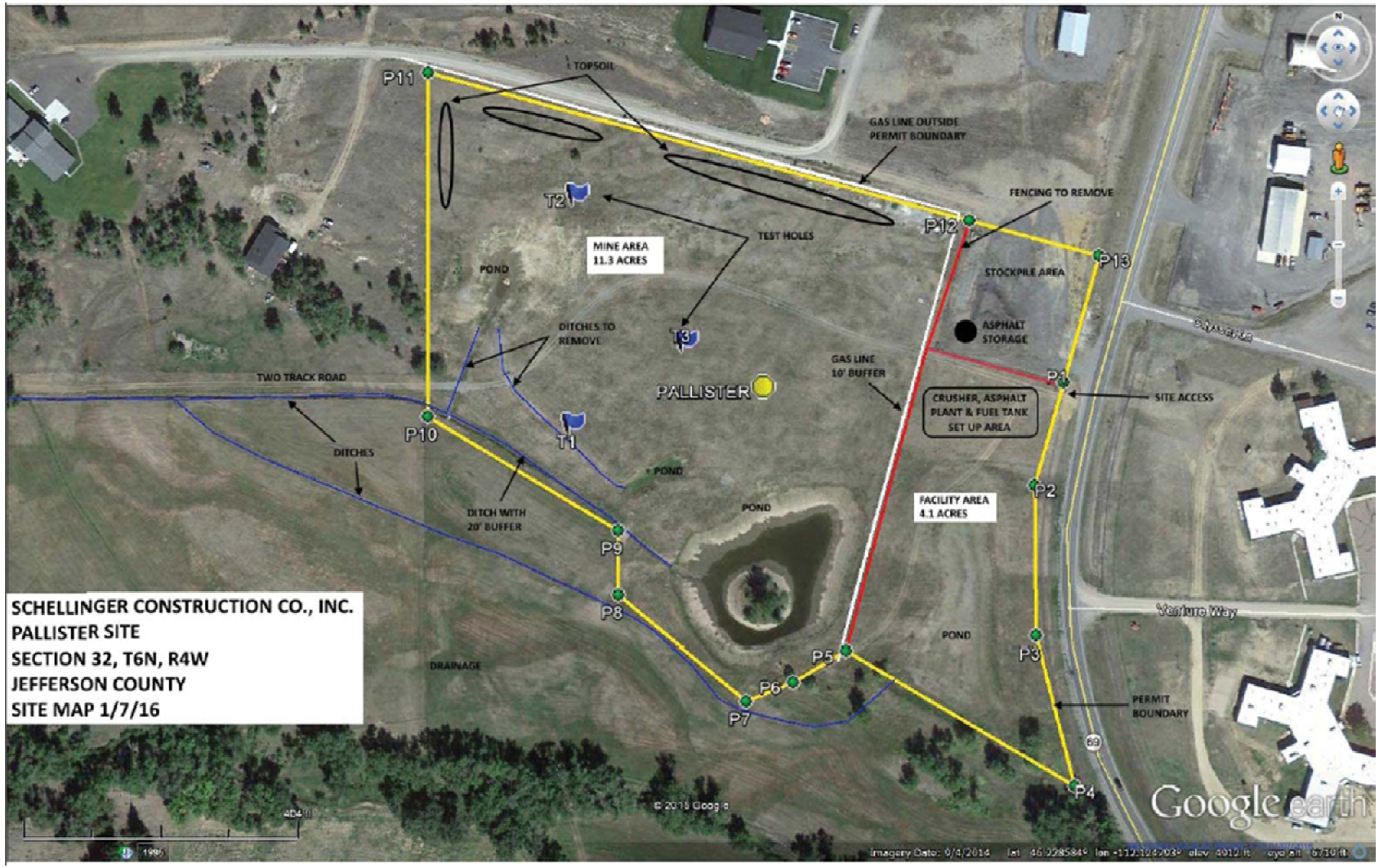
PRIVATE PROPERTY ASSESSMENT ACT (PPAA) CHECKLIST

DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PPAA?

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deprive the owner of all economically viable uses of the property?
	X	4. Does the action deny a fundamental attribute of ownership?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? (If answer is NO, skip questions 5a and 5b and continue with question 6.)
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property?
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? (If the answer is NO, skip questions 7a-7c)
		7a. Is the impact of government action direct, peculiar, and significant?
		7b. Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?
		7c. Has the government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?

Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b.

If taking or damaging implications exist, the agency must comply with § 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.


P11
TOPSOIL
GAS LINE OUTSIDE PERMIT BOUNDARY
T2
FENCING TO REMOVE
P12
TEST HOLES
MINE AREA 11.3 ACRES
POND
P13
STOCKPILE AREA
DITCHES TO REMOVE
T3
ASPHALT STORAGE
GAS LINE 10' BUFFER
TWO TRACK ROAD
PALLISTER
P1
SITE ACCESS
CRUSHER, ASPHALT PLANT & FUEL TANK SET UP AREA
P10
T1
DITCHES
POND
POND
FACILITY AREA 4.1 ACRES
P2
DITCH WITH 20' BUFFER
P9
P8
Venture Way
POND
P5
P3
DRAINAGE
P6
P7
PERMIT BOUNDARY
P4
SCHELLINGER CONSTRUCTION CO., INC.
PALLISTER SITE
SECTION 32, T6N, R4W
JEFFERSON COUNTY
SITE MAP 1/7/16
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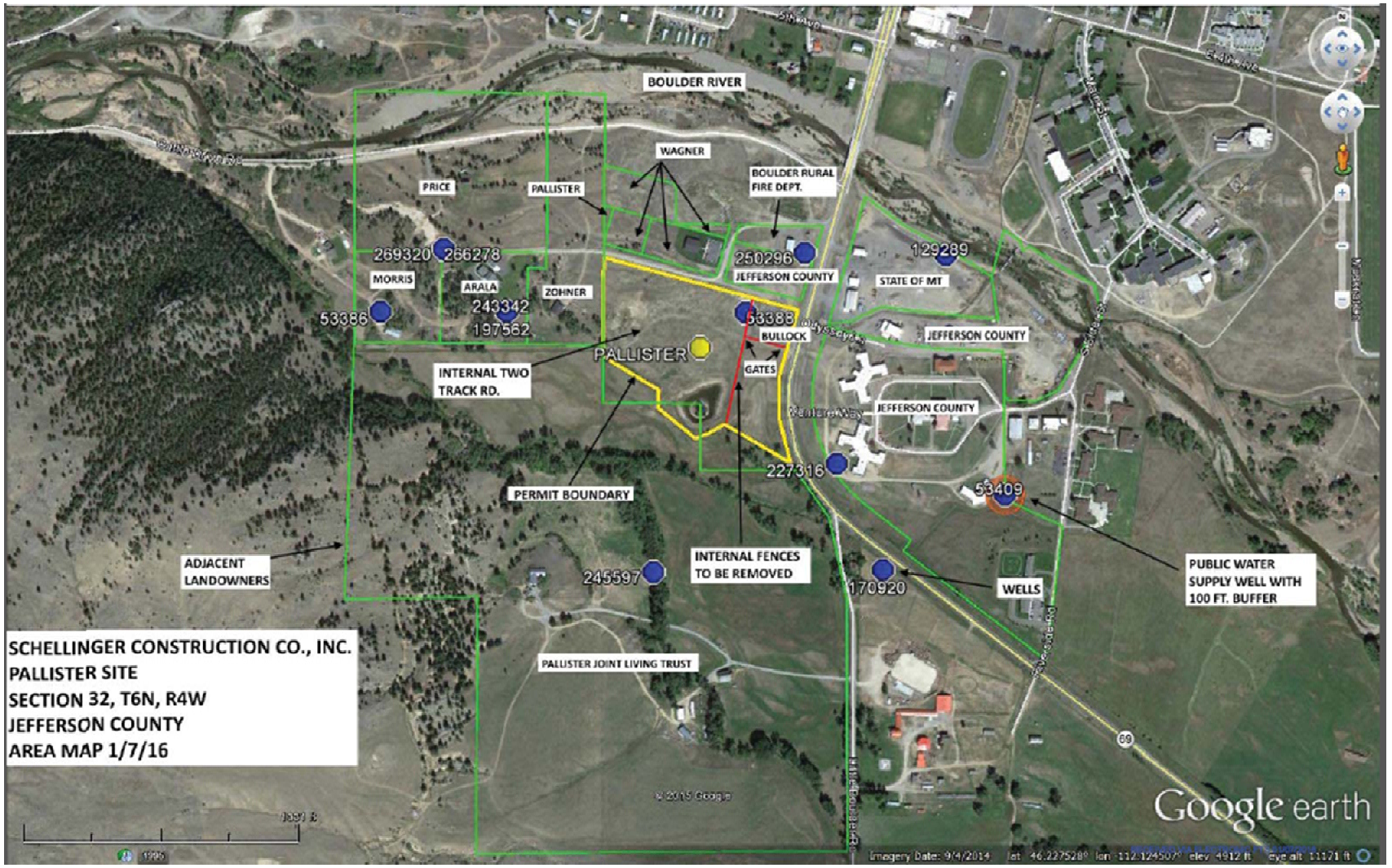
Google earth


BOULDER RIVER
WAGNER
PRICE
PALLISTER
BOULDER RURAL FIRE DEPT.
269320
266278
250296
129289
MORRIS
ARALA
ZOHNER
JEFFERSON COUNTY
STATE OF MT
243342
197562
53386
53383
BULLOCK
JEFFERSON COUNTY
PALLISTER
INTERNAL TWO TRACK RD.
GATES
JEFFERSON COUNTY
227316
53409
PERMIT BOUNDARY
ADJACENT LANDOWNERS
INTERNAL FENCES TO BE REMOVED
245597
170920
WELLS
PUBLIC WATER SUPPLY WELL WITH 100 FT. BUFFER
PALLISTER JOINT LIVING TRUST
SCHELLINGER CONSTRUCTION CO., INC.
PALLISTER SITE
SECTION 32, T6N, R4W
JEFFERSON COUNTY
AREA MAP 1/7/16
Google earth