BORTON - LAKEY
LAW AND POLICY

141 E. CARLTON AVE., MERIDIAN, IDAHO 83642
(208) 908-4415 (OFFICE) (208) 493-4610 (FAX)

July 6, 2017

Boise City Mayor and Council Members
City of Boise
150 N. Capitol Blvd.
P.O. Box 500
Boise, ID 83701

Re: CAR17-00004 and Appeal PUD 17-00007 Barber Hills Villas

Hard and Electronic (thumb drive) Copies Materials Hand Delivered

Dear Mayor and Council Members,

Please accept the following information as part of your consideration of our rezone request CAR17-00004 and appeal of the decision regarding the PUD 17-0007, scheduled to be heard by Boise City Council on August 29, 2017. The information provided in this submittal is applicable to the rezone request and related issues and the grounds specified in the appeal application submitted on June 13, 2017. The cited grounds for PUD appeal were as follows:

1. Lack of acceptance by the Planning and Zoning Commission of Technical Information from the applicant;
2. Planning and Zoning Commission did not recognize Comprehensive Plan designation;
3. Planning and Zoning Commission did not support proposed density.

The packet contains the following information:

- Letter in support of our re-zone application and PUD appeal from Todd Lakey;
- Updated Site Plan;
- Engagement Letter from Environmental Conservation Services, Inc (Wildlife Mitigation)
- Interim Preliminary Wetlands Delineation and Mitigation Report dated 6-30-2017
- MTI Phase I Environmental Assessment dated 3-6- 17
- Email from Natalie Lemas Hernandez with Commercial Northwest Property Management
- Letter from Jim Coslett, P.E. Rock Solid Civil

- Email Correspondence from Stacey Yarrington with ACHD and copy of updated staff ACHD Staff Report dated April 17, 2017

Thank you and please let me know if you have any questions regarding the information contained in this packet.

Sincerely,

BORTON-LAKEY LAW AND POLICY

Todd M. Lakey

BORTON - LAKEY
LAW AND POLICY

141 E. CARLTON AVE., MERIDIAN, IDAHO 83642
(208) 908-4415 (OFFICE) (208) 493-4610 (FAX)

July 6, 2017

Boise City Council
City of Boise
150 N. Capitol Blvd.
P.O. Box 500
Boise, ID 83701

Re: CAR17-00004 and Appeal PUD 17-00007 Barber Hills Villas

Dear City Council Members,

I am writing on behalf of my client, JKB Construction Management & Development in support of its application for re-zoning and a planned unit development in the above noted case numbers. This letter and our submittals focus of compliance with the zoning ordinance and comprehensive plan those related issues, items and information received and referenced by the planning and zoning commission during their hearing and issues noted in our appeal.

This Project is supported by the Comprehensive Plan and complies with the Boise City Zoning Ordinance. Staff and the Planning and Zoning Commission noted that multi-family R-2 zoning is appropriate for the property; however, they are deferring to the City Council for guidance as to what the appropriate level of residential density is for the property. There were also technical issues raised and discussed at the Planning and Zoning Commission level that have been addressed by our experts and are and/or will be incorporated in to the design of the project. The analysis and expert opinions of these professionals were not given the appropriate consideration and there was no comparable expert testimony offered by those in opposition. The technical issues such as engineering for storm water retention, wetland mitigation and the design of the wildlife corridor have been and are being addressed by the Applicant and will be implemented as part of the project.

Density

The appropriate level of density is the primary issue that both staff and the planning and zoning commission deferred to City Council. Staff recognized that multifamily is an appropriate use for this site but is seeking guidance from the Council as to the proper level of density. One Planning and Zoning Commissioner stated that his gut feeling or opinion was eight dwelling

units per acre was probably the proper density but the other commissioners did not provide more specific comments in that regard. The Applicant is proposing a high quality medium density residential project with a mixture of product types and some live/work uses. The proposed R2 density at 14.5 DU/acre is appropriate for the property's commercial designation in the comprehensive plan and well below the R3 density of up to 43.5 DU/acre which is also appropriate under the comprehensive plan.

The City has consistently supported the concept of mixed use and recognized that it is very appropriate and beneficial in that it promotes a healthy diverse community. Staff clearly supports multi-family use on the property. The opposition repeatedly and incorrectly refers to this project as being high density in its testimony and descriptive information provided to the community. There was also some confusion in the underlying staff report where staff referred to the project as high density in some instances and medium density in others. This development would provide a beneficial mixed-use project by allowing well designed and highly sought after medium density residential units to be located adjacent to low density single family homes. Developing more of the same larger single-family homes on this site is what the opposition wants to happen on this property but as staff said that would be a disservice to the City's commitment to mixed use and providing housing that is more affordable than what exists in the vicinity.

We are seeking close to the top end of the R-2 zone residential density but that is not a negative nor should it be perceived as such under the Comprehensive Plan. The applicant chose that zoning designation because it conforms with the property's Commercial designation in the City's Comprehensive Plan and was consistent with a development plan that would be feasible and successful on the site. The Commercial designation in the Comprehensive Plan also supports R-3 zoning. The Applicant could have pursued R-3 zoning and then argued that he is only proposing one third of the maximum density. The application is straight forward and transparent in its request. Our proposed density is well within what is provided for under the Comprehensive Plan.

Those in opposition do not want to see multifamily on the site and want more of the large home single family development that exists in the area. They do not support mixed use in their vicinity and feel multi-family and single family should not be located next to one another or at least not in their area. This application proposes a project that meets the City's stated desire to support diversity and mixed-use development and includes design elements and amenities that make it compatible with the existing low density uses.

Blueprint Boise/Comprehensive Plan

This property is within a Commercial designation in the Comprehensive Plan. The Primary uses with the Commercial designation are convenience, neighborhood, community and regional shopping centers, hotels and motels, car sales, restaurants, entertainment, and similar uses; and limited outpatient medical uses. However, Housing is an appropriate secondary use. Specifically, the following residential and commercial zoning classifications are appropriate in the Commercial Designation: R-1M, R-2, R-3, L-O, N-O, C-1, C-2, C-3, C-4, C-5, PC. The more intense commercial uses on the site are less appropriate and viable than the R-2 and R-3 zones as the City seeks to promote mixed use and a variety of housing choices. We feel our

request for R-2 medium density is more compatible with the nearby low-density development than R-3.

The project is not within the Barber Valley or Harris Ranch specific plans but the Comprehensive Plan notes that those plans should be used as a "policy basis" for the design of our project. The Comprehensive Plan states the following about the Harris Ranch Specific Plan:

> The Harris Ranch Specific Plan is a *mixed-use development* that is being built on and around the site of what was once the largest town in Idaho, the mill town of Barberton. Covering 1,800 acres, the Harris Ranch Specific Plan embraces New Urbanist design concepts. Specifically, it is *designed to integrate into the existing urban pattern, provide for a mix of uses within walking distance*, allow for commercial uses to address area residents' retail and employment needs, *provide a mix of housing types and affordability*, and support a multi-modal transportation framework.
>
> (Emphasis Added).

The Harris Ranch plan calls for mixed use and integrating a mix of housing types and affordability. The opposition points to the specific area plan maps for Barber Valley and Harris Ranch as being the locations to provide multi-family uses. They seek to limit medium and higher density uses to those areas noted on their plans. That approach is an attempt to use their specific area plan maps as almost a zoning designation and not a "policy" guide. This project is outside their specific plans so those maps are not binding or applicable for that purpose. However, those maps do serve as a policy guide to show that single family and multi-family can and should co-exist. Our project provides an integrated mixed-use project within walking distance of access to the foothills and the Boise River, larger commercial development such as the new Albertsons and public transit stops. We have designated connectivity points to the east and west in our project. However, our neighboring property owners have declined to participate in such connections. The Applicant has made multiple attempts to provide connectivity and will continue to work toward that goal but we can only control the use and design within our site. Our proposal provides for a mix of housing types and affordability versus more the large and very expensive single-family housing types that are adjacent to the property.

The project was designed to promote compatibility and support mixed use. The design of the buildings is anything but conventional for this entire region, and closely resembles the unique and varied styles found in the Barber Valley area today. The project also includes at least four completely different styles and uses of buildings: live/work units; apartment units, single-family units and townhouse units. The Harris Ranch design guidelines were closely followed for buildings of the density and style which were appropriate (single family, townhouse and 8 unit multi-family). The guidelines did not include direction for 12 unit buildings, but rather jumped to much higher density buildings which were not at all similar. We chose to keep the design of our 12 unit buildings very similar to the design of the 8 unit buildings. The current building height and location were both specifically chosen to promote compatibility with the neighbors, minimize visual impacts and maintain view corridors. The multi-family units utilize a building

mass that resembles the adjacent large residences and very closely follows the other specific community guidelines. The multi-family units look like a large residence. The single-family product types along the eastern boundary provide for transition between residential types and the fifty foot wildlife corridor on the west provides additional buffering and transition between the adjacent single family residential homes. The exterior parking meets city standards and is effectively hidden from the adjacent parcels and those traveling on the roads due to the topography and its location within the interior of the development surrounded by buildings and landscaping.

The property has unique and challenging topography with three distinct topographical levels to the site. The entire design of the site and location of the various structures incorporates the unique sloping and stepped natural topography of the site. The location, type and height of the buildings were considered as they were designed and located on the property. The building locations and density creates an abundance of space around the structures. The site design incorporates approximately 40% open space in its design. Our open space incorporates usable and non-usable open areas but requiring more non-useable open space does not make sense. The reason people enjoy living in this part of the city is the close proximity to some of the area's best recreation areas. This project is created to provide desirable housing that is more affordable near these areas, not recreate and/or compete with these areas.

The Comprehensive Plan notes that Boise's average household size is shrinking and is expected to continue to do so. In encouraging a variety of housing choices, the Plan states:

> The city will strive to balance its large inventory of detached single-family housing with a range of housing choices to meet the fiscal and functional needs of its residents. This range should include attached homes (duplexes, townhomes), multi-family dwellings (including condominiums), live/work opportunities, accessory dwellings, and housing included as part of mixed-use developments. As part of this objective, the city will seek ways to increase home ownership opportunities, utilize under-developed and re-developing lands for housing, and maintain a sufficient supply of workforce housing. The city will review and update existing regulations to ensure new housing types are consistent with its community character objectives for each neighborhood, providing for design characteristics that fit into existing neighborhoods.

The Applicant is using Nancy Lemas Commercial Northwest Property Management and she and her firm are very familiar with the area and the market for multi-family housing. Nancy notes that information from her firm regarding similar properties shows that over 50% of the demand comes from single women, the average household income is $75,000, many are employed in the medical or technology industry and there is also a strong number of retirees looking for maintenance free living and affordability.

This Project complies with NAC 7.1, NAC 7.4 and NAC 8. This project provides diversity in housing choices of the type and nature described above. It will provide an opportunity for housing that is more affordable than the larger single-family units existing in the area. Additionally, the diverse housing options provided will be of high quality and compatible design with the other housing types in the area. This is a desirable neighborhood that people of

varying income levels would choose to live in. This project provides people that have a lower income than those buying the large homes in the area with an opportunity to live in a quality medium density development in a desirable residential neighborhood.

Another stated goal of the Comprehensive Plan is to Promote Active Living and Healthy Lifestyles. In this regard, the Plan states "Boise residents treasure their active lifestyles. For many residents, living an active lifestyle means being able to live in compact neighborhoods where they may walk or ride their bikes to work, to shop, or to take their kids to school. For others, having access to a variety of recreational opportunities and outdoor activities is equally or more important." This more compact project is located near and within walking or biking distance of shopping opportunities such as the new Albertsons being built to the south as well as the Boise River and foothills recreational opportunities. The live/work units will allow people to live and work in their neighborhood. The project is also within walking distance of access to transit facilities and services.

Technical Issues

The Applicant is required to comply with many of these items by local, state and/or federal laws and regulations and they could be addressed by conditions of approval. However, the Applicant has also engaged the necessary technical experts with specific experience in the area to provide the preliminary analysis and address these issues.

Karl Gephardt with Resource Systems, Inc. is working with the Applicant. He is very familiar with this specific property and has been monitoring it for several years and also performed the wetlands analysis and permitting for the Barber Hills Vista project and the Antelope Springs project along with many others in the area. Mr. Gephardt has catalogued and evaluated the plant species, soils and the hydrology on the site. Mr. Gephardt submitted a letter with his initial analysis of the wetland on the Site. Ultimately the process to determine the scope of the wetland area located on the Site and approve any mitigation efforts comes through the 404 application and permitting process with the Army Corps of Engineers. Mr. Gephardt notes that the property is unusual in that it has been impacted by abnormal events over the past approximately five years such as damming of the drain downstream from the site, overly high water levels in the nearby ponds due to highway constructions and excessive pumping and poor maintenance of the drain itself. The site is considered highly disturbed as far as the wetland quality overall due to past grazing, proximity of development, hydrologic modifications nearby and the large amount of noxious weeds on the property. Among other noxious weeds poison hemlock was identified as the dominant plant on the site. Mitigation can be provided on Site and the quality of the wetland and habitat will be enhanced. Relocating the existing drain, additional grading and planting appropriate native species would be part of those mitigation efforts and increase the wetland quality by almost a factor of three times. Similar mitigation efforts have been successfully used nearby at the Harris Ranch on Spring Creek within the mitigation zone next to the Boise River. A more detailed report from Mr. Gebhardt dated June 30, 2017 is submitted with the materials supplied by the Applicant as part of this appeal. The Applicant anticipates that we can provide all wetland mitigation on the site but several beneficial wetland banking options exist and have been used in the Boise area if additional mitigation is needed.

The Applicant will be providing a fifty foot wide wildlife mitigation corridor along the western boundary of the property. A portion of the corridor will be used for wetland mitigation and improvement. The corridor will be designed and installed under the direction of Charlie Baun with Environmental Conservation Services Inc. and in coordination with the Idaho Department of Fish and Game. We referenced the Phase One environmental study that was performed on the property and a copy of the study by MTI dated 3-6-2017 is submitted with this letter.

The traffic counts were low enough in this project that a traffic study was not required. However, to be thorough the Applicant engaged Thompson Engineering to perform a traffic study and submitted it to ACHD. ACHD then reviewed the report and provided its comments and conditions. One of the Planning and Zoning Commissioners expressed some confusion over some of the numbers in one of the ACHD reports. However, he apparently was not reviewing the most recent updated ACHD report and findings dated April 17, 2017. The April 17, 2017 report is the correct report to be considered by the Council and is submitted with this letter.

The Applicant has updated the site plan to include the technical items noted and requested by the Planning and Zoning Commission. The items addressed include storm water/drainage retention locations, the 15' easement for a drainage line on the western boundary, parking for guests in the Live/Work component of the project along the north boundary, the wetland mitigation area along the southern and southwest area of the property and noting the patio homes will be platted with individual lots.

Conclusion

The Project as it is currently proposed and designed with 14.5 DU/acre is supported by the comprehensive plan and complies with the City's goals to promote a diversity of housing choices and promote sustainable communities with viable housing choices and affordability which incorporate compatible quality and design. The proposed use provides needed multi-family density in what is intended to be a mixed-use area. Our mixture of medium density residential uses including multi-family, single family and live/work components are more appropriate on this parcel than commercial uses or a continuation of more large single-family development. We feel strongly that this is an appropriate level of density and compatible design and request the City Council's support of proposed project density and design. If the Council feels a different density is more appropriate then the Applicant requests your direction in that regard.

The Applicant met multiple times with and listened to staff and the neighbors. The plan has been modified ten times in response to those meetings. Those opposed to this project feel that medium density housing is not compatible with the low density residential development nearby consisting of larger more expensive homes. Such a position is not compatible with the goals, objectives and policies of the City its Comprehensive Plan. The proposal is far from the typical multi-family project. It incorporates the design guidelines from the other communities in the area, mirrors adjacent building mass and specific building locations were determined considering height, the terraced topography and view preservation. With the large amount of open space and compatible structural design features that are consistent with the Harris Ranch

and Barber Valley communities this project provides a desirable alternative to boxy high density multifamily products. The project will help meet the demand for more affordable housing for professionals and retired individuals and provide beneficial diversity and choice among residential products available in this desirable area. The project is desirable not only because of its design and amenities but because of its location within walking distance to recreational opportunities in the foothills and along the Boise River, public transportation and commercial development.

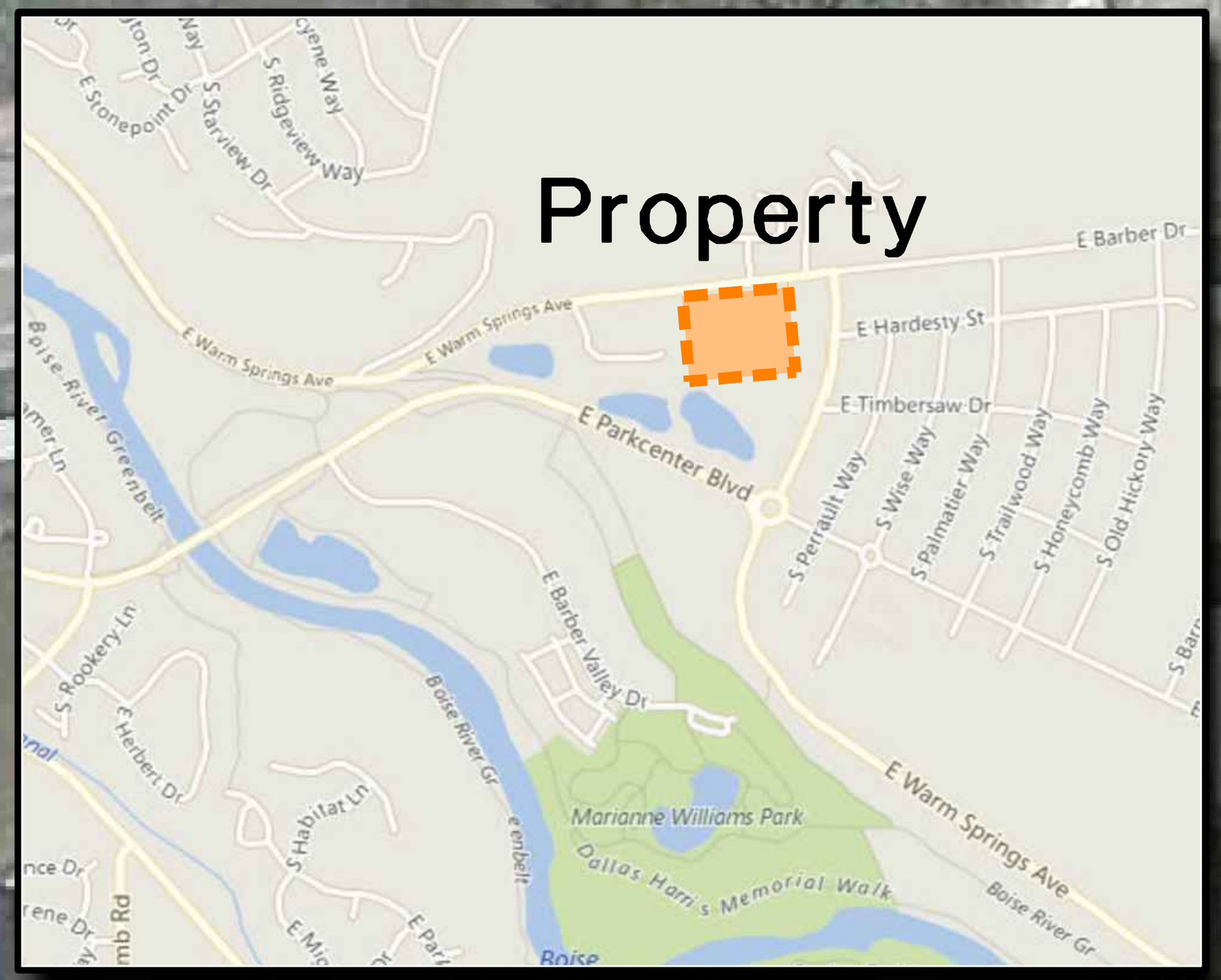
This project meets the goals and objectives of the City as stated in Blueprint Boise and the requirements of the applicable city ordinances. We respectfully request your recommendation of approval for this application. Please do not hesitate to contact me if you have any questions or if you need additional information.

Sincerely,

BORTON-LAKEY LAW AND POLICY

Todd M. Lakey

Barber Hill Vistas - Revised Site Plan



SITE LOCATION MAP

N.T.S.

NORTH

DEVELOPMENT DATA

PARCEL #s: S0919428350, S0919428250 & S0919428310

ADDRESS: 3503, 3547, 3555 E WARM SPRINGS BOISE,ID 83716

PAR #8350 NW4SE4
SEC 19 3N 3E
PAR C ROS 10462
#428315B

PAR #8310 POR NW4SE4
SEC 19 3N 3E
PAR B ROS 10462
#428315-B

PAR #8250 POR NW4SE4
SEC 19 3N 3E
PAR A ROS 10462
#428315-S

EXISTING ZONING: A-1
PROPOSED ZONING: R-2

TOTAL SITE AREA CALCULATIONS:

TOTAL SITE AREA:	376,794.0 SF (8.65 ACRES)
ROW AREA:	16,612.45 SF
PAVING AREA:	86,108.0 SF (23.0%)
LANDSCAPE AREA:	152,886.0 SF (40.5%)
OTHER (Walks, Patios etc.)	60,080.0 SF (15.9%)
CLUB HOUSE (2 FLOORS):	2,105.0 SF.
BUILDING UNITS 1st FLOOR:	75,615.0 SF
TOTAL AREA:	77,720.0 SF. (20.6%)
BUILDING 2nd FLOOR:	77,720.0 SF
BUILDING 3rd FLOOR:	13,650.0 SF.
TOTAL BUILDING SF.:	169,090.0 SF

PROPOSED UNIT MIX:

On-site Management Unit (Club House)	1 unit
Attached Townhouse Style Aprtments (Live/Work)	11 units (Warm Springs)
Attached Single Family Townhouse (Garage)	8 units (Warm Springs)
Detached Single Family (Garage)(Platted Lots)	13 units (East)
2 Story Apartments 8 units (7 bldg.)	56 units
3 story Apartment 12 unit (3 bldg.)	36 units
total units:	125 units

DENSITY: 14.45 DU/ACRE

MULTI-FAMILY PARKING:

1 BEDROOM UNITS	26 TOTAL
PARKING 1 PER UNIT	26 PARKING REQUIRED
2 BEDROOM UNITS	78 TOTAL
PARKING 1.25 PER UNIT	98 PARKING REQUIRED
GUEST PARKING 1 PER 10 (per unit)	11 SPACES REQUIRED
TOTAL PARKING REQUIRED:	135 SPACES

PROPOSED MULTI-FAMILY PARKING:
PARKING 179 SPACES

(DOES NOT EXCEED 1.5X THE MINIMUM REQUIRED)

SINGLE FAMILY PARKING: TWO GARAGE SPACES PER UNIT

BIKE PARKING (1 PER UNIT)	125 TOTAL REQUIRED
24 UNCOVERED, 102 COVERED=	126 PROPOSED

DEVELOPER:
JKB Construction Management & Development, Inc.
7795 N. Stonebriar Ln.
Meridian, ID
83646

PLANNER/ CONTACT:
SLN Planning Inc.
247 N. EAGLE ROAD
EAGLE, IDAHO 83616
Contact: SHAWN L. NICKEL
208-794-3013

ARCHITECT:
THE ARCHITECTS OFFICE PLLC
PRICE SANDERS RHEES RUBY

ROCK SOLID CIVIL
Civil Engineering and Land Development Consulting
270 North 27th Street, Boise, ID 83702
Office Phone: 208.342.3277
www.rocksolidcivil.com

South
LANDSCAPE ARCHITECTURE, P.C.

7/5/2017

June 30, 2017

Mr. Hal Simmons, Planning Director
Planning and Development Services
150 N Capital Blvd.
Boise, Idaho 83701

RE: Letter of engagement for Barber Hills Vista PUD17-00007.

Mr. Simmons

My name is Charles Baun and I have been retained by JKB Construction Management & Development, Inc. to work on their proposed PUD at 3555 East Warm Springs Avenue in the capacity of a subject matter expert for natural resource planning. Specifically, I will be working with the IDFG to develop a wildlife adaptive development plan and assist with the development and design of the wetlands mitigation plan.

As to my background, I am a Boise native and have spent my entire career here in the valley. Currently, I am the lead ecologist and principal of Environmental Conservation Services Inc. (ECS). I have over 24-years or academic and work-related experience with arid and forested ecosystems of the Great Basin and Columbia Plateau, primarily in southwest Idaho. I received a BS degree in biology, with an emphasis in ecology, from Albertson College of Idaho in 1998, and earned my MS degree in Natural Resource Management from the University of Idaho in 2001.

During my career I have worked in Boise in both the public and private sectors on over 200 projects in Ada County dealing with sage/grass ecosystems and habitat management planning. In particular I have been the lead or deputy project manager on the development of over 20 habitat/wildlife mitigation plans for proposed planned communities or PUDs within or adjacent to Ada County. I have also been retained by the City of Eagle as their subject matter expert for natural resources and planning.

To efficiently address habitat/wildlife mitigation planning I have developed a standardized process that directly coordinates with representatives from the planning agency, the Idaho Department of Fish and Game, various private interest groups; and the developer. At various stages throughout the process, I facilitate meetings with the IDFG and the other entities, to determine opinions, concerns, suggestions, and recommendations for the proposed plan. As I develop the plan, I conduct periodic checks with these groups to gather additional feedback and provide them an opportunity to help navigate the direction of the plan. The final adaptive wildlife plan is a compilation of scientific literature, expert field experience, and cooperative interactions between city, state, federal, and private interests.

Based on the size, location, and resources in the area of the proposed PUD, it is my opinion that a balanced IDFG-supported plan can be developed quickly, and submitted to Planning and Development Services. I have already set up a resource review meeting with the IDFG, and will coordinate with adjacent conservation committees (Harris Ranch and River Heights) to look at ways

Environmental Conservation Services Inc.
1072 N. Beachwood CT., Eagle Idaho 83616
Phone: 208-921-0195 • Email: cbaun@ecs-services.com

to more efficiently coordinate resources for continued management of wildlife and other natural resources associated with the Barber Valley.

If you have any questions or need additional information on my background or qualifications please feel free to contact me directly at cbaun@ecs-services.com or 208-921-0195. I look forward to working with you on this project.

Sincerely,
Environmental Conservation Services Inc.

Charles Baun, Lead Ecologist and Principal

ENVIRONMENTAL CONSERVATION SERVICES INC.
1072 N. Beachwood CT., Eagle Idaho 83616
Phone: 208-921-0195 • Email: cbaun@ecs-services.com

Barber Hills Vista
Interim Preliminary Wetland Delineation and Mitigation Report

Prepared for

Boise City Council & JKB Construction

June 30, 2017

Prepared by:

Karl Gebhardt, P.E., P.H.
Hydrologist/Environmental Engineer
Resource Systems, Inc.
Boise, Idaho

RESOURCE SYSTEMS INC
CONSULTING ENGINEERS
BIOLOGISTS & SCIENTISTS
10306 Harvester Drive
Boise, Idaho 83709
(208) 376-5264

Contents

Overview and Summary

This report presents findings about the Barber Hills Vista wetland study that will eventually lead to a formal Preliminary Wetland Delineation for potential permitting actions under Section 404 of the Clean Water Act administered by the U.S. Army Corps of Engineers (Corps). The formal delineation would be prepared at a later time during the preparation of a permit application that is representative of both the proposed project and more normal site conditions since the study site has been significantly impacted by events that are outside of the "normal".

The study site (Site) is the lower area of the Barber Hills Vista project area adjoining Harris Ranch to the east and south and the Antelope Springs development to the west. We have prepared wetland studies and permitting for both of these developments and many others over the past 30+ years. The Barber Hills Vista site, referred to as site, is extremely complex, which will be explained later. Because of the complexity, several approaches to permit application are needed that will fulfill requirements of the Corps and the client.

This report will summarize and present the 404 permitting process, mitigation requirements and alternative mitigation strategies.

The report will summarize and discuss the regulations as they currently apply and potential changes that may occur based on recent executive orders and related information.

This report will summarize and present the current physical-biological wetland status of the site, factors affecting its current condition, suspected trends based on physical data collected at the site, and future site changes that might occur if certain maintenance practices were carried out.

Summary 404 Permitting Process

The Corps issues permits for fill in Waters of the U.S., which include some types of wetland. The Corps has two basic types of permits they process, the Nationwide and the Individual. Nationwide permits are generally for fill of small areas less than 0.5-acres that have minor impacts. Individual Permits are for more complex fill requests that are larger than 0.5-acres and may have more than minor impacts. Nationwide Permits are processed without extensive public or agency review and often can be obtained within 45 days. Individual Permits require extensive public and agency review and generally take 4 months or longer to process. The current Barber Hills Vista project would require an individual permit because expected fill amounts are greater than 0.5-acres of what may be jurisdictional wetland.

Waters of the U.S. currently include navigable waters, like the Boise Rivers and their tributaries including ditches, canals, drains, and adjacent wetlands. The Barber Hills Vista site adjoins an historical drain which flows through a pipe (in a portion of the drain that was filled for the Antelope Springs development), into the continuation of the drain, then into Walling Creek and then to the Boise River. The site is currently considered jurisdictional by the Corps.

The extent of the potential wetland is determined by a delineation methods following a Corps manual and supplement. Jurisdictional wetlands must possess three characteristics, wetland vegetation, wetland soil (called hydric soil), and wetland hydrology. In most cases delineating jurisdictional wetland is straightforward. In the case of this site, there are several complicating issues mostly having to do with wetland hydrology associated with changes in the area and soil conditions that were developed many years ago when the site was created by the Boise River (relic). The Corps makes a determination about a delineation report. In many cases, the Corps no longer approves a delineation, rather it accepts a preliminary delineation and has the applicant agree that it represents the jurisdictional wetland. The formal approval process for a delineation can take a very long time so the Corps uses the jurisdictional determination to help speed up the permitting process. For this site, because of the complexity of the wetland, the applicant may choose to go with a less strenuous delineation in lieu of a long-term study which would tend to result in a larger area of wetland delineated. This report presents three delineations, one representing current indicators using the best available data but has uncertainty, one representing current indicator with few uncertainties, and one that shows a probably outcome if certain site maintenance were done in conjunction with a long-term study. The final amount of wetland determined by the Corps is used by the applicant to determine the amount of wetland required to be filled to fulfill the needs of the project (considered unavoidable impact) which becomes the 404 permit application. If the Corps determines the required fill to be permittable, they will issue a permit which usually requires mitigation to compensate for the wetland to be filled.

Compensatory mitigation is the process by which the Corps allows permittable fill to be placed while compensating for the value of the wetland to be filled. Mitigation can be done through a mitigation bank) which is an existing area of wetland that was designed and constructed to be used for mitigation purposes and which is regulated by the Corps (see Appendix EPA mitigation brochure. Boise has several of these banks which are operated by the Wetlands Group. One bank is located within Marianne Williams Park and is available for use by entering into a purchase agreement and buying credits for the amount of mitigation that is required by the Corps. Another type of mitigation involves establishing mitigation on-site. This requires a detailed mitigation plan, specifications, performance standards, conservation easements, monitoring, success, and a third-party holder such as the Idaho Foundation for Parks and Lands, Land Trust of the Treasure Valley, City of Boise and so on. On-site mitigation requires the mitigation area to be held in perpetuity. Resource Systems Inc. has been involved in developing both the wetland bank and many on-site mitigation projects, the nearest being on Harris Ranch and Marianne Williams Park.

Summary of Laws and Regulations Concerning Waters of the United States

Waters of the United States definition is found in the Clean Water Act and has been amended by federal regulations and court decisions, including the Supreme Court, including Region 9 US District Court. Waters of the United States include wetlands. These definitions and rules are complex and keep evolving due to litigation, rule changes, and executive order. A new wetland final rule was promulgated on June 29, 2015 and resulted in numerous litigation around the country. President Trump issued an Executive Order on February 28, 2017 to rescind or revise

the 2015 rule. On June 26, 2017 a pre-release of a proposed rule that would rescind and re-define Waters of the U.S. was released by the Corps and EPA.

While it is uncertain if and when this pre-release would go into effect, it does underscore the volatility of the subject and does rescind the 2015 rule replace the definition of "waters of the United States" with the definition that was in place prior to the 2015 rule. Essentially, it probably will not change the way the Corps has been processing 404 Permits in this area for the moment but it does state than the agencies would engage in a "substantive rulemaking to reconsider the definition of "waters of the United States."" (see Appendix Waters of the United States.) Therefore, for the purpose of 404 Permitting, we are assuming nothing will change in the immediate future.

Summary of the Current Site

Additional discussion including figures are presented in specific sections later in this report.

We conducted a wetland investigation of the adjacent areas in 1990 in cooperation with Dr. Dana R Sanders who was the principal author of the current Corps wetland delineation manual (Environmental Laboratory, 1987). This gives us a relatively long perspective of observation from which to make conclusions about how the site is affected by various things. Historically, the site and surrounding area was created by the Boise River. It appears the site was an old flood channel meander and probably became full of fine sediment through many episodes of flooding prior to the development of dams on the Boise River. This is apparent in the fine-grained nature of the soil on the site and the shallow depth to ground water which is also typical of the surrounding area prior to recent development activities. The site and adjacent area, while not within a 100-year or even 500-year floodplain, is still impacted by high flows of the Boise River via a ground water connection and can be seen within depressions that intersect the groundwater surface, particularly during long term flooding such as in 2017. Irrigation was the primary source of high water in the area until recently and now much of the land use is now in residential homes and flood irrigation has diminished.

Hydrology - Hydrology is the largest source of complexity at this site as it pertains to determining jurisdictional wetland. The site is impacted by surface and ground water. Surface water comes from precipitation directly on the site, runoff from adjoining land, and from drainage water in an historical drain adjoining the site along the northerly boundary. Normal ground water levels are influenced locally on the site by precipitation, the drain, and ponds which are adjoining the property on the south. Wetland hydrology is determined on the frequency and duration of inundation and depth of ground water during the growing season that can create saturated conditions for periods of several weeks. Overall, the normal depth to ground water ranges from less than 1-foot to a few feet. This depth to ground water is the primary factor in what determines "normal" wetland hydrology on the site. Normal wetland hydrology on the site has been significantly impacted by several man-caused events and one extreme event over the past 5-years making the determination of normal hydrology difficult.

Vegetation - About half of plants that can normally be found in either wetland or upland and half are usually found in wetland. There are many areas of the site that have obligate wetland plants with upland plants growing next to them. Much of this complexity is thought to be caused by the historical presence of wetland plants and their seed rejuvenated by extreme recent events described above. These plants originated and thrived in very moist conditions caused by historical high ground water levels during the growing season due to irrigation of adjacent properties that no longer occurs. Now, in the much of the growing season, water drops significantly as it has done in 2017. There appears to be a transition occurring that really can only be documented within the plant communities by long-term monitoring with the assumption that extreme man-caused events will not occur. The quality of the vegetation is some areas of the site is not good. Poison hemlock was identified as a dominate plant on the site. Several noxious weeds are also taking on a more prevalent role on the site.

Soil – Soil on the site will not change. It was created by conditions long ago and indicators of such will not go away, therefore, it is not useful to a wetland delineation other to conclude that much of the site consists of soil with hydric (wetland) indicators.

Site maintenance and management - Several maintenance and management changes could occur on the site to manage water better, including removing barriers that prevent site drainage, cleaning out drains to prevent overflow, and repairing ditch banks that result in overflow.

Wetland conditions – The maximum wetland seen on the site without considering probably transitional changes is about 1.6-acres. This figure would likely be what the Corps would use in a evaluating a permit request anytime soon. The wetland area based on analysis of normal hydrology is about 1.25 acres, and the amount of wetland that would be present with maximum maintenance and management is estimated at 0.76-acres.

Mitigation Potential – There is mitigation potential via restoration and creation on most of the site simply because of the transitional problems with the vegetation community. This is discussed in greater detail in the mitigation section below. Based on the current project proposal, a mitigation zone was designed to be placed along the south and west border of the project. The existing drain would be reconstructed as a creek feature and placed along the south border towards the west boundary and then proceed north to the present drain exit location. Another possibility is to proceed to the south to the Harris Irrigation Pond. Wetland mitigation would be placed along the creek. Planned wetland mitigation would include a shrub & tree complex along the creek since this has a much higher value than the present wetland. The mitigation area would be approximately 0.56-acres and a target increase in value of 3 to 1 could result in all of the potential fill in the maximum wetland scenario being done on-site. If this approach was not acceptable to the Corps, mitigation banking could be done for whatever amount cannot be accomplished on-site.

Wetland Delineation Report

Site Description

The site vicinity is shown in Figure Vicinity and Figure USGS Quad. Important features on that figure include the preliminary delineation boundary areas, ditch, pipe, Penitentiary Canal to the north, irrigation ponds, Harris Ranch development to the east, roads, and Antelope Springs development to the west. These features will be discussed as a part of developing an explanation conditions on the site over the last 5 or 6 years. In addition, historical use over the last 80 years or so is captured in aerial photos provided in Appendix Historical Aerial Photos and is useful in sorting out the various factors important to wetland indicators present on the site today.

An historical summary of the area is provided in the sequence Appendix Historical Aerial Photos. Those show a site history as explained briefly below.

1938-39 – Pre-development. Extent of river and relic flood channel crescent is obvious.

1984 – Pre-development. This photo also has evidence that ground water seeps from the hillslope.

1992 – Historical drain provides water to the site and drains water away. It was deepened later but on the east part of the property remains a viable surface water source. The site has wetland vegetation as does the surrounding property. There are no ponds to the south. Flood irrigation is evident east in what now is Harris Ranch residential areas. The crescent on the south site of the site was delineated as wetland in 1996.

1998 – Significant changes west of the site probably due to grazing. Site is heavily vegetated as is most of the surrounding property.

2002 – Photo date is June 1, 2002. Cumulative precipitation from December to June 1 was about 4.2-inches compared to average of 7.8 (2002-2017). This photo illustrates the vegetation on the area is impacted by irrigation.

2003 – Photo dates is June 14, & July 1, 2003. Cumulative precipitation from December to June 1 was about 8.7-inches compared to average of 7.8 (2002-2017). These two photos really illustrate the impact irrigation has on the site and adjoining property.

2004 – Photo dates is June 15, 2004. Cumulative precipitation from December to June 1 was about 8.2-inches compared to average of 7.8 (2002-2017).

2005 - Photo date is June 25, 2005. Cumulative precipitation from December to June 1 was about 8.1-inches compared to average of 7.8 (2002-2017).

2006 - Photo date is September 9, 2006. Cumulative precipitation from December to June 1 was about 10.8-inches compared to average of 7.8 (2002-2017).

2007 – 2008 – no photo.

2009 – Photo date is June 23, 2009. Cumulative precipitation from December to June 1 was about 5.8-inches compared to average of 7.8 (2002-2017). Harris Ranch construction begins with road construction, East Park Center Bridge construction, ponds near site constructed. Drain cut off from. Installation of subsurface drainage pipes discharging into drain.

2010 – Photo date is July 11, 2010. Cumulative precipitation from December to June 1 was about 9.6-inches compared to average of 7.8 (2002-2017). Harris irrigation pond constructed, subdivision graded, infrastructure installed east of site.

2011 – Photo date is August 31, 2010. Cumulative precipitation from December to June 1 was about 9.6-inches compared to average of 7.8 (2002-2017). Filling of site begins west of site including drain piped and filled.

2012 – Photo date is October 5, 2010. Cumulative precipitation from December to June 1 was about 8.8-inches compared to average of 7.8 (2002-2017).

2013 – Photo date is August 29, 2013. Cumulative precipitation from December to June 1 was about 5.0-inches compared to average of 7.8 (2002-2017).

2014 – Photo date is June 6, 2014. Cumulative precipitation from December to June 1 was about 8.8-inches compared to average of 7.8 (2002-2017).

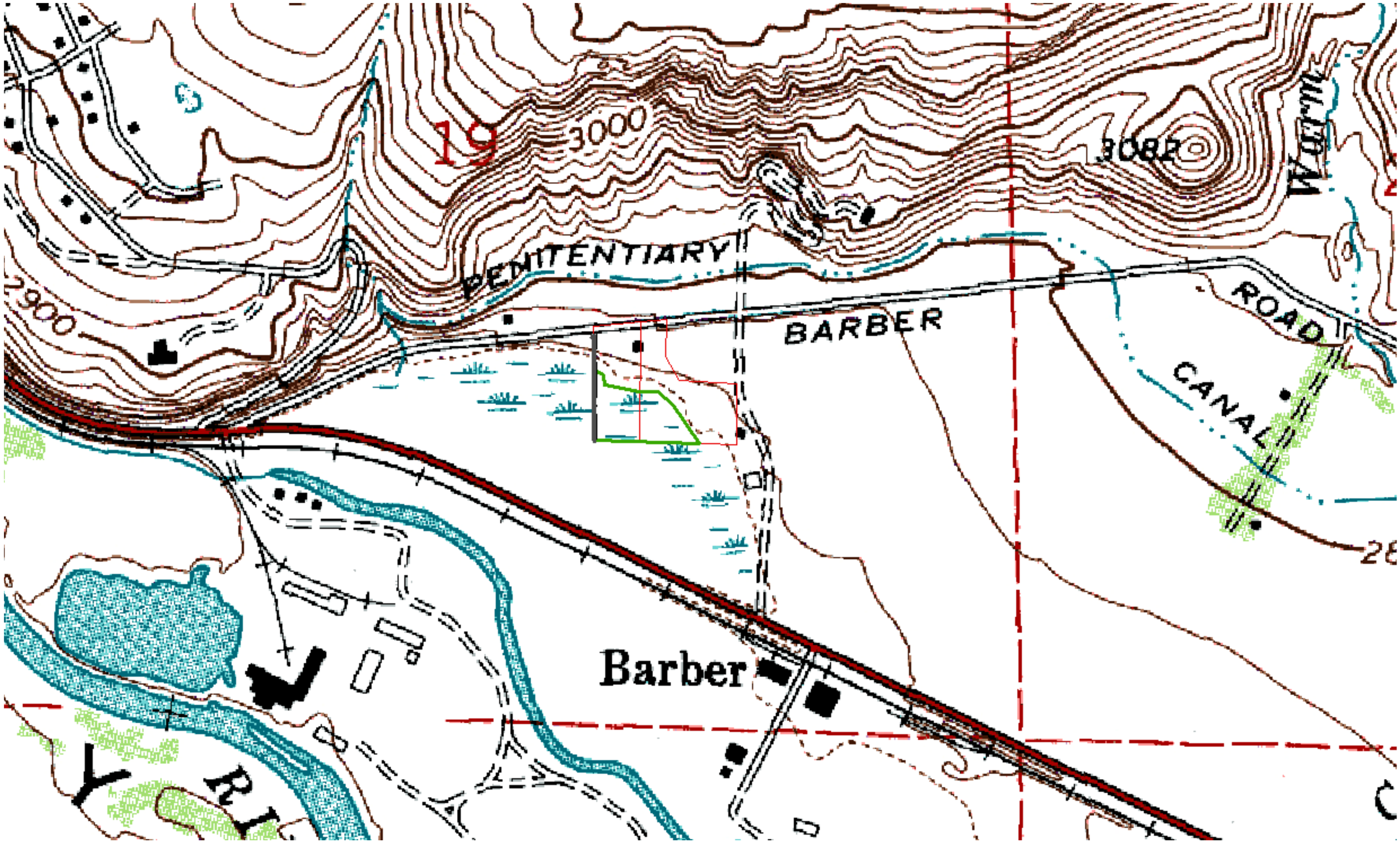
2015 – Photo date is April 29, 2015. Cumulative precipitation from December to June 1 was about 8.1-inches compared to average of 7.8 (2002-2017).

2016 – Photo date is April 1, 2016. Cumulative precipitation from December to June 1 was about 6.3-inches compared to average of 7.8 (2002-2017).

2017 – Photo pending. Cumulative precipitation from December to June 1 was about 11.8-inches compared to average of 7.8 (2002-2017).

Land Use - The site has been historically grazed. The forage is not considered very good. Grazing has been removed from the site since about 2011 or so with an occasional visit by llamas and perhaps deer.

USGS QUAD

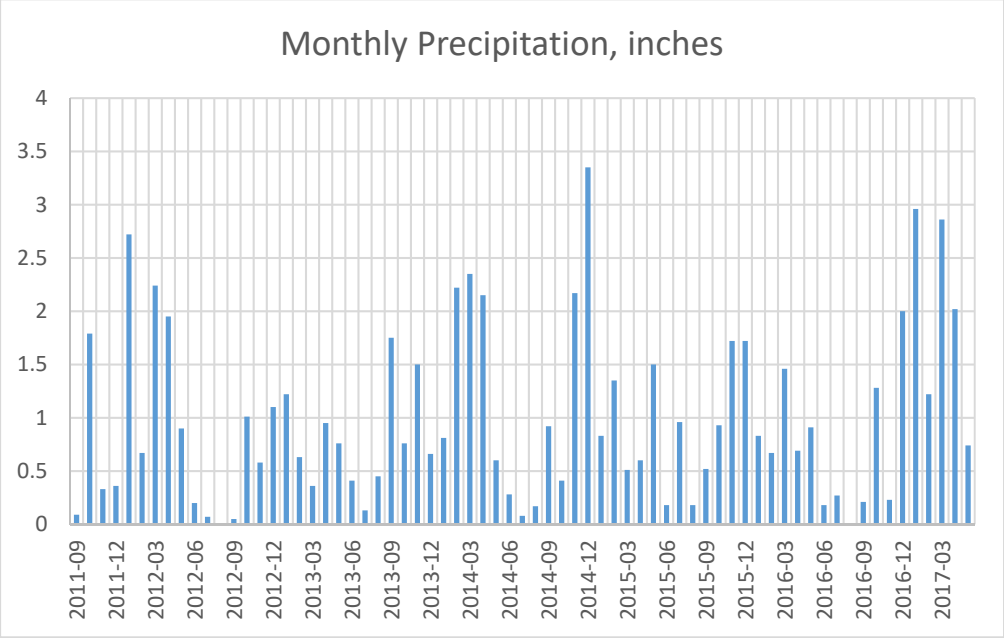



Vicinity
Ditch
Pipe
To Walling
Parcel Boundary
Preliminary Delineation Area
E Barber Dr
Pheasant Ln
S Pheasant Ln
To Walling
Pipe
ACHD Pond
Ditch
ACHD Pond
Irrigation Pond
E Timbersaw Dr
E Parkcenter Blvd
E Warm Springs Ave
E Barber Station
Boise River

Climate

Climate of the site is considered the same as represented by the Boise Airport weather station. A summary of site precipitation is presented below from 2011-2017. Precipitation and its distribution over the year is useful in developing an understanding of how the site vegetation responds. A frost table is also shown which is helpful in establish an approximate range of the normal growing season.

Figure Precipitation



FROST - BOISE AIR TERMINAL, ID

Probability	24F or lower	28F or lower	32F or lower
Last freezing temperature in spring:			
1 yr in 10 later than	April 22	May 13	May 25
2 yr in 10 later than	April 11	May 5	May 19
5 yr in 10 later than	March 20	April 19	May 8
First freezing temperature in fall:			
1 yr in 10 earlier than	October 17	October 5	September 21
2 yr in 10 earlier than	October 24	October 11	September 28
5 yr in 10 earlier than	November 6	October 23	October 10

Soil

The soil mapping units for the property are shown in the figure below.

Figure Soil Survey

Unit 1000 accurately depicts the soil in the study site with the exception of the northeast portion which is very high in elevation compared to the site. Unit 1000 is called Moulton-Phyllis complex, 0 to 1 percent slopes and is composed of the Moulton and Phyllis soil series. The soil in the site closely resembles these soils in color and description. Phyllis soil is a hydric soil with ground water levels at shallow 0 – 7-inch depths while Moulton is not hydric (except in depressions) with deeper ground water (NRCS soil data is included in Appendix Soil and detailed soil data for sampling sites will be included in the field data sheets). Field examination shows that many areas within the east half of the site have higher clay content in the upper layers than described in the soil series. The hydrologic characteristics of the soil, particularly in the east part of the site resemble Phyllis soil as it is considered very poorly drained which limits its use in agriculture. The south portion of the site is slightly better draining and has many of the same fine sandy loam characteristics as the east side. Vegetation associated with Moulton is black cottonwood and for Phyllis is moist meadow.

Field samples showed several areas where the upper soil layer to a depth of a few inches was much higher in clay content because of plastic properties than described in the series descriptions. These areas were adjacent to the drain suggesting the clay probably was deposited from transported clay in irrigation return flow and runoff. Overall, the soil on the site

is considered hydric as most of the initial sampling had indicators matching indicator F6 Redox Dark Surface. Additional field examination will be conducted to determine if these features are still applicable to the present site hydrology and more examination is needed in the areas identified in the 12 + inches to water in the ground water analysis.

Vegetation

Site vegetation on the site is highly variable and appears to be undergoing a transition. We first examined the site late in 2011. At that time is was clear that characteristic hydrophytes were growing and have grown over much of the site but were showing an abnormal lack of persistence and some upland plants were found. Complications in site hydrology (see below) made the continued analysis of this site futile however, we did continue to make observations, albeit anecdotal. This trend of increased presence of FACU and FAC vegetation, in addition to undesirable plant species has continued over the past 5 years. The Barber Hills Vistas development has triggered a need to formally describe the vegetation as it exists for the purpose of permitting although it probably does not represent future conditions as plants respond to changing site conditions.

The site is divided into three major zones, east, west, and access. The access is a zone considered to be a farm road that connects upland area and separates the east and west zones from surface connectivity, with the exception of the historic drain/ditch.

The current field indicator form uses a weighted ranking for determining if an area has wetland vegetation by assigning 1, 2, 3, 4, 5 points to obligate (OBL), facultative wet (FACW), facultative (FAC), facultative upland (FACU), and upland (UPL) species, respectively on a percent abundance basis. Areas having summed values less than or equal to 3 as a prevalence factor are considered to be wetland.

This prevalence factor has not yet been determined for the site since this is considered an interim long-term delineation and it would be inappropriate, at this time, to assign values to a plant community that is obviously changing. However, for the purposes of immediate Section 404 Permitting, if needed, this determination may be made later in the growing season to be more representative of the area. The interim wetland delineation figure shows a maximum wetland area which is considered consistent with what additional field measurement would show later in the growing season. This is based largely on the site plant species list shown below. There are a lot of undesirable plants, including poison hemlock, which is considered a dominant species on site.

Site Plant List

Common Name	*Scientific Name*	Noxious Weed	Dominant Species	Wetand status
TREES				
chokecherry	*Prunus virginiana*			fac
green ash	*Fraxinus pennsylvanica*			facw
peachleaf willow	*Salix amygdaloides*		X	facw
russian olive	*Elaeagnus angustifolia*		X	fac
SHRUBS				
golden currant	*Ribes aureum*			fac
Himalayan blackberry	*Rubus armeniacus*			facu
wild rose	*Rosa woodsii*			facu
yellow willow	*Salix lutea*			obl
FORBS				
annual sunflower	*Helianthus annuus*			facu
bittersweet nightshade, climbing nightshade	*Solanum dulcamara*			fac
black mustard	*Brassica nigra*			upl ?
blue vervain, Simpler's-Joy	*Verbena hastata*			fac
bull thistle	*Cirsium vulgare*			facu
Canada goldenrod	*Solidago canadensis*			facu
Canada thistle	*Cirsium arvense*	X		facu
common mallow	*Malva neglecta*			upl ?
common mullein	*Verbascum thapsus*			facu
curlycup gumweed	*Grindelia squarrosa*			facu
duckweed	*Lemna minor*			obl
horseweed, Canadian horseweed	*Conyza canadensis*		X	facu
indianhemp	*Apocynum cannabinum*			fac
kochia	*Kochia scoparia*			upl ?
lesser burdock	*Arctium minus*			facu
nodding beggartick	*Bidens cernua*			obl
perennial sowthistle	*Sonchus arvensis*	X		facu
poison hemlock	*Conium maculatum*	X	X	facw
prickly lettuce	*Lactuca serriola*			facu
purple loosestrife	*Lythrum salicaria*	X		obl
showy milkweed	*Asclepias speciosa*			fac
teasel	*Dipsacus fullonum*		X	fac
water speedwell	*Veronica anagallis-aquatica*			obl
Watson's willowweed, Fringed Willowherb	*Epilobium ciliatum*		X	facw
wild mint	*Mentha arvensis*			facw
GRASSES/GRAMINOIDS				
cattail	*Typha latifolia*		X	obl
cheatgrass	*Bromus tectorum*			upl ?
common reed	*Phragmites australis*		X	facw
hardstem bulrush	*Schoenoplectus acutus*		X	obl
rabbitfoot grass	*Polypogon monspeliensis*		X	facw
reed canarygrass	*Phalaris arundinacea*		X	facw
tapertip rush	*Juncus acuminatus*			obl
unknown sedge	*Carex sps.*			obl

Hydrology

Much of this site may lack indicators of wetland hydrology and is being examined to accurately identify a "normal" condition as it pertains to wetland hydrology. This site is a relatively special case in that it does not follow the assumptions of typical arid conditions described in the arid supplement (Environmental Laboratory 2008) as high ground water conditions are during the growing season attributed to area-wide irrigation. Also, the site hydrology has been impacted by a number of human-induced events, extreme events and nearby alterations impacting site hydrology. Therefore, a detailed long-term study is required to accurately determine a normal and representative hydrology for this site. Nevertheless, an interim finding is presented in this section to help move forward with permitting under Section 404 of the Clean Water Act.

Hydrology is the largest source of complexity at this site as it pertains to determining jurisdictional wetland. The site is impacted by surface and ground water. Surface water comes from precipitation directly on the site, runoff from adjoining land, and from drainage water in an historical drain adjoining the site along the northerly boundary. Normal ground water levels are influenced locally on the site by precipitation, the drain, and ponds which are adjoining the property on the south. Wetland hydrology is determined on the frequency and duration of inundation and depth of ground water during the growing season that can create saturated conditions for periods of several weeks. There are barriers to surface flow along the drain that prevents water from draining from parts of the site. Additionally, the fine-grained soil, particularly with high clay content, limits the rate at which water can drain from the site. Overall, the normal depth to ground water ranges from less than 1-foot to a few feet. This depth to ground water is thought to be the primary factor in what determines "normal" wetland hydrology on the site.

Normal wetland hydrology on the site has been significantly impacted by several man-caused events and one extreme event over the past 5-years or so. These events include: damming of the drain downstream of the site, overly high water levels in the pond caused by water from highway construction and excessive pumping, and poor maintenance on the banks of the drain. These events have resulted in above normal moisture conditions and an equivalent response from vegetation on the site. Without a long-term controlled study of natural water conditions on the site, it is very difficult to determine what is or is not wetland hydrology. In this study we enlisted the use of high-resolution LiDAR coupled with ground water observation to plot the zones where normal ground water would be lower than required by true wetland plants.

Historically, the site was probably flooded from the drain or at least had a constant supply of water due to irrigation return flow, ground water flow from the adjacent hillslope, ground water contributions from and seepage from the Penitentiary Canal.

In 2008-2009 construction began on the area in a big way. East Park Center Bridge started with construction of ponds downstream from the site. A road was constructed upstream from the site along with subsurface drainage facilities that empty into the drain directly above the site. An irrigation pond was dug due south of the site. Changes in Harris Ranch consisted of conversion of flood-irrigated land to residential subdivision resulted in an undocumented

change in ground and surface water. These changes have resulted in changes to the historical hydrology of the area including the site, the impact of which has not been documented.

The first ground water measurements on the site were made in 4 areas in October of 2011. Unusual events, described below, resulted in delaying the delineation until 2017.

November 2011 – site was inundated for more than a month because of construction of the drainage pipe on the west property.

2012 – 2014 - Drain ditch overgrown with vegetation. Eventually cleaned which dropped water elevation in drain by more than a foot.
2015 – Construction of Park Center interchange and other roads resulting in the pumping of ground water into the Harris Irrigation pond that elevated ground water and flooded many parts of the site for a long period of time.

2016 – Continued high water in irrigation pond resulted in site flooding, eventually corrected. Property sold to another party. Delineation scheduled to begin when normal hydrology is achieved.

2017 – Highest water year in many years inundated much of the site due to poorly maintained drain. Maintenance problems still exist. Detailed wetland study (this study) initiated by prospective buyer of property.

A series of observation holes/wells were placed on May 29, 2017. Site was inundated from heavy precipitation events and runoff. Precipitation for the area was 4-inches more than the average during the past 15 years. Additional wells were installed and measurements made on June 22, 2017 and inundation was gone, ground water had returned to approximate levels measured in October 2011. A ground water elevation map was computed using the water level measurement and estimates for the site and is shown in Figure Depth to Ground Water. This map is expected to represent near-normal ground water conditions based on the limited data available and experience in the area.

LiDAR data was used to estimate surface site hydrology using a 2-dimensional flow model. The results, shown in a time-sequence Figure Surface Flooding Simulation, illustrates how the eastern portion of the property responds to flow in the ditch. Basically, there are part of the ditch that allow water to flood the site under certain conditions and create barriers to site drainage.

Figure Interim Preliminary Wetland Delineation shows two areas that represent the expected wetland community based on normal hydrology and also the expected wetland community based on site maintenance and long-term change resulting from that management.

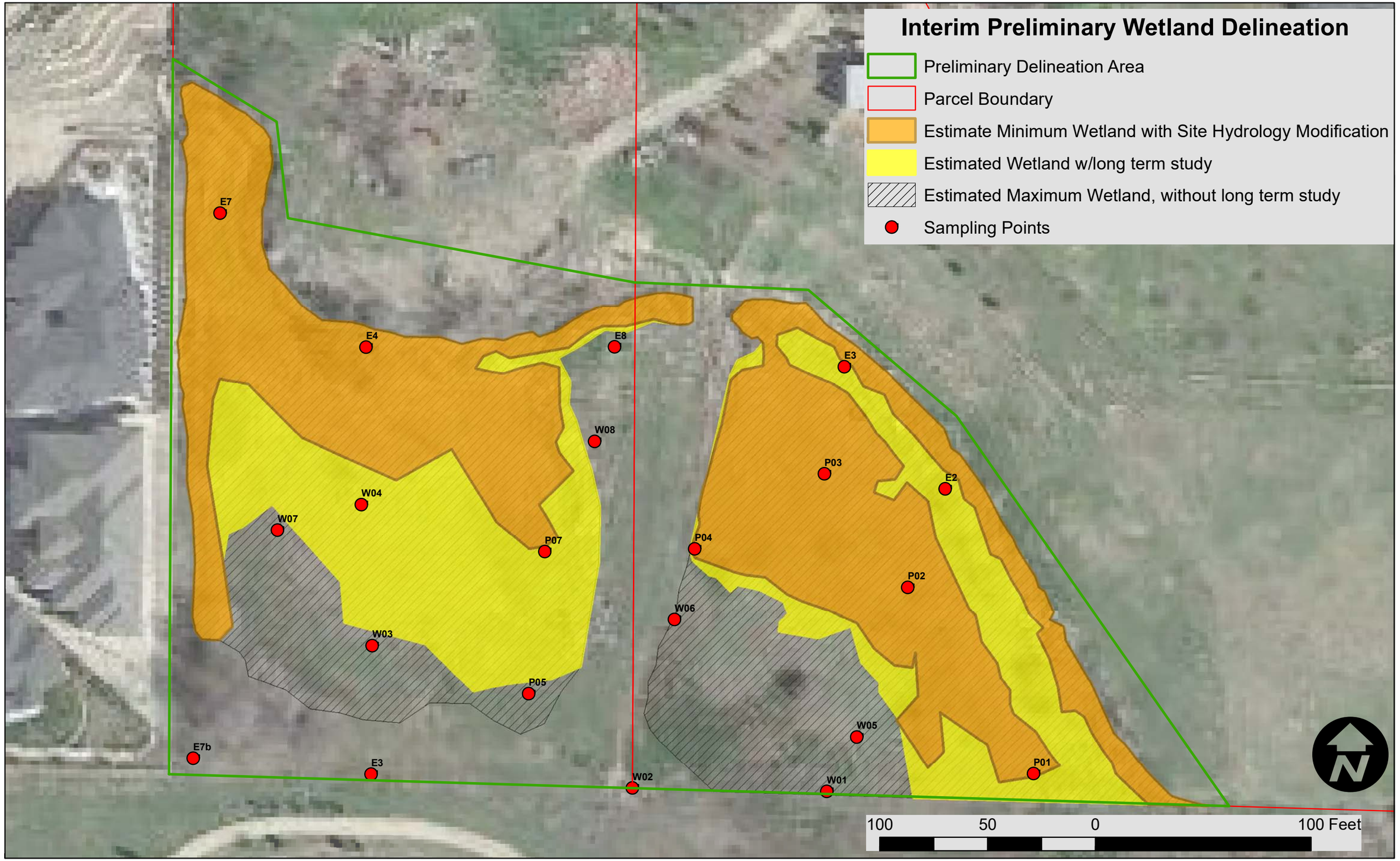

Interim Preliminary Wetland Delineation
Preliminary Delineation Area
Parcel Boundary
Estimate Minimum Wetland with Site Hydrology Modification
Estimated Wetland w/long term study
Estimated Maximum Wetland, without long term study
Sampling Points
E7
E4
E8
E3
W08
P03
E2
W04
W07
P07
P04
P02
W06
W03
P05
W05
E7b
E3
W02
W01
P01
N
100
50
0
100 Feet

Figure LiDAR 0.2' Contour

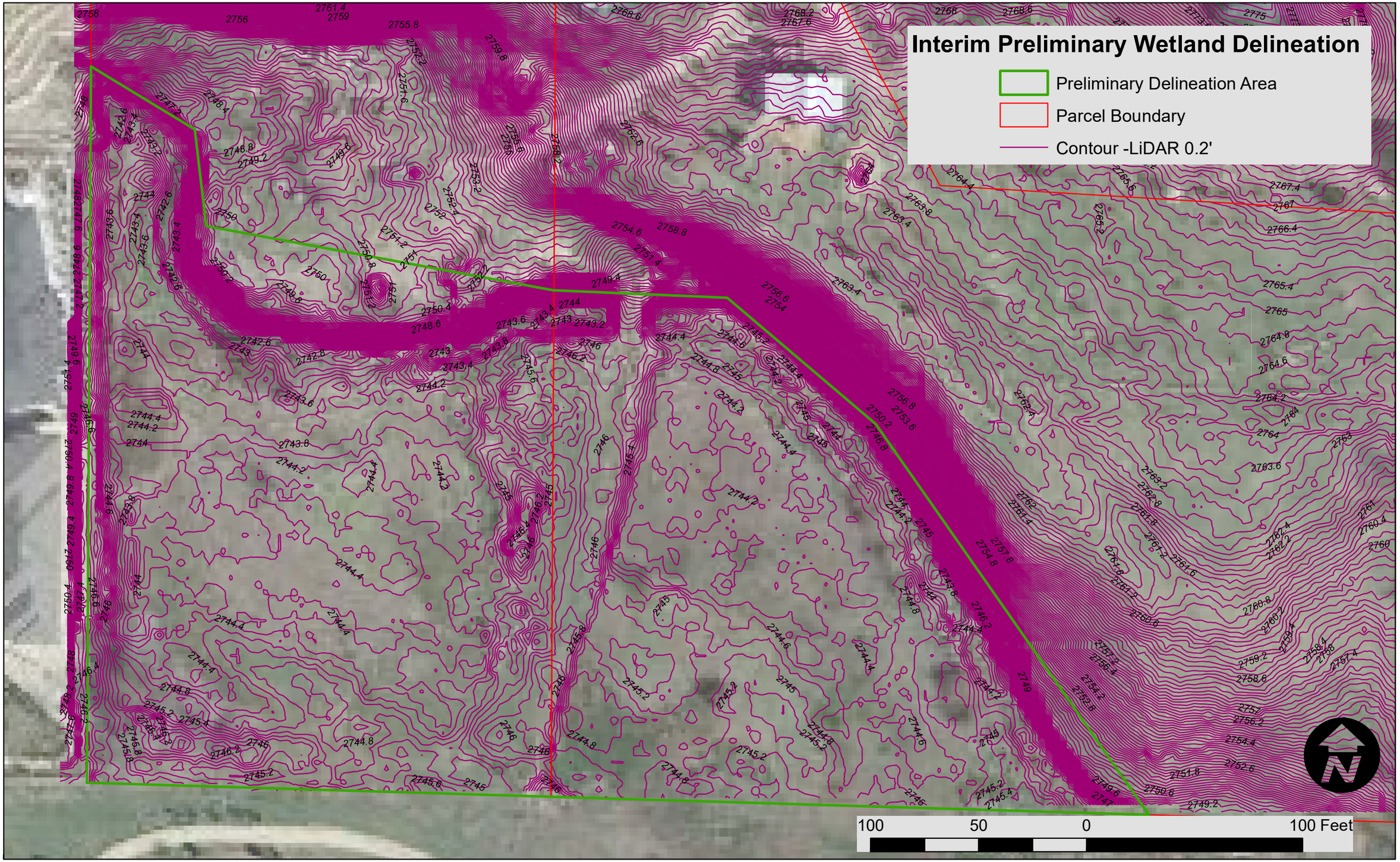
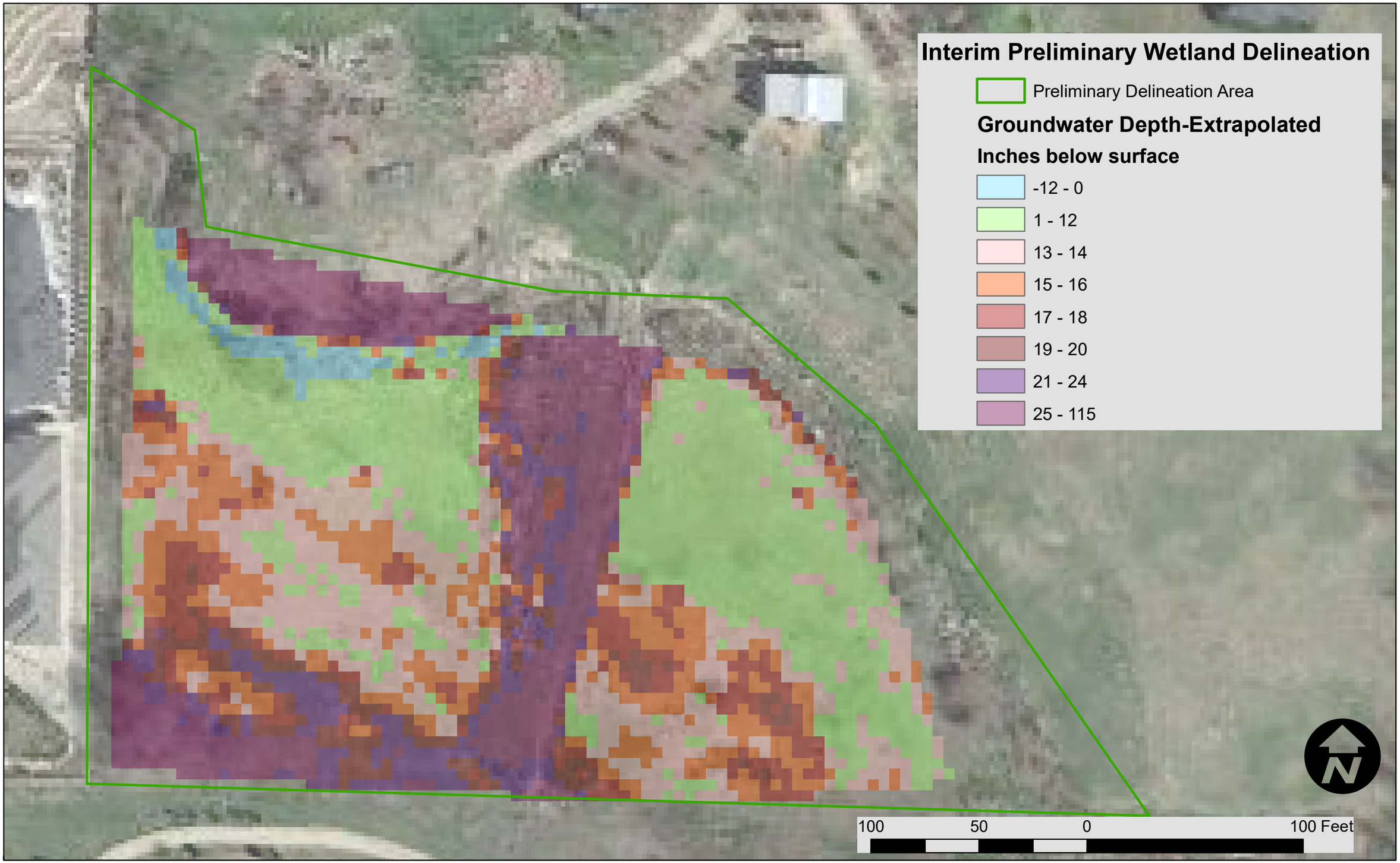
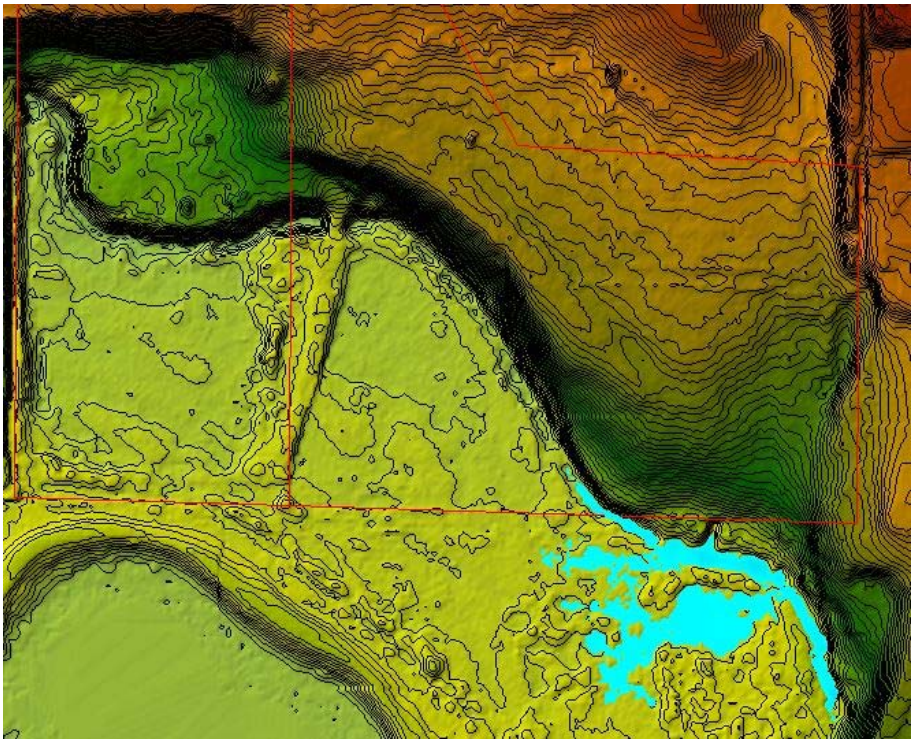


Figure Depth to Groundwater

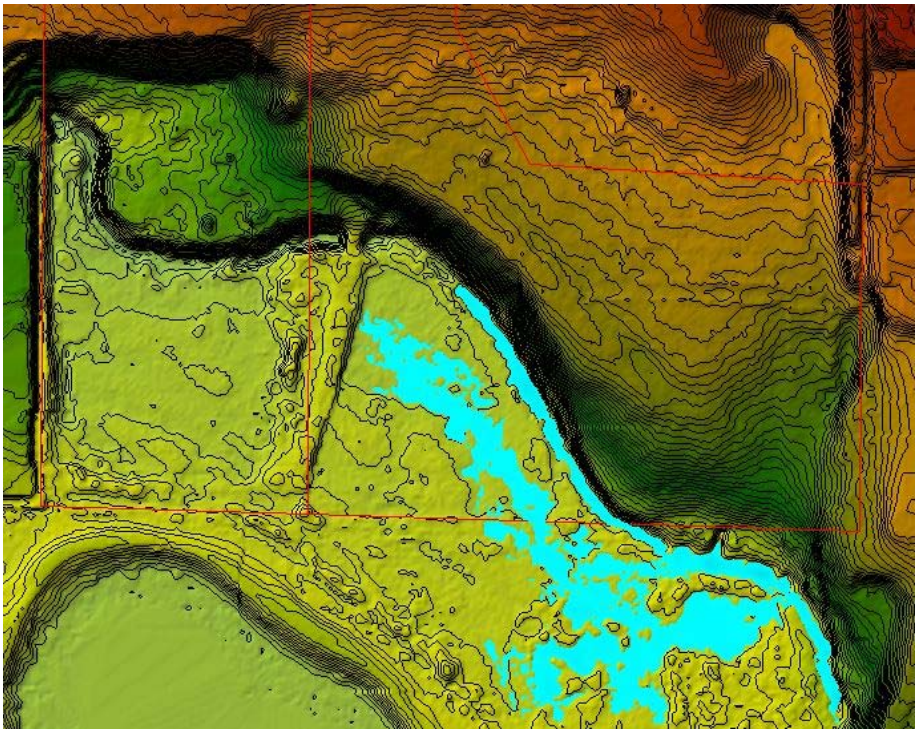


Surface Flooding Simulation – This demonstrates how site responds to high flow in existing ditch that is not maintained. It also demonstrates how berms designed to keep flow in the ditch also serve to keep water on the site after a flood because water gets trapped behind the berms. Sequence is shown after 20, 60, 90 120-minutes, 4 hrs, and 23-hours. Flow is reduced to a small amount after 5-hours.

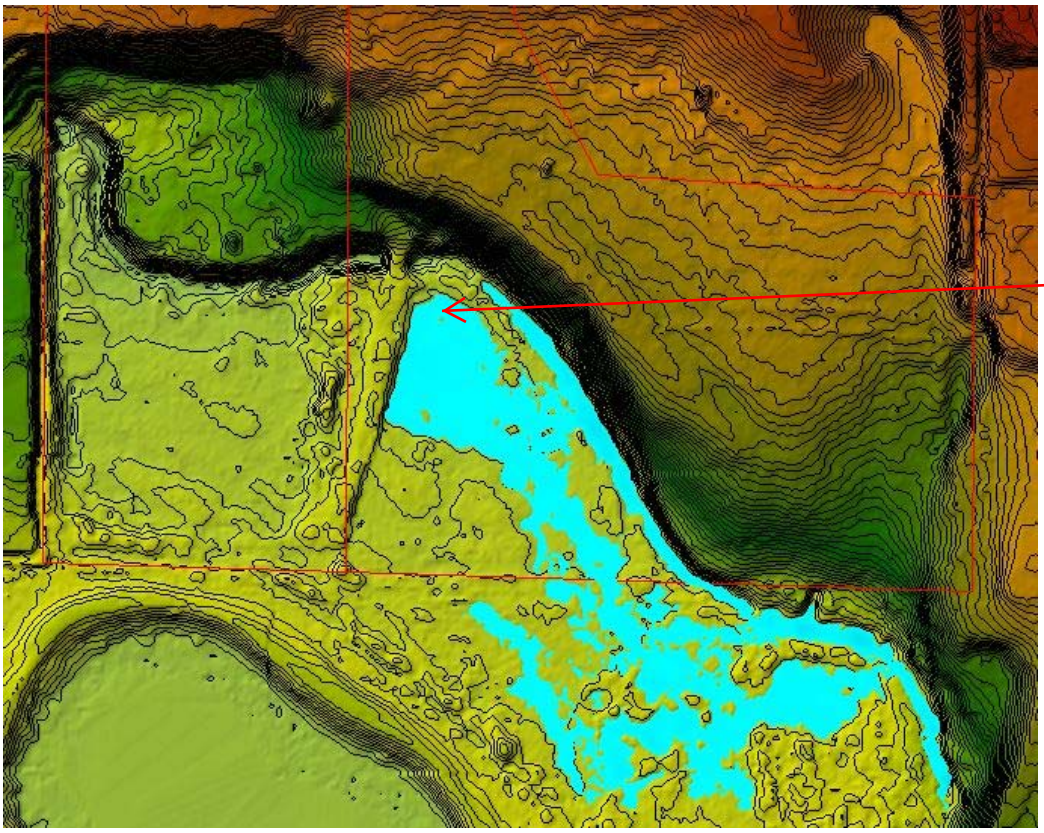
20 minutes



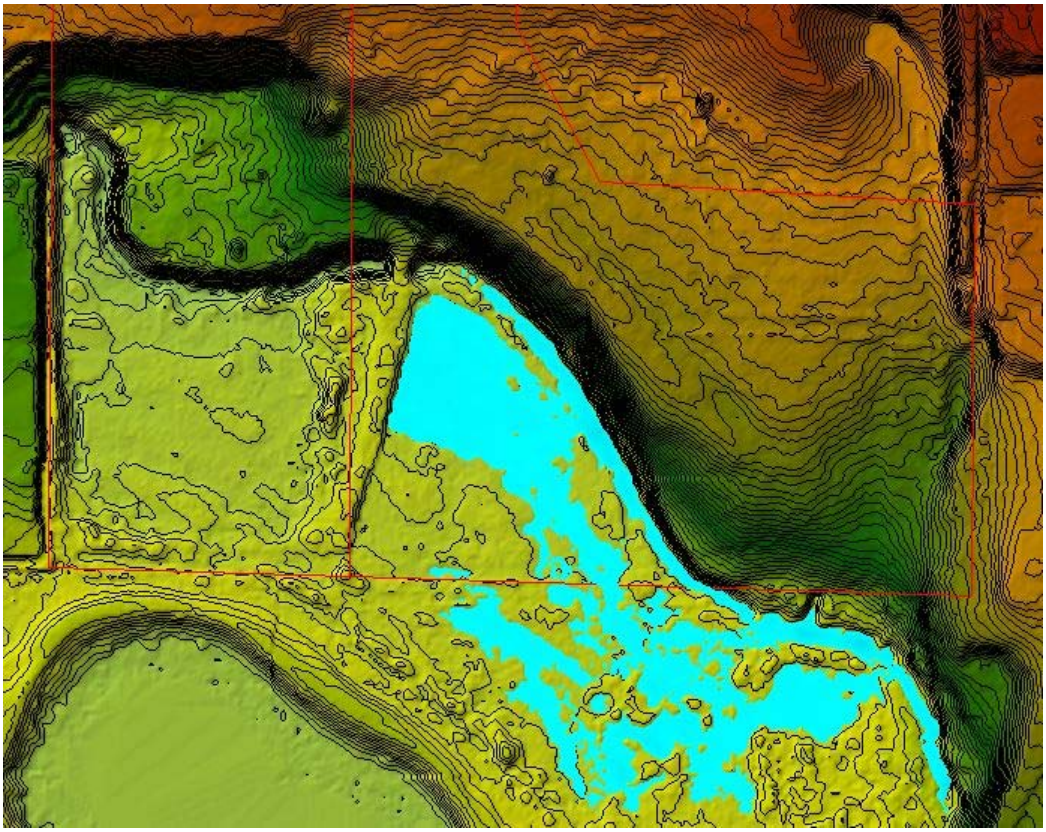
60-minutes



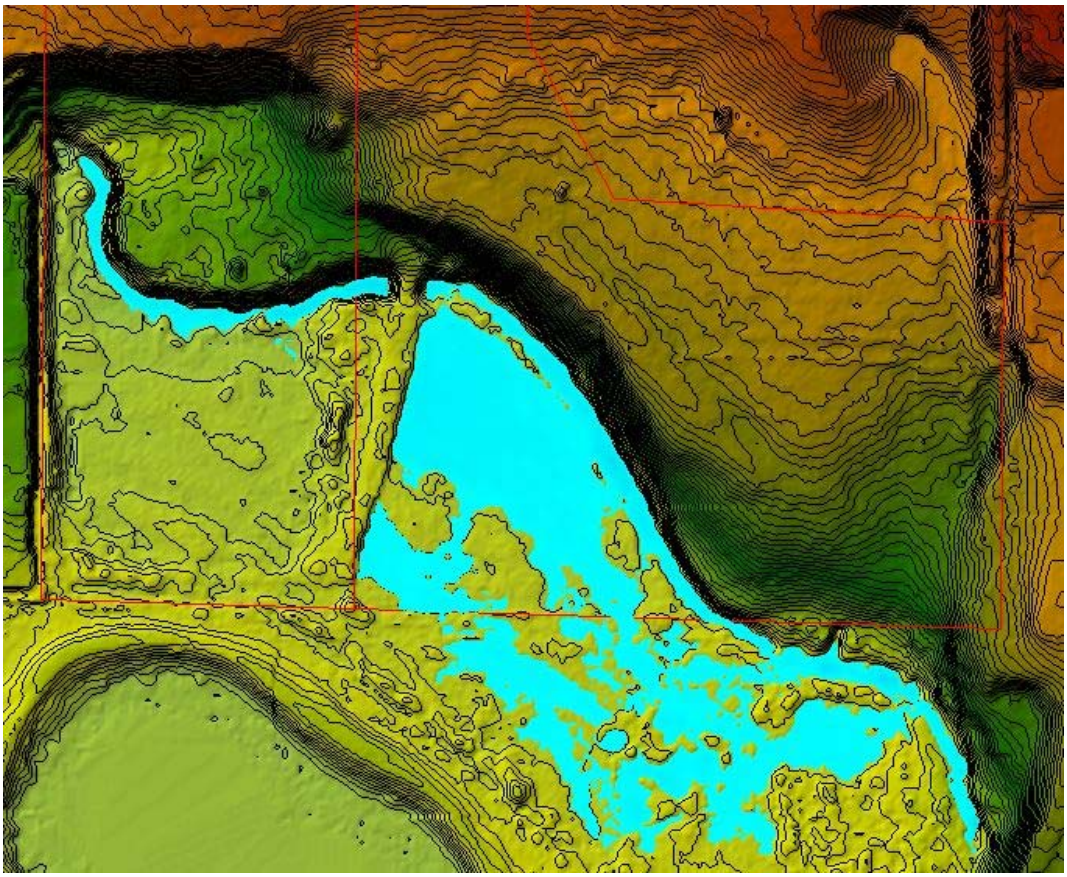
90-minutes



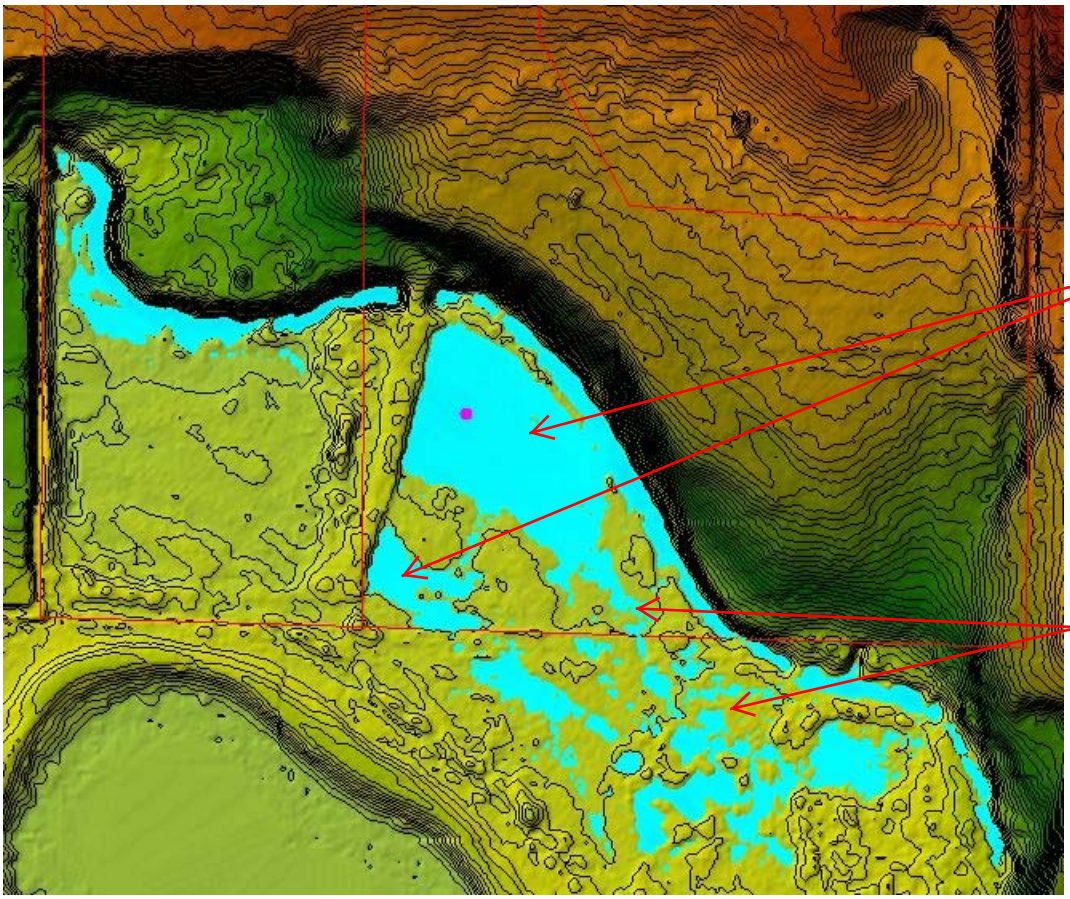
120-minutes



4-hours



23-hours

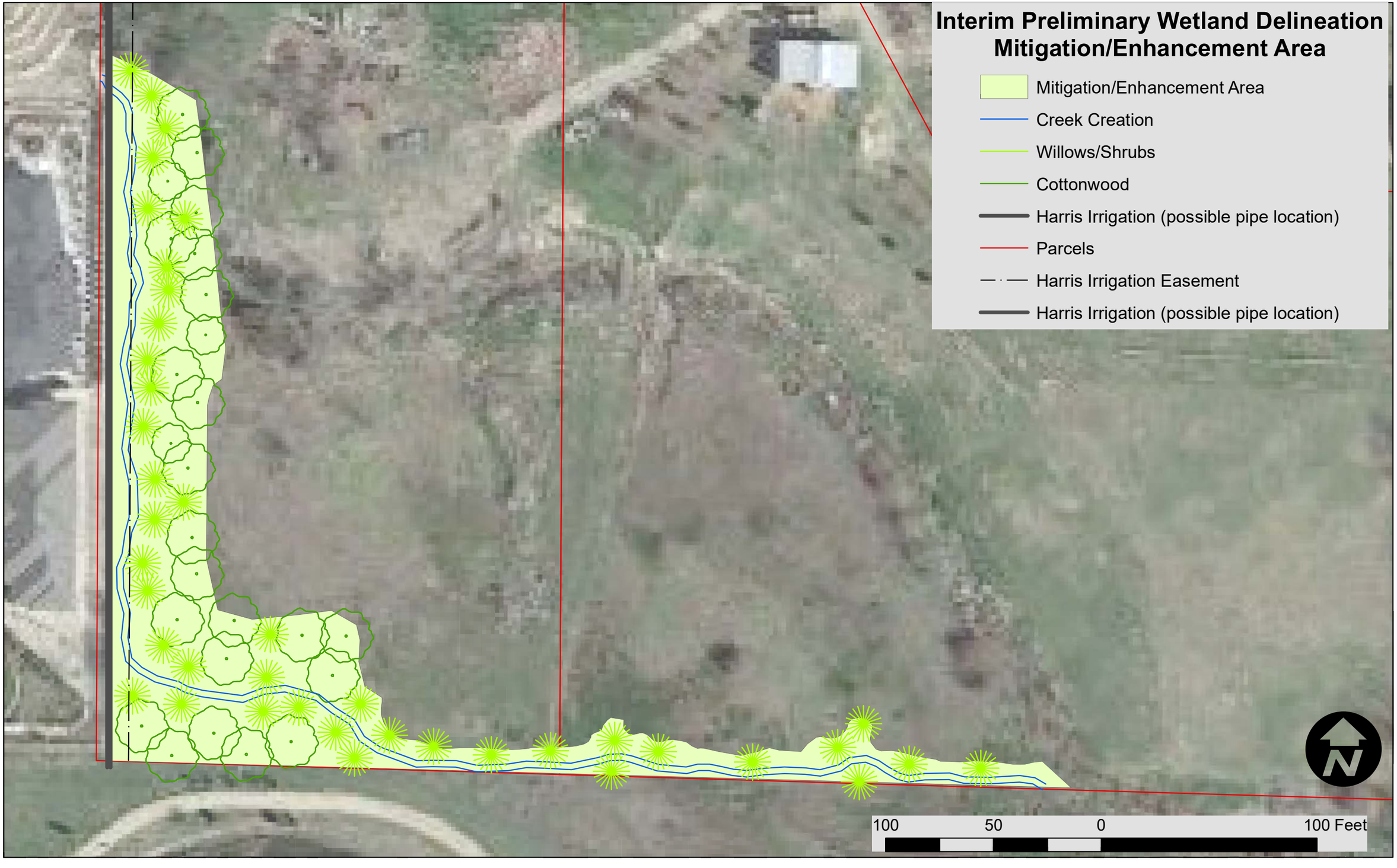


Vegetation Quality – Functional Assessment

The Montana Method was used as an estimate of functional value assessment on the site. The site is considered highly disturbed because of past grazing, proximity of development, hydrologic modification nearby, and large amount of noxious vegetation. The site is marginal habitat for small numbers of marsh dwellers such as redwing blackbirds, killdeer, occasional deer and small mammals and is a portion of the remainder of habitat that has been converted over the years to farm and residential development. The site does not have usable habitat for endangered or threatened species. Wildlife use rated as 0.3 because of low features and moderate use. No fish habitat exists. Flood attenuation is not really a viable since there is an established drain within the site, however, the site does attenuate local runoff and this is considered a positive attribute. Overall, the wetland areas probably flood or pond 5 of 10 years but at a volume of less than 1 acre foot and considered temporary as the amount of water retained is not expected to sustain the site. The rating for attenuation is 0.2. Sediment, nutrient, and toxicant retention and removal processes occur for rainfall and perhaps when drain overflows, but considered very minor since the water source is already free of most pollutants. Flow and subsequent drainage over the site is probably adding to potential sediment compared with inflow quality. A rating of -.2 is appropriate for the retention/removal of sediment/toxicants since the site is a source of noxious weeds that can be transmitted from the site. Note that a negative rating is not a part of the published procedure but deemed to be appropriate is rating this site. Production Export/Food Chain support: The site is between 1 and 5 acres, does not have an established outlet, a moderate biological activity rating, and a temporary duration of surface water resulting in a 0.2 rating. Groundwater discharge/recharge: The site is in a low precipitation zone and the soil/vegetation system would likely retain and use all of the water and then some. Rating is 0.1 for low or none. Uniqueness: the site is now considered unique because of the change that has occurred in the area. Although the rating methodology was not really designed for an urban setting, the site is given a diversity that is no longer common nearby. A rating of 0.2 is given because it is different than much of the adjacent area. No rating was given for recreation/educational value. Based on the 1.6 acre expected wetland area the percent of possible score is 5.5 %. The rating table is found in Appendix Wetland Function & Value.

Mitigation Report

Mitigation for the proposed site unavoidable impacts could be accomplished through use of the Barber Valley Mitigation area located in Marianne Williams Park and/or on-site mitigation. On-site mitigation approach is described here. Mitigation consists of relocating the existing drain (~625-linear-feet) to the south property boundary and creating a water feature resembling a natural stream of approximately 750-linear-feet). The area on either side of the creek amounting to about 0.56-acres would be graded and planted to support willow and cottonwood growth. Both the soil, water, and ground water within the mitigation zone is expected to support the planned vegetation. Similar mitigation efforts have been successfully used nearby at Harris Ranch on Spring Creek, within the Harris Ranch mitigation zone next to the Boise River, and within Walling Creek which is a part of Marianne Williams Park, Julia Creek in Julia Davis Park and other areas around the valley. The use of native species is a requirement and should yield a relatively thick understory and an eventual tree canopy providing much more habitat diversity, cover, shelter, and screening. Mitigation areas require performance standard that require weed control, targets for types of vegetation, a conservation easement to protect the area, and a third-party holder of the easement. The proposed vegetation would include about a 38 % cottonwood, 32 % willow, and 30% creek and emergent wetland. Additional planning of milkweed to support the national effort for monarch butterfly migration habitat restoration. The mitigation is expected to increase the percent of functional score from 5.5 percent to above 15 percent due mostly to the increased diversity of vegetation, removal of noxious weeds, and educational opportunities that could be created using interpretive signs posted along pathways and mitigation boundaries.


Interim Preliminary Wetland Delineation
Mitigation/Enhancement Area
Mitigation/Enhancement Area
Creek Creation
Willows/Shrubs
Cottonwood
Harris Irrigation (possible pipe location)
Parcels
Harris Irrigation Easement
Harris Irrigation (possible pipe location)
N
100
50
0
100 Feet

Qualifications of the Preparer

Karl Gebhardt, P.E., P.H., Hydrologist/Environmental Engineer –

Karl has a unique job history. He was the BLM Idaho State Hydrologist for 30+ years and was a pioneer in the national BLM riparian program, hazardous materials program, and research cooperator at the ARS Northwest Watershed Experiment Station. In 1983 he founded Resource Systems, Inc. in response to Boise City and Ada County desire to have a comprehensive fish and wildlife study of the Boise River. The Boise River Wildlife and Fish Study serves as the basis for the Boise River Plan and Ordinance. Karl's primary areas of expertise are in habitat restoration/creation, flood modeling, and hazardous materials. He has conducted hundreds of studies on wetlands, flooding, and habitat restoration. Karl developed most of the concepts for Barber Valley that have resulted in the creation and restoration of river habitats and connectivity along the river from below East Park Center Bridge to the Barber Pool. Notable Projects include: Spring Meadows Riverfront Nature Park and Loggers Creek Extension, Marianne Williams Park, Harris Ranch, Mace River Ranch. Karl has provided assistance in greenbelt and park projects including: Trout Unlimited Projects (Julia Creek, Alta Harris Creek, Island Creek) Garden City footbridge, Greenbelt, Boise Water Park, Esther Simplot Park and others. Karl's main goal has always been to create win-win opportunities for habitat creation and protection, flood protection, development, and recreation.

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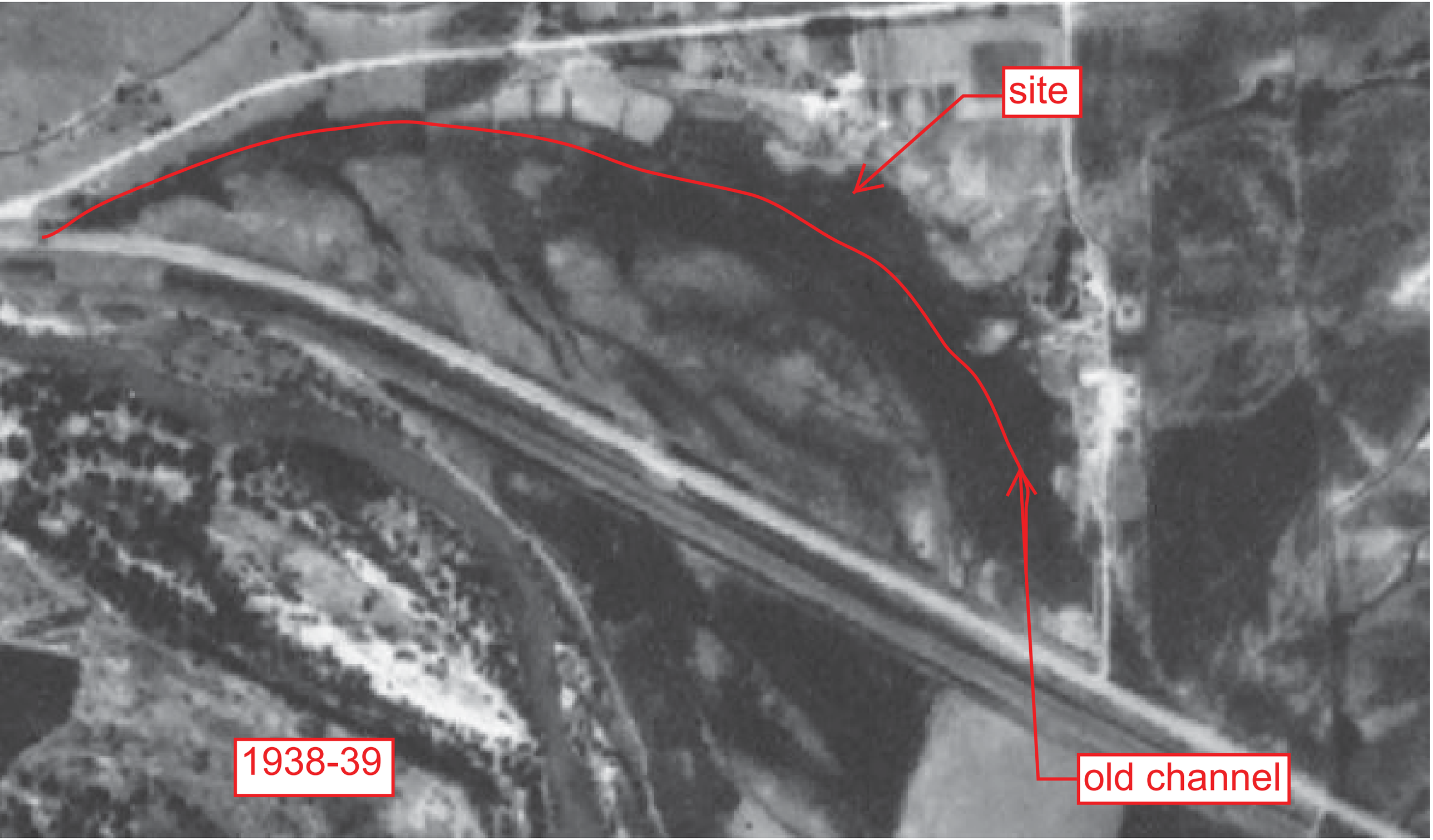
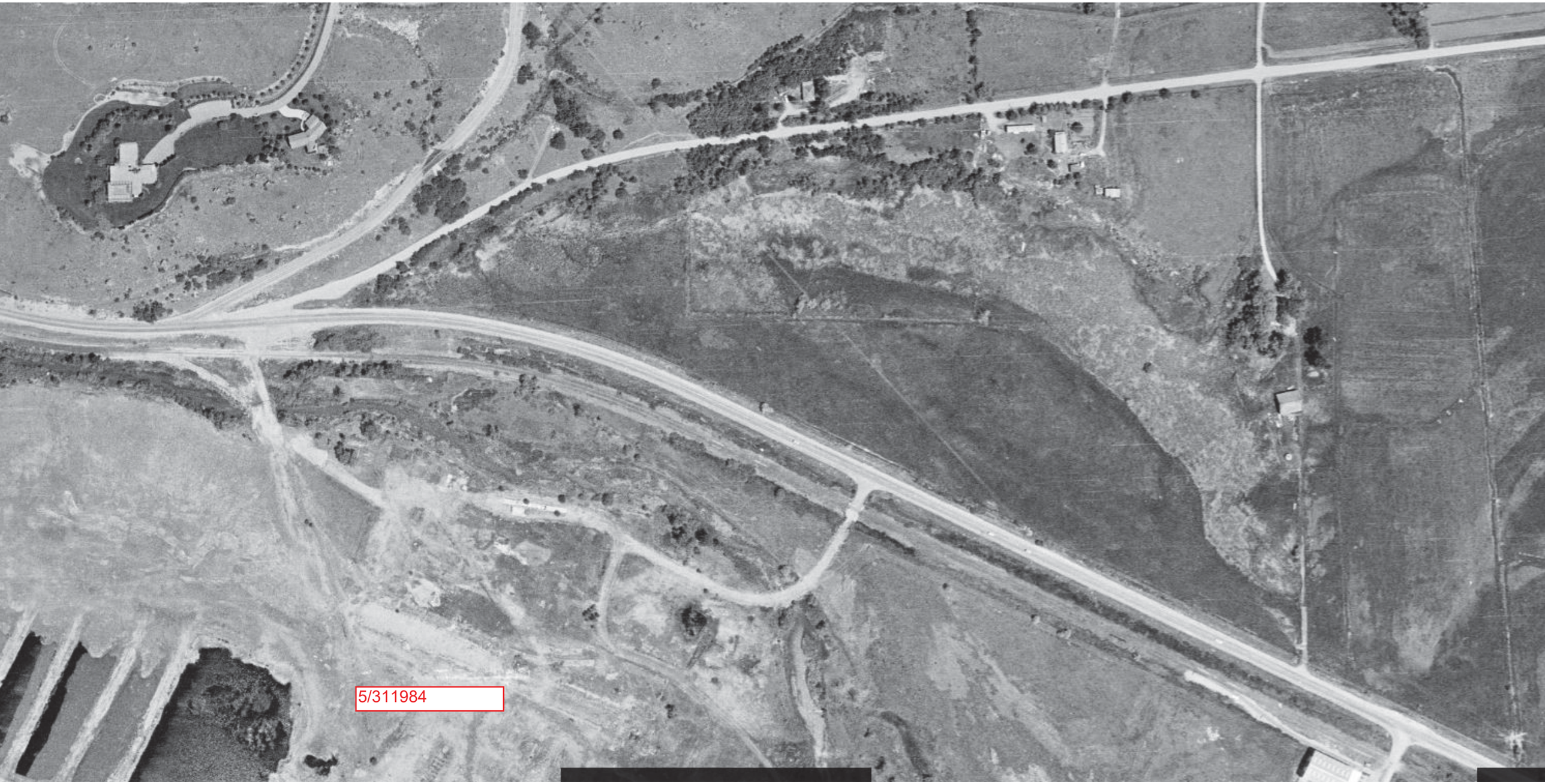
Appendices

Historical Aerial Photos


site
old channel
1938-39


5/311984


6/1992
1992
2016
Starview
E Barber Dr
Pheasant Ln
site
S Pheasant Ln
E Timbersaw Dr
E Parkcenter Blvd
E Warm Springs Ave
Historic Drain
S Perrault Way
E Barber Station Dr
Boise River Greenbelt
1992
685 ft
Image U.S. Geological Survey
Google Earth


6/1998
1992
2016
Starview
E Barber Dr
Pheasant Ln
S Pheasant Ln
E Timbersaw Dr
E Parkcenter Blvd
E Warm Springs Ave
S Perrault Way
E Barber Station Dr
Boise River Greenbelt
1998
685 ft
Image U.S. Geological Survey
Google Earth


6/2002
Mill Point
Starview
E Barber Dr
Pheasant Ln
S Pheasant Ln
E Timbersaw Dr
E Parkcenter Blvd
E Warm Springs Ave
S Perrault Way
E Barber Station Dr
Boise River Greenbelt
June 1, 2002
685 ft
Image © 2017 DigitalGlobe
Google Earth


6/2003
Starview
E Barber Dr
Pheasant Ln
S Pheasant Ln
E Timbersaw Dr
E Parkcenter Blvd
E Warm Springs Ave
S Perrault Way
E Barber Station Dr
Boise River Greenbelt
June 14, 2003
685 ft
Image © 2017 DigitalGlobe
Google Earth


E Barber Dr
Starview Dr
N Warm Springs Ave
Pleasant Ln
E Parkcenter Blvd
Boise River Greenbelt
S Pleasant Way
7/1/2003


E Barber Dr
Pheasant Ln
Warm Springs Ave
Starview Dr
S Wise Way
E Parkcenter Blvd
Boise River Greenbelt
S Perrault Way
6/15/2004


E Barber Dr
Pheasant Ln
S Pheasant Ln
E Timbersaw Dr
E Parkcenter Blvd
E Warm Springs Ave
Boise River Greenbelt
2005


E Barber Dr
Pheasant Ln
S Pheasant Ln
E Timbersaw Dr
E Parkcenter Blvd
E Warm Springs Ave
Boise River Greenbelt
2006


8/2009
1992
2016
Starview
E Barber Dr
Pheasant Ln
Road Constructec
S Pheasant Ln
Ponds dug
E Timbersaw Dr
Ponds dug
E Parkcenter Blvd
E Warm Springs Ave
S Perrault Way
Boise River Greenbelt
E Barber Station Dr
2009
685 ft
Image USDA Farm Service Agency
Google Earth


7/2010
1992
2016
Starview
E Barber Dr
Pheasant Ln
S Pheasant Ln
E Timbersaw Dr
E Parkcenter Blvd
E Warm Springs Ave
S Perrault Way
Boise River Greenbelt
E Barber Station Dr
Pond dug just south of site
07/11/2010
685 ft
Google Earth


8/2011
1992
2016
Site Filled
Several shallow wells dug
E Barber Dr
Pheasant Ln
S Pheasant Ln
E Timbersaw Dr
E Parkcenter Blvd
E Warm Springs Ave
S Perrault Way
Boise River Greenbelt
E Barber Station Dr
08/11/2011
685 ft
Google Earth


10/2012
Ditch piped and filled
E Barber Dr
Pheasant Ln
S Pheasant Ln
E Timbersaw Dr
E Parkcenter Blvd
E Warm Springs Ave
S Perrault Way
E Barber Station Dr
Boise River Greenbelt
10/05/2012
685 ft
Google Earth


E Barber Dr
Pheasant Ln
S Pheasant Ln
E Timbersaw Dr
E Parkcenter Blvd
E Warm Springs Ave
S Perrault Way
E Barber Station Dr
Boise River Greenbelt
04/23/2013
685 ft
Google Earth


Click to zoom in on the time slider.
6/2014
1992
2016
Starview
E Barber Dr
Pheasant Ln
S Pheasant Ln
E Timbersaw Dr
E Parkcenter Blvd
E Warm Springs Ave
S Perrault Way
E Barber Station Dr
Boise River Greenbelt
06/06/2014
685 ft
Google Earth


4/2015
1992
2016
Starview
E Barber Dr
Pheasant Ln
S Pheasant Ln
E Timbersaw Dr
E Parkcenter Blvd
E Warm Springs Ave
S Perrault Way
Boise River Greenbelt
E Barber Station Dr
Road Construction
04/29/2015
685 ft
Google Earth


4/2016
E Barber Dr
Pheasant Ln
S Pheasant Ln
E Timbersaw Dr
E Parkcenter Blvd
E Warm Springs Ave
S Perrault Way
E Barber Station Dr
Boise River Greenbelt
04/01/2016
Google Earth

Wetland Data Sheets (reserved)

Soil Survey

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Ada County, Idaho

June 25, 2017

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Map Scale: 1:1,540 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 20 40 80 120

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Ada County, Idaho
Survey Area Data: Version 4, Sep 9, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 10, 2011—Aug 23, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Ada County, Idaho (ID001)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
1000	Moulton-Phyllis complex, 0 to 1 percent slopes	2.5	28.9%
1002	Ballentine-Eagle complex, 0 to 1 percent slopes	0.1	0.6%
1009	Bissell loam, 2 to 4 percent slopes	0.6	7.3%
3043	Cashmere loamy sand, 8 to 25 percent slopes	5.4	63.2%
Totals for Area of Interest		**8.6**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Ada County, Idaho

1000—Moulton-Phyllis complex, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 20kdy
Elevation: 2,450 to 2,870 feet
Mean annual precipitation: 10 to 13 inches
Mean annual air temperature: 50 to 52 degrees F
Frost-free period: 145 to 155 days
Farmland classification: Not prime farmland

Map Unit Composition

Moulton and similar soils: 45 percent
Phyllis and similar soils: 30 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Moulton

Setting

Landform: Flood-plain steps
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy alluvium over sandy and gravelly alluvium

Typical profile

Ap - 0 to 6 inches: fine sandy loam
A - 6 to 12 inches: fine sandy loam
Bw1 - 12 to 19 inches: fine sandy loam
Bw2 - 19 to 26 inches: fine sandy loam
2C1 - 26 to 30 inches: very gravelly loamy sand
2C2 - 30 to 60 inches: stratified gravelly loamy sand to very gravelly coarse sand

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 20 to 30 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water storage in profile: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 6c
Hydrologic Soil Group: B
Other vegetative classification: black cottonwood series - riparian (HC)
Hydric soil rating: No

Description of Phyllis

Setting

Landform: Flood-plain steps

Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Coarse-loamy alluvium over sandy and gravelly alluvium

Typical profile

A - 0 to 7 inches: fine sandy loam
Ag - 7 to 11 inches: very fine sandy loam
Cg1 - 11 to 22 inches: fine sandy loam
Cg2 - 22 to 29 inches: fine sandy loam
2C - 29 to 59 inches: very gravelly loamy sand

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 0 to 7 inches
Frequency of flooding: Frequent
Frequency of ponding: Frequent
Calcium carbonate, maximum in profile: 5 percent
Available water storage in profile: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): 5w
Land capability classification (nonirrigated): 6c
Hydrologic Soil Group: B/D
Other vegetative classification: Moist meadow series (MM)
Hydric soil rating: Yes

Minor Components

Fluvaquentic endoaquolls, poorly drained

Percent of map unit: 10 percent
Landform: Flood-plain steps
Down-slope shape: Linear
Across-slope shape: Concave
Other vegetative classification: Moist meadow series (MM)
Hydric soil rating: Yes

Fluvaquentic endoaquolls

Percent of map unit: 5 percent
Landform: Flood-plain steps
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: MEADOW DECA18-CANE2 (R011XY019ID)
Other vegetative classification: Moist meadow series (MM)
Hydric soil rating: Yes

1002—Ballentine-Eagle complex, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: 20kdz
Elevation: 2,450 to 2,840 feet
Mean annual precipitation: 10 to 13 inches
Mean annual air temperature: 50 to 52 degrees F
Frost-free period: 145 to 155 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Ballentine and similar soils: 45 percent
Eagle and similar soils: 35 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ballentine

Setting

Landform: Stream terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-loamy alluvium over sandy and gravelly alluvium

Typical profile

A1 - 0 to 2 inches: fine sandy loam
A2 - 2 to 14 inches: fine sandy loam
AC - 14 to 22 inches: fine sandy loam
C1 - 22 to 35 inches: fine sandy loam
2C2 - 35 to 70 inches: stratified extremely gravelly coarse sand to very gravelly loamy sand

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 40 to 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Available water storage in profile: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 6c
Hydrologic Soil Group: A
Other vegetative classification: Upland shrub/bunchgrass subseries (SMGX)
Hydric soil rating: No

Description of Eagle

Setting

Landform: Stream terraces
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy and gravelly alluvium

Typical profile

A - 0 to 3 inches: gravelly fine sandy loam
AC - 3 to 10 inches: fine sandy loam
C1 - 10 to 15 inches: gravelly fine sandy loam
2C2 - 15 to 63 inches: very gravelly sand

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: About 40 to 60 inches
Frequency of flooding: Rare
Frequency of ponding: None
Available water storage in profile: Very low (about 1.9 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Other vegetative classification: Upland shrub/bunchgrass subseries (SMGX)
Hydric soil rating: No

1009—Bissell loam, 2 to 4 percent slopes

Map Unit Setting

National map unit symbol: 20kfb
Elevation: 2,760 to 2,870 feet
Mean annual precipitation: 11 to 13 inches
Mean annual air temperature: 50 to 52 degrees F
Frost-free period: 145 to 155 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Bissell and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Bissell

Setting

Landform: Fan remnants, stream terraces

Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy alluvium

Typical profile

Ap - 0 to 8 inches: loam
Bt1 - 8 to 18 inches: clay loam
Bt2 - 18 to 25 inches: clay loam
Bt3 - 25 to 41 inches: clay loam
C1 - 41 to 60 inches: loam
C2 - 60 to 66 inches: sandy loam

Properties and qualities

Slope: 2 to 4 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 5 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 5.0
Available water storage in profile: High (about 10.4 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 4c
Hydrologic Soil Group: C
Ecological site: Loamy 8-12 ARTRT/PSSP6 (R011XY026ID)
Hydric soil rating: No

3043—Cashmere loamy sand, 8 to 25 percent slopes

Map Unit Setting

National map unit symbol: 2185b
Elevation: 2,660 to 3,480 feet
Mean annual precipitation: 13 to 14 inches
Mean annual air temperature: 49 to 52 degrees F
Frost-free period: 135 to 155 days
Farmland classification: Farmland of statewide importance, if irrigated

Map Unit Composition

Cashmere, sandy surface, and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cashmere, Sandy Surface

Setting

Landform: Hillslopes

Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Sandy alluvium

Typical profile

A1 - 0 to 2 inches: loamy sand
A2 - 2 to 10 inches: loamy sand
Bw1 - 10 to 17 inches: sandy loam
Bw2 - 17 to 29 inches: sandy loam
C1 - 29 to 46 inches: sandy loam
C2 - 46 to 60 inches: loamy sand

Properties and qualities

Slope: 8 to 25 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: A
Ecological site: SAND 8-12 ARTRT/ACHY (R011XY011ID)
Hydric soil rating: No

Soil Information for All Uses

Ecological Site Assessment

Individual soil map unit components can be correlated to a particular ecological site. The Ecological Site Assessment section includes ecological site descriptions, plant growth curves, state and transition models, and selected National Plants database information.

All Ecological Sites — Rangeland

An "ecological site" is the product of all the environmental factors responsible for its development. It has characteristic soils that have developed over time; a characteristic hydrology, particularly infiltration and runoff, that has developed over time; and a characteristic plant community (kind and amount of vegetation). The vegetation, soils, and hydrology are all interrelated. Each is influenced by the others and influences the development of the others. For example, the hydrology of the site is influenced by development of the soil and plant community. The plant community on an ecological site is typified by an association of species that differs from that of other ecological sites in the kind and/or proportion of species or in total production.

An ecological site name provides a general description of a particular ecological site. For example, "Loamy Upland" is the name of a rangeland ecological site. An "ecological site ID" is the symbol assigned to a particular ecological site.

The map identifies the dominant ecological site for each map unit, aggregated by dominant condition. Other ecological sites may occur within each map unit. Each map unit typically consists of one or more components (soils and/or miscellaneous areas). Each soil component is associated with an ecological site. Miscellaneous areas, such as rock outcrop, sand dunes, and badlands, have little or no soil material and support little or no vegetation and therefore are not linked to an ecological site. The table below the map lists all of the ecological sites for each map unit component in your area of interest.

Map—Dominant Ecological Site

Map Scale: 1:1,540 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

R011XY011ID

R011XY026ID

Not rated or not available

Soil Rating Lines

R011XY011ID

R011XY026ID

Not rated or not available

Soil Rating Points

R011XY011ID

R011XY026ID

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Ada County, Idaho
Survey Area Data: Version 4, Sep 9, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 10, 2011—Aug 23, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Ecological Sites by Map Unit Component

Ada County, Idaho					
Map unit symbol	**Map unit name**	**Component name (percent)**	**Ecological site**	**Acres in AOI**	**Percent of AOI**
1000	Moulton-Phyllis complex, 0 to 1 percent slopes	Moulton (45%)		2.5	28.9%
		Phyllis (30%)			
		Fluvaquentic Endoaquolls, poorly drained (10%)			
		Fluvaquentic Endoaquolls (5%)	R011XY019ID — MEADOW DECA18-CANE2		
1002	Ballentine-Eagle complex, 0 to 1 percent slopes	Ballentine (45%)		0.1	0.6%
		Eagle (35%)			
1009	Bissell loam, 2 to 4 percent slopes	Bissell (85%)	R011XY026ID — Loamy 8-12 ARTRT/PSSP6	0.6	7.3%
3043	Cashmere loamy sand, 8 to 25 percent slopes	Cashmere, sandy surface (85%)	R011XY011ID — SAND 8-12 ARTRT/ACHY	5.4	63.2%
Totals for Area of Interest				**8.6**	**100.0%**

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LOCATION MOULTON ID

Established Series
Rev. GHL/LMR/HBM
05/2001

MOULTON SERIES

The Moulton series consists of very deep, poorly drained soils that formed in alluvium dominantly from granitic material. Moulton soils are on flood plains, low terraces and low alluvial fans and have slopes of 0 to 3 percent. Permeability is moderately rapid. The average annual precipitation is about 10 inches and average annual air temperature is about 49 degrees F.

TAXONOMIC CLASS: Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Typic Endoaquolls

TYPICAL PEDON: Moulton fine sandy loam, cultivated. (Colors are for dry soil unless otherwise noted.)

Ap--0 to 6 inches; grayish brown (2.5Y 5/2) fine sandy loam, very dark grayish brown (2.5Y 3/2) moist; weak very fine granular structure; slightly hard, very friable, slightly sticky; common fine roots; common fine pores; neutral; (pH 6.6); abrupt smooth boundary. (4 to 8 inches thick)

A--6 to 12 inches; grayish brown (2.5Y 5/2) fine sandy loam, very dark grayish brown (2.5Y 3/2) moist; common fine faint grayish brown (10YR 5/2) mottles; weak medium fine subangular blocky structure; slightly hard, very friable, slightly sticky; common fine roots; many very fine pores; neutral (pH 6.8); clear wavy boundary. (4 to 8 inches thick)

Bw1--12 to 19 inches; grayish brown (2.5Y 5/2) fine sandy loam, dark grayish brown (2.5Y 4/2) moist; common fine distinct brown (10YR 5/3) mottles; massive; slightly hard, very friable, slightly sticky; common fine roots; many very fine pores; neutral (pH 6.7); clear wavy boundary. (5 to 20 inches thick)

Bw2--19 to 26 inches; light brownish gray (2.5Y 6/2) fine sandy loam, dark grayish brown (2.5Y 4/2) moist; medium distinct very pale brown (10YR 7/4) mottles; massive; slightly hard, very friable, slightly sticky; common fine roots; many very fine pores; neutral (pH 6.7); abrupt smooth boundary. (0 to 7 inches thick)

2C1--26 to 30 inches; light brownish gray (2.5Y 6/2) moist very gravelly loamy sand; few dark grayish brown (2.5Y 4/2) mottles; single grained; loose; few fine roots; neutral (pH 6.8). (0 to 5 inches thick)

2C2--30 to 60 inches; sand and gravel; single grain; loose; neutral.

TYPE LOCATION: Gem County, Idaho; 600 feet south and 320 feet east of the center of sec. 6, T. 6 N., R. 2 W.

RANGE IN CHARACTERISTICS:

Average annual soil temperature - 47 to 54 degrees F.
Moisture - saturated with water much of the year unless drained Mottles - at depths of 6 to 20 inches
Reaction - neutral or mildly alkaline
Depth to strongly contrasting sand and pebbles - 20 to 40 inches

A horizons
Hue - 10YR or 2.5Y and moist
Value - 4 or 5 dry, 2 or 3 moist
Chroma - 1 or 2 dry and moist
Organic matter to depth 10 inches - 2 to 4 percent
Some pedons are slightly effervescent in the upper part

Bw horizons
Hue - 10YR or 2.5Y
Value - 5 or 6 dry, 3 or 4 moist
Chroma - 2 or 3 dry and moist
Texture 10 inches to sand and pebbles - FSL, SL, weighted average less than 18 percent clay, less than 50 percent fine and coarser sand, and less than 15 percent coarse fragments.

COMPETING SERIES: These are the Gannett and Wamba series. Gannett soils have an 0 horizon. Wamba soils are silt loam or gravelly silt loam above the contrasting sand and gravel layer.

GEOGRAPHIC SETTING: The Moulton soils are on flood plains, low terraces, and low alluvial fans at elevations of 2,100 to 4,500 feet. Slopes are dominantly less than 1 percent and range from 0 to 3 percent. The soils formed in recent alluvium dominantly from granitic material and a small amount from basalt. The average annual temperature is 45 to 52 degrees. The frost-free period ranges from 140 to 160 days, and the average annual precipitation ranges from 8 to 12 inches, including 1.5 to 3 feet of snow.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the competing Chance and Falk soils, and the Emerson and Notus soils. Emerson soils are usually dry and lack mottles. Notus soils are less than 20 inches deep to sand and gravel.

DRAINAGE AND PERMEABILITY: Poorly drained; slow runoff or ponded;moderately rapid permeability. The water table commonly fluctuates between 18 to 26 inches during the year.

USE AND VEGETATION: Irrigated cropland and pasture. Crops are corn, alfalfa, small grains, sugar beets, and clover. Vegetation is chiefly bunchgrasses, big sagebrush, rabbitbrush, rushes, and sedges.

DISTRIBUTION AND EXTENT: Southwestern Idaho and possibly southeastern Oregon. The series is of moderate extent.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Portland, Oregon

SERIES ESTABLISHED: Gem County, Idaho, 1949.

REMARKS: Diagnostic horizons and features recognized in this profile are:

Mollic epipedon - zone from 0 to 19 inches (Ap, A and Bw1 horizons)

Cambic horizon - zone from 12 to 26 inches (Bw1, Bw2 horizons)

Contrasting textures - at 26 inches

Mottles - at 6 inches

Moisture regime - aquic

Temperature regime - mesic

National Cooperative Soil Survey
U.S.A.

LOCATION PHYLLIS ID

Established Series
IRD: JCB/ALH
07/2012

PHYLLIS SERIES

The Phyllis series consists of very deep, very poorly drained soils with moderately high saturated hydraulic conductivity that formed in alluvium from granitic rocks. Slopes range from 0 to 1 percent in valleys. The average annual precipitation is about 279 mm and the average annual temperature is about 10.5 degrees C.

TAXONOMIC CLASS: Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, mesic Fluvaquentic Endoaquolls

TYPICAL PEDON: Phyllis fine sandy loam -- on a nearly level flood-plain step, in a pasture, at 755 meters elevation. When described on October 5, 2006, the soil was moist to 38 cm and wet below. (Colors are for air-dry soil unless otherwise stated.)

A--0 to 18 cm; grayish brown (10YR 5/2) fine sandy loam, very dark grayish brown (10YR 3/2) moist; moderate fine granular structure; slightly hard, very friable, nonsticky and nonplastic; many very fine and fine, common medium roots; many very fine and fine, few medium tubular and vesicular pores; common very fine faint dark yellowish brown (10YR 4/6) iron concentrations, common fine and medium distinct dark gray (2.5Y 4/1) iron depletions; slightly effervescent; neutral (pH 7.0); clear smooth boundary. (18 to 25 cm thick)

Ag--18 to 27 cm; gray (2.5Y 5/1) very fine sandy loam, very dark gray (2.5Y 3/1) moist; weak fine and medium subangular blocky structure; moderately hard, friable, nonsticky and slightly plastic; common very fine, fine and medium roots; many very fine tubular and vesicular pores; common fine prominent dark yellowish brown (10YR 4/6) moist redox concentrations; slightly acid (pH 6.3); clear smooth boundary. (0 to 38 cm thick)

Cg1--27 to 56 cm; light brownish gray (2.5Y 6/2) fine sandy loam, dark grayish brown (2.5Y 4/2) moist; massive; moderately hard, friable, nonsticky and nonplastic; few very fine, common fine and medium roots; many very fine tubular and vesicular pores; common medium and coarse prominent dark yellowish brown (10YR 4/6) moist redox concentrations along root channels; slightly acid (pH 6.2); clear smooth boundary.

Cg2--56 to 74 cm; light brownish gray (10YR 6/2) fine sandy loam, dark grayish brown (10YR 4/2) moist; massive; moderately hard, friable, nonsticky and nonplastic; few very fine and common fine and medium roots; many very fine tubular and vesicular pores; common medium and coarse prominent dark yellowish brown (10YR 4/6) moist redox concentrations along root channels; slightly acid (pH 6.4); clear smooth boundary. (combined Cg horizon - 25 to 37 cm thick)

2C--74 to 150 cm; multi-colored very gravelly loamy sand; single grain; loose, nonsticky and nonplastic; few very fine and fine roots; 45 percent

gravel, 5 percent cobbles; neutral (pH 6.6).

TYPE LOCATION: Ada County, Idaho; about one and one-half miles southeast of Star; 80 feet south and 50 feet east of the center of section 20, T.4 N., R.1 W; USGS Star Quadrangle; Latitude - 43 degrees, 40 minutes, 11 seconds N. and Longitude - 116 degrees, 29 minutes, 00 seconds W., NAD 83.

RANGE IN CHARACTERISTICS:
Thickness of mollic epipedon - 25 to 64 cm
Depth to discontinuity (sand & gravel) - 50 to 100 cm
Depth to bedrock - greater than 180 cm
Particle-size control section (upper part) - 8 to 18 percent clay; less than 50 percent fine sand or coarser sand; 0 to 15 percent gravel
Particle-size control section (lower part) - 0 to 8 percent clay; 0 to 70 percent rock fragments
Average annual soil temperature - 11 to 12 degrees C.

A horizon
Value - 4 or 5 dry, 2 or 3 moist
Chroma - 1 or 2 dry and moist
Clay content -8 to 20 percent
Rock fragments - 0 to 5 percent gravel
Reaction - slightly acid or neutral
Effervescence - none or slight
Redoximorphic features - distinct or prominent iron concentrations; faint or distinct depletions

Ag horizon (when present)
Hue - 10YR through 10Y
Texture - VFSL, FSL or L
Clay content -8 to 20 percent
Rock fragments - 0 to 5 percent gravel
Reaction - slightly acid or neutral
Redoximorphic features - distinct or prominent iron concentrations

Cg horizon
Hue - 10YR through 10Y
Value - 5 or 6 dry, 3 or 4 moist
Texture - VFSL, FSL or SL
Clay content - 7 to 12 percent
Rock fragments - 0 to 5 percent gravel
Reaction - slightly acid or neutral
Redoximorphic features - distinct or prominent iron concentrations

2C horizon

Texture - stratified LFS to S
Clay content - 0 to 8 percent
Rock fragments - 0 to 60 percent gravel, 0 to 10 percent cobbles and 0 to 70 percent total
Reaction - slightly acid or neutral

COMPETING SERIES: This is the Craigmile series. Craigmile soils have less than 7 percent gravel in the lower 63 cm of the control section, and the Cg horizon does not have hue yellower than 10YR. Chance soils are similar but do not have a mollic epipedon.

GEOGRAPHIC SETTING: The Phyllis soils are on fluves or depressions of flood plain-steps at elevations of 748 to 876 meters. Slopes range from 0 to 1 percent. These soils formed in recent alluvium from granitic rocks with minor influence of other igneous materials. The average annual precipitation is 254 to 330 mm. The average annual temperature is 10 to 11 degrees C. The frost-free period is 145 to 155 days.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the Moulton and Notus soils. Moulton and Notus soils are somewhat poorly drained and on smooth or convex geomorphic positions. Notus soils do not have mollic epipedons, and are less than 50 cm deep to sand and gravel.

DRAINAGE AND SATURATED HYDRAULIC CONDUCTIVITY: Very poorly drained with normal seasonal high saturation less than 25 cm from the surface; slow runoff; moderately high over very high saturated hydraulic conductivity. Phyllis soils are subject to frequent ponding and flooding where not protected for brief periods from December to June. These soils are commonly saturated to the surface during the growing season due to flood irrigation.

USE AND VEGETATION: Phyllis soils are used mainly for hayland/pasture, parkland and golf courses. Native vegetation is sedges, bulrushes and cattails.

DISTRIBUTION AND EXTENT: Southwestern Idaho. MLRA 11. Phyllis soils are of small extent.

MLRA SOIL SURVEY REGIONAL OFFICE (MO) RESPONSIBLE: Portland, Oregon

SERIES ESTABLISHED: Ada County, Idaho, 2012.

REMARKS: Diagnostic horizons and features recognized in this profile:
Mollic epipedon - zone from 0 to 27 cm (A and Ag horizons)
Redoximorphic features - zone from 0 to 74 cm (A, Ag, Cg1 and Cg2 horizons)
Lithologic discontinuity - at 74 cm
Particle-size control section - zone from 25 to 100 cm
Soil moisture regime - aquic

Hydric soil indicator - A11 (Field Indicators of Hydric Soils in the United States - Version 6.0, 2006)

National Cooperative Soil Survey
U.S.A.

Wetland Function & Values

FUNCTION & VALUE SUMMARY & OVERALL RATING - Existing _ 1.6 Acres

Function & Value Variables	Rating	Actual Functional Points	Possible Functional Points	Functional Units: (Actual Points x Estimated AA Acreai:ie)
A. Listed/Proposed T&E Species Habitat	0	0	1	0
B. MT Natural Heritaqe Proqram Species Habitat	0	0	1	0
C. General Wildlife Habitat	0.2	0.2	1	0.32
D. General Fish Habitat	0	0	1	0
E. Flood Attenuation	0	0	1	0
F. Short and Lonq Term Surface Water Storaqe	0.2	0.2	1	0.32
G. Sediment/Nutrient/Toxicant Removal	-0.2	-0.2	1	-0.32
H. Sediment/Shoreline Stabilization	0	0	1	0
I. Production Export/Food Chain Support	0.2	0.2	1	0.32
J. Groundwater Discharqe/Recharqe	0	0	1	0
K. UniQueness	0.2	0.2	1	0.32
L. Recreation/Education Potential(bonus points)	0	0	NA	0
Totals:	0.6	0.6	18	0.96
		Percent of Possible Score	5.5	

FUNCTION & VALUE SUMMARY & OVERALL RATING - Mitigation _ 0.56 Acres

Function & Value Variables	Rating	Actual Functional Points	Possible Functional Points	Functional Units: (Actual Points x Estimated AA Acreai:ie)
A. Listed/Proposed T&E Species Habitat	0.1	0.1	1	0.056
B. MT Natural Heritaqe Proqram Species Habitat	0	0	1	0
C. General Wildlife Habitat	0.4	0.4	1	0.224
D. General Fish Habitat	0	0	1	0
E. Flood Attenuation	0	0	1	0
F. Short and Lonq Term Surface Water Storaqe	0.2	0.2	1	0.112
G. Sediment/Nutrient/Toxicant Removal	0.2	0.2	1	0.112
H. Sediment/Shoreline Stabilization	0	0	1	0
I. Production Export/Food Chain Support	0.4	0.4	1	0.224
J. Groundwater Discharqe/Recharqe	0	0	1	0
K. UniQueness	0.4	0.4	1	0.224
L. Recreation/Education Potential(bonus points)	0.2	0.2	NA	0.112
Totals:	1.9	1.9	6	1.064
Percent of Possible Score			17.3	

EPA mitigation brochure

United States
Environmental
Protection Agency

Wetlands Compensatory Mitigation

The objective of the Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Toward achievement of this goal, the CWA prohibits the discharge of dredged or fill material into waters of the United States unless a permit issued by the Army Corps of Engineers or approved State under CWA Section 404 authorizes such a discharge.

For every authorized discharge, the adverse impacts to wetlands, streams and other aquatic resources must be avoided and minimized to the extent practicable. For unavoidable impacts, ***compensatory mitigation*** *is required to replace the loss of wetland and aquatic resource functions in the watershed. Compensatory mitigation refers to the restoration, establishment, enhancement, or in certain circumstances preservation of wetlands, streams or other aquatic resources for the purpose of offsetting unavoidable adverse impacts.*

The Mitigation Sequence

Compensatory mitigation is actually the third step in a sequence of actions that must be followed to offset impacts to aquatic resources. The 1990 Memorandum of Agreement (MOA) between the Environmental Protection Agency (EPA) and the Department of Army establishes a three-part process, known as the mitigation sequence to help guide mitigation decisions and determine the type and level of mitigation required under Clean Water Act Section 404 regulations.

Step 1. Avoid - Adverse impacts to aquatic resources are to be avoided and no discharge shall be permitted if there is a practicable alternative with less adverse impact.

Step 2. Minimize - If impacts cannot be avoided, appropriate and practicable steps to minimize adverse impacts must be taken.

Step 3. Compensate - Appropriate and practicable ***compensatory mitigation*** is required for unavoidable adverse impacts which remain. The amount and quality of compensatory mitigation may not substitute for avoiding and minimizing impacts.

Photo by James Valentine

The American Crocodile, a Federal Endangered Species, makes its home in the Everglades Mitigation Bank.

Methods of Compensatory Mitigation:

Even after avoiding and minimizing impacts, projects that will cause adverse impacts to wetlands, streams and other aquatic resources typically require some type of compensatory mitigation. The Army Corps of Engineers (or approved state authority) is responsible for determining the appropriate form and amount of compensatory mitigation required. Methods of compensatory mitigation include restoration, establishment, enhancement and preservation.

• **Restoration:** Re-establishment or rehabililitation of a wetland or other aquatic resource with the goal of returning natural or historic functions and characteristics to a former or degraded wetland. Restoration may result in a gain in wetland function or wetland acres, or both.

• **Establishment (Creation):** The development of a wetland or other aquatic resource where a wetland did not previously exist through manipulation of the physical, chemical and/or biological characteristics of the site. Successful establishment results in a net gain in wetland acres and function.

• **Enhancement:** Activities conducted within existing wetlands that heighten, intensify, or improve one or more wetland functions. Enhancement is often undertaken for a specific purpose such as to improve water quality, flood water retention or wildlife habitat. Enhancement results in a gain in wetland function, but does not result in a net gain in wetland acres.

• **Preservation:** The permanent protection of ecologically important wetlands or other aquatic resources through the implementation of appropriate legal and physical mechanisms (i.e. conservation easements, title transfers). Preservation may include protection of upland areas adjacent to wetlands as necessary to ensure protection or enhancement of the aquatic ecosystem. Preservation does not result in a net gain of wetland acres and may only be used in certain circumstances, including when the resources to be preserved contribute significantly to the ecological sustainability of the watershed.

Source: *Compensatory Mitigation for Losses of Aquatic Resources*, 40 CFR Part 230 Subpart J and 33 CFR Part 332.

Mechanisms for Compensatory Mitigation:

Compensatory mitigation for unavoidable wetland impacts may be accomplished through three distinct mechanisms. With permittee-responsible mitigation, the permittee maintains liability for the construction and long-term success of the site. Mitigation banking and in-lieu fee mitigation are forms of "third party" compensation, where the liability for project success is transferred to the mitigation bank or in-lieu fee sponsor.

- **Permittee-Responsible Mitigation:** Restoration, establishment, enhancement or preservation of wetlands undertaken by a permittee in order to compensate for wetland impacts resulting from a specific project. The permittee performs the mitigation after the permit is issued and is ultimately responsible for implementation and success of the mitigation. Permittee-responsible mitigation may occur at the site of the permitted impacts or at an off-site location within the same watershed.
- **Mitigation Banking:** A wetlands mitigation bank is a wetland area that has been restored, established, enhanced or preserved, which is then set aside to compensate for future conversions of wetlands for development activities. Permittees, upon approval of regulatory agencies, can purchase credits from a mitigation bank to meet their requirements for compensatory mitigation. The value of these "credits" is determined by quantifying the wetland functions or acres restored or created. The bank sponsor is ultimately responsible for the success of the project. Mitigation banking is performed "off-site," meaning it is at a location not on or immediately adjacent to the site of impacts, but within the same watershed. Federal regulations establish a flexible preference for using credits from a mitigation bank over the other compensation mechanisms.
- **In-Lieu Fee Mitigation:** Mitigation that occurs when a permittee provides funds to an in-lieu-fee sponsor (a public agency or non-profit organization). Usually, the sponsor collects funds from multiple permittees in order to pool the financial resources necessary to build and maintain the mitigation site. The in-lieu fee sponsor is responsible for the success of the mitigation. Like banking, in-lieu fee mitigation is also "off-site," but unlike mitigation banking, it typically occurs after the permitted impacts.

EPA-843-F-08-002

Compensatory Mitigation Resources

Federal Wetlands Mitigation Regulations and Guidance

Available at: www.epa.gov/wetlandsmitigation/

Section 404(b)(1) Guidelines. In 1980, EPA finalized regulations that constitute the substantive environmental criteria used in evaluating activities regulated under Section 404 of the Clean Water Act.

Compensatory Mitigation for Losses of Aquatic Resources; Final Rule. In 2008, EPA and the U.S. Army Corps of Engineers, through a joint rulemaking, expanded the Section 404(b)(1) Guidelines to include comprehensive standards for all three mechanisms for providing compensatory mitigation.

1990 Memorandum Of Agreement (MOA) Between The Department of the Army and The Environmental Protection Agency. This MOA contains the policy and procedures to be used in determining the type and level of mitigation necessary to demonstrate compliance with the Section 404(b)(1) Guidelines. (Portions of this MOA that concern the type and location of compensatory mitigation are superseded by the above 2008 rule.)

Recent Evaluations of Wetlands Compensatory Mitigation

The Status and Character of In-Lieu Fee Mitigation in the Unites States. 2006. Environmental Law Institute, Washington, D.C. Available at www.eli.org

2005 Status Report on Compensatory Mitigation in the United States. 2006. Environmental Law Institute, Washington, D.C. Available at www.eli.org

Corps of Engineers Does Not Have an Effective Oversight Approach to Ensure That Compensatory Mitigation Is Occurring. 2005. U.S. Government Accountability Office Report GAO-05-898, Washington, D.C. Available at www.gao.gov

BANKS AND FEES: The Status of Off-Site Wetland Mitigation in the United States. 2002. Environmental Law Institute, Washington, D.C. Available at www.eli.org

Stakeholder Forum on Federal Wetlands Mitigation. 2001-2006. Environmental Law Institute, Washington, D.C. Available at www.eli.org

National Academy of Sciences. *Compensating for Wetland Losses Under the Clean Water Act.* 2001. National Academy Press, Washington, D.C. Available at www.nap.edu

Wetlands Protection: Assessments Needed to Determine Effectiveness of In-Lieu-Fee Mitigation. 2001. U.S. General Accounting Office Report GAO-01-325. Washington, D.C. Available at www.gao.gov

Waters of the United States

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The White House

Office of the Press Secretary

For Immediate Release February 28, 2017

Presidential Executive Order on Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the "Waters of the United States" Rule

EXECUTIVE ORDER

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RESTORING THE RULE OF LAW, FEDERALISM, AND ECONOMIC GROWTH
BY REVIEWING THE "WATERS OF THE UNITED STATES" RULE

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1. Policy. It is in the national interest to ensure that the Nation's navigable waters are kept free from pollution, while at the same time promoting economic growth, minimizing regulatory uncertainty, and showing due regard for the roles of the Congress and the States under the Constitution.

Sec. 2. Review of the Waters of the United States Rule. (a) The Administrator of the Environmental Protection Agency (Administrator) and the Assistant Secretary of the Army for Civil Works (Assistant Secretary) shall review the final rule entitled "Clean Water Rule: Definition of 'Waters of the United States,'" 80 Fed. Reg. 37054 (June 29, 2015), for consistency with the policy set forth in section 1 of this order and publish for notice and comment a proposed rule rescinding or revising the rule, as appropriate and consistent with law.

(b) The Administrator, the Assistant Secretary, and the heads of all executive departments and agencies shall review all orders, rules, regulations, guidelines, or policies implementing or enforcing the final rule listed in subsection (a) of this section for consistency with the policy set forth in section 1 of this order and shall rescind or revise, or publish for notice

and comment proposed rules rescinding or revising, those issuances, as appropriate and consistent with law and with any changes made as a result of a rulemaking proceeding undertaken pursuant to subsection (a) of this section.

(c) With respect to any litigation before the Federal courts related to the final rule listed in subsection (a) of this section, the Administrator and the Assistant Secretary shall promptly notify the Attorney General of the pending review under subsection (b) of this section so that the Attorney General may, as he deems appropriate, inform any court of such review and take such measures as he deems appropriate concerning any such litigation pending the completion of further administrative proceedings related to the rule.

Sec. 3. Definition of "Navigable Waters" in Future Rulemaking. In connection with the proposed rule described in section 2(a) of this order, the Administrator and the Assistant Secretary shall consider interpreting the term "navigable waters," as defined in 33 U.S.C. 1362(7), in a manner consistent with the opinion of Justice Antonin Scalia in Rapanos v. United States, 547 U.S. 715 (2006).

Sec. 4. General Provisions. (a) Nothing in this order shall be construed to impair or otherwise affect:

(i) the authority granted by law to an executive department or agency, or the head thereof; or

(ii) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This order shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This order is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

DONALD J. TRUMP

THE WHITE HOUSE,
February 28, 2017.

6560-50-P

DEPARTMENT OF DEFENSE

Department of the Army, Corps of Engineers

33 CFR Part 328

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 110, 112, 116, 117, 122, 230, 232, 300, 302, and 401

[EPA-HQ-OW-2017-0203; FRL-9962-34-OW]

RIN 2040-AF74

Definition of "Waters of the United States" – Recodification of Pre-existing Rules

AGENCIES: Department of the Army, Corps of Engineers, Department of Defense; and Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency and the Department of the Army ("the agencies") are publishing this proposed rule to initiate the first step in a comprehensive, two-step process intended to review and revise the definition of "waters of the United States" consistent with the Executive Order signed on February 28, 2017, "Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the 'Waters of the United States' Rule." This first step proposes to rescind the definition of "waters of the United States" in the Code of Federal

Regulations to re-codify the definition of "waters of the United States," which currently governs administration of the Clean Water Act, pursuant to a decision issued by the U.S. Court of Appeals for the Sixth Circuit staying a definition of "waters of the United States" promulgated by the agencies in 2015. The agencies would apply the definition of "waters of the United States" as it is currently being implemented, that is informed by applicable agency guidance documents and consistent with Supreme Court decisions and longstanding practice. Proposing to re-codify the regulations that existed before the 2015 Clean Water Rule will provide continuity and certainty for regulated entities, the States, agency staff, and the public. In a second step, the agencies will pursue notice-and-comment rulemaking in which the agencies will conduct a substantive re-evaluation of the definition of "waters of the United States."

DATES: Comments must be received on or before **[insert date 30 days after date of publication in the Federal Register]**.

ADDRESSES: Submit your comments, identified by Docket ID No. EPA-HQ-OW-2017-0203, at http://www.regulations.gov. Follow the online instructions for submitting comments. Once submitted, comments cannot be edited or removed from Regulations.gov. The agencies may publish any comment received to the public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The agencies will generally not consider comments or comment contents located outside of the primary submission (i.e. on the

web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit http://www2.epa.gov/dockets/commenting-epa-dockets.

FOR FURTHER INFORMATION, CONTACT: Ms. Donna Downing, Office of Water (4504-T), Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460; telephone number: (202) 566-2428; e-mail address: *CWAwotus@epa.gov*; or Ms. Stacey Jensen, Regulatory Community of Practice (CECW–CO–R), U.S. Army Corps of Engineers, 441 G Street, NW, Washington, DC 20314; telephone number: (202) 761-5903; e-mail address: *USACE_CWA_Rule@usace.army.mil.*

SUPPLEMENTARY INFORMATION:

The regulatory definition of "waters of the United States" in this proposed rule is the same as the definition that existed prior to promulgation of the Clean Water Rule in 2015 and that has been in effect nationwide since the Clean Water Rule was stayed on October 9, 2016. The agencies will administer the regulations as they are currently being implemented consistent with Supreme Court decisions and longstanding practice as informed by applicable agency guidance documents.

State, tribal, and local governments have well-defined and longstanding relationships with the federal government in implementing CWA programs and these relationships are not altered by the proposed rule. This proposed rule will not establish any new regulatory requirements. Rather, the rule simply codifies the current legal *status quo* while the agencies

engage in a second, substantive rulemaking to reconsider the definition of "waters of the United States."

I. Executive Summary

A. What this proposed rule does

In this proposed rule, the agencies define the scope of "waters of the United States" that are protected under the Clean Water Act (CWA). In 2015, the agencies published the "Clean Water Rule: Definition of 'Waters of the United States'" (80 FR 37054, June 29, 2015), and on October 9, 2015, the U.S. Court of Appeals for the Sixth Circuit stayed the 2015 Rule nationwide pending further action of the court. The agencies propose to replace the stayed 2015 definition of "waters of the United States", and re-codify the exact same regulatory text that existed prior to the 2015 rule, which reflects the current legal regime under which the agencies are operating pursuant to the Sixth Circuit's October 9, 2015 order. The proposed regulatory text would thus replace the stayed rulemaking text, and re-codify the regulatory definitions (at 33 CFR 328 and 40 CFR Parts 110; 112; 116; 117; 122; 230; 232; 300; 302; and 401) in the Code of Federal Regulations (CFR) as they existed prior to the promulgation of the stayed 2015 definition. If this proposed rule is finalized, the agencies would continue to implement those prior regulatory definitions), informed by applicable agency guidance documents and consistent with Supreme Court decisions and longstanding agency practice.

B. History and the purpose of this rulemaking

Congress enacted the Federal Water Pollution Control Act Amendments of 1972, Pub. L. No. 92-500, 86 Stat. 816, as amended, Pub. L. No. 95-217, 91 Stat. 1566, 33 U.S.C. 1251 *et seq*. ("Clean Water Act" or "CWA" or "Act") "to restore and maintain the chemical, physical and

biological integrity of the Nation's waters." Section 101(a). A primary tool in achieving that purpose is a prohibition on the discharge of any pollutants, including dredged or fill material, to "navigable waters" except in accordance with the Act. Section 301(a). The CWA provides that "[t]he term 'navigable waters' means the waters of the United States, including the territorial seas." Section 502(7).

The CWA also provides that States retain their traditional role in preventing, reducing and eliminating pollution. The Act states that "[i]t is the policy of the Congress to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources…" Section 101(b). States and Tribes voluntarily may assume responsibility for permit programs governing discharges of pollution under section 402 for any jurisdictional water bodies (section 402(b)), or of dredged or fill material discharges under section 404 (section 404(g)), with agency approval. (Section 404(g) provides that states may not assume permitting authority over certain specified waters and their adjacent wetlands.) States are also free to establish their own programs under state law to manage and protect waters and wetlands independent of the federal CWA. The statute's introductory purpose section thus commands the Environmental Protection Agency (EPA) to pursue two policy goals simultaneously: (a) to restore and maintain the nation's waters; and (b) to preserve the States' primary responsibility and right to prevent, reduce, and eliminate pollution.

The regulations defining the scope of federal CWA jurisdiction currently in effect, which today's proposed rule would recodify, were established in large part in 1977 (42 FR 37122, July 19, 1977). While EPA administers most provisions in the CWA, the U.S. Army Corps of Engineers (Corps) administers the permitting program under section 404. During the 1980s, both

of these agencies adopted substantially similar definitions (51 FR 41206, Nov. 13, 1986, amending 33 CFR 328.3; 53 FR 20764, June 6, 1988, amending 40 CFR 232.2).

Federal courts have reviewed the definition of "waters of the United States" and its application to a variety of factual circumstances. Three Supreme Court decisions, in particular, provide critical context and guidance in determining the appropriate scope of "waters of the United States."

In *United States* v. *Riverside Bayview Homes*, 474 U.S. 121 (1985) (*Riverside*), the Court, in a unanimous opinion, deferred to the Corps' ecological judgment that adjacent wetlands are "inseparably bound up" with the waters to which they are adjacent, and upheld the inclusion of adjacent wetlands in the regulatory definition of "waters of the United States." *Id*. at 134.

In *Solid Waste Agency of Northern Cook County* v. *U.S. Army Corps of Engineers*, 531 U.S. 159 (2001) (*SWANCC*), the Supreme Court held that the use of "isolated" non-navigable intrastate ponds by migratory birds was not by itself a sufficient basis for the exercise of federal regulatory authority under the CWA. The *SWANCC* decision created uncertainty with regard to the jurisdiction of other isolated non-navigable waters and wetlands. In January 2003, EPA and the Corps issued joint guidance interpreting the Supreme Court decision in *SWANCC* ("the 2003 Guidance"). The guidance indicated that *SWANCC* focused on isolated, intrastate, non-navigable waters, and called for field staff to coordinate with their respective Corps or EPA Headquarters on jurisdictional determinations which asserted jurisdiction for waters under 33 CFR 328.3(a)(3)(i-iii). Waters that were jurisdictional pursuant to 33 CFR 328.3(a)(3) could no longer be determined jurisdictional based solely on their use by migratory birds.

Five years after the *SWANCC* decision, in *Rapanos* v. *United States*, 547 U.S. 715 (2006) (*Rapanos*), a four-Justice plurality opinion in *Rapanos*, authored by Justice Scalia, interpreted the term "waters of the United States" as covering "relatively permanent, standing or continuously flowing bodies of water . . .," *id.* at 739, that are connected to traditional navigable waters, *id.* at 742, as well as wetlands with a "continuous surface connection . . ." to such water bodies, *id*. (Scalia, J., plurality opinion). The *Rapanos* plurality noted that its reference to "relatively permanent" waters did "not necessarily exclude streams, rivers, or lakes that might dry up in extraordinary circumstances, such as drought," or "*seasonal* rivers, which contain continuous flow during some months of the year but no flow during dry months...." *Id.* at 732 n.5 (emphasis in original). Justice Kennedy concurred with the plurality judgment, but concluded that the appropriate test for the scope of jurisdictional waters is whether a water or wetland possesses a "'significant nexus' to waters that are or were navigable in fact or that could reasonably be so made." *Id*. at 759. The four dissenting Justices in *Rapanos*, who would have affirmed the court of appeals' application of the agencies' regulations, also concluded that the term "waters of the United States" encompasses, *inter alia*, all tributaries and wetlands that satisfy "either the plurality's [standard] or Justice Kennedy's." *Id.* at 810 & n.14 (Stevens, J., dissenting).

While the *SWANCC* and *Rapanos* decisions limited the way the agencies' longstanding regulatory definition of "waters of the United States" was implemented, in neither case did the Court invalidate that definition.

After the *Rapanos* decision, the agencies issued joint guidance in 2007 to address the waters at issue in that decision but did not change the codified definition. The guidance indicated that "waters of the United States" included traditional navigable waters and their

adjacent wetlands, relatively permanent waters and wetlands that abut them, and waters with a significant nexus to a traditional navigable water. The guidance did not address waters not at issue in *Rapanos*, such as interstate waters and the territorial seas. The guidance was reissued in 2008 with minor changes (hereinafter, the "2008 guidance"). [1]

After issuance of the 2008 guidance, Members of Congress, developers, farmers, state and local governments, environmental organizations, energy companies and others asked the agencies to replace the guidance with a regulation that would provide clarity and certainty on the scope of the waters protected by the CWA.

Following public notice and comment on a proposed rule, the agencies published a final rule defining the scope of "waters of the United States" on June 29, 2015 (80 FR 37054). Thirty-one States and a number of other parties sought judicial review in multiple actions in Federal district courts and Circuit Courts of Appeal, raising concerns about the scope and legal authority of the 2015 rule. One district court issued an order granting a motion for preliminary injunction on the rule's effective date, finding that the thirteen State challengers were likely to succeed on their claims, including that the rule violated the congressional grant of authority to the agencies under the CWA and that it appeared likely the EPA failed to comply with Administrative Procedure Act (APA) requirements in promulgating the rule. *State of North Dakota et al. v. US EPA*, No. 15-00059, slip op. at 1-2 (D.N.D. Aug. 27, 2015, as clarified by order issued on September 4, 2015). Several weeks later, the Sixth Circuit stayed the 2015 rule nationwide to restore the "pre-Rule regime, pending judicial review." *In re U.S. Dep't. of Def. and U.S. Envtl.*

[1] The guidance expressly stated that it was not intended to create any legally binding requirements, and that "interested persons are free to raise questions about the appropriateness of the application of this guidance to a particular situation, and EPA and/or the Corps will consider whether or not the recommendations or interpretations of this guidance are appropriate in that situation based on the statutes, regulations, and case law." 2008 guidance at 4 n. 17.

Protection Agency Final Rule: Clean Water Rule, No. 15-3751 (lead), slip op. at 6. The Sixth Circuit found that the petitioners had demonstrated a substantial possibility of success on the merits, including with regard to claims that certain provisions of the rule were at odds with the *Rapanos* decision and that the distance limitations in the rule were not substantiated by scientific support. Pursuant to the court's order, the agencies have implemented the statute pursuant to the regulatory regime that preceded the 2015 rule. On January 13, 2017, the U.S. Supreme Court granted *certiorari* on the question of whether the court of appeals has original jurisdiction to review challenges to the 2015 rule. The Sixth Circuit granted petitioners' motion to hold in abeyance the briefing schedule in the litigation challenging the 2015 rule pending a Supreme Court decision on the question of the court of appeals' jurisdiction.

On February 28, 2017, the President of the United States issued an Executive Order entitled "Restoring the Rule of Law, Federalism, and Economic Growth by Reviewing the 'Waters of the United States' Rule." Section 1 of the Order states, "[i]t is in the national interest to ensure that the Nation's navigable waters are kept free from pollution, while at the same time promoting economic growth, minimizing regulatory uncertainty, and showing due regard for the roles of the Congress and the States under the Constitution." It directs the EPA and the Army to review the 2015 rule for consistency with the policy outlined in section 1, and to issue a proposed rule rescinding or revising the 2015 rule as appropriate and consistent with law. Section 2. The Executive Order also directs the agencies to consider interpreting the term "navigable waters" in a manner consistent with Justice Scalia's plurality opinion in *Rapanos*. Section 3.

The agencies have the authority to rescind and revise the regulatory definition of "waters of the United States," consistent with the guidance in the Executive Order, so long as the revised

definition is authorized under the law and based on a reasoned explanation. *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009) ("*Fox*"). Importantly, such a revised decision need not be based upon a change of facts or circumstances. A revised rulemaking based "on a re-evaluation of which policy would be better in light of the facts" is "well within an agency's discretion," and "[a] change in administration brought about by the people casting their votes is a perfectly reasonable basis for an executive agency's reappraisal" of its regulations and programs. *Nat'l Ass'n of Home Builders v. EPA*, 682 F.3d 1032, 1038 & 1043 (D.C. Cir. 2012) (citing *Fox*, 556 U.S. at 514-15 (Rehnquist, J., concurring in part and dissenting in part)).

The Executive Order states that it is in the national interest to protect the nation's waters from pollution as well as to allow for economic growth, ensuring regulatory clarity, and providing due deference to States, as well as Congress. Executive Order section 1. These various priorities reflect, in part the CWA itself, which includes both the objective to "restore and maintain" the integrity of the nation's waters, as well as the policy to "recognize, preserve, and protect the primary responsibilities and right of States to prevent, reduce, and eliminate pollution…" CWA sections 101(a), 101(b). Re-evaluating the best means of balancing these statutory priorities, as called for in the Executive Order, is well within the scope of authority that Congress has delegated to the agencies under the CWA.

This rulemaking is the first step in a two-step response to the Executive Order, intended to ensure certainty as to the scope of CWA jurisdiction on an interim basis as the agencies proceed to engage in the second step: a substantive review of the appropriate scope of "waters of the United States."

C. Today's proposed rule

In this proposed rule, the agencies would rescind the 2015 Clean Water Rule and replace it with a recodification of the regulatory text that governed the legal regime prior to the 2015 Clean Water Rule and that the agencies are currently implementing under the court stay, informed by applicable guidance documents (e.g., the 2003 and 2008 guidance documents, as well as relevant memoranda and regulatory guidance letters), and consistent with the *SWANCC* and *Rapanos* Supreme Court decisions, applicable case law, and longstanding agency practice. The proposal retains exclusions from the definition of "waters of the United States" for prior converted cropland and waste treatment systems, both of which existed before the 2015 regulations were issued. Nothing in this proposed rule restricts the ability of States to protect waters within their boundaries by defining the scope of waters regulated under State law more broadly than the federal law definition.

D. *Rationale for this rulemaking*

This rulemaking action is consistent with the February 28, 2017, Executive Order and the Clean Water Act. This action will consist of two steps. In this first step, the agencies are proposing as an interim action to repeal the 2015 definition of "waters of the United States" and codify the legal *status quo* that is being implemented now under the Sixth Circuit stay of the 2015 definition of "waters of the United States" and that was in place for decades prior to the 2015 rule. This regulatory text would, pending completion of the second step in the two-step process, continue to be informed by the 2003 and 2008 guidance documents. In the second step, the agencies will conduct a separate notice and comment rulemaking that will consider

developing a new definition of "waters of the United States" taking into consideration the principles that Justice Scalia outlined in the *Rapanos* plurality opinion.

In the 2015 rulemaking, the agencies described their task as "interpret[ing] the scope of the 'waters of the United States' for the CWA in light of the goals, objectives, and policies of the statute, the Supreme Court case law, the relevant and available science, and the agencies' technical expertise and experience." 80 Fed. Reg. 37,054, 37,060 (June 29, 2015). In so doing, the agencies properly acknowledged that a regulation defining "waters of the United States" in this area is not driven by any one type or piece of information, but rather must be the product of the evaluation and balancing of a variety of different types of information. That information includes scientific data as well as the policies articulated by Congress when it passed the Act. For example, the agencies recognized this construct in the preamble to the 2015 Rule by explaining that what constitutes a "significant nexus" to navigable waters "is not a purely scientific determination" and that "science does not provide bright line boundaries with respect to where 'water ends' for purposes of the CWA." 80 Fed. Reg. at 37,060.[2]

The objectives, goals, and policies of the statute are detailed in sections 101(a)-(g) of the statute, and guide the agencies' interpretation and application of the Clean Water Act. Section 101(a) of the Act states that the "objective of this chapter is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters," and identifies several goals and national policies Congress believed would help the Act achieve that objective. 33 U.S.C.

[2] This notion was at least implicitly recognized by the Chief Justice in his concurring opinion in *Rapanos*: "[T]he Corps and the EPA would have enjoyed plenty of room to operate in developing *some* notion of an outer bound to the reach of their authority." *Rapanos v. United States*, 547 U.S. 715, 758 (2006) (Roberts, C.J., concurring). Ultimately, developing "some notion of an outer bound" from the full range of relevant information is the task facing the agencies.

§ 1251(a). When referring to the Act's objective, the 2015 rule referred specifically to Section 101(a). 80 Fed. Reg. at 37,056.

In addition to the objective of the Act and the goals and policies identified to help achieve that objective in section 101(a), in section 101(b) Congress articulated that it is "the policy of the Congress" to:

> [R]ecognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to consult with the Administrator in the exercise of his authority under this chapter. It is the policy of Congress that the States manage the construction grant program under this chapter and implement the permit programs under sections 1342 and 1344 of this title.

33 U.S.C. § 1251(b). Therefore, as part of the two-step rulemaking, the agencies will be considering the relationship of the CWA objective and policies, and in particular, the meaning and importance of section 101(b).

The 2015 rule did acknowledge the language contained in section 101(b) and the vital role states and tribes play in the implementation of the Act and the effort to meet the Act's stated objective. *See, e.g.*, 80 Fed. Reg. at 37,059. In discussing the provision, the agencies noted that it was "[o]f particular importance[,] [that] states and tribes may be authorized by the EPA to administer the permitting programs of CWA sections 402 and 404." *Id.* The agencies also noted that "States and federally-recognized tribes, consistent with the CWA, retain full authority to implement their own programs to more broadly and more fully protect the waters in *their jurisdiction*." *Id*. at 37,060. However, the agencies did not include a discussion in the 2015 rule preamble of the meaning and importance of section 101(b) in guiding the choices the agencies make in setting the outer bounds of jurisdiction of the Act, despite the recognition that the rule must be drafted "in light of the goals, objectives, and policies of the statute." In the two-step rulemaking process commencing with today's notice, the agencies will more fully consider the

policy in section 101(b) when exercising their discretion to delineate the scope of waters of the U.S., including the extent to which states or tribes have protected or may protect waters that are not subject to CWA jurisdiction.

The scope of CWA jurisdiction is an issue of great national importance and therefore the agencies will allow for robust deliberations on the ultimate regulation. While engaging in such deliberations, however, the agencies recognize the need to provide as an interim step for regulatory continuity and clarity for the many stakeholders affected by the definition of "waters of the United States." The pre-CWR regulatory regime is in effect as a result of the Sixth Circuit's stay of the 2015 rule but that regime depends upon the pendency of the Sixth Circuit's order and could be altered at any time by factors beyond the control of the agencies. The Supreme Court's resolution of the question as to which courts have original jurisdiction over challenges to the 2015 rule could impact the Sixth Circuit's exercise of jurisdiction and its stay. If, for example, the Supreme Court were to decide that the Sixth Circuit lacks original jurisdiction over challenges to the 2015 rule, the Sixth Circuit case would be dismissed and its nationwide stay would expire, leading to inconsistencies, uncertainty, and confusion as to the regulatory regime that would be in effect pending substantive rulemaking under the Executive Order.

As noted previously, prior to the Sixth Circuit's stay order, the District Court for North Dakota had preliminarily enjoined the rule in 13 States (North Dakota, Alaska, Arizona, Arkansas, Colorado, Idaho, Missouri, Montana, Nebraska, Nevada, South Dakota, Wyoming and New Mexico). Therefore, if the Sixth Circuit's nationwide stay were to expire, the 2015 rule would be enjoined under the North Dakota order in States covering a large geographic area of the

country, but the rule would be in effect in the rest of the country pending further judicial decision-making or substantive rulemaking under the Executive Order.

Adding to the confusion that could be caused if the Sixth Circuit's nationwide stay of the 2015 rule were to expire, there are multiple other district court cases pending on the 2015 rule, including several where challengers have filed motions for preliminary injunctions. These cases – and the pending preliminary injunction motions – would likely be reactivated if the Supreme Court were to determine that the Sixth Circuit lacks original jurisdiction over challenges to the 2015 rule. The proposed interim rule would establish a clear regulatory framework that would avoid the inconsistencies, uncertainty and confusion that would result from a Supreme Court ruling affecting the Sixth Circuit's jurisdiction while the agencies reconsider the 2015 rule. It would ensure that, during this interim period, the scope of CWA jurisdiction will be administered exactly the way it is now, and as it was for many years prior to the promulgation of the 2015 rule. The agencies considered other approaches to providing stability while they work to finalize the revised definition, such as simply withdrawing or staying the Clean Water Rule, but did not identify any options that would do so more effectively and efficiently than this proposed rule would do. A stable regulatory foundation for the *status quo* would facilitate the agencies' considered re-evaluation, as appropriate, of the definition of "waters of the United States" that best effectuates the language, structure, and purposes of the Clean Water Act.

II. General Information

A. How can I get copies of this document and related information?

1. *Docket.* An official public docket for this action has been established under Docket Id. No. EPA-HQ-OW-2017-0203. The official public docket consists of the documents specifically referenced in this action, and other information related to this action. The official

public docket is the collection of materials that is available for public viewing at the OW Docket, EPA West, Room 3334, 1301 Constitution Ave. NW, Washington, DC 20004. This Docket Facility is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The OW Docket telephone number is 202-566-2426. A reasonable fee will be charged for copies.

2. *Electronic Access.* You may access this Federal Register document electronically under the "Federal Register" listings at *http://www.regulations.gov*. An electronic version of the public docket is available through EPA's electronic public docket and comment system, EPA Dockets. You may access EPA Dockets at *http://www.regulations.gov* to view public comments as they are submitted and posted, access the index listing of the contents of the official public docket, and access those documents in the public docket that are available electronically. For additional information about EPA's public docket, visit the EPA Docket Center homepage at *http://www.epa.gov/epahome/dockets.htm*. Although not all docket materials may be available electronically, you may still access any of the publicly available docket materials through the Docket Facility.

B. What is the agencies' authority for taking this action?

The authority for this action is the Federal Water Pollution Control Act, 33 U.S.C. 1251, *et seq.*, including sections 301, 304, 311, 401, 402, 404 and 501.

C. What are the economic impacts of this action?

This proposed rule is the first step in a comprehensive, two-step process to review and revise the 2015 definition of "waters of the United States." The agencies prepared an illustrative economic analysis to provide the public with information on the potential changes to the costs and benefits of various CWA programs that could result if there were a change in the number of positive jurisdictional determinations. The economic analysis is provided pursuant to the

requirements of Executive Orders 13563 and 12866 to provide information to the public. The 2015 CWR is used as a baseline in the analysis in order to provide information to the public on the estimated differential effects of restoring pre-2015 status quo in comparison to the 2015 CWR. However, as explained previously, the 2015 CWR has already been stayed by the Sixth Circuit, and this proposal would merely codify the legal status quo, not change current practice.

The proposed rule is a definitional rule that affects the scope of "waters of the United States." This rule does not establish any regulatory requirements or directly mandate actions on its own. However, by changing the definition of "waters of the United States," the proposed rule would change the waters where other regulatory requirements that affect regulated entities come into play, for example, the locations where regulated entities would be required to obtain certain types of permits. The consequence of a water being deemed non-jurisdictional is simply that CWA provisions no longer apply to that water. There are no avoided costs or forgone benefits if similar state regulations exist and continue to apply to that water. The agencies estimated that the 2015 rule would result in a small overall increase in positive jurisdictional determinations compared to those made under the prior regulation as currently implemented, and that there would be fewer waters within the scope of the CWA under the 2015 rule compared to the prior regulations. The agencies estimated the avoided costs and forgone benefits of repealing the 2015 rule. This analysis is contained in the *Economic Analysis for the Proposed Definition of "Waters of the United States" – Recodification of Pre-existing Rules* and is available in the docket for this action.

III. Public Comments

The agencies solicit comment as to whether it is desirable and appropriate to re-codify in regulation the *status quo* as an interim first step pending a substantive rulemaking to reconsider the definition of "waters of the United States" and the best way to accomplish it. Because the agencies propose to simply codify the legal *status quo* and because it is a temporary, interim measure pending substantive rulemaking, the agencies wish to make clear that this interim rulemaking does not undertake any substantive reconsideration of the pre-2015 "waters of the United States" definition nor are the agencies soliciting comment on the specific content of those longstanding regulations. *See P&V Enterprises v. Corps of Engineers*, 516 F.3d 1021,1023-24 (D.C. Cir. 2008). For the same reason, the agencies are not at this time soliciting comment on the scope of the definition of "waters of the United States" that the agencies should ultimately adopt in the second step of this two-step process, as the agencies will address all of those issues, including those related to the 2015 rule, in the second notice and comment rulemaking to adopt a revised definition of "waters of the United States" in light of the February 28, 2017, Executive Order. The agencies do not intend to engage in substantive reevaluation of the definition of "waters of the United States" until the second step of the rulemaking. *See P&V*, 516 F.3d at 1025-26.

IV. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This action is a significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review. Any changes made in response to OMB recommendations have been documented in the docket.

In addition, the agencies prepared an analysis of the potential avoided costs and forgone benefits associated with this action. This analysis is contained in the *Economic Analysis for the Proposed Definition of "Waters of the United States" – Recodification of Pre-existing Rules*. A copy of the analysis is available in the docket for this action.

B. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control numbers 2050-0021 and 2050-0135 for the CWA section 311 program and 2040-0004 for the 402 program.

For the CWA section 404 regulatory program, the current OMB approval number for information requirements is maintained by the Corps (OMB approval number 0710–0003). However, there are no new approval or application processes required as a result of this rulemaking that necessitate a new Information Collection Request (ICR).

C. Regulatory Flexibility Act

We certify that this action will not have a significant economic impact on a substantial number of small entities. Because this action would simply codify the legal *status quo*, we have concluded that this action will not have a significant impact on small entities. This analysis is contained in the *Economic Analysis for the Proposed Definition of "Waters of the United States" – Recodification of Pre-existing Rules*. A copy of the analysis is available in the docket for this action.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531-1538, and does not significantly or uniquely affect small governments. The definition of

"waters of the United States" applies broadly to CWA programs. The action imposes no enforceable duty on any state, local, or tribal governments, or the private sector, and does not contain regulatory requirements that might significantly or uniquely affect small governments.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Consistent with the agencies' policy to promote communications with state and local governments, the agencies have informed states and local governments about this proposed rulemaking.

The agencies will appropriately consult with States and local governments as a subsequent rulemaking makes changes to the longstanding definition of "waters of the United States."

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This proposed rule does not have tribal implications as specified in Executive Order 13175. This proposed rule maintains the legal *status quo*. Thus, Executive Order 13175 does not apply to this action.

Consistent with the EPA Policy on Consultation and Coordination with Indian Tribes (May 4, 2011), the agencies will appropriately consult with tribal officials during the development of a subsequent rulemaking that makes changes to the longstanding definition of "waters of the United States." In fact, the agencies have already initiated the formal consultation process with respect to the subsequent rulemaking.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because the environmental health risks or safety risks addressed by this action do not present a disproportionate risk to children.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not a "significant energy action" because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

I. National Technology Transfer and Advancement Act

This proposed rule does not involve technical standards.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

This proposed rule maintains the legal *status quo*. The agencies therefore believe that this action does not have disproportionately high and adverse human health or environmental effects on minority, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, Feb. 16, 1994).

K. Executive Order 13771: Reducing Regulation and Controlling Regulatory Costs

Pursuant to Executive Order 13771 (82 FR 9339, February 3, 2017) this proposed rule is expected to be an E.O. 13771 deregulatory action.

List of Subjects

33 CFR Part 328

Environmental protection, Administrative practice and procedure, Intergovernmental relations, Navigation, Water pollution control, Waterways.

40 CFR Parts 110, 112, 116, 117, 122, 230, 232, 300, 302, and 401

Environmental protection, Water pollution control.

Dated: _____.

_____

E. Scott Pruitt,

Administrator,

Environmental Protection Agency.

Dated: _____.

_____

Douglas W. Lamont,

Senior Official Performing the Duties of the Assistant Secretary of the Army for Civil Works,

Department of the Army.

Title 33—Navigation and Navigable Waters

For the reasons set out in the preamble, title 33, chapter II of the Code of Federal Regulations is proposed to be amended as follows:

PART 328—DEFINITION OF WATERS OF THE UNITED STATES

1. The authority citation for part 328 is revised to read as follows:

Authority: 33 U.S.C. 1344.

2. Section 328.3 is amended by revising paragraphs (a) through (d) and adding paragraphs (e) and (f) to read as follows:

§328.3 Definitions.

* * * * *

(a) The term waters of the United States means

(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(2) All interstate waters including interstate wetlands;

(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:

(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(iii) Which are used or could be used for industrial purpose by industries in interstate commerce;

(4) All impoundments of waters otherwise defined as waters of the United States under the definition;

(5) Tributaries of waters identified in paragraphs (a) (1) through (4) of this section;

(6) The territorial seas;

(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1) through (6) of this section.

(8) Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

(b) The term *wetlands* means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

(c) The term *adjacent* means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like are "adjacent wetlands."

(d) The term *high tide line* means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

(e) The term *ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

(f) The term tidal waters means those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.

Title 40—Protection of Environment

For reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is proposed to be amended as follows:

PART 110—DISCHARGE OF OIL

3. The authority citation for part 110 is revised to read as follows:

Authority: 33 U.S.C. 1321(b)(3) and (b)(4) and 1361(a); E.O. 11735, 38 FR 21243, 3 CFR Parts 1971–1975 Comp., p. 793.

4. Section 110.1 is amended by revising the definition of "Navigable waters" and adding the definition of "Wetlands" in alphabetical order to read as follows:

§110.1 Definitions.

*** * * * ***

Navigable waters means the waters of the United States, including the territorial seas. The term includes:

(a) All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;

(b) Interstate waters, including interstate wetlands;

(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) That are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce;

(3) That are used or could be used for industrial purposes by industries in interstate commerce;

(d) All impoundments of waters otherwise defined as navigable waters under this section;

(e) Tributaries of waters identified in paragraphs (a) through (d) of this section, including adjacent wetlands; and

(f) Wetlands adjacent to waters identified in paragraphs (a) through (e) of this section: Provided, That waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States;

Navigable waters do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

*** * * * ***

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include playa lakes, swamps, marshes, bogs and similar areas such as sloughs, prairie potholes, wet meadows, prairie river overflows, mudflats, and natural ponds.

PART 112 –OIL POLLUTION PREVENTION

5. The authority citation for part 112 is revised to read as follows:

Authority: 33 U.S.C. 1251 et seq.; 33 U.S.C. 2720; E.O. 12777 (October 18, 1991), 3 CFR, 1991 Comp., p. 351.

6. Section 112.2 is amended by revising the definition of "Navigable waters" and adding the definition of "Wetlands" in alphabetical order to read as follows:

§112.2 Definitions.

*** * * * ***

Navigable waters of the United States means "navigable waters" as defined in section 502(7) of the FWPCA, and includes:

(1) All navigable waters of the United States, as defined in judicial decisions prior to passage of the 1972 Amendments to the FWPCA (Pub. L. 92–500), and tributaries of such waters;

(2) Interstate waters;

(3) Intrastate lakes, rivers, and streams which are utilized by interstate travelers for recreational or other purposes; and

(4) Intrastate lakes, rivers, and streams from which fish or shellfish are taken and sold in interstate commerce.

*** * * * ***

Wetlands means those areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include playa lakes, swamps, marshes, bogs, and similar areas such as sloughs, prairie potholes, wet meadows, prairie river overflows, mudflats, and natural ponds.

*** * * * ***

PART 116—DESIGNATION OF HAZARDOUS SUBSTANCES

7. The authority citation for part 116 is revised to read as follows:

Authority: Secs. 311(b)(2)(A) and 501(a), Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.).

8. Section 116.3 is amended by revising the definition of "Navigable waters" to read as follows:

§116.3 Definitions.

*** * * * ***

Navigable waters is defined in section 502(7) of the Act to mean "waters of the United States, including the territorial seas," and includes, but is not limited to:

(1) All waters which are presently used, or were used in the past, or may be susceptible to use as a means to transport interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide, and including adjacent wetlands; the term *wetlands* as used in this regulation shall include those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevelanceof vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas; the term adjacent means bordering, contiguous or neighboring;

(2) Tributaries of navigable waters of the United States, including *adjacent* wetlands;

(3) Interstate waters, including wetlands; and

(4) All other waters of the United States such as intrastate lakes, rivers, streams, mudflats, sandflats and wetlands, the use, degradation or destruction of which affect interstate commerce including, but not limited to:

(i) Intrastate lakes, rivers, streams, and wetlands which are utilized by interstate travelers for recreational or other purposes; and

(ii) Intrastate lakes, rivers, streams, and wetlands from which fish or shellfish are or could be taken and sold in interstate commerce; and

(iii) Intrastate lakes, rivers, streams, and wetlands which are utilized for industrial purposes by industries in interstate commerce.

Navigable waters do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

*** * * * ***

PART 117—DETERMINATION OF REPORTABLE QUANTITIES FOR HAZARDOUS SUBSTANCES

9. The authority citation for part 117 is revised to read as follows:

Authority: Secs. 311 and 501(a), Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), ("the Act") and Executive Order 11735, superseded by Executive Order 12777, 56 FR 54757.

10. Section 117.1 is amended by revising paragraph (i) to read as follows:

§117.1 Definitions.

*** * * * ***

(i) *Navigable waters* means "waters of the United States, including the territorial seas." This term includes:

(1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(2) Interstate waters, including interstate wetlands;

(3) All other waters such as intrastate lakes, rivers, streams, (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes;

(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce;

(iii) Which are used or could be used for industrial purposes by industries in interstate commerce;

(4) All impoundments of waters otherwise defined as navigable waters under this paragraph;

(5) Tributaries of waters identified in paragraphs (i) (1) through (4) of this section, including adjacent wetlands; and

(6) Wetlands adjacent to waters identified in paragraphs (i) (1) through (5) of this section ("Wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally included playa lakes, swamps, marshes, bogs, and similar areas such as sloughs, prairie potholes, wet meadows, prairie river overflows, mudflats, and natural ponds): *Provided*, That waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.

Navigable waters do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

*** * * * ***

PART 122—EPA ADMINISTERED PERMIT PROGRAMS: THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

11. The authority citation for part 122 continues to read as follows:

Authority: The Clean Water Act, 33 U.S.C. 1251 *et.seq.*

12. Section 122.2 is amended by:

a. Revising the definition of "Waters of the United States".

b. Adding a Note 1 to the definition of "Waters of the United States" and the definition of "Wetlands".

The revision and additions read as follows:

§122.2 Definitions.

*** * * * ***

Waters of the United States or *waters of the U.S.* means:

(a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(b) All interstate waters, including interstate "wetlands;"

(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) Which are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(3) Which are used or could be used for industrial purposes by industries in interstate commerce;

(d) All impoundments of waters otherwise defined as waters of the United States under this definition;

(e) Tributaries of waters identified in paragraphs (a) through (d) of this definition;

(f) The territorial sea; and

(g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. [See Note 1 of this section.] Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

NOTE: At 45 FR 48620, July 21, 1980, the Environmental Protection Agency suspended until further notice in §122.2, the last sentence, beginning "This exclusion applies . . ." in the definition of "Waters of the United States." This revision continues that suspension.[n1]

[n1] EDITORIAL NOTE: The words "This revision" refer to the document published at 48 FR 14153, Apr. 1, 1983.

Wetlands means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

*** * * * ***

PART 230—SECTION 404(b)(1) GUIDELINES FOR SPECIFICATION OF DISPOSAL SITES FOR DREDGED OR FILL MATERIAL

13. The authority citation for part 230 is revised to read as follows:

Authority: The Clean Water Act, Secs. 404(b) and 501(a) of the Clean Water Act of 1977 (33 U.S.C. 1344(b) and 1361(a)).

14. Section 230.3 is amended by:

a. Redesignating paragraphs (b) through (d) as (c) through (e).

b. Redesignating paragraphs (e) through (f) as (h) through (i).

c. Redesignating paragraph (g) as paragraph (k).

d. Redesignating paragraphs (h) through (l) as paragraphs (m) through (q).

e. Reserving paragraphs (j) and (l).

f. Redesignating paragraph (m) as paragraph (q-1).

g. Redesignating paragraph (o) as paragraph (s).

h. Redesignating paragraph (n) as paragraph (r).

i. Revising newly redesignated paragraph (s).

j. Adding the definition of “adjacent” at paragraph (b) and the definition of “wetlands” at paragraph (t).

The revision reads as follows:

§ 230.3 Definitions.

*** * * * ***

(b) The term *adjacent* means bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes, and the like are "adjacent wetlands."

*** * * * ***

(s) The term *waters of the United States* means:

(1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(2) All interstate waters including interstate wetlands;

(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:

(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(iii) Which are used or could be used for industrial purposes by industries in interstate commerce;

(4) All impoundments of waters otherwise defined as waters of the United States under this definition;

(5) Tributaries of waters identified in paragraphs (s)(1) through (4) of this section;

(6) The territorial sea;

(7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (s)(1) through (6) of this section; waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

(t) The term *wetlands* means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

PART 232—404 PROGRAMS DEFINITIONS; EXEMPT ACTIVITIES NOT REQUIRING 404 PERMITS

- 15. The authority citation for part 232 is revised to read as follows:

  Authority: 33 U.S.C. 1344.

- 16. Section 232.2 is amended by revising the definition of “Waters of the United States” and adding the definition of “Wetlands” to read as follows:

§232.2 Definitions.

* * * * *

Waters of the United States means:

All waters which are currently used, were used in the past, or may be susceptible to us in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.

All interstate waters including interstate wetlands.

All other waters, such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which would or could affect interstate or foreign commerce including any such waters:

Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

Which are used or could be used for industrial purposes by industries in interstate commerce.

All impoundments of waters otherwise defined as waters of the United States under this definition;

Tributaries of waters identified in paragraphs (g)(1)–(4) of this section;

The territorial sea; and

Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (q)(1)– (6) of this section.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Act (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

PART 300—NATIONAL OIL AND HAZARDOUS SUBSTANCES POLLUTION CONTINGENCY PLAN

17. The authority citation for part 300 is revised to read as follows:

Authority: 33 U.S.C. 1321(c)(2); 42 U.S.C. 9601-9657; E.O. 13626, 77 FR 56749, 3 CFR, 2013 Comp., p.306; E.O. 12777, 56 FR 54757, 3 CFR, 1991 Comp., p.351; E.O. 12580, 52 FR 2923, 3 CFR, 1987 Comp., p.193.

18. Section 300.5 is amended by revising the definition of "Navigable waters" to read as follows:

§ 300.5 Definitions.

*** * * * ***

Navigable waters as defined by 40 CFR 110.1, means the waters of the United States, including the territorial seas. The term includes:

(1) All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;

(2) Interstate waters, including interstate wetlands;

(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters;

(i) That are or could be used by interstate or foreign travelers for recreational or other purposes;

(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce;

(iii) That are used or could be used for industrial purposes by industries in interstate commerce;

(4) All impoundments of waters otherwise defined as navigable waters under this section;

(5) Tributaries of waters identified in paragraphs (a) through (d) of this definition, including adjacent wetlands; and

(6) Wetlands adjacent to waters identified in paragraphs (a) through (e) of this definition: Provided, that waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.

(7) Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

* * * * *

19. In appendix E to part 300, section 1.5 Definitions is amended by revising the definition of "Navigable waters" to read as follows:

Appendix E to Part 300—Oil Spill Response

* * * * *

1.5 Definitions. * * *

Navigable waters as defined by 40 CFR 110.1 means the waters of the United States, including the territorial seas. The term includes:

(a) All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;

(b) Interstate waters, including interstate wetlands;

(c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) That are or could be used by interstate or foreign travelers for recreational or other purposes;

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; and

(3) That are used or could be used for industrial purposes by industries in interstate commerce.

(d) All impoundments of waters otherwise defined as navigable waters under this section;

(e) Tributaries of waters identified in paragraphs (a) through (d) of this definition, including adjacent wetlands; and

(f) Wetlands adjacent to waters identified in paragraphs (a) through (e) of this definition: Provided, that waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States.

(g) Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

* * * * *

PART 302— DESIGNATION, REPORTABLE QUANTITIES, AND NOTIFICATION

20. The authority citation for part 302 is revised to read as follows:

Authority: 42 U.S.C. 9602, 9603, and 9604; 33 U.S.C. 1321 and 1361.

21. Section 302.3 is amended by revising the definition of “Navigable waters” to read as follows:

§ 302.3 Definitions.

*** * * * ***

Navigable waters or *navigable waters of the United States* means waters of the United States, including the territorial seas;

*** * * * ***

PART 401— GENERAL PROVISIONS

22. The authority citation for part 401 is revised to read as follows:

Authority: Secs. 301, 304 (b) and (c), 306 (b) and (c), 307 (b) and (c) and 316(b) of the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251, 1311, 1314 (b) and (c), 1316 (b) and (c), 1317 (b) and (c) and 1326(c); 86 Stat. 816 et seq.; Pub. L. 92-500.

23. Section 401.11 is amended by revising paragraph (l) to read as follows:

§ 401.11 General definitions.

*** * * * ***

(l) The term navigable waters includes: All navigable waters of the United States; tributaries of navigable waters of the United States; interstate waters; intrastate lakes, rivers, and streams which are utilized by interstate travelers for recreational or other purposes; intrastate lakes, rivers, and streams from which fish or shellfish are taken and sold in interstate commerce; and intrastate lakes, rivers, and streams which are utilized for industrial purposes by industries in interstate commerce. Navigable waters do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

* * * * *

PHASE I ENVIRONMENTAL SITE ASSESSMENT
for
3505, 3547 and 3555 E. Warm Springs Avenue, Boise, Idaho 83716

prepared for:

JKB Construction Management & Development, Inc.
7795 N. Stonebriar Lane
Meridian, Idaho 83646

MTI File Number: B170178E
Date: March 6, 2017

MR. J. KEVIN BRUNK
JKB CONSTRUCTION MANAGEMENT & DEVELOPMENT, INC.
7795 N. Stonebriar Lane
Meridian, Idaho 83646

Re: **Environmental Site Assessment, Phase I**
3505, 3547 and 3555 E. Warm Springs Avenue
Boise, Idaho 83716

Dear Mr. Brunk:

The attached document renders the observations, conclusions, and recommendations of Materials Testing & Inspection, Inc. MTI appreciates the opportunity to be of assistance to you on this project.

The following is the Environmental Professional statement as required by the ASTM 1527-13:

> I declare that, to the best of my professional knowledge and belief, I meet the definition of an Environmental Professional as defined in 40 CFR 312.10 of this part. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Property. I have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

MTI would be pleased to continue our role as environmental consultants as the project progresses. If MTI can be of any further assistance to you, please feel free to call **(208) 376-4748**.

Respectfully Submitted,
MATERIALS TESTING & INSPECTION, INC.

Karl Languirand, P.G.
Environmental Services Manager

Reviewed by: Jon Kruck, C.E.M.
Environmental Project Manager

cc: file

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Materials Testing & Inspection, Inc. (MTI) has conducted a Phase I Environmental Site Assessment (Phase I ESA) in conformance with the scope and limitations of the ASTM International, E1527-13 Standard Practice for Environmental Site Assessments of 3505, 3547 and 3555 E. Warm Springs Avenue, Boise, Idaho, the subject Property. This section briefly describes the report; for a comprehensive understanding of the items detailed, this report must be read in its entirety.

The subject Property was located in the NW¼SE¼, Section 19, Township 3 North, Range 3 East of the Boise Meridian and was generally situated near the intersection of E. Warm Springs and E Barber Drive, Boise, Idaho.

At the time of site reconnaissance, MTI observed the subject Property was an approximate 8.65-acre parcel occupied by a single family residence with several outbuildings, livestock and two orchard fields.

MTI has not identified any known or suspect recognized environmental conditions (RECs) on the subject Property and recommends no additional investigation based on our findings.

REPORT SUMMARY

Section	No RECs	REC	Recommendations
Data Gaps	√		
Current/Historical Uses of the subject Property	√		
Current/Historical Use of the Adjoining Properties	√		
Specialized Knowledge	√		
Standard Environmental Records Sources	√		
Historical Research	√		
Hazardous Substances and Petroleum Products	√		
Drums	√		
Staining	√		
ASTs	√		
USTs	√		
PCBs	√		
Solid Waste Disposal	√		
Stressed Vegetation	√		
Pits, Ponds, And Lagoons	√		
Wells	√		
Discharge Features	√		
Interviews	√		

As noted in the warranty section, this report is limited to the information available or known to MTI as of the date of the report. If any additional information becomes available, it will be forwarded to you for your evaluation.

INTRODUCTION

General

This report presents the findings and conclusions of the Phase I Environmental Site Assessment (Phase I ESA) conducted for JKB Construction Management & Development, Inc. on 3505, 3547 and 3555 E. Warm Springs Avenue, Boise, Idaho.

Purpose

The purpose of this Phase I ESA is to identify, to the extent feasible pursuant to the processes prescribed in ASTM Standard E1527-13, recognized environmental conditions (RECs) in connection with the subject Property. The purpose of ASTM Standard E1527-13 is to define good commercial and customary practice in the United States of America for conducting an environmental site assessment of a parcel of commercial real estate with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and petroleum products. As such, ASTM E1527-13 is intended to permit the user to satisfy one of the requirements to qualify for the innocent landowner defense to CERCLA liability: That is, the practices that constitute "all appropriate inquiries into the previous ownership and uses of the Property consistent with good commercial and customary practice" as defined in 42 USC § 9601(35)(B).

In defining a standard of good commercial and customary practice for conducting an environmental site assessment of a parcel of property, the goal of the processes established by ASTM E1527-13 is to attempt to identify recognized environmental conditions. The term recognized environmental conditions means "the presence or likely presence of any *hazardous substances* or *petroleum products* in, on, or at a *property*: 1) due to *release* to the *environment*; 2) under conditions indicative of a release to the environment: or 3) under conditions that pose a *material threat* of a future *release* to the environment". The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

The term "presence of any *hazardous substances* or *petroleum products* in, on, or at a *property*" is self-defined. The term "likely presence of any *hazardous substances* or *petroleum products* in, on, or at a *property*" reflects the potential for contamination from the federal and state standard environmental record sources that are required to be reviewed under ASTM E1527. ASTM E1527 requires the review of standard sources with a minimum search distance (radius) realizing that there is potential for contamination from these types of sources to extend to the subject Property.

Scope of Services

The research consisted of obtaining information from sources including governmental agencies, public utilities and where possible, the current property owners. Federal, state, and local government records were reviewed to identify reports of environmental conditions on the subject and adjacent properties that may affect the subject Property. A complete listing of the databases reviewed can be found in the *Records Review* section of this report. A description of these databases can be found in the *Glossary of Terms Used* section in the appendix of this report.

Under ASTM E1527-13, the User has an obligation to report to the preparer of the Phase I ESA any environmental liens encumbering the subject Property or any specialized knowledge or experience of the User that would provide important information about previous ownership or uses of the subject Property that may be material to identifying recognized environmental conditions (RECs). As a matter of routine, MTI asks the Owner or other individual(s) with *actual knowledge* of the Property to complete our Environmental Questionnaire. *Actual knowledge* is defined by ASTM E1527 as — *the knowledge actually possessed by an individual who is a real person, rather than an entity. Actual knowledge is to be distinguished from constructive knowledge as that knowledge imputed to an individual or entity*. MTI's questionnaire is modeled from the ASTM E 1528 Transaction Screen Process with some additions. An Environmental Questionnaire and Disclosure Statement was emailed to the property owner and/or User of this document to obtain pertinent environmental information regarding the present and past use of the subject Property. This document has been received and is discussed herein. Where available, additional information was obtained from interviews with people having *actual knowledge* of the site that might reveal recognized environmental conditions on the Property.

Significant Assumptions

During our site reconnaissance and subsequent research, MTI assumed the following:

1. The land included for assessment, as defined by the client in the form of a site plan, plat map, legal description or other mechanism, coincides with the actual property boundaries recorded at the county assessor's office.
2. Local groundwater flow is similar to regional groundwater gradient.

Limitations and Exceptions of Assessment

The site reconnaissance conducted on February 28, 2017 encountered no interference to the observance of surface conditions or access.

Data Gaps

MTI attempted to identify all obvious uses of the subject Property since the first developed use, or back to 1940, whichever was earlier. Historical records obtained during this assessment did not reveal any limitations to this requirement.

Warranty and Limiting Conditions

The field observations and research reported herein are considered sufficient in detail and scope to form a reasonable basis for a general environmental assessment of the subject Property within the context of ASTM E1527. MTI warrants that the findings and conclusions contained herein have been promulgated in accordance with generally accepted environmental engineering methods, only for the subject Property described in this report.

These environmental methods are necessarily limited to the conditions observed at the time of the reconnaissance and research. The report is also limited to the information available at the time it was prepared. In the event additional information is provided to MTI following the report, it may, but is not required to, be forwarded to the client in the form received for evaluation by the client. There is a distinct possibility that conditions may exist that could not be identified within the scope of the assessment or that were not apparent during the site reconnaissance. MTI cannot warrant or guarantee that the information provided is complete or accurate. MTI prepared this report for the use of JKB Construction Management & Development, Inc. ("Client"), and the conclusions and recommendations presented in this report are based upon the agreed upon scope of work outlined in the report and the Contract for Professional Services between the Client and MTI ("Consultant"). Use or misuse of this report, or reliance upon the findings hereof by any parties other than the Client, is at their own risk. Neither Client nor Consultant makes any representation of warranty to such other parties as to the accuracy or completeness of this report or the suitability of its use by such other parties for any purpose whatsoever, known or unknown to Client or Consultant. Neither Client nor Consultant shall have any liability to indemnify or hold harmless third parties for any losses incurred by the actual or purported use or misuse of this report. This report represents the opinion of MTI, and no other warranties are implied or expressed.

Authorization, Special Terms, and Conditions

Authorization to perform this assessment was given in the form of a written notice to proceed from J. Kevin Brunk to Karl Languirand of MTI on February 3, 2017 and is subject to all of the terms, conditions, and limitations described in the Contract/Purchase Order entered into between JKB Construction Management & Development, Inc. and MTI. As per the Client's instructions, MTI did not perform any additional screenings, investigations, surveys, or assessments, such as the following: radon, asbestos-containing material, lead-based paint, lead-in-drinking water, wetland, PCB sampling, regulatory compliance, ecological/natural resources or impacts, endangered species, indoor air quality, cultural and historical resources, industrial hygiene, health and safety, or high-voltage power lines.

User Reliance

The User understands and agrees that the document listed above is a copyrighted document, which MTI is the copyrighted owner, and that unauthorized use or copying this document is strictly prohibited without the express written permission of MTI. The User understands that MTI may withhold such permission at its sole discretion or grant such permission upon such terms and conditions as it deems acceptable, such as the execution of a Hold Harmless Agreement or the payment of a re-use fee. Third parties may obtain a "Letter of Reliance" or "Read and Rely" letter from MTI if agreed to by the User.

This ESA report is prepared for the exclusive use and reliance of JKB Construction Management & Development, Inc. use or reliance by any other party is prohibited without the written authorization of JKB Construction Management & Development, Inc. and MTI.

Reliance on the ESA by the client and all authorized parties will be subject to the terms, conditions and limitations stated in the proposal, ESA report, and MTI's Agreement for Services. The limitation of liability defined in the Agreement for Services is the aggregate limit of MTI's liability to the client and all relying parties.

Continued viability of this report is subject to ASTM E1527-13 Sections 4.6 and 4.8. If the ESA will be used by a different user (third party) than the user for whom the ESA was originally prepared, the third party must also satisfy the user's responsibilities in Section 6 of ASTM E1527-13.

SUBJECT PROPERTY

Subject Property Location and Legal Description

The subject Property was located in the NW¼SE¼, Section 19, Township 3 North, Range 3 East of the Boise Meridian and was generally situated near the intersection of E. Warm Springs and E Barber Drive, in Boise, Ada County, State of Idaho. The Ada County Assessor identified the subject Property as E2NW4SE4 S OF BARBER RD SEC 19 3N 3E #421000 B. Additional information describing the subject Property is included in the appendix of this report.

Subject Property and Vicinity Characteristics

The subject Property comprised an 8.65-acre parcel with a 4,363-square foot house, 2,852-square foot garage, an approximately 800-square foot pole barn, 500-square foot livestock shed and a 300-square foot chicken coop. The Ada County Assessor provided the following information pertaining to the subject Property:

1) The property owner was Kevin G. Duesman
2) The parcel number was S0919428315.
3) Parcel zoning was manufacturing (A-1).

Vegetation consisted of grass lawns, landscaped areas, two small orchards, mature trees, wetland plants consisting of cattails, sedges, grasses, willows, and volunteer trees. Access to the site was gained from the two-lane, asphalt-paved East Warm Springs Avenue, which was located adjacent to the north side of the Property. The subject Property was located within a residential subdivision of northeast Boise, with one commercial site located within the general vicinity of the subject Property.

Current Uses of the Subject Property

At the time of site reconnaissance, the subject Property was occupied by a single-family home with a garage three storage structures, two orchards and livestock consisting of goats and chickens.

Descriptions of Structures, Roads, and Other Improvements on the Subject Property

The residence was wood-framed with a concrete basement foundation. The garage was a wood-framed two story structure with a concrete slab-on-grade foundation. The residence was heated by a gas furnace with water supplied by the onsite well. There were two septic system located on the subject Property. The pole barn was constructed of wood and sheet metal, and was used for general storage. The livestock shed and chicken coop were both wood-framed and wood clad. One, six-inch diameter steel-cased domestic well was located on the property.

Current Use of Adjoining Properties

The adjacent sites to the east and west were occupied by residential properties. The adjacent property to the south was occupied by a public recreation area, which included walking trails and three ponds. The adjacent property to the north was occupied by leveled land which was undergoing the beginning stages of construction for Privada Estates. The adjacent property to the northwest was occupied by Barber Hills Nursery.

USER PROVIDED INFORMATION

Under the standards as outlined in the ASTM E1527-13 the User of the Phase I ESA has certain responsibilities regarding notification to the preparer of the report. Specifically, the User must notify the preparer of the report of any environmental liens encumbering the subject Property or any specialized knowledge or information about previous ownership or uses of the subject Property that may be material to identifying RECs.

Title Records
The Client did not request nor provide a chain-of-title as part of the scope of this Phase I ESA. MTI determined prior use of the subject Property with the aid of other records sources and interviews.

Environmental Liens or Activity and Use Limitations
No past or current environmental liens, deed restrictions, consent agreements, or government actions were reported by the User.

Specialized Knowledge
The Property owner, Ms. Martinez, informed MTI of the following information. The property contained paint containers and fluorescent light ballasts. The main home and the garage/shop were constructed in 2005. There were two septic tanks on the property, one for the main home and one for the shop located on the property. A private well was installed in 2005. There were invasive weeds in the wetlands. According to Ms. Martinez, the Property was historically used as a family residence with livestock.

Commonly Known or Reasonably Ascertainable Information
The Client/User did not report any commonly known or reasonably ascertainable information that is considered a REC in connection with the subject Property.

Valuation Reduction for Environmental Issues
No unexpected RECs were discovered by performing this ESA.

Owner, Property Manager, and Occupant Information
Information provided by the property owner, property manager, or occupant did not indicate a REC in connection with the Property.

Reason for Performing the Phase I Environmental Site Assessment
MTI's understanding is that the Property is being purchased by JBK Construction Management & Development, Inc. This Phase I ESA fulfills one requirement of the innocent landowner defense to CERCLA liability.

RECORDS REVIEW

The purpose of the records review is to obtain and review records that will help identify recognized environmental conditions in connection with the Property.

Standard Environmental Record Sources, Federal, and State

The review of the available federal and state environmental information included those properties or incident reports within an area not smaller than the ASTM 1527-13 minimum search distance (radius). The records review indicates the following summary of state and federal environmental data, which identifies potential environmental problem sites and other activities from the records of the State of Idaho and the United States Environmental Protection Agency (US EPA):

STANDARD ENVIRONMENTAL RECORD SOURCES REVIEWED	APPROXIMATE MINIMUM SEARCH DISTANCE IN MILES (KM)	IDENTIFIED ON PROPERTY
Federal NPL site list	1.0 (1.6)	**No**
Federal delisted NPL site list	0.5 (0.8)	**No**
Federal CERCLIS list	0.5 (0.8)	**No**
Federal CERCLIS NFRAP site list	0.5 (0.8)	**No**
Federal RCRA CORRACTS facilities list	1.0 (1.6)	**No**
Federal RCRA non-CORRACTS TSD facilities list	0.5 (0.8)	**No**
Federal RCRA (small and large-quantity) generators list	Property and adjoining properties	**No**
Federal institutional/engineering control registries	Property only	**No**
Federal ERNS list	Property only	**No**
State or tribal lists of hazardous waste sites identified for investigation or remediation (NPL and CERCLIS equivalents)	NPL equivalent – 1.0 (1.6) CERCLIS equivalent – 0.5 (0.8)	**No** **No**
State or tribal landfill and/or solid waste disposal site lists	0.5 (0.8)	**No**
State or tribal leaking UST lists	0.5 (0.8)	**No**
State or tribal registered UST lists	Property and adjoining properties	**No**
State or tribal institutional/engineering control registries	Property only	**No**
State or tribal voluntary cleanup sites	0.5 (0.8)	**No**
State or tribal Brownfield sites	0.5 (0.8)	**No**

I. STATE OF **IDAHO** ASTM DATABASE INFORMATION

1.	State Priority List	State of Idaho uses US EPA CERCLIS List
2.	Leaking Underground Storage Tank Facility List	01 LUST sites within a 0.5 Mile Radius.
3.	Solid Waste Landfill Capacity Inventory	00 SWF sites within a 0.5 Mile Radius.
4.	Underground Storage Tank Facility List	00 UST sites within a 0.25 Mile Radius.
5.	Voluntary Cleanup Sites	00 Voluntary cleanup sites within a 0.5 Mile Radius
6.	Brownfield Sites	00 Brownfield sites within a 0.5 Mile Radius.

II. FEDERAL ASTM DATABASE INFORMATION

1.	National Priorities List (NPL)	00 NPL sites within a 1.0 Mile Radius.
2.	Delisted NPL	00 delisted NPL sites within a 0.5 Mile Radius.
3.	Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) / CERCLIS NFRAP	01 CERCLIS/CERCLIS NFRAP sites within a 0.5 Mile Radius.
4.	Resource Conservation and Recovery Act (RCRA) Corrective Action Report	00 CORRACTS sites within a 1.0 Mile Radius.
5.	RCRA small- and large-quantity generators	00 RCRA facilities within a 0.25 Mile Radius.
6.	RCRA Treatment, Storage, and Disposal (TSD)	00 RCRA-TSD facilities within a 0.5 Mile Radius.

MTI reviewed those sites that were listed within the ASTM 1527-13 minimum search distance and researched only those sites from the report that posed a potential environmental impact to or were located on the subject Property. A copy of the database report, provided by Environmental Risk Information Services (ERIS), is included in the appendix.

ASTM E1527-13 defines the following conditions in connection with the subject Property: Recognized Environmental Conditions (REC), Controlled Recognized Environmental Conditions (CREC), or Historical Recognized Environmental Conditions (HREC). A REC represented a past, current or material threat of release of petroleum products or hazardous substances into the environment. A CREC represented a past release that had been addressed to the satisfaction of the applicable regulatory authority resulting in required controls (e.g. *property use restrictions, activity and use limitations, institutional controls, or engineering controls).* An HREC represented a past release that had been remediated to the satisfaction of the applicable regulatory authority and met unrestricted use criteria.

One leaking underground storage tank (LUST) sites and one CERCLIS / CERCLIS NFRAP were located within the ASTM E1527-13 Minimum Search Distance from the Property. All of these facilities were located down and cross groundwater gradient of the subject Property and do not represent an environmental impact to the subject Property. Therefore, based on information obtained from the database report, no sites were found that represent an environmental impact to the subject Property.

Additional Environmental Records Sources
MTI determined that the review of the above standard environmental record sources was sufficient; therefore, no additional environmental record sources were examined.

Physical Setting and Source(s)
The project site is located within the western Snake River Plain of southwestern Idaho and eastern Oregon. The plain is a northwest trending rift basin, about 45 miles wide and 200 miles long, that developed about 14 million years ago (Ma) and has since been occupied sporadically by large inland lakes. Geologic materials found within and along the margins of the plain reflect volcanic and fluvial/lacustrine sedimentary processes that have led to an accumulation of approximately 1½ to 3 miles of interbedded volcanic and sedimentary deposits within the plain. Along the margins of the plain, streams that drained the highlands to the north and south provided coarse to fine-grained sediments eroded from granitic and volcanic rocks, respectively. About 2 million years ago, the last of the lakes was drained, and since that time, fluvial erosion and deposition has dominated the evolution of the landscape. The project site is underlain by Tertiary (65-2 Ma) age “Alluvial Fan Deposits” as mapped by Othberg and Stanford (1993). Deposits are composed of poorly-sorted, silty and sandy gravels with subangular cobbles and boulders in crudely stratified layers and lenses and are mostly oxidized to a red-brown near the ground surface. These deposits occur as alluvial fan remnants deposited by debris flows and ephemeral streams from the Boise Foothills.

The soil type on the Property was identified as predominantly Cashmere loamy sand and Moulton-Phyllis complex with small areas of Bissell loam and Ballentine-Eagle complex. The Moulton-Phyllis complex formed from mixed alluvium and is characterized as a deep, poorly drained soil. The remaining soils are formed from mixed alluvium and are characterized as deep, well drained soils.

The subject Property was located in the Boise River Valley roughly 0.4 miles northeast of the Boise River. Based on regional groundwater gradient, topography, and local surface water flow the overall groundwater gradient in this area is west to northwest.

The subject Property and vicinity were characterized in part through the use of the following literature resources:

- Idaho Department of Water-Resources draft map, Treasure Valley Ground Water Elevations Spring, 1998, dated September 1998.
- U. S. Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey Database, http://websoilsurvey.sc.egov.usda.gov.
- United States Geological Survey (USGS), 7.5 Minute Topographic map Boise South Quadrangle, Idaho, dated 1972 and photorevised 1976.

Historical Use Information

The objective of consulting historical sources is to develop a history of the previous uses or occupancies of the Property and surrounding area in order to identify those uses or occupancies that are likely to have led to recognized environmental conditions in connection with the Property. During our research, MTI consulted at least five of the eight ASTM listed record sources that include the following: (1) aerial photographs, (2) fire insurance maps, (3) property tax files, (4) recorded land title records, (5) USGS topographic maps, (6) local street directories, (7) building department records, and (8) zoning / land use records.

Aerial Photographs

MTI reviewed aerial photographs for the subject Property and surrounding area from ERIS. No RECs were indicated by our review of the aerial photographs, and a copy of the aerial photography is included in the appendix of this report. MTI has added property boundaries to the 1938 and 2015 photographs for your reference. The following table summarizes the research:

AERIAL PHOTOGRAPHS		
DATE	**SUBJECT PROPERTY**	**SURROUNDING PROPERTIES**
1938	The subject Property was depicted as agricultural land. The quality of the photograph was poor.	The photograph depicted the adjacent sites as agricultural land or road ways. The quality of the photograph was poor.
1953, 1971, 1981, 1992	The subject Property was depicted as similar to the 1938 photograph with the addition of two residential structures.	The surrounding sites were similar to the 1938 aerial photograph, with a residential structure to the east.
1998	The subject Property was depicted as similar to the 1992 photograph.	The surrounding properties had an increase in development.
2006	The subject Property was depicted as partially leveled.	The surrounding properties were depicted as similar to the 1998 photograph.
2011	The subject Property was depicted with regrowth of vegetation.	The property to the west appeared to be partially leveled in preparation for development. The property to the south appeared to be a walking trail that was developed with ponds. The properties to the east had an increase in residential structures and roadway development. The properties to the

AERIAL PHOTOGRAPHS		
DATE	**SUBJECT PROPERTY**	**SURROUNDING PROPERTIES**
		north were depicted as similar to the 2006 photograph.
2013	The subject property was depicted as similar to the 2011 photograph.	The property to the west appeared to be completely leveled and the remaining surrounding properties were depicted s similar to the 2011 photograph.
2015	The subject property was depicted as similar to the 2013 photograph with the addition of three structures.	The property to the west appeared to be under construction to build a residential area. Seven residential structured appeared to have been completed at this time. The property to the north had been leveled and appeared to be under the beginning stages of construction. The remaining surrounding properties were depicted as similar to the 2013 photograph.

Fire Insurance Maps
The fire insurance maps did not provide coverage for the subject Property.

Property Tax Files
MTI did not review property tax files as a part of this assessment.

Recorded Land Title Records
The Client did not request nor provide a chain-of-title to include as part of the scope of this Phase I ESA. MTI determined prior use of the subject Property with the aid of other historical records sources and interviews.

USGS Topographic Map(s)
The USGS 7.5 Minute Boise South, Idaho and Lucky Peak, Idaho Quadrangle depicted the subject Property in an urban area of east Boise. Therefore, no structures were depicted. The map depicted E. Barber Drive immediately north of the subject Property and E. Warm Springs Avenue south of the subject Property. A copy of the topographic map is included in the appendix of this report. No RECs were indicated by our review of the topographic maps.

Local Street Directories
MTI reviewed the City Directory Report for the subject Property and surrounding properties from ERIS. No RECs were indicated by our review of the city street directories. The following table summarizes the historical research:

CITY DIRECTORIES			
DATE	**PROPERTY**	**SURROUNDING PROPERTIES**	**COMMENTS/ CONCERNS**
1936-1989	The subject Property is not listed.	The surrounding properties are not listed.	
1990	The subject Property is not listed.	Barber Drive 3555 – Claire Hardisty Pheasant Lane 4812 – Jose L Arias	The subject Property was part of the parcel with the address 3555 Barber Drive.

CITY DIRECTORIES			
DATE	**PROPERTY**	**SURROUNDING PROPERTIES**	**COMMENTS/ CONCERNS**
		4849 – Ken Hutchings 4903 – James Hutchings	
1995	The subject Property is not listed.	Barber Drive 3550 – David & Ann Medsker 3555 – Clair Hardisty & Jessie Danielson	The subject Property was part of the parcel with the address 3555 Barber Drive.
2000	The subject Property is not listed.	Barber Drive 3550 – David Medsker & Shoakoi Farm business services 3555 – James Chatman	The subject Property was part of the parcel with the address 3555 Barber Drive.
2005	The subject property is not listed.	Barber Drive 3550 – David & Ann Medsker & Showakoi Fish Farm ponds & pond supplies 3555 – 2 houses, no listing	The subject Property was part of the parcel with the address 3555 Barber Drive.
2009	The subject property is not listed.	The surrounding properties are not listed.	
2014	The subject property is not listed.	3400 East Warm Springs Avenue – Barber hills Nursery	
2016	The subject property is not listed.	3400 East Warm Springs Avenue – Barber hills Nursery	

Building Department Records
MTI did not review building department records as part of this assessment.

Zoning and Land Use Records
During our research, MTI consulted various record sources such as the Ada County Assessor's office, the 1939 Metsker's Atlas. The Ada County Assessor's website indicated that the subject Property consisted of 8.65-acre parcel, which was zoned as A-1. In addition, the Ada County Assessor's website indicated that the building on the subject Property was a 4,363-square foot residence, a 2,852-square foot garage, and approximately an 800-square foot pole barn, approximately a 500-square foot livestock shed and an approximately 300-square foot chicken coop. The residence and the garage were constructed in 2005. The 1939 Metsker's Atlas identified the subject Property as rangeland.

Historical Use Information on the Property
Property was historically used for agricultural purposes. No RECs were noted during the historical records review.

Historical Use Information on Adjoining Properties
Historical land use of surrounding sites from the subject Property included undeveloped land prior to 1992. After 1992, rural residential properties developed to the northwest and roadway development occurred. In 2011, there was a dramatic increase in residential and roadway development on the adjacent properties. There was also the development of a recreation area to the south containing three ponds and a walking-trails. Residential development continued to the east and west of the subject Property in 2013 and 2015.

SITE RECONNAISSANCE

The objective of site reconnaissance is to obtain information indicating the likelihood of identifying RECs in connection with the Property.

Methodology and Limiting Conditions

Visual reconnaissance was conducted February 28, 2017 in general accordance with MTI's standard environmental assessment procedures. This reconnaissance consisted of systematically walking the Property to provide an overlapping field of view and noting recognized environmental conditions as encountered. Photographic documentation of pertinent recognized environmental conditions, improvements, and adjacent properties was made and has been included in the appendix of this report. The reconnaissance of the adjacent properties was performed by walking the perimeter of the subject Property, by observing and photographing the readily accessible and visible areas bordering or adjacent to the subject Property, and by noting potential environmental conditions. At the time of the reconnaissance, all required areas were accessible. The scope of work did not include sampling of items such as soil, groundwater, surface water, drum contents, tanks, other containers, etc., for chemical laboratory analysis.

General Site Setting

At the time of site reconnaissance, MTI observed the subject Property was occupied by a single family home with a garage, three storage structures, livestock, two orchard fields and a decorative water feature. MTI observed wood fencing along the northwest, north and northeastern property boundaries. A combination of barbed wire and wire fencing along the southeast and south property boundaries was observed. Metal fencing was observed on the southwestern property boundary. MTI observed wire fencing throughout the Property, mostly in the southeastern quarter where livestock was kept. Wood fencing was observed near the house, garage, driveway and connecting paths on the subject Property. MTI observed landscaped areas throughout the northern portion of the Property, including a pond water feature in the north east corner. The northern half of the property was slightly higher in elevation, while the southern half was separated by a hill which dropped down into an irrigation ditch and wetlands.

Hazardous Substances and Petroleum Products

No hazardous substances were observed during the site reconnaissance.

Unidentified Substances

No unidentified substances were observed during the site reconnaissance.

Storage Tanks

One, empty plastic storage tank, approximately 80 gallons in size, was observed on the southeast corner of the garage at the time of the site reconnaissance.

Odors

No odors were discovered during the site reconnaissance.

Pools of Liquid

No pools of liquid were observed during the site reconnaissance.

Drums
No drums were observed during the site reconnaissance.

Staining
No staining was observed during the site reconnaissance.

ASTs
No evidence of aboveground storage tanks was observed during the site reconnaissance.

Lack of Secondary Containment
Since no evidence of aboveground storage tanks was observed during the site reconnaissance, secondary containment is not applicable to the subject Property.

USTs
Two septic tanks were placed on the Property in 2005; one system for the house and the other for the garage. MTI observed evidence of these tanks at the time of the site reconnaissance.

PCBs
One pad-mounted transformer was observed at the northwest corner of the intersection of the east driveway and the connecting drive, north of the garage. One pole mounted transformer was located east of the northwest corner of the Property boundary. Each of the transformers, owned and operated by Idaho Power Company, appeared to be in good condition and did not show any signs of leakage. Power companies are allowed to place Non-PCB containing stickers on transformers and other electrical equipment that contains less than or equal to 50 parts per million (PPM) PCBs.

Solid Waste Disposal
There was no evidence found of waste disposal on the subject Property. Refuse generated onsite was disposed of in trash cans and removed by a private collection company.

Surface Water Observations
A pond water feature was observed in the northeast corner at the time of the site reconnaissance. An irrigation ditch was observed at the bottom of the hill and stretched from the west to the southeast of the Property. Pools of water and wetlands were observed throughout the southern portion of the subject Property at the time of the site reconnaissance.

Exterior Observations
The following subsections list the observations noted during the site reconnaissance specific to the accessed exterior spaces on the subject Property.

Stressed Vegetation
No areas of stressed vegetation were observed on the subject Property at the time of the site reconnaissance.

Pits, Ponds, and Lagoons
One man-made pond water feature, was observed in the northeast corner of the Property at the time of the site reconnaissance.

Wells
One well was observed to the southwest of the garage. According to the Idaho Department of Water Resources (IDWR) online records, the well was installed in 1994. However according the questionnaire filled out by Ms. Martinez, the well was installed in 2005.

If any wells or well structures are discovered during the development of the Property and are not to be used, they should be abandoned in accordance with the Administrative Rules of the Idaho Water Resource Board Well Construction Standards Rules IDAPA 37, Title 03, Chapter 09, Rule 25.

Septic Systems
Evidence of two septic systems was observed during the site reconnaissance, one near the house and one near the garage. According to the questionnaire that MTI received, there are two septic tanks on the subject Property that were placed in 2005. If during future development any existing tanks are discovered and are to be abandoned, they should be properly closed or removed. The Idaho DEQ recommends the following procedures for septic tank abandonment: 1) disconnect the inlet and outlet piping; 2) pump the scum and septage with approved disposal; 3) fill the septic tank with earthen material or physically destroy the septic tank or remove the septic tank from the ground.

Discharge Features
No drains, catch basins, or oil/water separator vaults were observed on the subject Property.

Soil Contamination
No evidence of soil contamination was observed on the subject Property during the site reconnaissance, and no indication of soil contamination was reported by the Idaho DEQ.

Groundwater Contamination
No evidence of groundwater contamination was found on the subject Property during the site reconnaissance, and no indication of groundwater contamination was reported by the Idaho DEQ.

Use of Pesticides
Since the Property has been used for agricultural purposes, the questionnaire, filled out by Ms. Martinez, reported that there was a historical use of pesticides on the Property. As of the printing of this report, there was no evidence that past usage of pesticides, herbicides, or other agricultural chemicals were mixed, formulated, or disposed of at the Property.

Vapor Intrusion
Migrating contaminated groundwater is not a concern up groundwater gradient from the subject Property, and vapor intrusion is not likely to occur from the subject Property. Therefore, vapor intrusion is unlikely to occur.

Interior Observations
The following subsections list the observations noted during the site reconnaissance specific to the accessed interior spaces on the subject Property.

Hazardous Substances and Petroleum Products
No hazardous substances were observed during the site reconnaissance.

Unidentified Substances
No unidentified substances were observed during the site reconnaissance.

Storage Tanks
One empty plastic storage tank, approximately 80 gallons in size, was observed on the southeast corner of the garage at the time of the site reconnaissance.

Odors
No odors were discovered during the site reconnaissance.

Pools of Liquid
No pools of liquid were observed during the site reconnaissance.

Drums
No drums were observed during the site reconnaissance.

Staining
No staining was observed during the site reconnaissance.

ASTs
No evidence of aboveground storage tanks was observed during the site reconnaissance.

Oil Water Separators (Interior)
No floor drains or catchments were found on the subject Property.

INFORMATION FROM INTERVIEWS

Interview with Owner/Site Manager
The property owner, Ms. Michelle Martinez was interviewed using the standard MTI Questionnaire, which is modeled after the Transaction Screening Questionnaire from ASTM E 1528-14. A copy of the completed questionnaire is included in the appendix of this report. Specific information reported to MTI from this questionnaire is summarized below:

According to Ms. Martinez, the Property was historically used as a family residence with livestock. Ms. Martinez confirmed historical use of pesticides, fertilizer, herbicides or other agricultural chemicals have been used on the property, however she was uncertain if these chemicals were stored on the Property. Ms. Martinez also informed MTI of the following information. The property contained paint containers and fluorescent light ballasts. The main home and the garage/shop were constructed in 2005. There were two septic tanks on the property, one for the main home and one for the shop located on the property. A private well was installed in 2005. There were invasive weeds in the wetlands. None of the described items resulted RECs on the subject Property.

Interview with Occupant(s)
No occupant was interviewed during the site investigation.

Interview with Local Government Officials
The standard environmental record sources do not warrant interviews with local government officials.

Interview with Others
No other persons were interviewed during this assessment.

NON-SCOPE CONSIDERATIONS

There may be additional environmental issues or conditions at a property that parties may wish to assess in connection with commercial real estate that are outside the scope of ASTM E1527. Some substances may be present on a property in quantities and under conditions that may lead to contamination of the property or of nearby properties that are not included in the CERCLA definition of hazardous substances (42 USC § 9601 (14)) or that do not otherwise present potential CERCLA liability. As per the Client's instructions, MTI did not perform any additional screenings, investigations, surveys, or assessments for the subject Property, such as the following: radon, asbestos-containing material, lead-based paint, lead-in-drinking water, wetland, PCB sampling, regulatory compliance, ecological/natural resources or impacts, endangered species, indoor air quality, cultural and historical resources, industrial hygiene, health and safety, or high-voltage power lines.

FINDINGS

As noted in the warranty section, this report is limited to the information available or known to MTI as of the date of the report, and if any additional information becomes available, it will be forwarded to you for your evaluation. During this assessment, MTI has not identified any known or suspect RECs, CRECs, HRECs, or *de minimis* conditions on the subject Property.

OPINION

It is MTI's opinion that no RECs, CRECs, HRECs, or *de minimis* conditions exist on the subject Property.

CONCLUSIONS

MTI has conducted a Phase I ESA in conformance with the scope and limitations of ASTM International, E1527-13 of 3505, 3547 and 3555 E. Warm Springs Avenue, Boise, Idaho, the subject Property. Any exception to, or deletions from, this practice are described in the Limitations and Exceptions of Assessment section of this report.

This assessment has revealed no evidence of a REC in connection with the subject Property, and MTI recommends no additional investigation based on our findings.

DEVIATIONS

During our performance of this Phase I ESA, MTI did not deviate from ASTM E1527-13.

APPLICATION FOR AUTHORIZATION TO USE COPYRIGHTED DOCUMENT

3505, 3547 AND 3555
E. WARM SPRINGS AVENUE
BOISE, IDAHO 83716

TO: MATERIALS TESTING AND INSPECTION
2791 SOUTH VICTORY VIEW WAY
BOISE, ID 83709

FROM: _____

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Please clearly identify name and address of person/entity applying to use or copy this document.

Gentlemen:

APPLICANT _____ hereby applies for permission to: (State here the use(s) contemplated)

for the purpose(s) of: (State here why you wish to do what is contemplated as set forth above.)

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Name

_____

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NOTE: THIS APPLICATION MUST BE COMPLETED FOR USE OR COPYING OF THIS DOCUMENT BY ANYONE OTHER THAN THE CLIENT.

Appendix

GLOSSARY AND ACRONYMS

QUALIFICATIONS OF KEY ENVIRONMENTAL PROFESSIONALS

ENVIRONMENTAL QUESTIONNAIRE AND DISCLOSURE FORMS

ENVIRONMENTAL RESEARCH REPORTS (STATE AND FEDERAL REPORT)

EXCERPTS FROM REGULATORY FILES

HISTORICAL INFORMATION AND LEGAL DESCRIPTION

VICINITY MAP

SITE MAP WITH PHOTO LOCATIONS

PHOTOGRAPHS

AERIAL PHOTOGRAPHS

GROUNDWATER GRADIENT MAP

MATERIALS TESTING & INSPECTION

❑ Environmental Services ❑ Geotechnical Engineering ❑ Construction Materials Testing ❑ Special Inspections

GLOSSARY & ACRONYMS

MATERIALS TESTING & INSPECTION

❑ Environmental Services ❑ Geotechnical Engineering ❑ Construction Materials Testing ❑ Special Inspections

GLOSSARY OF TERMS USED

Acrylonitrile—a colorless liquid used as a pesticide fumigant for stored grain, and in manufacturing acrylic rubber and fiber.

Asbestos—six naturally occurring fibrous variety of minerals found in certain types of rock. Of the six, the minerals chrysotile, amosite, and crocidolite have been most commonly used in building products. When mined and processed, asbestos is typically separated into very thin fibers. Because asbestos is strong, incombustible, and corrosion resistant, asbestos was used in many commercial products beginning early in the 1900's and peaking in the period from World War II into the 1970s. When inhaled in sufficient quantities, asbestos fibers can cause serious health problems.

Asbestos-Containing Material (ACM)—USEPA defines this as any material or product that contains more than 1% asbestos. US OSHA defines this as any material or product that contains asbestos in any percentage.

Biochemical oxygen demand—(BOD) a measure of the amount of oxygen consumed in biological processes that break down organic matter in water.

BTEX—benzene, toluene, ethyl benzene and xylene.

Clean Air Act Amendments—(CAA) Clean Air Act Amendments (1990); expands EPA enforcement powers and adds restriction on air toxics, ODSs, stationary and mobile emissions sources, and emissions implicated in acid rain and global warming.

CERCLA—Comprehensive Environmental Response, Compensation and Liability Act (1980, 1986); also Superfund; federal law authorizing identification and remediation of unsupervised hazardous waste sites.

CERCLIS—Comprehensive Environmental Response, Compensation and Liability Information System. CERCLIS contains information on sites identified by the USEPA as known or suspect abandoned, inactive or uncontrolled hazardous waste sites which may require cleanup.

CFC—chlorofluorocarbon; family of chemical substances used as refrigerants and solvents; believed to be associated with depletion of Earth's ozone layer.

CFR—Code of Federal Regulations; notation indicated volume number, part and section of the code, as in 29 CFR 1910.120.

Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)—the list of sites compiled by EPA that EPA has investigated or is currently investigating for potential hazardous substance contamination for possible inclusion on the National Priorities List.

Construction debris—concrete, brick, asphalt, and other such building materials discarded in the construction of a building or other improvement to property.

Contaminated public wells—public wells used for drinking water that have been designated by a government entity as contaminated by toxic substances (e.g., chlorinated solvents), or as having water unsafe to drink without treatment.

Clean Water Act—(CWA) (1972, 1987); federal law regulating pollutant discharges into surface waters or to POTWs.

CREC – Controlled Recognized Environmental Condition. Represents a past release that had been addressed to the satisfaction of the applicable regulatory authority resulting in required controls (e.g. property use restrictions, activity and use limitations, institutional controls, or engineering controls.

DNAPL—dense, non-aqueous phase liquid.

Demolition debris—concrete, brick, asphalt, and other such building materials discarded in the demolition of a building or other improvement to property.

De minimis—conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Department of Energy—(DOE) U.S. Department of Energy; agency responsible for research and development of energy technology, marketing of federal power, the nuclear weapons program, and energy regulation.

Drum—a container (typically, but not necessarily, holding 55 gallons (208L) of liquid) that may be used to store *hazardous substances* or *petroleum products*.

Dry wells—underground areas where soil has been removed and replaced with pea gravel, coarse sand, or large rocks. Dry wells are used for drainage, to control storm runoff, for the collection of spilled liquids (intentional and non-intentional) and wastewater disposal (often illegal).

Dwelling—structure or portion thereof used for residential habitation.

Environmental Lien—a charge, security, or encumbrance upon title to a property to secure the payment of a cost, damage, debt, obligation, or duty arising out of response actions, cleanup, or other remediation of hazardous substances or petroleum products upon a property, including (but not limited to) liens imposed pursuant to CERCLA 42 USC § 9607(1) and similar state or local laws.

EPCRA—Emergency Planning and Community Right to Know Act; see SARA Title III.

ERNS List—EPAs emergency response notification system list of reported CERCLA hazardous substance releases or spills in quantities greater than the reportable quantity, as maintained at the National Response Center. Notification requirements for such releases or spills are codified in 40 CFR Parts 302 and 355.

Ex-situ—treatment of contaminated materials offsite or away from their point of generation.

Federal Register, (FR)—publication of the United States government published daily (except for federal holidays and weekends) containing all proposed and final regulations and some other activities of the federal government. When regulations become final, they are included in the Code of Federal Regulations (CFR), as well as published in the Federal Register.

FIFRA—Federal Insecticide, Fungicide and Rodenticide Act (1972, 1988); federal law mandating toxicity testing and registration of pesticides.

FINDS—Facility Index System. FINDS contains both facility information and "pointers" to other sources that contain more detail. These include: RCRIS, PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]), CERCLIS,. DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statues), FURS (Federal Underground Injection Control), FRDS (Federal Reporting Data System), SIA (Surface Impoundments), CICIS (TSCA Chemicals in Commerce Information System), PADS, RCRA-J (medical waste transporters/disposers), TRIS and TSCA.

Fire Insurance Maps—maps produced for private fire insurance map companies that indicate uses of properties at specified dates and that encompass the Property. These maps are often available at local libraries, historical societies, private resellers, or from the map companies who produced them.

Generator—a person, group, or organization whose activities produce hazardous waste.

HAP—hazardous air pollutant; any of 189 air toxics identified for regulation under the CAA Amendments.

Hazardous Substance—A substance defined as a hazardous substance pursuant to CERCLA 42 USC § 9601 (14), as interpreted by EPA regulations and the courts: "(A) any substance designated pursuant to section 1321 (b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (42 USC § 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC § 6901 et seq.) has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act (42 USC § 7412), and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator (of EPA) has taken action pursuant to section 2606 of Title 15. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

Hazardous Waste—any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (42 USC § 6921) (but not including any waste the regulation of which under the Solid Waste Disposal Act (42 USC § 6901 et seq.) has been suspended by Act of Congress). The Solid Waste Disposal Act of 1980 amended RCRA. RCRA defines a hazardous waste, in 42 USC § 6903, as: "solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may—(A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating irreversible, illness; or (B)

pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed".

HAZWOPER—Hazardous Waste Operations and Emergency Response

HCFCs—hydrochlorofluorocarbon; family of substances temporarily allowed as CFC substitutes in refrigerants and industrial applications.

HMIRS—Hazardous Materials Information Reporting System. HMIRS contains hazardous material spill incidents reported to DOT.

HON—hazardous organic NESHAP; MACT standard for the organic chemical manufacturing industry.

HREC - Historical Recognized Environmental Condition. Represents a past release that had been remediated to the satisfaction of the applicable regulatory authority and met unrestricted use criteria.

HSWA—Hazardous and Solid Waste Amendments (1984); amendments to RCRA establishing a timetable for **land bans** and more stringent UST requirements.

IDLH—immediately dangerous to life or health.

In Situ—treatment of contaminated areas without excavation or other removal, as in the in situ treatment of contaminated soils through biodegradation.

Land bans: RCRA—provisions prohibiting disposal of specific toxic materials in landfills, also called land disposal restrictions.

Landfill—a place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term solid waste disposal site and is also known as a garbage dump, trash dump, or similar term.

LEL—lower explosive limit; minimum concentration at which a vapor or gas will explode when ignited.

LEPC—local emergency planning committee; group defined in ***SARA*** as responsible for developing emergency plans.

Local Street Directories—directories published by private (or sometimes government) sources that show ownership, occupancy, and or use of sites by reference to street addresses. Often local street directories are available at libraries of local governments, colleges or universities, or historical societies.

MACT—maximum achievable control technology; controls and procedures required under ***CAA Amendments*** for certain air pollutant sources.

Material Safety Data Sheet (MSDS)—written or printed material concerning a hazardous substance which is prepared by chemical manufacturers, importers, and employers for hazardous chemicals pursuant to OSHA's Hazard Communication Standard, 29 CFR 1910.1200 and 29 CFR 1926.59.

MEK—methyl ethyl ketone.

MMA—methyl-methacrylate.

MSDS—material safety data sheet; contains descriptive information required by ***OSHA*** for hazardous chemicals.

MTBE—methyl tertiary butyl ether.

NAAQS—National Ambient Air Quality Standards; standards under ***CAA*** requiring states to develop ***SIP***'s and establishing maximum air pollutant emission standards.

National Contingency Plan (NCP)—the National Oil and Hazardous Substances Pollution Contingency Plan, found at 40 CFR Part 300, that is the EPA's blueprint on how hazardous substances are to be cleaned up pursuant to CERCLA.

National Priorities List (NPL)—list compiled by EPA pursuant to CERCLA 42 USC § 9605(a)(8)(B) of properties with the highest priority for cleanup pursuant to EPA's Hazard Ranking System. See 40 CFR Part 300. The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas.

NPL Liens—National Priority List: Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

NESHAP—National Emission Standards for Hazardous Air Pollutants; federal emissions standards for ***HAP***'s regulated under ***CAA***.

NPDES—National Pollutant Discharge Elimination System; federal permitting system required under ***CWA*** for discharging effluent waste to surface waters.

NPL—National Priorities List; official list of hazardous waste sites to be addressed by ***CERCLA***.

NRC—National Response Center; operated by the US Coast Guard.

Occupants—those tenants, subtenants, or other persons or entities using the Property or a portion of the Property.

Owner—generally the fee owner of record of the Property.

PADS—PCB Activity Database System. PADS identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

PAH—polychlorinated aromatic hydrocarbons; a group of organic compounds, some of which are potent human carcinogens.

PCB—polychlorinated biphenyl; pathogenic and teratogenic industrial compound used as a heat-transfer agent; ***PCB***'s may accumulate in human or animal tissue.

> Because ASTM E 1527-05 requires comment on indications of polychlorinated biphenyls (PCBs), MTI is providing the following information about PCBs for your use. PCBs (polychlorinated biphenyls) belong to a broad family of organic chemicals known as chlorinated hydrocarbons. PCBs are produced by the combination of one or more chlorine atoms and a biphenyl molecule. Virtually all PCBs in existence today have been synthetically manufactured. PCBs range in consistency from heavy oily liquids to waxy solids. Prior to 1979, PCBs were widely used in electrical equipment such as transformers, capacitors, switches, and voltage regulators for their "cooling" properties because they do not readily burn or do not conduct electricity, and only boil at high temperature. Also, PCBs do not readily react with other chemicals. They were also used in mining equipment, heat transfer and hydraulic systems, carbonless copy paper, pigments, and microscopy mounting media. The EPA banned the manufacture and sales of PCB containing equipment in 1978, although producers were allowed to used their stocks.
>
> When released into the environment, PCBs do not easily break apart and form new chemical arrangements (i.e., they are not readily biodegradable). Instead, they persist for many years, bioaccumulate, and bioconcentrate in organisms. Laboratory data show that PCBs cause cancer in animals. Although there are no actual data showing that PCBs cause cancer in humans, EPA's policy is to consider any animal carcinogen a possible human carcinogen. Animal studies show adverse reproductive and developmental effects from repeated exposure to PCBs. In addition, it has been shown that PCBs are toxic to fish at very low levels of exposure. The survival rate and the reproductive success of fish can be adversely affected by the presence of PCBs. EPA believes there may be similar cause for concern when humans are exposed to large doses of PCBs. Exposure to PCBs can cause chloracne (a painful, disfiguring skin illness), nausea, dizziness, eye irritation, and bronchitis. Ingestion of PCBs can cause liver damage and digestive problems. EPA regulates PCBs through rules issued pursuant to the Toxic Substances Control Act of 1976.
>
> Another risk associated with PCB containing oils occurs when the oil is burned or partially burned. The burning of chemicals as toxic as PCBs produces gases which are particularly dangerous. Individuals may be exposed to PCB gases if a fire occurs in or near an electrical transformer or other electrical equipment which uses PCBs in its insulating fluid. When PCB dielectric fluid is partly burned—as it may be in a transformer fire—the PCB fluid produces by-products, which include polychlorinated dibenzodioxin and polychlorinated dibenzofurans, that are much more toxic than the PCBs themselves. Dioxins and furans are associated with a number of health risks, and has been shown to cause cancer of the liver, mouth, adrenal gland, and lungs in laboratory animals.

PCP—pentachlorophenol; a chlorinated phenol used as a wood preservative.

PEL—permissible exposure limit; workplace exposure limit established by ***OSHA*** for each of 600 industrial chemicals.

Petroleum Exclusion—The exclusion from CERCLA liability provided in 42 USC § 9601(14), as interpreted by the courts and EPA: "The term (hazardous substance) does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas)."

Petroleum Products—those substances included within the meaning of the petroleum exclusion to CERCLA, 42 USC § 9601(14), as interpreted by the courts and EPA that is: petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under Subparagraphs (A) through (F) of 42 USC § 9601(14), natural gas, natural gas liquids, liquefied natural gas, and synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). (The word fraction refers to certain distillates of crude oil, including gasoline, kerosene, diesel oil, jet fuels, and fuel oil, pursuant to Standard Definitions of Petroleum Statistics.

Phase I Environmental Site Assessment—the process by which a person or entity seeks to determine if a particular parcel of real property (including improvements) is subject to recognized environmental conditions. At the option of the user, an environmental site assessment may include more inquiry than that constituting appropriate inquiry or, if the user is not concerned about qualifying for the innocent landowner defense, less inquiry than that constituting appropriate inquiry. An environmental site assessment is both different from and less rigorous than an environmental audit.

Pits, Ponds, or Lagoons—manmade or natural depressions in a ground surface that is likely to hold liquids or sludge containing hazardous substances or petroleum products. The likelihood of such liquids or sludge being present is determined by evidence of factors associated with the pit, pond, or lagoon, including, but not limited to, discolored water, distressed vegetation, or the presence of an obvious wastewater discharge.

POTW—publicly owned treatment works; municipal wastewater treatment facility.

PPA—Pollution Prevention Act (1990); federal law establishing a national policy of pollution prevention and waste reduction.

PPE—personal protective equipment, safety gear, including chemical protective clothing and breathing apparatus.

Property—the real property that is the subject of the environmental site assessment described in this practice. Real property includes buildings and other fixtures and improvements located on the Property and affixed to the land.

Property Tax Files—the files kept for property tax purposes by the local jurisdiction where the Property is located and includes records of past ownership, appraisals, maps, sketches, photos, or other information that is reasonably ascertainable and pertaining to the Property.

PRP—potentially responsible party; individual of organization legally liable under ***CERCLA*** for cleanup of ***NPL*** sites.

RAATS—RCRA Administrative Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA.

RACT—reasonably available control technology controls required under the ***CAA Amendments*** for certain sources of ***VOC*** and ***NOx*** emissions sources.

RCRA—Resource Conservation and Recovery Act (1976, 1984); federal law regulating management and disposal of solid and hazardous wastes.

RCRA generators—those persons or entities that generate hazardous wastes, as defined and regulated by RCRA.

RCRA generators list—list kept by EPA of those persons or entities that generate hazardous wastes as defined and regulated by RCRA.

RCRA TSD facilities—those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA.

RCRA TSD facilities list—list kept by EPA of those facilities on which treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA.

RCRIS—Resource Conservation and Recovery Information system. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

REC – *Recognized Environmental Condition.* Represents a past, current or material threat of release of petroleum products or hazardous substances into the environment

Recorded Land Title Records—records of fee ownership, leases, land contracts, easements, liens, and other encumbrances on or of the Property recorded in the place where land title records are, by law or custom, recorded for the local jurisdiction in which the Property is located. (Often such records are kept by a municipal or county recorder or clerk.) Such records may be obtained from title companies or directly from the local government agency. Information about the title to the Property that is recorded in a U.S. District court or any place other than where land title records are, by law or custom, recorded for the local jurisdiction in which the Property is located, are not considered part of recorded land title records.

Records Of Emergency Release Notifications (SARA 304)—Section 304 of EPCRA or Title III of SARA requires operators of facilities to notify their local emergency planning committee (as defined in EPCRA) and state emergency response commission (as defined in EPCRA) of any release beyond the facility's boundary of any reportable quantity of any extremely hazardous substance. Often the local fire department is the local emergency planning committee. Records of such notifications are "Records of Emergency Release Notifications" (SARA – 304).

Report—the written record of a transaction screen process as required by Practice E 1528 or the written record prepared by the environmental professional and constituting part of a "Phase I Environmental Site Assessment" as required by this practice.

RI/FS—remedial investigation and feasibility study; an ***EPA*** investigation at a ***Superfund*** site to asses contamination and environmental problems, and evaluate cleanup alternatives.

ROD—record of decision; ***EPA*** 's statement of remedy for a ***Superfund*** site cleanup.

Release—any occurrence where a regulated substance is emitted into air, soil or water.

SARA—Superfund Amendments and Reauthorization Act (1986); federal law reauthorizing and expanding ***CERCLA*** jurisdiction.

SARA Tile III—section of ***SARA*** requiring public disclosure of chemical release information and development of emergency response plans; see ***TRI***.

SIP—state implementation plan; requiring of each state under ***CAA*** to implement air quality standards.

SITE—Superfund Innovative Technology Evaluation; ***EPA***-supported program to demonstrate and evaluate innovative remediation technologies.

SO_2—sulfur dioxide; gas released from burning fossil fuels, associated with atmospheric ozone depletion and ground level ozone (smog) production.

Solid Waste—any garbage, refuse or sludge, including solid, liquid, semisolid or contained gaseous material resulting from industrial, commercial, agriculture and mining operations, and community activities (excluding material in domestic sewage, discharges subject to regulation as point sources under ***CWA***, or any nuclear material or byproduct regulated under the Atomic Energy Act of 1954).

Solid Waste Disposal Site—a place, location, tract of land, area, or premises used for the disposal of solid wastes as defined by state solid waste regulations. The term is synonymous with the term landfill and is also known as a garbage dump, trash dump, or similar term.

Solvent—a chemical compound that is capable of dissolving another substance and is itself a hazardous substance, used in a number of manufacturing/industrial processes including but not limited to the manufacture of paints and coatings for industrial and household purposes, equipment cleanup, and surface degreasing in metal fabricating industries.

Source—a geographic area, facility or portion of a facility where ***CAA***-regulated emissions may be released; as applied to hazardous waste generation, a process or process component resulting in waste production.

SPCC—spill prevention, control and countermeasures; a plan covering release of hazardous substances a defined in ***CWA***.

State Registered USTs—state lists of underground storage tanks required to be registered under Subtitle I, Section 9002 of RCRA.

Sump—a pit, cistern, cesspool, or similar receptacle where liquids drain, collect, or are stored.

TC—toxicity characteristic.

TCLP—toxicity characteristic leaching procedure; requiring under ***RCRA*** to determine toxicity and mobility of hazardous waste.

TRIS—Toxics Release Inventory System. TRIS is a collection of annual reports on chemical releases regulated companies must file under ***SARA Tile III***.

TSCA—Toxic Substances Control Act (1976); federal law authorizing ***EPA*** to gather information on chemical risks; basis for regulating ***PCB***'s asbestos and other toxic substances. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It included data on the production volume of these substances by plant site. USEPA has no current plan to update and/or re-issue this database.

TSDF—treatment, storage or disposal facility; hazardous waste facility regulated under ***RCRA***.

Underground Storage Tank (UST)—any tank, including underground piping connected to the tank, that is or has been used to contain hazardous substances or petroleum products and the volume of which is 10 % or more beneath the surface of the ground.

USGS 7.5 Minute Topographic Map—the map (if any) available from or produced by the United States Geological Survey, entitled "USGS 7.5 Minute Topographic Map" and showing the Property.

Wastewater—water that (1) is or has been used in an industrial or manufacturing process, (2) conveys or has conveyed sewage, or (3) is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. Wastewater does not include water originating on or passing through or adjacent to a site, such as stormwater flows, that has not been used in industrial or manufacturing processes, has not been combined with sewage, or is not directly related to manufacturing, processing, or raw materials storage areas at an industrial plant.

Zoning/Land Use Records—those records of the local government in which the Property is located indicating the uses permitted by the local government in particular zones within its jurisdiction. The records may consist of maps and/or written records. They are often located in the planning department of a municipality or county.

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DESCRIPTIONS OF TERMS SPECIFIC TO ASTM STANDARDS E 1527-13 AND 1528-06

Actual Knowledge—the knowledge actually possessed by an individual who is a real person, rather than an entity. Actual knowledge is to be distinguished from constructive knowledge that is knowledge imputed to an individual or entity.

Adjoining Properties—any real property or properties the border of which is contiguous or partially contiguous with that of the Property, or that would be contiguous or partially contiguous with that of the Property but for a street, road, or other public thoroughfare separating them.

Aerial Photographs—photographs taken from an airplane or helicopter (from a low enough altitude to allow identification of development and activities) of areas encompassing the Property. Aerial photographs are often available from government agencies or private collections unique to a local area.

Appropriate Inquiries—that inquiry constituting "All appropriate inquiries into the previous ownership and uses of the Property consistent with good commercial and customary practice" as defined in CERCLA, 42 USC – 9601(35)(B), that will give a party to a commercial real estate transaction the innocent landowner defense to CERCLA liability (42 USC § 9601(A) and (B) and § 9607(b)(3)), assuming compliance with other elements of the defense.

Approximate Minimum Search Distance—the area for which records must be obtained and reviewed pursuant to Section 7 of ASTM E 1528-00 subject to the limitations provided in that section. This may include areas outside the Property and shall be measured from the nearest property boundary. This term is used in lieu of radius to include irregularly shaped properties.

Building Department Records—those records of the local government in which the Property is located indicating permission of the local government to construct, alter, or demolish improvements on the Property. Often building department records are located in the building department of a municipality or county.

Commercial Real Estate—any real property except a dwelling or property with no more than four dwelling units exclusively for residential use (except that a dwelling or property with no more than four dwelling units exclusively for residential use is included in this term when it has a commercial function, as in the building of such dwellings for profit). This term includes but is not limited to undeveloped real property and real property used for industrial, retail, office, agricultural, other commercial, medical, or educational purposes; property used for residential purposes that has more than four residential dwelling units; and property with no more than four dwelling units for residential use when it has a commercial function, as in the building of such dwellings for profit.

Commercial Real Estate Transaction—a transfer of title to or possession of real property or receipt of a security interest in real property, except that it does not include transfer of title to or possession of real property or the receipt of a security interest in real property with respect to an individual dwelling or building containing fewer than five dwelling units, nor does it include the purchase of a lot or lots to construct a dwelling for occupancy by a purchaser, but a commercial real estate transaction does include real property purchased or leased by persons or entities in the business of building or developing dwelling units.

Due Diligence—the process of inquiring into the environmental characteristics of a parcel of commercial real estate or other conditions, usually in connection with a commercial real estate transaction. The degree and kind of due diligence vary for different properties and differing purposes.

Environmental Audit—the investigative process to determine if the operations of an existing facility are in compliance with applicable environmental laws and regulations. This term should not be used to describe Practice E 1528 or this practice, although an environmental audit may include an environmental site assessment or, if prior audits are available, may be part of an environmental site assessment.

Environmental Professional—a person possessing sufficient training and experience necessary to conduct a site reconnaissance, interviews, and other activities in accordance with this practice, and from the information generated by such activities, having the ability to develop conclusions regarding recognized environmental conditions in connection with the Property in question. An individuals "status as an environmental professional" may be limited to the type of assessment to be performed or to specific segments of the assessment for which the professional is responsible. The person may be an independent contractor or an employee of the user.

Environmental Site Assessment (ESA)—the process by which a person or entity seeks to determine if a particular parcel of real property (including improvements) is subject to recognized environmental conditions. At the option of the user, an environmental site assessment may include more inquiry than that constituting appropriate inquiry or, if the user is not concerned about qualifying for the innocent landowner defense, less inquiry than that constituting appropriate inquiry. An environmental site assessment is both different from and less rigorous than an environmental audit.

Fill Dirt—dirt, soil, sand, or other earth, that is obtained offsite, that is used to fill holes or depressions, create mounds, or otherwise artificially change the grade or elevation of real property. It does not include material that is used in limited quantities for normal landscaping activities.

Hazardous Waste/Contaminated Sites—sites on which a release has occurred, or is suspected to have occurred, of any hazardous substance, hazardous waste, or petroleum products, and that release or suspected release has been reported to a government entity.

Innocent Landowner Defense—that defense to CERCLA liability provided in 42 USC § 9601(35) and § 9607(b)(3). One of the requirements to qualify for this defense is that the party make "all appropriate inquiries into the previous ownership and uses of the Property consistent with good commercial or customary practice." There are additional requirements to qualify for this defense.

Interviews—those portions of this practice (ASTM E 1528-13) that are contained in Section 10 and 11 thereof and address questions to be asked of owners and occupants of the Property and questions to be asked of local government officials.

Key Site Manager—the person identified by the owner of a property as having good knowledge of the uses and physical characteristics of the Property.

Local Government Agencies—those agencies of municipal or county government having jurisdiction over the Property. Municipal and county government agencies include but are not limited to cities, parishes, townships, and similar entities.

LUST Sites—state lists of leaking underground storage tank sites. Section 9003 (h) of Subtitle I of RCRA gives EPA and states, under cooperative agreements with EPA, authority to clean up releases from UST systems or require owners and operators to do so.

Major Occupants—those tenants, subtenants, or other persons or entities each of which uses at least 40% of the leasable area of the Property or any anchor tenant when the Property is a shopping center.

Migrate/Migration— movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface.

Obvious—that which is plain or evident; a condition or fact that could not be ignored or overlooked by a reasonable observer while visually or physically observing the property.

Other Historical Sources—any source or sources other than those designated in 8.3.4.1 through 8.3.4.8 that are credible to a reasonable person and that identify past uses or occupancies of the Property. The term includes records in the files and/or personal knowledge of the Property owner and/or occupants.

Physical Setting Sources—sources that provide information about the geologic, hydrogeologic, hydrologic, or topographic characteristics of a property.

Practically Reviewable—information that is practically reviewable means that the information is provided by the source in a manner and in a form that, upon examination, yields information relevant to the Property without the need for extraordinary analysis of irrelevant data. The form of the information shall be such that the user can review the records for a limited geographic area. Records that cannot be feasibly retrieved by reference to the location of the Property or a geographic area in which the Property is located are not generally practically reviewable. Most databases of public records are practically reviewable if they can be obtained from the source agency by the county, city, zip code, or other geographic area of the facilities listed in the record system. Records that are sorted, filed, organized, or maintained by the source agency only chronologically are not generally practically reviewable. For large databases with numerous facility records (such as RCRA hazardous waste generators and registered underground storage tanks), the records are not practically reviewable unless they can be obtained from the source agency in the smaller geographic area of zip codes. Even when information is provided by zip code for some large databases, it is common for an unmanageable number of sites to be identified within a given zip code. In these cases, it is not necessary to review the impact of all of the sites that are likely to be listed in any given zip code because that information would not be practically reviewable. In other words, when so much data is generated that it cannot be feasibly reviewed for its impact on the Property, it is not practically reviewable.

Preparer—the person preparing the transaction screen questionnaire pursuant to Practice E 1528, who maybe either the user or the person to whom the user has delegated the preparation of the transaction screen questionnaire.

Publicly Available—information that is publicly available means that the source of the information allows access to the information by anyone upon request.

Reasonably Ascertainable—for purposes of both this practice and Practice E 1528, information that is (1)publicly available, (2) obtainable from its source within reasonable time and cost constraints, and (3) practically reviewable.

Recognized Environmental Conditions—the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to release to the environment; 2) under conditions indicative of a release to the environment; or 3) under conditions that pose a material threat of a future release to the environment. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Records Review—that part that is contained in Section 8 of this practice that addresses which records shall or may be reviewed.

Site Reconnaissance—that part that is contained in Section 9 of this practice and addresses what should be done in connection with the site visit. The site reconnaissance includes, but is not limited to, the site visit done in connection with such a Phase I Environmental Site Assessment.

Site Visit—the visit to the Property during which observations are made constituting the site reconnaissance section of this practice and the site visit requirement of Practice E 1528.

Standard Environmental Record Sources—Those records specified in 8.2.1.

Standard Historical Sources—those sources of information about the history of uses of property specified in 8.3.4.

Standard Physical Setting Source—a current USGS 7.5 minute topographic map (if any) showing the area on which the Property is located.

Standard Practice(s)—the activities set forth in either and both this practice and Practice E 1528.

Standard Sources—sources of environmental, physical setting, or historical records specified in Section 8 of this practice.

Transaction Screen Process—the process described in Practice E 1528.

Transaction Screen Questionnaire—the questionnaire provided in Section 6 of Practice E 1528.

User—the party seeking to use Practice E 1528 to perform an environmental site assessment of the Property. A user may include, without limitation, a purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager.

Visually and/or Physically Observed—during a site visit pursuant to Practice E 1528, or pursuant to this practice, this term means observations made by vision while walking through a property and the structures located on it and observations made by the sense of smell, particularly observations of noxious or foul odors. The term "walking through" is not meant to imply that disabled persons who cannot physically walk may not conduct a site visit; they may do so by the means at their disposal for moving through the Property and the structures located on it.

Acronyms

ASTM—American Society for Testing and Materials

CERCLA—Comprehensive Environmental Response, Compensation and Liability Act of 1980 (as amended, 42 USC § 9601 et seq.)

CERCLIS—Comprehensive Environmental Response, Compensation and Liability Information System (maintained by EPA).

CFR—Code of Federal Regulations

EPA—United States Environmental Protection Agency

EPCRA—Emergency Planning and Community Right to Know Act ((also known as SARA Title 111), 42 USC § 11001 et seq.)

ERNS—emergency response notification system

ESA—environmental site assessment (different than an environmental audit)

FOIA—U.S. Freedom of Information Act (5 USC 552 et seq.)

FR—Federal Register

LUST—leaking underground storage tank

MSDS—material safety data sheet

NCP—National Contingency Plan

NPDES—national pollution discharge elimination system

NPL—national priorities list

PCBs—polychlorinated biphenyls

PRP—potentially responsible party (pursuant to CERCLA 42 USC § 9607(a))

RCRA—Resource Conservation and Recovery Act (as amended, 42 USC § 6901 et seq.)

SARA—Superfund Amendments and Reauthorization Act of 1986 (amendment to CERCLA)

USGS—United States Geological Survey

UST—underground storage tank

QUALIFICATIONS OF KEY ENVIRONMENTAL PROFESSIONALS

Materials Testing & Inspection

KARL LANGUIRAND, P.G., R.G., L.G.
ENVIRONMENTAL SERVICES MANAGER

As the Environmental Services Manager with MTI, Mr. Languirand is charged with a multitude of field and office activities for a variety of projects as well as report preparation and review. Mr. Languirand has balanced his academic career with a variety of learning experiences. He routinely consults with clients regarding a variety of environmental concerns. He has experience with various environmental concerns including asbestos, radon, contaminated groundwater, and is experienced in petrographic and porosity analysis of hardened concrete and natural rock. He is also a EPA Certified Lead Professional and performs all LBP Assessments for the company as well as NEPA Investigations Geotechnical Engineering Reports, Phase I/II Environmental Site Assessments, asbestos inspections, well monitoring, and other related activities.

YEARS OF EXPERIENCE: 21
Years at MTI: 20

EDUCATION:
Boise State University, Boise, ID
◊ B.S. Geology, Dec. 1996
Materials Testing and Inspection Inc., 1996
◊ NIOSH 582e- Analysis of Airborne Asbestos Fibers
EHS International Inc., 1997
◊ AHERA Building Inspector Course
BHP Enterprises, 1998
◊ Portable Nuclear Gauge Safety
OSU Western Regional Lead Training Center
◊ EPA - RRP Trainer
◊ EPA Certified Lead Risk Assessor, 2000
◊ Lead Inspector, 2000
◊ Lead Abatement Contractor/Supervisor, 2002
Design for Health Training Center
◊ Asbestos Management Planner, 2011
◊ Asbestos Project Designer, 2011

TRAINING, CERTIFICATIONS, AND AFFILIATIONS
Registered Professional Geologist, P.G.#1014 State of Idaho, 2001
Registered Geologist, R.G. # G1987 Oregon, 2003
Licensed Geologist, L.G. #2748, State of Washington, 2008
Boise State University Alumni

RELEVANT EXPERIENCE

US Bank - RETECHS (various commercial projects)
Phase I and II Environmental Site Assessments

Idaho Power (various projects)
Phase I Environmental Site Assessment, Asbestos and Lead Survey, & Air Monitoring.

City of Boise Fire Station
Phase I Environmental Site Assessment, Geotechnical Investigation; Well monitoring

Walgreen's (various projects)
Geotechnical Investigations, Phase I Environmental Site Assessments

Water Sampling & Well Monitoring Hawkins Smith (various projects)
Geotechnical Investigation, Underground Storage Tank decommissioning, Phase I ESA

Boise State University
Various asbestos inspections, Lead Based Paint Assessment, and hazardous materials consulting services.

Idaho Central Credit Union, ICCU (various commercial projects)
Phase I and II Environmental Site Assessments

City of Boise – Housing & Community Development
Numerous Lead Risk Assessments and Lead Based Paint Inspections, & consulting services.

Albertson's, Inc (various projects)
Geotechnical Investigation, Asbestos and Lead Survey

US Bureau of Reclamation
Multiple Lead Based Paint Assessments



JON KRUCK, C.E.M., C.R.S.
REMEDIATION SPECIALIST/HAZARDOUS MATERIALS SPECIALIST

Mr. Kruck performs Phase I, II and III Environmental Site Assessments, groundwater monitoring and remediation, as well as Aboveground Storage Tank (AST) and Underground Storage Tank (UST) decommissioning. He has, for over twenty seven years, performed countless environmental site assessment and remediation projects in Idaho, Oregon and Washington, and has additional experience with projects throughout the U.S. including Brownfields Development and has been a keynote speaker at the Oregon Brownfields conference as well as personally owning Brownfields properties which he redeveloped. He is personally responsible for the development, implementation, and evaluation of multiple cleanup programs and maintains term contracts with various municipal entities to conduct their environmental work. His experience also includes all aspects of field activities including excavation, drilling and boring, UST inerting, removal and cleaning, air, soil and groundwater sampling, confined space work and rescue, drug lab and hazardous materials spill response, Haz-Cat, and the design and installation of remediation equipment and systems. Mr. Kruck is also responsible for MTI programs including training, program research and planning.

YEARS OF EXPERIENCE: 27
YEARS AT MTI: 15

Education:

- ◊ Phoenix Institute of Technology - Computer Diagnostics
- ◊ OSHA 1910.120, Hazardous Materials Specialist, Radiological & Biological Specialist, Transportation Accident Specialist & Incident Commander Level Training with annual refresher courses
- ◊ Structural Firefighter II, Wildland Interface Firefighter
- ◊ BHP Enterprises, Boise, ID - Radiation Safety
- ◊ Sales and Marketing & Management Training Seminar, A.G., Inc
- ◊ Environmental Assessment Association
- ◊ Certified Environmental Manager
- ◊ Certified Remediation Specialist
- ◊ Idaho DEQ Risk Evaluation Manual Training
- ◊ Northwest Environmental Training Center - Contaminant Chemistry and Transport Series

TRAINING, CERTIFICATIONS, AND AFFILIATIONS

Previously Licensed and Bonded Monitoring Well Driller – Oregon and Idaho
EnviroWaste Management Program 1993
IFCI National Certification UST Decomm. #0876931-26
State of Oregon

- ◊ UST Service Providers License # 16625,16626
- ◊ UST Decom. License # 15414
- ◊ Soils Matrix Cleanup License #13867
- ◊ Former member, Region 14 - Haz-Mat Team 10 Hazardous Materials Incident Command Level

State of Washington

- ◊ Site Assessment #876931-47
- ◊ UST Decomm. #876931-42

RELEVANT EXPERIENCE

Chevron USA – multiple locations
Petroleum Release Investigations, Groundwater Remediation, O&M, Remediation System Installations

U.S. EPA—Payette, ID
Remediation System Installation, Quarterly Monitoring, O&M, System Abandonment

Ontario Real Estate Company, Ontario, OR
Investigate, Delineate, Remediate PCE Impacted Soil & Groundwater (Brownfields Redevelopment)

Owyhee Malheur Watershed Council Flow Monitoring
Monitored for various pollutants and stream flow measurements at locations throughout Malheur and Harney Counties.

Port of Hood River
Investigation, Delineation and Treatment of Petroleum Impacted Soil

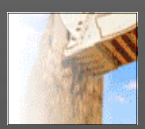
Oregon Department of Transportation, multiple locations
Investigate, Delineate, Remediate petroleum Impacted Soil & Groundwater, Spill Response, Environmental Consulting

Port of Vancouver
Petroleum Release Investigation, On-Site Soil Remediation of 24,000 cubic yards soil.

Over 450 UST Decommissioning Projects for Private and Public Entities including:
Presbyterian Community Care Center; Boise State University; Cennex Co-op USA; Chevron USA; City of Ontario; Baker City – Baker County; City of Boise, Idaho; Holy Rosary Medical Center; Simplot Foods; Ore-Ida (Heinz Frozen Foods).

City of Ontario, multiple locations
Petroleum Release Investigations, Soil & Groundwater Remediation, O&M

Materials Testing & Inspection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ENVIRONMENTAL QUESTIONNAIRE AND DISCLOSURE FORMS

MATERIALS TESTING & INSPECTION

❑ Environmental Services ❑ Geotechnical Engineering ❑ Construction Materials Testing ❑ Special Inspections

Michelle Martinez

(INSERT CURRENT OCCUPANT / TENANT)

RE: AUTHORIZATION FOR SITE AND BUILDING ACCESS for
BARBER HILL DEVELOPMENT
3547-3603-3555 E. WARMSPRINGS AVE
BOISE, ID 83712
(INSERT PROJECT NAME)

To Whom It May Concern:

Please be advised that MATERIALS TESTING AND INSPECTION, INC. is authorized to survey the above referenced property and improvements.

Your cooperation and assistance are appreciated. Should you have any questions, contact the undersigned.

(PRINT NAME) Michelle Martinez

(SIGNATURE) M. M.

(COMPANY NAME) WJS Properties, LLC

(TELEPHONE) 408-489-0214

ENVIRONMENTAL QUESTIONNAIRE AND DISCLOSURE STATEMENT

Purchaser/Lender: JKB Construction Management and Development, Inc.

Owner/Seller/Borrower: WJS Properties, LLC

Subject Property: 3555 E. Warm Springs Boise, ID 83716

To the best of your knowledge, please answer the following questions:

Question	Response/Comment
1. Describe current use of the Property.	Single family home with acreage. Livestock.
2. When did you acquire the Property?	May 2016
3. If known, who was the previous owner(s)?	Kevin and Elizabeth Duesman
4. List dates when buildings were constructed.	Main home and Garage/shop 2005
5. List dates of major renovations for each building.	none
6. Name(s) of current and previous occupant(s).	Current owner is Michelle Martinez. Current occupant until March 31st is Kristen and Brett Lyons.

7. Has the Property or any adjoining property been used for the following purposes?	**Subject Property**			**Adjacent Properties**			**Response/Comment** (Describe location, type, and/or size.)
	Yes	No	Unk.	Yes	No	Unk.	
gasoline station		✓				✓	
motor repair facility		✓				✓	
commercial printing facility		✓				✓	
dry cleaners		✓				✓	
photo developing laboratory		✓				✓	
wrecking yard		✓				✓	
landfill/waste dump		✓				✓	

Question	Subject Property			Response/Comment (Describe location, type, amount and/or size.)
8. Has any of the following been located at the subject Property?	Yes	No	Unk.	
electrical transformers			✓	
capacitors			✓	
fluorescent light ballasts	✓			
hydraulic equipment			✓	
fill pipes, vent pipes, or pipes protruding from the ground			✓	
above or underground storage tanks(AST or UST) including heating oil, gasoline, diesel, etc.			✓	
fill dirt			✓	
stained soil			✓	
drums (typically 55-gallon)			✓	
dry chemicals in sacks or other containers			✓	
chemicals containers in aggregate volume of 50 gallons or greater including ASTs and USTs			✓	
chemicals in buckets (typically 5-gallon) containers			✓	
automotive or industrial batteries			✓	
pesticides, fertilizer, herbicides, or other agricultural chemicals (bug spray, weed killer, etc.)	✓			
paint containers	✓			
9. Has any of the following been dumped, buried, or burned on the Property? *(Attach copies of any waste disposal permits or licenses pertaining to operations on the property.)*	**Subject Property**			**Response/Comment** (Describe location, type, amount and/or size.)
	Yes	No	Unk.	
hazardous substance			✓	
petroleum products			✓	
unidentified waste materials			✓	
tires			✓	
automotive or industrial batteries			✓	
any other waste materials			✓	

Question	Subject Property			Response/Comment (Describe location, type, and/or size.)
	Yes	No	Unk.	
10. Has there been any spill, leak, or other release of chemicals onto the Property? *(If so, describe the chemicals and quantities released as well as any cleanup measures.)*			✓	
11. Are there any records indicating the presence of PCBs? *(If so, describe the use and quantity of PCBs used.)*			✓	
12. Are there any asbestos containing building materials associated with the building(s)? *(If so, attach a copy of any survey report or results.)*			✓	
13. Has a survey or air sampling been conducted at the Property? *(If so, attach a copy of any survey report or results.)*			✓	
14. Are there any air emissions from the Property or adjoining properties? *(If so, describe air emissions from each source, including fuel-burning equipment on the Property, and attach copies of air permits or licenses pertaining to these operations.)*			✓	
15. Are there any dry or injection wells located on the Property? *(If so, list any information regarding depth, diameter, location and date of installation.)*			✓	
16. Is the Property served by a private well or non-public water system? *(If so, list any information regarding depth, diameter, location and date of installation.)*	✓			Private well installed in 2005
17. Does the owner, site manager, or occupant of the Property have any knowledge of current or past groundwater monitoring performed at the Property?			✓	
18. Are there any sources of wastewater discharge to surface waters, septic systems, holding ponds, or public sewer systems? *(Attach copies of any water discharge permits or licenses pertaining to operations on the Property.)*			✓	
19. Have any septic tanks, drainfields, or wastewater treatment facilities been located on the Property? *(If so, describe the location and the type of wastes treated in each.)*	✓			2 septic tanks. One for main home, one for shop
20. Have evaporation or storage ponds been located on the Property? *(If so, describe the location of all ponds and type of wastes placed in each pond.)*			✓	
21. Is there any other type of liquid or solid waste generated at the Property? *(If so, describe how the liquid and solid wastes generated at the Property are disposed.)*			✓	
22. Has the property been used for disposal of any liquid or solid waste? *(If so, describe the location of all disposal sites and the type of wastes disposed at each site.)*			✓	

Question	Subject Property			Response/Comment (Describe location, type, and/or size.)
	Yes	No	Unk.	
23. Has any raw chemical or waste chemical storage areas been located on the Property? *(If so, describe the location of all such areas and the type of products or wastes stored in each area.)*			✓	
24. Has the Property been used for any agricultural purposes? *(If so, list dates of usage.)*			✓	
25. Have pesticides, fertilizer, herbicides, or other agricultural chemicals, e.g., weed and insect killer, been used at the Property? *(If so, describe the amounts, locations, and dates of application.)*	✓			
26. Are weeds, insects, disease and other pests controlled on the Property? *(If so, describe the control methods..)*		✓		Invasive weed in wetlands.
27. Are pesticides, fertilizer, herbicides or other agricultural chemicals mixed, stored, or disposed on the Property? *(If so, describe the locations where such chemicals were mixed, formulated, rinsed, or disposed.)*			✓	
28. Does the owner, site manager, or occupant have any knowledge of any environmental liens or governmental notifications relating to past or current violations of environmental laws with respect to the Property?		✓		
29. Has an Environmental Site Assessment, such as the type being performed now, been performed in the past on the Property?			✓	
30. Does the owner, site manager, or occupant of the Property have any knowledge of past, threatened, or pending lawsuits or administrative proceedings concerning environmental conditions?		✓		
31. Does the owner, site manager, or occupant of the Property have any knowledge of correspondence from the EPA or a similar state agency regarding the Property?		✓		

I, as the present owner of the Property or as an officer or the general partner in ownership of the Property or as the duly authorized representative of such owner, state to the best of my knowledge, information, and belief that the information above is true and correct.

PRINT NAME: Michelle Martinez DATE: 2/17/2017

SIGNATURE: *michelle martinez* COMPANY NAME: WJS Properties, LLC

TITLE: Manager TELEPHONE: 408-489-0214

ENVIRONMENTAL RESEARCH REPORTS (STATE AND FED REPORT)

ENVIRONMENTAL RISK INFORMATION SERVICES

DATABASE REPORT

Project Property:	*3505, 3547, 3555 East Warm Springs Avenue* *3505, 3547, 3555 E. Warm Springs Avenue* *Boise ID*
Project No:	*B170178e*
Report Type:	*Database Report*
Order No:	*20170217120*
Requested by:	*Materials Testing & Inspection*
Date Completed:	*February 20, 2017*

Environmental Risk Information Services
A division of Glacier Media Inc.
P: 1.866.517.5204
E: info@erisinfo.com

www.erisinfo.com

Table of Contents

Executive Summary

Property Information:

Project Property:		*3505, 3547, 3555 East Warm Springs Avenue* *3505, 3547, 3555 E. Warm Springs Avenue Boise ID*
Project No:		*B170178e*
Coordinates:		
	Latitude:	*43.579108*
	Longitude:	*-116.140246*
	UTM Northing:	*4,825,486.06*
	UTM Easting:	*569,415.55*
	UTM Zone:	*UTM Zone 11T*
Elevation:		*2,759 FT*

Order Information:

Order No:	*20170217120*
Date Requested:	*February 17, 2017*
Requested by:	*Materials Testing & Inspection*
Report Type:	*Database Report*

Historicals/Products:

Aerial Photographs	*Historical Aerials*
City Directory Search	*2 Street Search*
Excel Add-On	*Excel Add-On*
Fire Insurance Maps	*US Fire Insurance Maps*
Physical Setting Report (PSR)	*PSR*

Executive Summary: Report Summary

Database	Searched	Search Radius	Project Property	Within 0.12mi	.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
Standard Environmental Records								
Federal								
NPL	Y	1	0	0	0	0	0	0
PROPOSED NPL	Y	1	0	0	0	0	0	0
DELETED NPL	Y	.5	0	0	0	0	-	0
SEMS	Y	.5	0	0	0	0	-	0
SEMS ARCHIVE	Y	.5	0	0	0	1	-	1
CERCLIS	Y	.5	0	0	0	1	-	1
CERCLIS NFRAP	Y	.5	0	0	0	1	-	1
CERCLIS LIENS	Y	PO	0	-	-	-	-	0
RCRA CORRACTS	Y	1	0	0	0	0	0	0
RCRA TSD	Y	.5	0	0	0	0	-	0
RCRA LQG	Y	.25	0	0	0	-	-	0
RCRA SQG	Y	.25	0	0	0	-	-	0
RCRA CESQG	Y	.25	0	0	0	-	-	0
RCRA NON GEN	Y	.25	0	0	0	-	-	0
FED ENG	Y	.5	0	0	0	0	-	0
FED INST	Y	.5	0	0	0	0	-	0
ERNS 1982 TO 1986	Y	PO	0	-	-	-	-	0
ERNS 1987 TO 1989	Y	PO	0	-	-	-	-	0
ERNS	Y	PO	0	-	-	-	-	0
FED BROWNFIELDS	Y	.5	0	0	0	0	-	0
FEMA UST	Y	.25	0	0	0	-	-	0
State								
SWF/LF	Y	.5	0	0	0	0	-	0
HIST SWF	Y	.5	0	0	0	0	-	0
LUST	Y	.5	0	0	0	1	-	1
DELIST LST	Y	.5	0	0	0	0	-	0
UST	Y	.25	0	0	0	-	-	0
DELISTED STORAGE TANK	Y	.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
INST	Y	.5	0	0	0	0	-	0
VCP	Y	.5	0	0	0	0	-	0
BROWNFIELDS	Y	.5	0	0	0	0	-	0
HIST BROWN	Y	.5	0	0	0	0	-	0
Tribal								
INDIAN LUST	Y	.5	0	0	0	0	-	0
INDIAN UST	Y	.25	0	0	0	-	-	0
DELISTED ILST	Y	.5	0	0	0	0	-	0
DELISTED IUST	Y	.25	0	0	0	-	-	0
County	***No County standard environmental record sources available for this State.***							
Additional Environmental Records								
Federal								
FINDS/FRS	Y	PO	0	-	-	-	-	0
TRIS	Y	PO	0	-	-	-	-	0
HMIRS	Y	.125	0	0	-	-	-	0
NCDL	Y	PO	0	-	-	-	-	0
ODI	Y	.5	0	0	0	0	-	0
IODI	Y	.5	0	0	0	0	-	0
TSCA	Y	.125	0	0	-	-	-	0
HIST TSCA	Y	.125	0	0	-	-	-	0
FTTS ADMIN	Y	PO	0	-	-	-	-	0
FTTS INSP	Y	PO	0	-	-	-	-	0
PRP	Y	PO	0	-	-	-	-	0
SCRD DRYCLEANER	Y	.5	0	0	0	0	-	0
ICIS	Y	PO	0	-	-	-	-	0
FED DRYCLEANERS	Y	.25	0	0	0	-	-	0
DELISTED FED DRY	Y	.25	0	0	0	-	-	0
FUDS	Y	1	0	0	0	0	0	0
MLTS	Y	PO	0	-	-	-	-	0
HIST MLTS	Y	PO	0	-	-	-	-	0
MINES	Y	.25	0	0	0	-	-	0
ALT FUELS	Y	.25	0	0	0	-	-	0
State								
REM SITES	Y	.5	0	0	0	3	-	3
DELISTED REM	Y	.5	0	0	0	0	-	0
DRYCLEANERS	Y	.25	0	0	0	-	-	0
SPILLS	Y	.125	0	0	-	-	-	0
CDL	Y	PO	0	-	-	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
Tribal	***No Tribal additional environmental record sources available for this State.***							
County	***No County additional environmental record sources available for this State.***							
Total:			*0*	*0*	*0*	*7*	*0*	*7*

**** PO – Property Only***
**** 'Property and adjoining properties' database search radii are set at 0.25 miles.***

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number

No records found in the selected databases for the project property.

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
1	CERCLIS	PRE-COTE IND INC	2929 WISE WAY BOISE ID 83707	SSE	0.29 / 1,536.39	-4	16
1	CERCLIS NFRAP	PRE-COTE IND INC	2929 WISE WAY BOISE ID 83707	SSE	0.29 / 1,536.39	-4	16
1	LUST	PRE COTE INDUSTRIES	2929 WISE WY BOISE ID 83712	SSE	0.29 / 1,536.39	-4	17
			LUST ID | Status | Cleanup Date: 460 | Site Cleanup Completed | 2/27/1996				
1	REM SITES	PRE COTE INDUSTRIES	2929 WISE WAY BOISE ID	SSE	0.29 / 1,536.39	-4	18
1	SEMS ARCHIVE	PRE-COTE IND INC	2929 WISE WAY BOISE ID 83707	SSE	0.29 / 1,536.39	-4	18
2	REM SITES	DANIELS CO THE	2990 WISE WAY BOISE ID	SSE	0.32 / 1,700.47	-6	18
3	REM SITES	PRODUCERS LUMBER CO	3051 WISE WY BOISE ID	SSE	0.34 / 1,790.08	-8	19

Executive Summary: Summary by Data Source

Standard

Federal

SEMS ARCHIVE - SEMS List 8R Archive Sites

A search of the SEMS ARCHIVE database, dated Dec 5, 2016 has found that there are 1 SEMS ARCHIVE site(s) within approximately 0.50 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
PRE-COTE IND INC	2929 WISE WAY BOISE ID 83707	SSE	0.29 / 1,536.39	1

CERCLIS - Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS

A search of the CERCLIS database, dated Oct 25, 2013 has found that there are 1 CERCLIS site(s) within approximately 0.50 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
PRE-COTE IND INC	2929 WISE WAY BOISE ID 83707	SSE	0.29 / 1,536.39	1

CERCLIS NFRAP - CERCLIS - No Further Remedial Action Planned

A search of the CERCLIS NFRAP database, dated Oct 25, 2013 has found that there are 1 CERCLIS NFRAP site(s) within approximately 0.50 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
PRE-COTE IND INC	2929 WISE WAY BOISE ID 83707	SSE	0.29 / 1,536.39	1

State

LUST - Leaking Underground Storage Tank (LUST) Report

A search of the LUST database, dated Jan 23, 2017 has found that there are 1 LUST site(s) within approximately 0.50 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
PRE COTE INDUSTRIES	2929 WISE WY BOISE ID 83712	SSE	0.29 / 1,536.39	1

***LUST ID | Status | Cleanup Date**: 460 | Site Cleanup Completed | 2/27/1996*

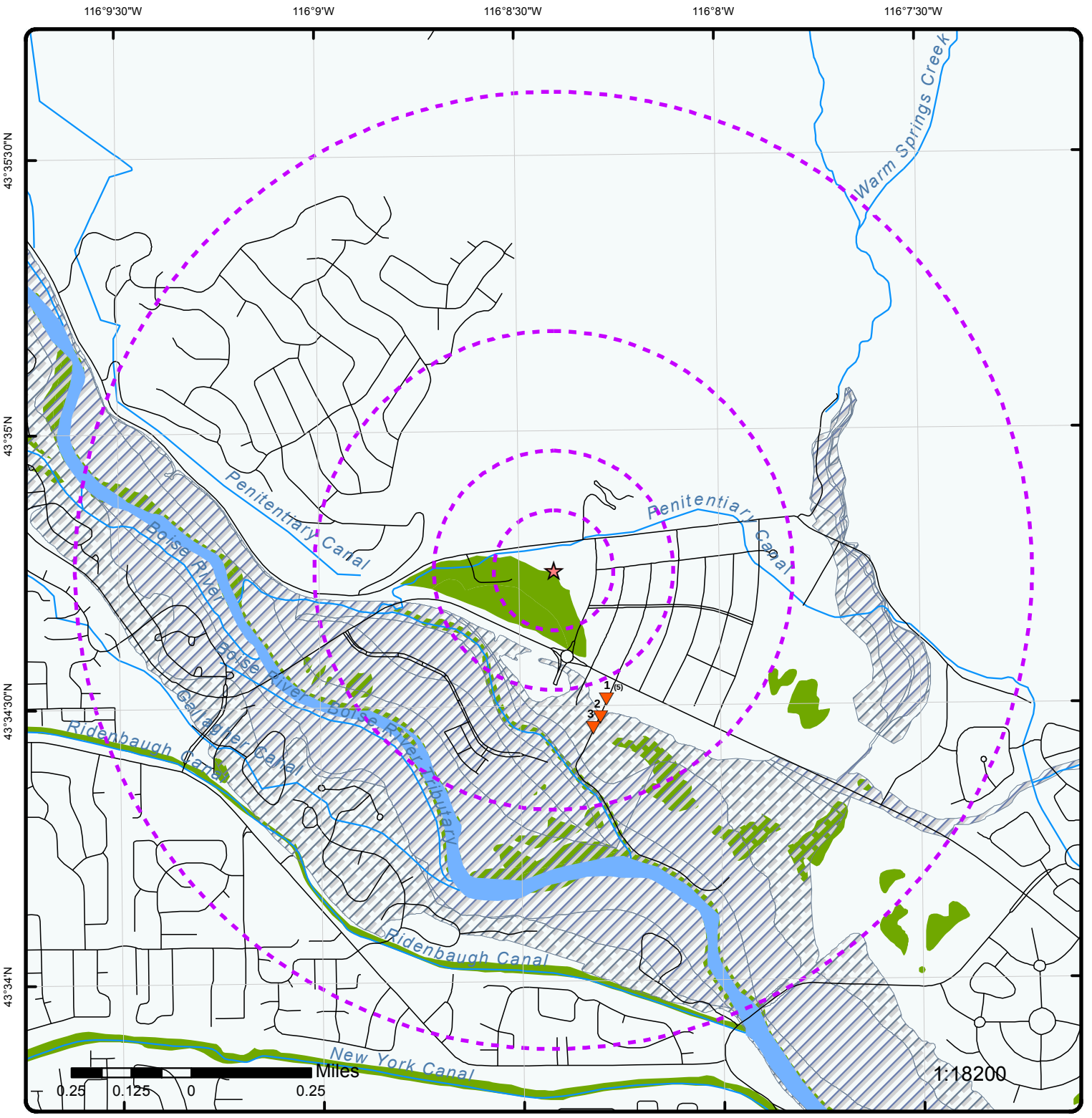
Non Standard

State

REM SITES - Remediation Site Database

A search of the REM SITES database, dated Jan 4, 2017 has found that there are 3 REM SITES site(s) within approximately 0.50 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
PRE COTE INDUSTRIES	2929 WISE WAY BOISE ID	SSE	0.29 / 1,536.39	1
DANIELS CO THE	2990 WISE WAY BOISE ID	SSE	0.32 / 1,700.47	2
PRODUCERS LUMBER CO	3051 WISE WY BOISE ID	SSE	0.34 / 1,790.08	3



Map : 1 Mile Radius

Order No: 20170217120

Address: 3505, 3547, 3555 E. Warm Springs Avenue, Boise, ID

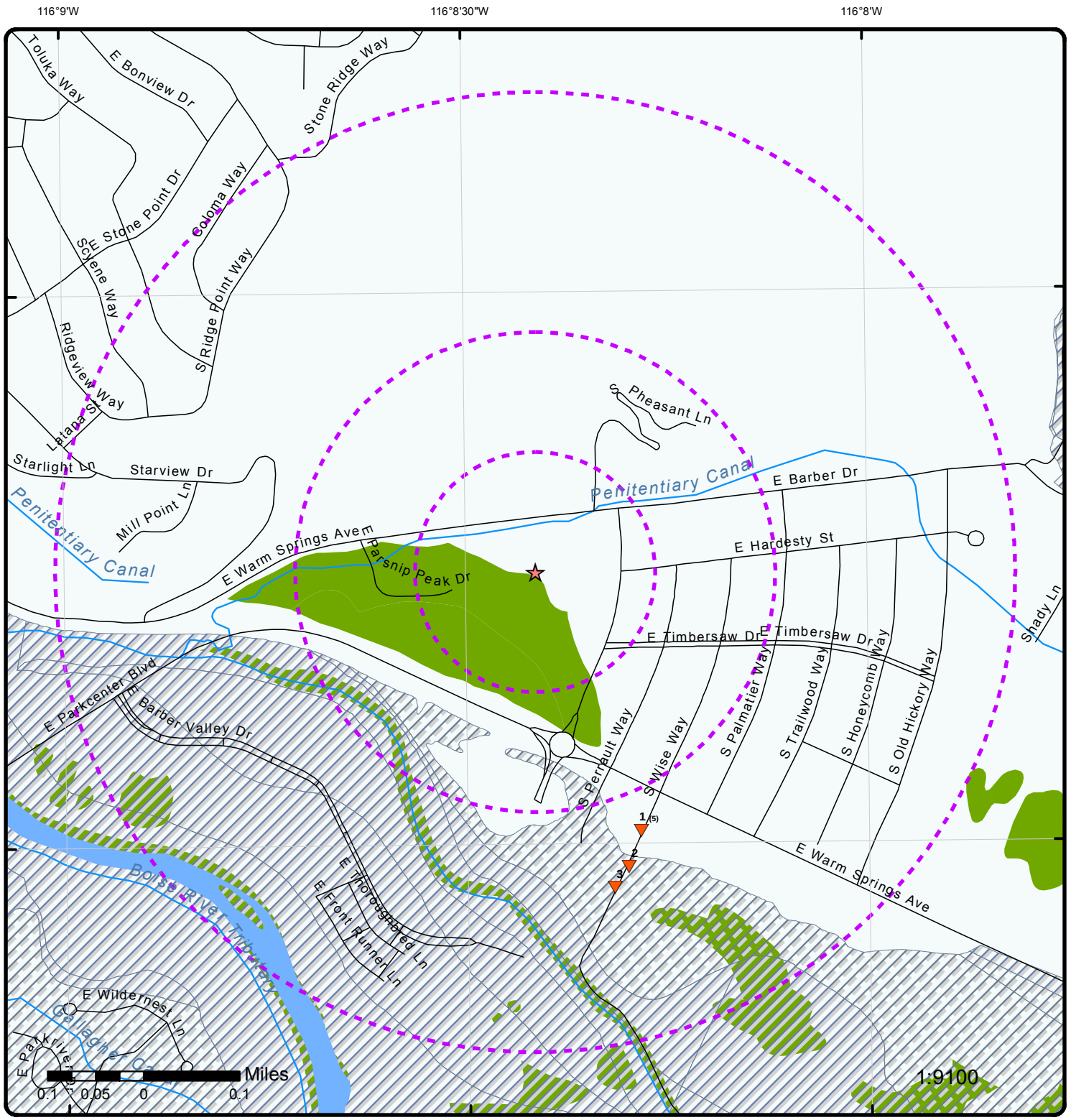
ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES

Project Property
Buffer Outline
Eris Sites with Higher Elevation
Eris Sites with Same Elevation
Eris Sites with Lower Elevation
Eris Sites with Unknown Elevation
County Boundary

Rails
Major Highways
Major Highways Ramps
Major Roads
Major Roads Ramps
Secondary Roads
Secondary Roads Ramps
Local Roads and Ramps

State Boundary
National Priority List Sites
National Wetland
Indian Reserve Land
Historic Fill
100 Year Flood Zone
500 Year Flood Zone

FWS Special Designation Areas
State Brownfield Sites
State Brownfield Areas
State Superfund Areas:Dept. of Defense
State Superfund Areas:NPL
WQARF Areas
Federal Lands: Dept. of Defense (owned/administered areas)



Map : 0.5 Mile Radius

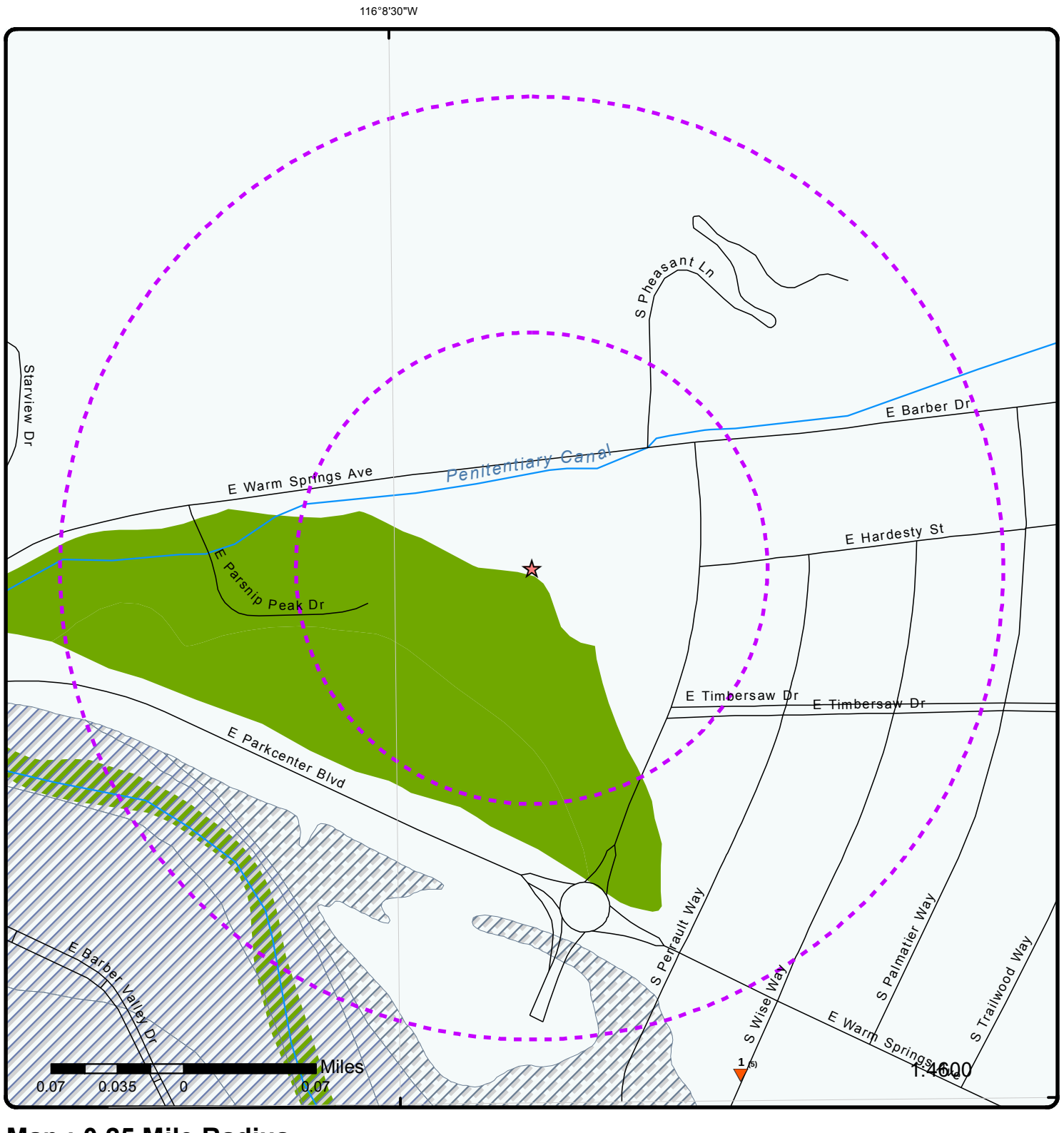
Order No: 20170217120

Address: 3505, 3547, 3555 E. Warm Springs Avenue, Boise, ID

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES

Project Property	Rails	State Boundary	FWS Special Designation Areas
Buffer Outline	Major Highways	National Priority List Sites	State Brownfield Sites
Eris Sites with Higher Elevation	Major Highways Ramps	National Wetland	State Brownfield Areas
Eris Sites with Same Elevation	Major Roads	Indian Reserve Land	State Superfund Areas:Dept. of Defense
Eris Sites with Lower Elevation	Major Roads Ramps	Historic Fill	State Superfund Areas:NPL
Eris Sites with Unknown Elevation	Secondary Roads	100 Year Flood Zone	WQARF Areas
County Boundary	Secondary Roads Ramps	500 Year Flood Zone	Federal Lands: Dept. of Defense (owned/administered areas)
	Local Roads and Ramps		

Source: © 2016 ESRI



Map : 0.25 Mile Radius

Order No: 20170217120

Address: 3505, 3547, 3555 E. Warm Springs Avenue, Boise, ID

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES

Project Property	Rails	State Boundary	FWS Special Designation Areas
Buffer Outline	Major Highways	National Priority List Sites	State Brownfield Sites
Eris Sites with Higher Elevation	Major Highways Ramps	National Wetland	State Brownfield Areas
Eris Sites with Same Elevation	Major Roads	Indian Reserve Land	State Superfund Areas:Dept. of Defense
Eris Sites with Lower Elevation	Major Roads Ramps	Historic Fill	State Superfund Areas:NPL
Eris Sites with Unknown Elevation	Secondary Roads	100 Year Flood Zone	WQARF Areas
County Boundary	Secondary Roads Ramps	500 Year Flood Zone	Federal Lands: Dept. of Defense (owned/administered areas)
	Local Roads and Ramps		

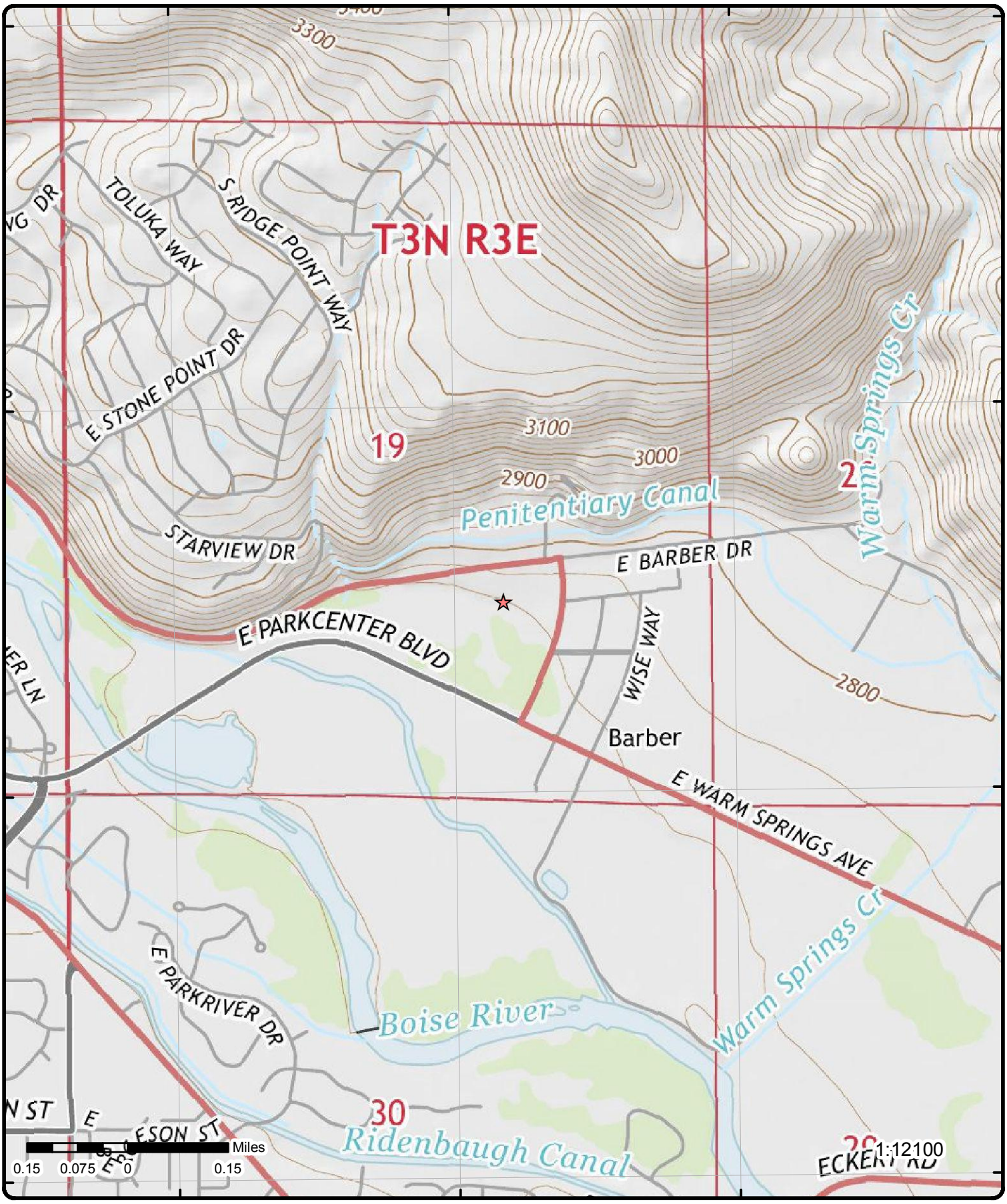
Aerial

Order No: 20170217120

Address: 3505, 3547, 3555 E. Warm Springs Avenue, Boise, ID

Source: ESRI World Imagery

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES



Topographic Map

Order No: 20170217120

Address: 3505, 3547, 3555 E. Warm Springs Avenue, Boise, ID

Source: USGS Topographic Map

Detail Report

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev (ft)	Site	DB
1	1 of 5	SSE	0.29 / 1,536.39	2,755.01	PRE-COTE IND INC 2929 WISE WAY BOISE ID 83707	CERCLIS

Site ID: 1000177
Site EPA ID: IDD007816754
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information
Federal Facility: Not a Federal Facility
Site Cnty Name: ADA

CERCLIS Assess History
-- --
Date Started:
Date Completed:
Site Description: No description available
.
-- --

CERCLIS Assess History
-- --
Action: DISCOVERY
Date Started:
Date Completed: 7/1/1979 00:00:00
Site Description:
-- --

CERCLIS Assess History
-- --
Action: PRELIMINARY ASSESSMENT
Date Started: 2/21/1985 00:00:00
Date Completed: 9/6/1985 00:00:00
Site Description:
-- --

CERCLIS Assess History
-- --
Action: SITE INSPECTION
Date Started: 2/1/1980 00:00:00
Date Completed: 2/1/1980 00:00:00
Site Description:
-- --

CERCLIS Assess History
-- --
Action: SITE INSPECTION
Date Started: 4/17/1989 00:00:00
Date Completed: 4/17/1989 00:00:00
Site Description:
-- --

CERCLIS Assess History
-- --
Action: ARCHIVE SITE
Date Started:
Date Completed: 4/17/1989 00:00:00
Site Description:
-- --

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev (ft)	Site	DB
1	2 of 5	SSE	0.29 / 1,536.39	2,755.01	PRE-COTE IND INC 2929 WISE WAY BOISE ID 83707	CERCLIS NFRAP

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev (ft)	Site	DB

Site ID: 1000177
Site EPA ID: IDD007816754
Site Fips Code: 16001
Federal Facility:
Site Parent ID:
Parent Site Name:
Site Cngrsnl District Code: 2
Region Code: 10
State Code: ID
Site Cnty Name: ADA

CERCLIS-NFRAP Assess History
-- --
Action: DISCOVERY
Priority Level:
Date Started:
Date Completed: 7/1/1979
-- --

CERCLIS-NFRAP Assess History
-- --
Action: PRELIMINARY ASSESSMENT
Priority Level: Low priority
Date Started: 2/21/1985
Date Completed: 9/6/1985
-- --

CERCLIS-NFRAP Assess History
-- --
Action: SITE INSPECTION
Priority Level: Higher priority
Date Started: 2/1/1980
Date Completed: 2/1/1980
-- --

CERCLIS-NFRAP Assess History
-- --
Action: SITE INSPECTION
Priority Level: NFRAP
Date Started: 4/17/1989
Date Completed: 4/17/1989
-- --

CERCLIS-NFRAP Assess History
-- --
Action: ARCHIVE SITE
Priority Level:
Date Started:
Date Completed: 4/17/1989
-- --

1	3 of 5	SSE	0.29 / 1,536.39	2,755.01	**PRE COTE INDUSTRIES** **2929 WISE WY** **BOISE ID 83712**	LUST

Facility ID: 3-010407
Facility Type: Not Listed
Terradex ID: 7237
LUST ID: 460
ID: ID: 2011BAZ5264
Facility Status: Closure
Leak Status: Closed
Status: Site Cleanup Completed
Instrument No:
Date Certified: 07/16/1986

Modified Date:
Last Verification:
Terminated Date:
Cleanup Method:
Facility Name: *PRE COTE INDUSTRIES*
Address Line 1: *2929 WISE WY*
Address Line 2:
Facility City: *BOISE*
Facility Zip: *83712*
Terradex Fac Nm: *PRE COTE INDUSTRIES*

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev (ft)	Site	DB

Edited By: DGRAY
Release Date: 6/30/1992
Cleanup Date: 2/27/1996
Medium:
Age Yrs:
Recorded Date:
Program: Leaking Underground Storage Tanks
Within 1000 Ft of a Drinking Water Src: Yes

Terradex Address: *2929 WISE WAY*
Terradex City State: *BOISE ID*
Facility Phone:
Facility Latitude: *43.57536*
Facility Longitude: *-116.13822*

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev (ft)	Site	DB
1	4 of 5	SSE	0.29 / 1,536.39	2,755.01	PRE COTE INDUSTRIES 2929 WISE WAY BOISE ID	REM SITES

Reference ID: 7237
Box NO: 2011BAZ5264
Site County: Ada

Latitude: *43.57536*
Longitude: *-116.13822*

--Details--

Program: Multiple Programs
All Programs For Site: Leaking Underground Storage Tanks, Mining, RCRA Hazardous Waste Site, Underground Storage Tanks
Covenant:

Program: RCRA Hazardous Waste Sites
All Programs For Site: Leaking Underground Storage Tanks, Mining, RCRA Hazardous Waste Site, Underground Storage Tanks
Covenant:

Program: Mine - Preliminary Assessment Sites
All Programs For Site: Leaking Underground Storage Tanks, Mining, RCRA Hazardous Waste Site, Underground Storage Tanks
Covenant:

Program: Underground Storage Tanks
All Programs For Site: Leaking Underground Storage Tanks, Mining, RCRA Hazardous Waste Site, Underground Storage Tanks
Covenant:

Program: Leaking Underground Storage Tanks
All Programs For Site: Leaking Underground Storage Tanks, Mining, RCRA Hazardous Waste Site, Underground Storage Tanks
Covenant:

Program: Multiple Programs
All Programs For Site: Leaking Underground Storage Tanks, Mining, RCRA Hazardous Waste Site, Underground Storage Tanks
Covenant:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev (ft)	Site	DB
1	5 of 5	SSE	0.29 / 1,536.39	2,755.01	PRE-COTE IND INC 2929 WISE WAY BOISE ID 83707	SEMS ARCHIVE

Site ID: 1000177
EPA ID: IDD007816754
NPL: Not on the NPL
Federal Facility: No
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

FIPS Code: *16001*
Cong District: *02*
County: *ADA*
Region: *10*

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev (ft)	Site	DB
2	1 of 1	SSE	0.32 / 1,700.47	2,752.23	DANIELS CO THE 2990 WISE WAY BOISE ID	REM SITES

Reference ID: 3239
Box NO: 2011BAZ1683
Site County: Ada

Latitude: *43.574654;43.5746546*
Longitude: *-116.138409;-116.1384096*

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev (ft)	Site	DB

--Details--
Program: RCRA Hazardous Waste Sites
All Programs For Site: RCRA Hazardous Waste Site
Covenant:

Program: RCRA Hazardous Waste Site
All Programs For Site: RCRA Hazardous Waste Site
Covenant:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev (ft)	Site	DB
3	1 of 1	SSE	0.34 / 1,790.08	2,750.87	PRODUCERS LUMBER CO 3051 WISE WY BOISE ID	REM SITES

Reference ID: 7250
Box NO: 2011BAZ5318
Site County: Ada
Latitude: *43.57418*
Longitude: *-116.13898*

--Details--
Program: Underground Storage Tanks
All Programs For Site: Underground Storage Tanks
Covenant:

Program: Underground Storage Tanks
All Programs For Site: Underground Storage Tanks
Covenant:

Unplottable Summary

Total: 4 Unplottable sites

DB	Company Name/Site Name	Address	City	Zip	ERIS ID
HIST SWF	BOISE COUNTY LANDFILL	NW OF IDAHO CITY (Warm Springs Ridge)	ID		819938168
HIST SWF	IDAHO CITY/WARM SPRINGS RD	NW OF IDAHO CITY (Warm Springs Ridge)	ID		819938174
HIST SWF	IDAHO CITY TRANSFER STATION	WARMSPRINGS RIDGE CENTERVILLE ROAD	ID		819938173
SPILLS		Barber Dam	ID		827435498

Unplottable Report

Site: ***BOISE COUNTY LANDFILL***
NW OF IDAHO CITY (Warm Springs Ridge) ID

HIST SWF

Facility ID:	SW308001	***Size Acres:***	
Status:	Existing*	***Section:***	SEC21 NE1/4
Type:	Non-MSWLF	***Range:***	R05E
Location:	NW OF IDAHO CITY (Warm Springs Ridge)	***Township:***	T06N
Owner:	BOISE COUNTY	***County:***	BOISE
Operator:	BOISE COUNTY	***Regional Office:***	BOISE
Contact:	MIKE BOTTOMS	***Health District:***	4
Phone:	208-392-4431	***GW Monit. Req.:***	
Site Certified:		***Financ. Ass. Req.:***	
Site Cert Date:		***FA Plan Approved:***	
First Waste:		***Design Appr. Req.:***	
Last Waste:		***Design Approved:***	
Close Date:		***Alt Design Appr.:***	
Vol. Tons/Day:		***Ops. Plan Approv.:***	
Recycling:		***Ops. Plan Approv.:***	
Composting:		***Alt Oper. Approved:***	
Oil:		***Closure Plan Appr.:***	
House Haz Waste:		***Closure Plan Appr.:***	
Asbestos?:		***Alt. Close:***	
Comments:			

Site: ***IDAHO CITY/WARM SPRINGS RD***
NW OF IDAHO CITY (Warm Springs Ridge) ID

HIST SWF

Facility ID:	SW308001	***Size Acres:***	60
Status:	Closed	***Section:***	SEC21 NE1/4
Type:	MSWLF	***Range:***	R05E
Location:	NW OF IDAHO CITY (Warm Springs Ridge)	***Township:***	T06N
Owner:	BOISE COUNTY	***County:***	BOISE
Operator:	BOISE COUNTY	***Regional Office:***	BOISE
Contact:	MIKE BOTTOMS	***Health District:***	4
Phone:	208-795-2447	***GW Monit. Req.:***	Y
Site Certified:		***Financ. Ass. Req.:***	
Site Cert Date:	11/13/96	***FA Plan Approved:***	01/20/98
First Waste:	1/25/88	***Design Appr. Req.:***	
Last Waste:		***Design Approved:***	
Close Date:	2/14/2009	***Alt Design Appr.:***	
Vol. Tons/Day:	9.00	***Ops. Plan Approv.:***	
Recycling:	Y	***Ops. Plan Approv.:***	01/25/88
Composting:	N	***Alt Oper. Approved:***	
Oil:	N	***Closure Plan Appr.:***	Y
House Haz Waste:	N	***Closure Plan Appr.:***	05/01/94
Asbestos?:		***Alt. Close:***	
Comments:	SCX-OPEN		

Site: ***IDAHO CITY TRANSFER STATION***
WARMSPRINGS RIDGE CENTERVILLE ROAD ID

HIST SWF

Facility ID:	SW308006	***Size Acres:***	
Status:	Existing*	***Section:***	SEC21 NE1/4
Type:	Transfer Station	***Range:***	R05E
Location:	WARMSPRINGS RIDGE CENTERVILLE ROAD	***Township:***	T06N
Owner:	BOISE COUNTY	***County:***	BOISE
Operator:	BOISE COUNTY	***Regional Office:***	BOISE

Contact:	MIKE BOTTOMS	***Health District:***	4
Phone:	208-795-2447	***GW Monit. Req.:***	
Site Certified:		***Financ. Ass. Req.:***	
Site Cert Date:		***FA Plan Approved:***	
First Waste:		***Design Appr. Req.:***	
Last Waste:		***Design Approved:***	
Close Date:		***Alt Design Appr.:***	
Vol. Tons/Day:		***Ops. Plan Approv.:***	
Recycling:		***Ops. Plan Approv.:***	
Composting:		***Alt Oper. Approved:***	
Oil:		***Closure Plan Appr.:***	
House Haz Waste:		***Closure Plan Appr.:***	
Asbestos?:	N	***Alt. Close:***	
Comments:			

Site:

Barber Dam ID

SPILLS

Incident No:	H-2015-00026	***Level:***	Regulatory
Substance:	Oil	***Injuries:***	0
Amount Released:	10" X 10" area	***Exposures:***	0
Date:	5/3/2015	***County:***	Ada
Time:	20:44		

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ERIS updates databases as set out in ASTM Standard E1527-13, Section 8.1.8 Sources of Standard Source Information:

"Government information from nongovernmental sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public."

Standard Environmental Record Sources

Federal

National Priority List: NPL

National Priorities List (Superfund)-NPL: EPA's (United States Environmental Protection Agency) list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. The NPL, which EPA is required to update at least once a year, is based primarily on the score a site receives from EPA's Hazard Ranking System. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action.

Government Publication Date: Nov 7, 2016

National Priority List - Proposed: PROPOSED NPL

Includes sites proposed (by the EPA, the state, or concerned citizens) for addition to the NPL due to contamination by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment.

Government Publication Date: Nov 7, 2016

Deleted NPL: DELETED NPL

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Government Publication Date: Nov 7, 2016

SEMS List 8R Active Site Inventory: SEMS

The Superfund Program has deployed the Superfund Enterprise Management System (SEMS), which integrates multiple legacy systems into a comprehensive tracking and reporting tool. This inventory contains active sites evaluated by the Superfund program that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted.

Government Publication Date: Dec 5, 2016

SEMS List 8R Archive Sites: SEMS ARCHIVE

The Superfund Enterprise Management System (SEMS) Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time.

Government Publication Date: Dec 5, 2016

Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS: CERCLIS

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

Government Publication Date: Oct 25, 2013

CERCLIS - No Further Remedial Action Planned: CERCLIS NFRAP

An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. The Archive designation means that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Government Publication Date: Oct 25, 2013

CERCLIS Liens: CERCLIS LIENS

A Federal Superfund lien exists at any property where EPA has incurred Superfund costs to address contamination ("Superfund site") and has provided notice of liability to the property owner. A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Jan 30, 2014

RCRA CORRACTS-Corrective Action: RCRA CORRACTS

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. At these sites, the Corrective Action Program ensures that cleanups occur. EPA and state regulators work with facilities and communities to design remedies based on the contamination, geology, and anticipated use unique to each site.

Government Publication Date: Dec 12, 2016

RCRA non-CORRACTS TSD Facilities: RCRA TSD

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. This database includes Non-Corrective Action sites listed as treatment, storage and/or disposal facilities of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Government Publication Date: Dec 12, 2016

RCRA Generator List: RCRA LQG

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Large Quantity Generators (LQGs) generate 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste.

Government Publication Date: Dec 12, 2016

RCRA Small Quantity Generators List: RCRA SQG

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month.

Government Publication Date: Dec 12, 2016

RCRA Conditionally Exempt Small Quantity Generators List: RCRA CESQG

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Conditionally Exempt Small Quantity Generators (CESQG) generate 100 kilograms or less per month of hazardous waste or one kilogram or less per month of acutely hazardous waste.

Government Publication Date: Dec 12, 2016

RCRA Non-Generators: RCRA NON GEN

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Non-Generators do not presently generate hazardous waste.

Government Publication Date: Dec 12, 2016

Federal Engineering Controls-ECs: FED ENG

Engineering controls (ECs) encompass a variety of engineered and constructed physical barriers (e.g., soil capping, sub-surface venting systems, mitigation barriers, fences) to contain and/or prevent exposure to contamination on a property. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Jan 20, 2016

Federal Institutional Controls- ICs: FED INST

Institutional controls are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Although it is EPA's (United States Environmental Protection Agency) expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable, ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site.

Government Publication Date: Jan 20, 2016

Emergency Response Notification System: ERNS 1982 TO 1986

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1982-1986

Emergency Response Notification System: ERNS 1987 TO 1989

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1987-1989

Emergency Response Notification System: ERNS

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Oct 7, 2015

The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database: FED BROWNFIELDS

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Feb 3, 2017

FEMA Underground Storage Tank Listing: FEMA UST

The Federal Emergency Management Agency (FEMA) of the Department of Homeland Security maintains a list of FEMA owned underground storage tanks.

Government Publication Date: Dec 6, 2016

State

Solid Waste Program Sites: SWF/LF

Locations of Solid Waste sites on the Idaho Department of Environmental Quality (DEQ)'s Waste Remediation Facility Mapper. Solid waste is defined in Idaho's Solid Waste Management Rules (IDAPA 58.01.06) as any garbage or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities.

Government Publication Date: Jan 04, 2017

Solid Waste Facilities Database: HIST SWF

Solid Waste Facilities database made available by the Idaho Department of Environmental Quality (DEQ). Includes municipal and non-municipal solid waste landfills, transfer stations and incinerators, petroleum contaminated soils treatment facilities, materials recovery facilities, waste tire storage, and composting facilities.

Government Publication Date: Mar 14, 2014

Leaking Underground Storage Tank (LUST) Report: LUST

A list of Leaking Underground Storage Tanks (LUSTs), made available by Idaho Department of Environmental Quality (Idaho DEQ). Idaho DEQ's LUST program provides for the oversight and cleanup of petroleum releases from state regulated Underground Storage Tanks (USTs.)

Government Publication Date: Jan 23, 2017

Delisted Leaking Storage Tanks: DELIST LST

This database contains a list of leaking storage tank sites that were removed from the Idaho Department of Environmental Quality (Idaho DEQ).

Government Publication Date: Jan 23, 2017

Underground Storage Tank (UST) Report: UST

A list of Underground Storage Tanks (USTs), made available by Idaho Department of Environmental Quality (Idaho DEQ). USTs store petroleum products or certain other hazardous liquids that can harm the environment and human health if the contents are released into the environment.

Government Publication Date: Oct 16, 2016

Delisted Storage Tanks: DELISTED STORAGE TANK

This database contains a list of storage tank sites that were removed from the Idaho Department of Environmental Quality (Idaho DEQ) storage tank database. The records may be removed due to incorrectly assigned regulation statues.

Government Publication Date: Oct 16, 2016

Environmental Covenants and Restrictions: INST

A list of sites with institutional controls (ICs) on them, made available by Idaho Department of Environmental Quality (IDEQ). Institutional controls are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy.

Government Publication Date: Jan 04, 2017

Voluntary Cleanup Program Participants: VCP

A list of sites involved in Idaho Department of Environmental Quality (Idaho DEQ) Voluntary Cleanup Program.

Government Publication Date: Jan 04, 2017

Brownfield Sites: BROWNFIELDS

A list of Brownfield sites, made available by Idaho Department of Environmental Quality (Idaho DEQ). A brownfield site is a vacant or underutilized property where redevelopment or reuse is complicated by actual or perceived environmental contamination.

Government Publication Date: Jan 04, 2017

Historical Brownfields List: HIST BROWN

A brownfield site is a vacant or underutilized property where redevelopment or reuse is complicated by actual or perceived environmental contamination. This is a list of brownfield sites made available by the Idaho Department of Environmental Quality (DEQ) that have received DEQ brownfield funding or funding through other brownfield redevelopment initiatives.

Government Publication Date: Dec 31, 2011

Tribal

Leaking Underground Storage Tanks (LUSTs) on Indian Lands: INDIAN LUST

LUSTs on Tribal/Indian Lands in Region 10, which includes Idaho.

Government Publication Date: Apr 15, 2016

Underground Storage Tanks (USTs) on Indian Lands: INDIAN UST

USTs on Tribal/Indian Lands in Region 10, which includes Idaho.

Government Publication Date: Apr 15, 2016

Delisted Tribal Leaking Storage Tanks: DELISTED ILST

Leaking Underground Storage Tank facilities which have been removed from the Regional Tribal LUST lists made available by the EPA.

Government Publication Date: Apr 26, 2016

Delisted Tribal Underground Storage Tanks: DELISTED IUST

Underground Storage Tank facilities which have been removed from the Regional Tribal UST lists made available by the EPA.

Government Publication Date: Nov 09, 2016

County

No County standard environmental record sources available for this State.

Additional Environmental Record Sources

Federal

Facility Registry Service/Facility Index: FINDS/FRS

The US Environmental Protection Agency (EPA)'s Facility Registry System (FRS) is a centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, data collected from EPA's Central Data Exchange registrations and data management personnel.

Government Publication Date: Oct 13, 2016

Toxics Release Inventory (TRI) Program: TRIS

The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment.

Government Publication Date: 1987-2015

Hazardous Materials Information Reporting System: HMIRS

US DOT - Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) Incidents Reports Database taken from Hazmat Intelligence Portal, U.S. Department of Transportation.

Government Publication Date: Sep 08, 2016

National Clandestine Drug Labs: NCDL

The U.S. Department of Justice ("the Department") provides this data as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy.

Government Publication Date: Sep 12, 2016

Inventory of Open Dumps, June 1985: ODI

The Resource Conservation and Recovery Act (RCRA of the Act) provides for publication of an inventory of open dumps. The Act defines "open dumps" as facilities which do not comply with EPA's "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR 257).

Government Publication Date: Jun 1985

EPA Report on the Status of Open Dumps on Indian Lands: IODI

Public Law 103-399, The Indian Lands Open Dump Cleanup Act of 1994, enacted October 22, 1994, identified ongressional concerns that solid waste open dump sites located on American Indian or Alaska Native (AI/AN) lands threaten the health and safety of residents of those lands and contiguous areas. The purpose of the Act is to identify the location of open dumps on Indian lands, assess the relative health and environment hazards posed by those sites, and provide financial and technical assistance to Indian tribal governments to close such dumps in compliance with Federal standards and regulations or standards promulgated by Indian Tribal governments or Alaska Native entities.

Government Publication Date: Dec 31, 1998

Toxic Substances Control Act: TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.

The CDR enables EPA to collect and publish information on the manufacturing, processing, and use of commercial chemical substances and mixtures (referred to hereafter as chemical substances) on the TSCA Chemical Substance Inventory (TSCA Inventory). This includes current information on chemical substance production volumes, manufacturing sites, and how the chemical substances are used. This information helps the Agency determine whether people or the environment are potentially exposed to reported chemical substances. EPA publishes submitted CDR data that is not Confidential Business Information (CBI).

Government Publication Date: Jun 30, 2014

Hist TSCA: HIST TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.
The 2006 IUR data summary report includes information about chemicals manufactured or imported in quantities of 25,000 pounds or more at a single site during calendar year 2005. In addition to the basic manufacturing information collected in previous reporting cycles, the 2006 cycle is the first time EPA collected information to characterize exposure during manufacturing, processing and use of organic chemicals. The 2006 cycle also is the first time manufacturers of inorganic chemicals were required to report basic manufacturing information.

Government Publication Date: 2006

FTTS Administrative Case Listing: FTTS ADMIN

An administrative case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

FTTS Inspection Case Listing: FTTS INSP

An inspection case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

Potentially Responsible Parties List: PRP

Early in the cleanup process, the Environmental Protection Agency (EPA) conducts a search to find the potentially responsible parties (PRPs). EPA looks for evidence to determine liability by matching wastes found at the site with parties that may have contributed wastes to the site.

Government Publication Date: Nov 12, 2013

State Coalition for Remediation of Drycleaners Listing: SCRD DRYCLEANER

The State Coalition for Remediation of Drycleaners (SCRD) was established in 1998, with support from the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation. Coalition members are states with mandated programs and funding for drycleaner site remediation. Current members are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Government Publication Date: Nov 09, 2016

Integrated Compliance Information System (ICIS): ICIS

The Integrated Compliance Information System (ICIS) is a system that provides information for the Federal Enforcement and Compliance (FE&C) and the National Pollutant Discharge Elimination System (NPDES) programs. The FE&C component supports the Environmental Protection Agency's (EPA) Civil Enforcement and Compliance program activities. These activities include Compliance Assistance, Compliance Monitoring and Enforcement. The NPDES program supports tracking of NPDES permits, limits, discharge monitoring data and other program reports.

Government Publication Date: Nov 18, 2016

Drycleaner Facilities: FED DRYCLEANERS

A list of drycleaner facilities from the Integrated Compliance Information System (ICIS). The Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.

Government Publication Date: Sep 14, 2016

Delisted Drycleaner Facilities: DELISTED FED DRY

List of sites removed from the list of Drycleaner Facilities (sites in the EPA's Integrated Compliance Information System (ICIS) with NAIC or SIC codes identifying the business as a drycleaner establishment).

Government Publication Date: Sep 14, 2016

Formerly Used Defense Sites: FUDS

Formerly Used Defense Sites (FUDS) are properties that were formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DoD) is responsible for an environmental restoration. This list is published by the U.S. Army Corps of Engineers.

Government Publication Date: Nov 22, 2016

Material Licensing Tracking System (MLTS): MLTS

A list of sites that store radioactive material subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This list is maintained by the NRC. As of September 2016, the NRC no longer releases location information for sites. Site locations were last received in July 2016.

Government Publication Date: Sep 13, 2016

Historic Material Licensing Tracking System (MLTS) sites: HIST MLTS

A historic list of sites that have inactive licenses and/or removed from the Material Licensing Tracking System (MLTS). In some cases, a site is removed from the MLTS when the state becomes an "Agreement State". An Agreement State is a State that has signed an agreement with the Nuclear Regulatory Commission (NRC) authorizing the State to regulate certain uses of radioactive materials within the State.

Government Publication Date: Jan 31, 2010

Mines Master Index File: MINES

The Master Index File (MIF) contains mine identification numbers issued by the Department of Labor Mine Safety and Health Administration (MSHA) for mines active or opened since 1971. Note that addresses may or may not correspond with the physical location of the mine itself.

Government Publication Date: Nov 07, 2016

Alternative Fueling Stations: ALT FUELS

List of alternative fueling stations made available by the US Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Biodiesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE). The National Renewable Energy Laboratory (NREL) obtains information about new stations from trade media, Clean Cities coordinators, a Submit New Station form on the Station Locator website, and through collaborating with infrastructure equipment and fuel providers, original equipment manufacturers (OEMs), and industry groups.

Government Publication Date: Nov 3, 2016

State

Remediation Site Database: REM SITES

Idaho's remediation database is a compilation of data on state and delegated federal remediation programs operated by the Idaho Department of Environmental Quality (Idaho DEQ). Includes Preliminary Assessment and General Remediation sites.

Government Publication Date: Jan 4, 2017

Delisted Remediation Site Database: DELISTED REM

This database contains a list of remediation records that were removed from Idaho's remediation database operated by the Idaho Department of Environmental Quality (Idaho DEQ). This list includes Preliminary Assessment and General Remediation sites.

Government Publication Date: Jan 4, 2017

Drycleaner Facilities: DRYCLEANERS

A listing of drycleaner facilities provided be the Department of Environmental Quality (DEQ). DEQ gathered air quality data on dry cleaners as part of a Tier I applicability project during 2001 and 2002. EPA has since determined that dry cleaners are not applicable to this program unless they are a major source. None of the dry cleaners in Idaho are major sources and as such, DEQ no longer maintains updated information on them.

Government Publication Date: Dec 21, 2015

Hazardous Material Spills, Releases or Accidents: SPILLS

A list of Hazardous Material spills, releases or accidents reported to Idaho Department of Environmental Quality (Idaho DEQ).

Government Publication Date: Jan 17, 2017

Clandestine Drug (Meth) Laboratory Site Property List: CDL

A list of Clandestine Drug (Meth) Laboratory (CDL) sites discovered by law enforcement officials. This list is managed by Idaho Department of Environmental Quality (Idaho DEQ). Typically, CDLs have been used to manufacture methamphetamine (commonly referred to as meth).

Government Publication Date: Jun 30, 2016

Tribal

No Tribal additional environmental record sources available for this State.

County

No County additional environmental record sources available for this State.

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

EXCERPTS FROM REGULATORY FILES

Emily Spreer

From: Jennifer.Shafer@deq.idaho.gov
Sent: Monday, February 27, 2017 2:57 PM
To: Emily Spreer
Subject: PRR 170226 - Phase I ESA - 3505, 3547, & 3555 East Warm Springs Avenue in Boise, ID

Dear Ms. Spreer:

On February 23, 2017, the Idaho Department of Environmental Quality (DEQ) received a public records request from you regarding Phase I ESA - 3505, 3547, & 3555 East Warm Springs Avenue in Boise, ID. At this time, we do not have any information associated with this request in our files.

Please contact me at (208)373-0523 with any questions.

Sincerely,

Jenny Shafer
Idaho Department of Environmental Quality
1410 N Hilton
Boise, Idaho 83706
(208) 373-0523

MATERIALS TESTING & INSPECTION

❑ Environmental Services ❑ Geotechnical Engineering ❑ Construction Materials Testing ❑ Special Inspections

HISTORICAL INFORMATION AND LEGAL DESCRIPTION

Ada County Assessor

Property Details for Parcel S0919428315 and Year 2016

Back to Parcel Search

Parcel: S0919428315
Year: 2016
Primary Owner: DUESMAN KEVIN G
Zone Code: A-1
Total Acres: 8.65
Tax Code Area: 01-6
Instrument Number: 105124558
Property Description: E2NW4SE4 S OF BARBER RD SEC 19 3N 3E #421000 B

Address: 3555 E WARM SPRINGS AVE BOISE , ID 83716
Subdivision: 3N 3E 19
Land Group Type: SECT
Township/Range/Section: 3N3E19

Valuation Details

Role	SCC	Acreage	Assessed Value	Valuation Method	Code Area
Property	410 RES IMPROVEMENT	0.0	$595,800	COST	01-6
Property	190 WASTE LAND	0.385	$0	MARKET	01-6
Property	200 RES LOT OR TRACT	8.265	$250,000	MARKET	01-6

Valuation History

Year	Value
2016	$845,800
2015	$854,800
2014	$797,300
2013	$727,100
2012	$686,200
2011	$686,600
2010	$734,200
2009	$964,000
2008	$976,500
2007	$976,500
2006	$809,100
2005	$346,400
2004	$192,200
2003	$186,000
2002	$169,100
2001	$63,000
2000	$63,000

Tax Districts

Tax District	Levy	Description	Phone

1	0.003017951	ADA COUNTY	208-287-7000
3	0.000150938	EMERGENCY MEDICAL	208-287-2962
6	0.000955148	ADA COUNTY HIGHWAY DIST	208-387-6123
7	0.004929113	SCHOOL DISTRICT NO. 1	208-854-4029
14	0.007132898	BOISE CITY	208-384-3732
43	0.00002927	MOSQUITO ABATEMENT	208-577-4646
100	0.000159508	COLLEGE OF WESTERN IDAHO	208-562-3299

Total Levy: 0.016374826000000002

Taxes, Certifications, and Fees

Year	Total Taxes	Taxes Paid	Taxes Due	Delinquent	Tax Data Current as of
2016	$12,298.38	$6,149.19	$6,149.19	No	02/22/2017
2015	$12,909.88	$12,909.88	$0.00	No	02/22/2017
2014	$12,254.48	$12,254.48	$0.00	No	02/22/2017
2013	$11,971.38	$11,971.38	$0.00	No	02/22/2017
2012	$11,729.90	$11,729.90	$0.00	No	02/22/2017
2011	$10,875.83	$10,875.83	$0.00	No	02/22/2017
2010	$10,861.44	$10,861.44	$0.00	No	02/22/2017
2009	$12,665.72	$12,665.72	$0.00	No	02/22/2017
2008	$11,523.94	$11,523.94	$0.00	No	02/22/2017
2007	$11,299.38	$11,299.38	$0.00	No	02/22/2017
2006	$10,192.64	$10,192.64	$0.00	No	02/22/2017

Characteristics

Land

Residential

Ada County Assessor
Land Records/GIS

Main Menu

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- Contact Us
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Property Search

- Search by Parcel
- Search by Address
- Search by Subdivision
- Online Documents

Interactive Map

Land Characteristics for Parcel S0919428315

Back to Parcel Search

Residential Acres:	8.265
Commercial Acres:	0.0
Other Acres Acres:	0.385
Street:	None
SideWalks:	N
Curb-Gutters:	N
Corner:	N

Ada County Assessor
Land Records/GIS

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Property Search

Search by Parcel
Search by Address
Search by Subdivision
Online Documents

Interactive Map

Residential Characteristics for Parcel S0919428315

Back to Parcel Search

Year Built:	2005
Year Remodel:	0
Number of Bedrooms:	4
Number of Bathrooms:	4.0
Number of FirePlaces:	2
Air Conditioning:	Y
Car Storage Sq Ft #1:	959
Car Storage Sq Ft #2:	1896
General Purpose Building Sq Ft:	792
Porch Sq Ft:	238
Deck Sq Ft:	448
Deck Covered:	Y
Patio Sq Ft:	448
Patio Covered:	N
Pool Sq Ft:	0
Total Sq Ft:	4363
Main Floor Sq Ft:	2628
Upper Floor Sq Ft:	0
Finished Lower Floor Sq Ft:	0
Unfinished Lower Floor Sq Ft:	0
Finished Basement FLoor Sq Ft:	1735
Unfinished Basement Floor Sq Ft:	0
Finished Attic Sq Ft:	0
Unfinished Attic Sq Ft:	0

FIRE INSURANCE MAP RESEARCH RESULTS

Date: 2017-02-20

Order Number:20170217120

3505, 3547, 3555 E. Warm Springs Avenue, Boise, ID

ERIS has searched our in-house collection of close to 1 million Fire Insurance Maps for the address at 3505, 3547, 3555 E. Warm Springs Avenue, Boise, ID.

Please note that no information was found for your site or adjacent properties.

If you have any questions regarding the enclosed information, please do not hesitate to contact us.

Individual Fire Insurance Maps for the subject property and/or adjacent sites are included with the ERIS environmental database report to be used for research purposes only and cannot be resold for any other commercial uses other than for use in a Phase I environmental assessment.

Address: 38 Lesmill Road Unit 2, Toronto, ON M3B 2T5
Phone: 416-510-5204 Fax: 416-510-5133
info@erisinfo.com www.erisinfo.com

ENVIRONMENTAL RISK INFORMATION SERVICES

HISTORICAL DIRECTORY REPORT

for the site:

3505, 3547, 3555 East Warm Springs Avenue
3505, 3547, 3555 E. Warm Springs Avenue
Boise, ID
PO #:

Report ID: 20170217120
Completed: 2/21/2017

ERIS Information Inc.
Environmental Risk Information Services (ERIS)
A division of Glacier Media Inc.
P: 1.866.517.5204
E: info@erisinfo.com

www.erisinfo.com

Search Results Summary

Date	Source	Comment
2016	DIGITAL BUSINESS DIRECTORY	*Images Provided*
2014	DIGITAL BUSINESS DIRECTORY	*Images Provided*
2009	DIGITAL BUSINESS DIRECTORY	*Images Provided*
2005	POLKS	*Images Provided*
2000	POLKS	*Images Provided*
1995	POLKS	*Images Provided*
1990	POLKS	*Images Provided*
1985	POLKS	*Images Provided*
1980	POLKS	*Images Provided*
1975	POLKS	*Images Provided*
1970	POLKS	*Images Provided*
1965	POLKS	*Images Provided*
1960	POLKS	*Images Provided*
1955	POLKS	*Images Provided*
1950	POLKS	*Images Provided*
1945	POLKS	*Images Provided*
1940	POLKS	*Images Provided*
1936	POLKS	*Images Provided*

2/21/2017

RE: CITY DIRECTORY RESEARCH
3505, 3547, 3555 East Warm Springs Avenue
3505, 3547, 3555 E. Warm Springs Avenue Boise, ID

Valued Client,

Thank you for contacting ERIS for an City Directory Search for the site described above. Our staff has conducted a reverse listing City Directory search to determine prior occupants of the subject site and adjacent properties. We have provided the nearest addresses(s) when adjacent addresses are not listed. If we have searched a range of addresses, all addresses in that range found in the Directory are included.

Note: Reverse Listing Directories generally are focused on more highly developed areas. Newly developed areas may be covered in the more recent years, but the older directories will tend to cover only the "central" parts of the city. To complete the search, we have either utilized the ACPL, Library of Congress, State Archives, and/or a regional library or history center as well as multiple digitized directories. These do not claim to be a complete collection of all reverse listing city directories produced.

ERIS has made every effort to provide accurate and complete information but shall not be held liable for missing, incomplete or inaccurate information. To complete this search we used the general range(s) below to search for relevant findings. If you believe there are additional addresses or streets that require searching please contact us at 866-517-5204.

Search Criteria:

3500-3700 of East Barber Drive
3450-3650 of East Warm Springs Avenue

Street Not Listed

2200 **Knopp, Larry R** .....*Architects*
2200 **Apex Chiropractic & Wellness** .....*Chiropractors Dc*
2200 **Warm Springs Dental** .....*Dentists*
2207 **Warm Springs Storage** .....
Recreational Vehicles-storage
2207 **Stevens & Assoc** .....*Real Estate*
2207 **Warm Springs Storage** .....
Storage-household & Commercial
2223 **E Trip Trader Inc** .....
Custom Computer Programming Services
2285 **Trey Mc Intyre Project** .....
Federal Government Contractors
2290 **Church Of Jesus Christ Of Lds** .....*Churches*
2290 **Church Of Jesus Christ Of Lds** .....*Churches*
2293 **Church Of Jesus Christ Of Lds** .....*Churches*
2495 **City Of Boise** .....*Government Offices-city, Village & Twp*
2495 **Warm Springs Golf Club** .....*Restaurants*
2495 **Warm Springs Golf Club** .....*Golf Courses*
2733 **Island Homeowners Assoc** .....*Apartments*
3400 **Barber Hills Nursery** .....*Nurserymen*
5455 **Barber Dam Hydroelectric** .....
Electric Companies
5521 **Riverstone International Schl** .....*Schools*
5600 **East Junior High School** .....*Schools*
5657 **Parks & Recreation Dept** .....*Parks*
5657 **Idaho Foundation For Parks** .....
Non-profit Organizations
5657 **Idaho Shakespeare Festival Inc** .....
Non-profit Organizations
5657 **Idaho Foundation For Parks** .....*Associations*
5657 **Parks & Recreation Dept** .....
Federal Government Contractors
5657 **Shakespeare Cafe By Berryhill** .....*Coffee Shops*
5657 **Shakespeare Cafe By Berryhill** .....*Coffee Shops*
6776 **Outdoor Adventures** .....
Rental Service-stores & Yards
6781 **Crow Inn** .....*Restaurants*
7000 **Mark Moser Handyman Svc** .....
Handyman Services

Street Not Listed

2200 **Knopp, Larry R** .....*Architectural Svcs*
2200 **Apex Chiropractic Wellness** .....
Offices Of Chiropractors
2200 **Smith, Tyler J Dds** .....
Offices Of Dentists
2200 **Warm Springs Dental** .....
Offices Of Dentists
2207 **Warm Springs Storage** .....
Recreational Vehicles-storage
2207 **Warm Springs Storage** .....
Miniwarehouse & Self-storage Unit Operators
2207 **Stevens Assoc** .....*Offices Of Real Estate Agents & Brokers*
2207 **Warm Springs Storage** .....
Federal Government Contractors
2285 **Trey Mc Intyre Project** .....
Federal Government Contractors
2290 **Church Of Jesus Christ Of Lds** .....
Religious Organization
2495 **Warm Springs Golf Club** .....
Golf Courses & Country Clubs
2495 **Warm Springs Golf Club** .....*Restaurants*
2495 **Warm Springs Golf Club** .....
Golf Practice Ranges
2733 **Island Homeowners Assoc** .....
Lessors Of Residential Buildings
3400 **Barber Hills Nursery** .....
Nursery, Garden, & Farm Supply Stores
5455 **Barber Dam Hydroelectric** .....
Electric Power Distribution
5521 **Riverstone International Schl** .....
Elementary & Secondary Schools
5600 **East Jr High School** .....
Elementary & Secondary Schools
5657 **Idaho Foundation For Parks** .....
Other Social Advocacy Organizations
5657 **Shakespeare Cafe By Berryhill** .....
Snack & Nonalcoholic Beverage Bars
5657 **Idaho Foundation For Parks** .....*Associations*
5657 **Parks & Recreation Dept** .....
Federal Government Contractors
5657 **Parks Recreation Dept** .....
Nature Parks & Other Similar Institutions
5657 **Shakespeare Cafe By Berryhill** .....*Coffee Shops*
5657 **Idaho Shakespeare Festival Inc** .....
Other Social Advocacy Organizations
6776 **Outdoor Adventures** .....
General Rental Centers
6781 **Crow Inn** .....*Full-service Restaurants*
7000 **Mark Moser Handyman Svc** .....
Residential Remodelers

Street Not Listed

2012 **Brain Injury Assn Of Idaho** ..... *Associations*
2207 **Stevens & Assoc** ..... *Real Estate Agt,mgr*
2207 **Warm Springs Storage** .....
Warehousing Self Stor
2207 **Stevens & Assoc** ..... *Real Estate*
2244 **Hyde Park Antiques** .....
Ret Used Merchandise Ret Gifts/novelties
2244 **Nothing New Antiques At Hub** ..... *Antiques-dealers*
2285 **Five Rivers Furniture** ..... *Furniture Stores*
2285 **Five Rivers Furniture** .....
Furniture-dealers-retail
2290 **Church-jesus Christ-lds** .....
Church Of Jesus Of Lds
2290 **Church Of Jesus Christ Of Lds** ..... *Churches*
2290 **Corporation Of President Of Th** .....
Religious Organization
2495 **Warm Springs Golf Club** .....
Public Golf Courses
2495 **Warm Springs Golf Club** .....
Golf Courses-public
2495 **Warm Springs Golf Course** .....
Golf Courses-public
2733 **Island Homeowners Assoc** .....
Nclassifiable Estab
2733 **Island Homeowners Assoc** .....
Nonclassified Establishments
5455 **Barber Dam Hydroelectric** .....
Electric Services
5455 **Barber Dam Hydroelectric** .....
Electric Companies
5493 **Riverstone Community School** .....
Element, Secon Schl
5493 **Riverstone Community School** ..... *Schools*
5657 **Idaho Foundation For Parks** .....
Social Services Nec
5657 **Idaho Shakespeare Festival** .....
Social Services Nec
5657 **Parks & Recreation Dept** .....
Amus, Recreation Sv
5657 **Idaho Foundation For Parks** .....
Non-profit Organizations
5657 **Idaho Shakespeare Festival** .....
Non-profit Organizations
5657 **Parks & Recreation Dept** ..... *Parks*
5657 **Shakespeare Cafe By Berryhill** ..... *Restaurants*
6445 **Cullen Construction Llc** .....
Construction Company
6760 **Keith Braun Construction** ..... *Excavation Work*
6776 **Outdoor Adventures Inc** .....
Amus, Recreation Sv
6776 **Outdoor Adventures Inc** .....
Amusement/recreation Services
6781 **Crow Inn** ..... *Eating Places*
6781 **Bens Crow Inn** ..... *Restaurants*
6781 **Crow Inn** ..... *Hotels & Motels*
7000 **Mark Moser Handyman Svc** ..... *Handyman Service*
7000 **Mark Moser Handyman Svc** .....
Handyman Services
7010 **Lets Dance** ..... *Dance Studio/school/hall*

2005
SOURCE: POLKS

EAST BARBER DRIVE

BARBER DR (BOISE)-FROM 3021 WARM SPRINGS AVE NORTHEAST
+ PHEASANT LN ENDS
+ PHEASANT LN CONTINUES
• ZIP CODE 83716 CAR-RT C019
3400 BARBER HILLS NURSERY nurserymen
.....208-338-1030
3550 Medsker David K & Ann 15 ♠
.....208-385-9944
SHOWAKOI FISH FARM ponds & pond supl
.....208-385-9944
3555 - 3607 No Current Listing (2 Hses)
+ BARBER LN BEGINS
+ ECKERT RD INTERSECTS
BUSINESSES 2 **HOUSEHOLDS 3**

2005
SOURCE: POLKS

EAST WARM SPRINGS AVENUE

No Listings in Range

2000 EAST BARBER DRIVE

SOURCE: POLKS

BARBER DR (BOISE)-FROM 3737 WARM SPRINGS AVE EAST

· ZIP CODE 83712 CAR-RT C051

3400 BARBER HILLS NURSERY ret nsrs gdn strs 338-1030

Telleria Patrick J & Evelyn [9]+ 384-5454

3550 Medsker David K [9]+ 385-9944

SHOAKOI FARM busn svcs 385-9944

3555 (N) Chatman James 363-9360

+PHEASANT LN INTERSECTS

3607 Not Verified

BUSINESSES 2 HOUSEHOLDS 4

2000 EAST WARM SPRINGS AVENUE

SOURCE: POLKS

No Listings in Range

1995 *SOURCE: POLKS*

EAST BARBER DRIVE

BARBER DR -FROM WARM SPRINGS AV NORTHEAST

60

· ZIP CODE 83712

2360 Not Verified

3400 Telleria Patrick J & Evelyn R [3] ☗ 384-5454

3550 Medsker David K & Ann [3] ☗ 385-9944

3555 Hardisty Claire B [9]+ ☗ 344-4134

Danielson Jessie D 344-4134

+ *PHEASANT LANE INTERSECTS*

+ *SHADY LA INTERSECTS*

+ *N ECKERT INTERSECTS*

HOUSEHOLDS 4

1995 *SOURCE: POLKS*

EAST WARM SPRINGS AVENUE

No Listings in Range

1990 EAST BARBER DRIVE

SOURCE: POLKS

60

BARBER DR –FROM WARM SPRINGS AV NORTHEAST

ZIP CODE 83712
3400 Tellaaria Patk J ◎
3555 Hardisty Claire ◎ 344-4134
4000 Danielson Jessie D ◎ 344-5139
SHADY LA INTERSECTS
PHEASANT LA INTERSECTS
4812 Arias Jose L 342-0085
4849 Hutchings Ken 345-3243
4903 Hutchings James K ◎ 343-0816

1990 EAST WARM SPRINGS AVENUE

SOURCE: POLKS

No Listings in Range

1985
SOURCE: POLKS

EAST BARBER DRIVE

Street Not Listed

1985
SOURCE: POLKS

EAST WARM SPRINGS AVENUE

No Listings in Range

1980
SOURCE: POLKS

EAST BARBER DRIVE

Street Not Listed

1980
SOURCE: POLKS

EAST WARM SPRINGS AVENUE

No Listings in Range

1975
SOURCE: POLKS

EAST BARBER DRIVE

Street Not Listed

1975
SOURCE: POLKS

EAST WARM SPRINGS AVENUE

No Listings in Range

1970
SOURCE: POLKS

EAST BARBER DRIVE

Street Not Listed

1970
SOURCE: POLKS

EAST WARM SPRINGS AVENUE

No Listings in Range

1965
SOURCE: POLKS

EAST BARBER DRIVE

Street Not Listed

1965
SOURCE: POLKS

EAST WARM SPRINGS AVENUE

No Listings in Range

1960
SOURCE: POLKS

EAST BARBER DRIVE

Street Not Listed

1960
SOURCE: POLKS

EAST WARM SPRINGS AVENUE

No Listings in Range

1955
SOURCE: POLKS

EAST BARBER DRIVE

Street Not Listed

1955
SOURCE: POLKS

EAST WARM SPRINGS AVENUE

No Listings in Range

1950
SOURCE: POLKS

EAST BARBER DRIVE

Street Not Listed

1950
SOURCE: POLKS

EAST WARM SPRINGS AVENUE

No Listings in Range

1945
SOURCE: POLKS

EAST BARBER DRIVE

Street Not Listed

1945
SOURCE: POLKS

EAST WARM SPRINGS AVENUE

No Listings in Range

1940
SOURCE: POLKS

EAST BARBER DRIVE

Street Not Listed

1940
SOURCE: POLKS

EAST WARM SPRINGS AVENUE

No Listings in Range

1936
SOURCE: POLKS

EAST BARBER DRIVE

Street Not Listed

1936
SOURCE: POLKS

EAST WARM SPRINGS AVENUE

No Listings in Range

---End of Report---

VICINITY MAP

Vicinity Map

Plate 1

MAP NOTES:

- Delorme Street Atlas
- Not to Scale

LEGEND

Approximate Site Location

N

3505, 3547 and 3555
E. Warm Springs Avenue
Boise, Idaho 83716

Modified from DeLorme by: JJK
March 6, 2017
Drawing: B170178e

MATERIALS TESTING & INSPECTION

2791 S. Victory View Way
Boise, ID 83709-2835

Phone: 208 376-4748
Fax: 208 322-6515
E-mail: mti@mti-id.com

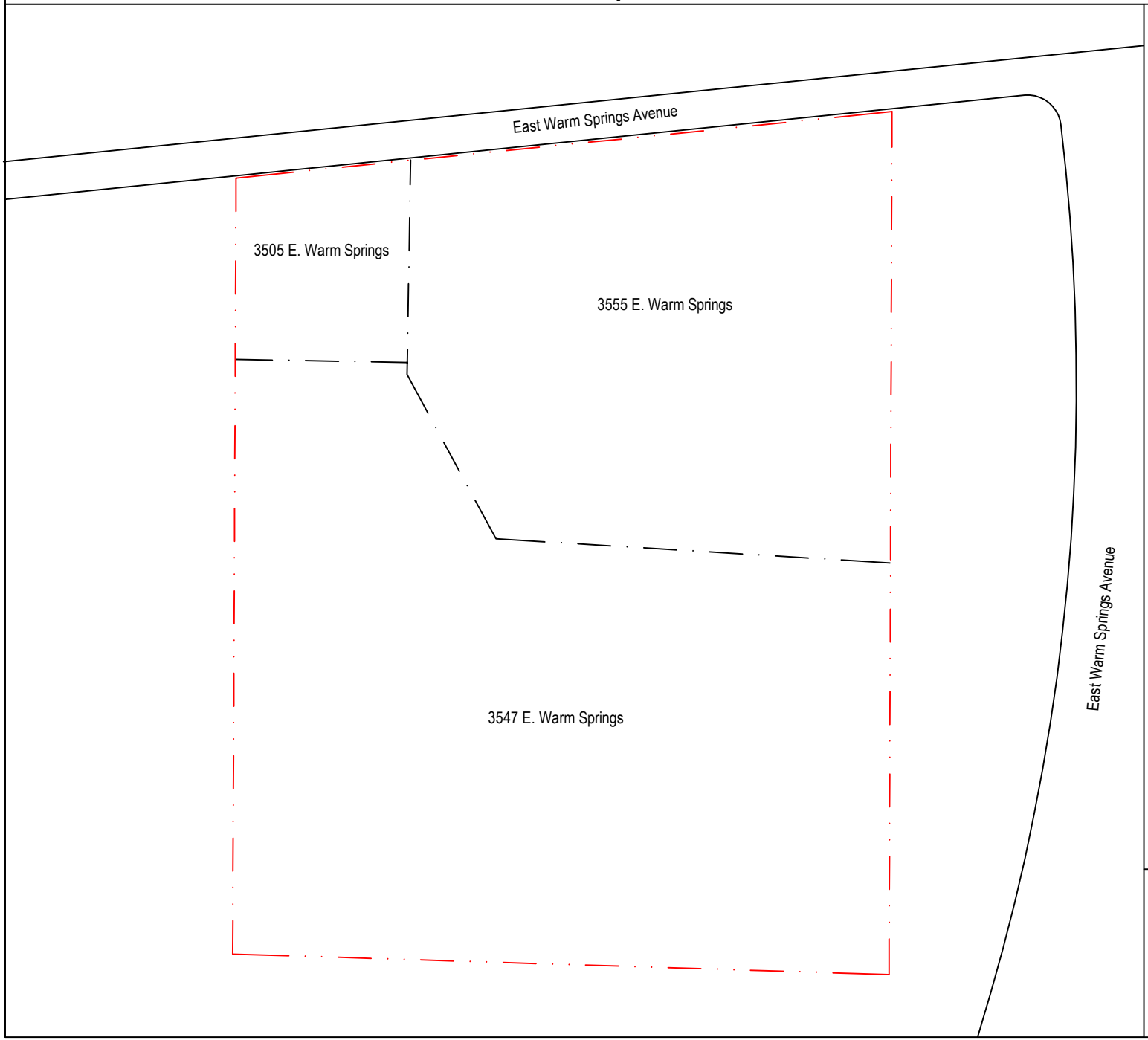
MATERIALS TESTING & INSPECTION

❑ Environmental Services ❑ Geotechnical Engineering ❑ Construction Materials Testing ❑ Special Inspections

SITE PLAN WITH SITE PHOTOGRAPH LOCATIONS

Site Map

Plate 2



NOTES:

- Not to Scale

LEGEND

Approximate Site Boundary

N

3505, 3547 and 3555
E. Warm Springs Avenue
Boise, Idaho 83716

Modified from DeLorme by: JJK
March 6, 2017
Drawing: B170178e

MATERIALS TESTING & INSPECTION

2791 S. Victory View Way
Boise, ID 83709-2835

Phone: 208 376-4748
Fax: 208 322-6515
E-mail: mti@mti-id.com

MATERIALS TESTING & INSPECTION

❑ Environmental Services ❑ Geotechnical Engineering ❑ Construction Materials Testing ❑ Special Inspections

SITE PHOTOGRAPHS

Southeast corner of Property, looking north

←
1

→
2

Southeast corner of Property, looking east

Southeast corner of Property, looking south

←
3

→
4

Southeast corner of Property, looking west

Photographs taken by Emily Spreer, MTI

Southeast corner of Property, looking northwest

←
5

Center east of Property, looking north

→
6

Center east of Property, looking west

←
7

Northeast corner of Property, looking north

→
8

Photographs taken by Emily Spreer, MTI

Northeast corner of Property, looking east

← 9

→ 10

Northeast corner of Property, looking southwest

Northeast corner of Property, looking west

← 11

→ 12

Northeast corner of Property, looking west

Photographs taken by Emily Spreer, MTI

Northwest corner of Property, looking north

←
13

→
14

Northwest corner of Property, looking east

Northwest corner of Property, looking east

←
15

→
16

Northwest corner of Property, looking south

Photographs taken by Emily Spreer, MTI

Northwest corner of Property, looking south

←
17

→
18

Northwest corner of Property, looking west

West side of Property, looking southeast

←
19

→
20

West side of Property, looking south

Photographs taken by Emily Spreer, MTI

Southwest corner of property, looking north

← 21

→ 22

Southwest corner of property, looking east

Southwest corner of property, looking south

← 23

→ 24

Southwest corner of property, looking west

Photographs taken by Emily Spreer, MTI

MATERIALS TESTING & INSPECTION

❑ Environmental Services ❑ Geotechnical Engineering ❑ Construction Materials Testing ❑ Special Inspections

AERIAL PHOTOGRAPHS

ENVIRONMENTAL RISK INFORMATION SERVICES

HISTORICAL AERIAL REPORT

for the site:

3505, 3547, 3555 East Warm Springs Avenue
3505, 3547, 3555 E. Warm Springs Avenue
Boise, ID
PO #:

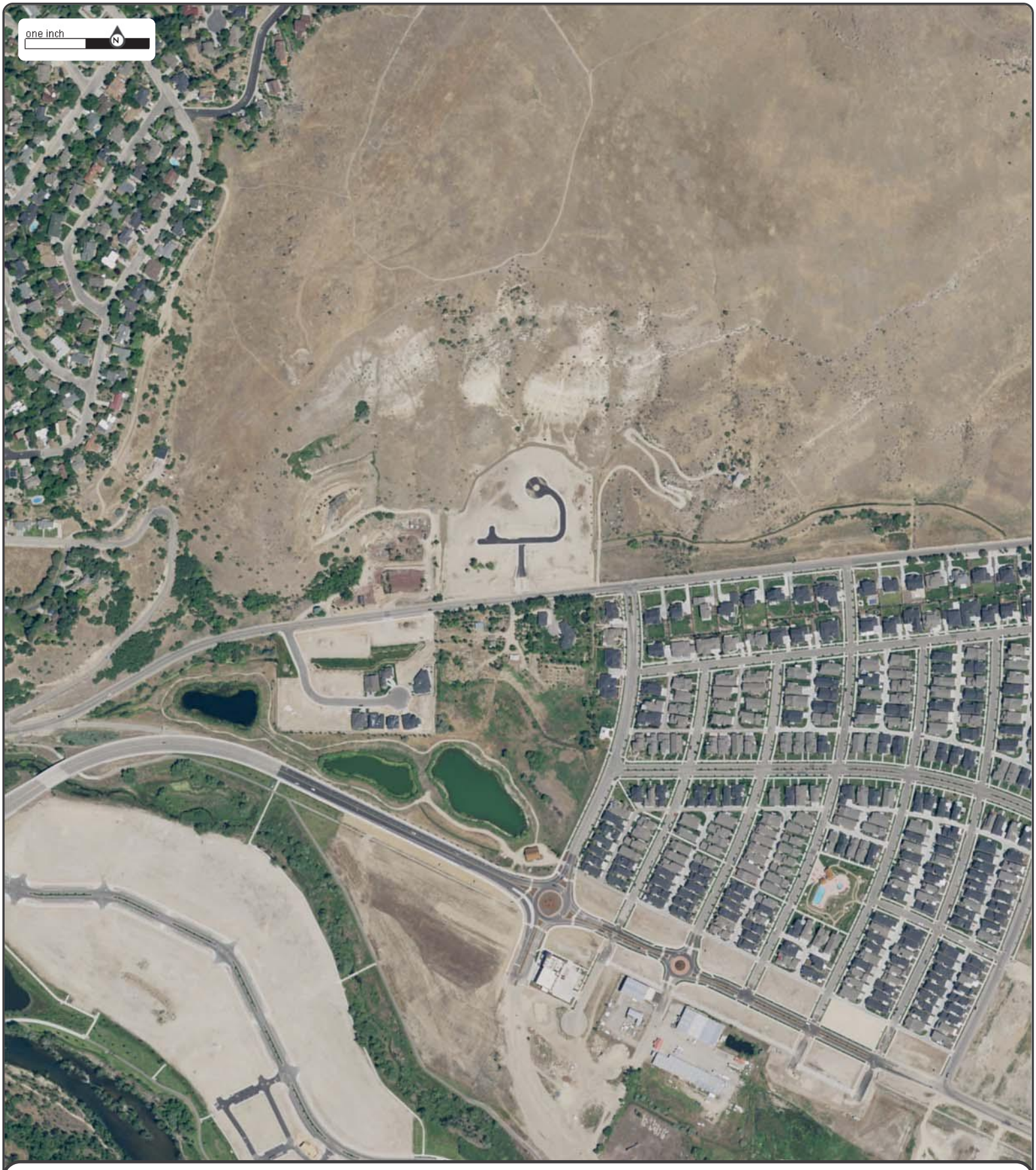
Report ID: 20170217120
Completed: 2/17/2017

ERIS Information Inc.
Environmental Risk Information Services (ERIS)
A division of Glacier Media Inc.
P: 1.866.517.5204
E: info@erisinfo.com

www.erisinfo.com

Search Results Summary

Date	Source	Scale	Comment
2015	**NAIP** - National Agriculture Information Program	1"=500'	
2013	**NAIP** - National Agriculture Information Program	1"=500'	
2011	**NAIP** - National Agriculture Information Program	1"=500'	
2006	**NAIP** - National Agriculture Information Program	1"=500'	
1998	**USGS** - US Geological Survey	1"=500'	
1992	**USGS** - US Geological Survey	1"=500'	
1981	**NHAP** - National High Altitude Photography	1"=500'	
1971	**USGS** - US Geological Survey	1"=500'	
1953	**AMS** - Army Mapping Service	1"=500'	
1938	**ASCS** - Agriculture and Soil Conservation Service	1"=500'	*BEST COPY AVAILABLE*



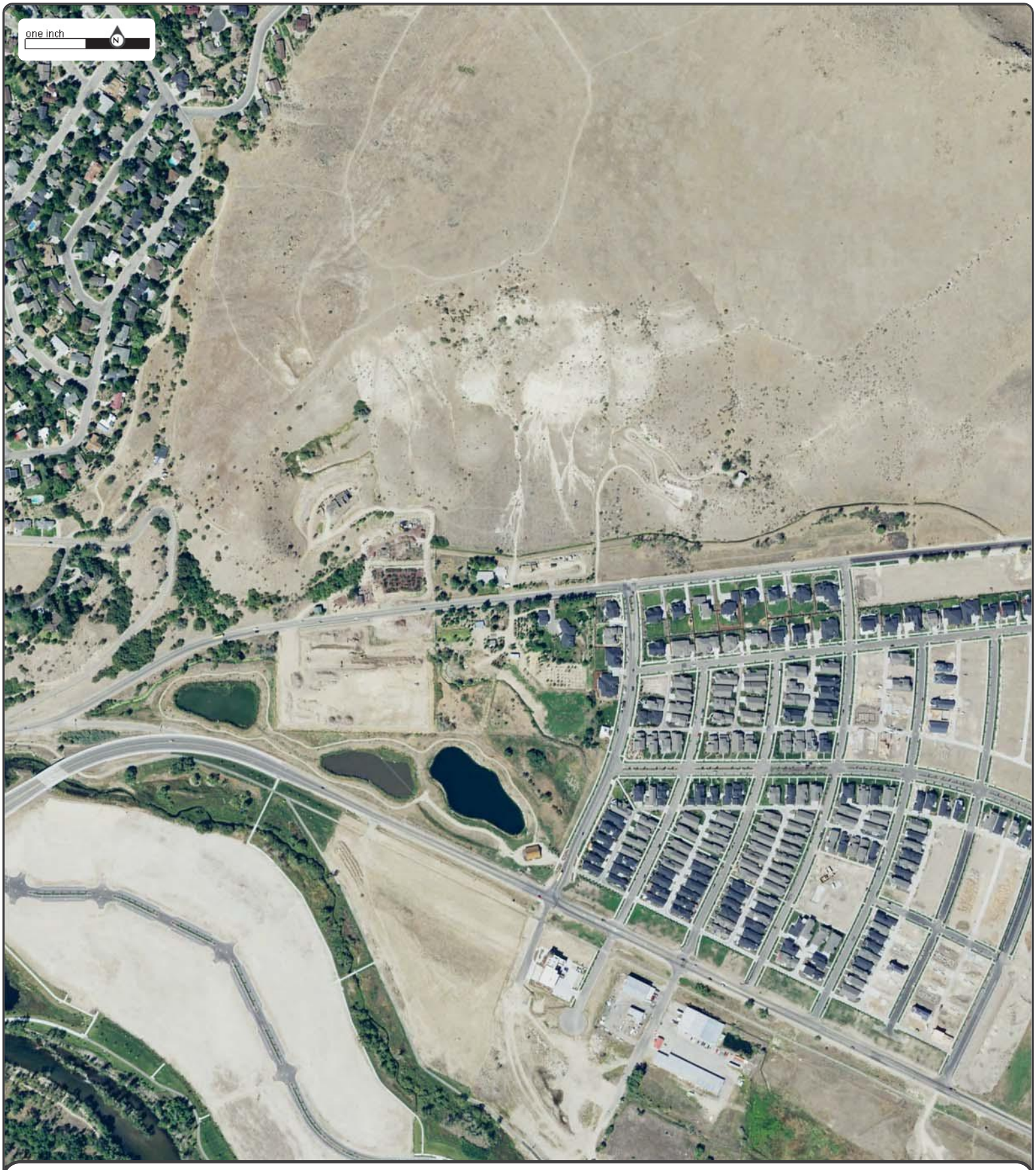
Date: **2015**
Source: **NAIP**
Scale: **1" to 500'**
Comments:

N

Subject: 3505, 3547, 3555 E. Warm Springs Avenue Boise ID
Approx Center: 43.57910 / -116.1402

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES

www.erisinfo.com | 1.866.517.5204



Date: **2013**
Source: **NAIP**
Scale: **1" to 500'**
Comments:

N

Subject: 3505, 3547, 3555 E. Warm Springs Avenue Boise ID
Approx Center: 43.57910 / -116.1402

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES

www.erisinfo.com | 1.866.517.5204

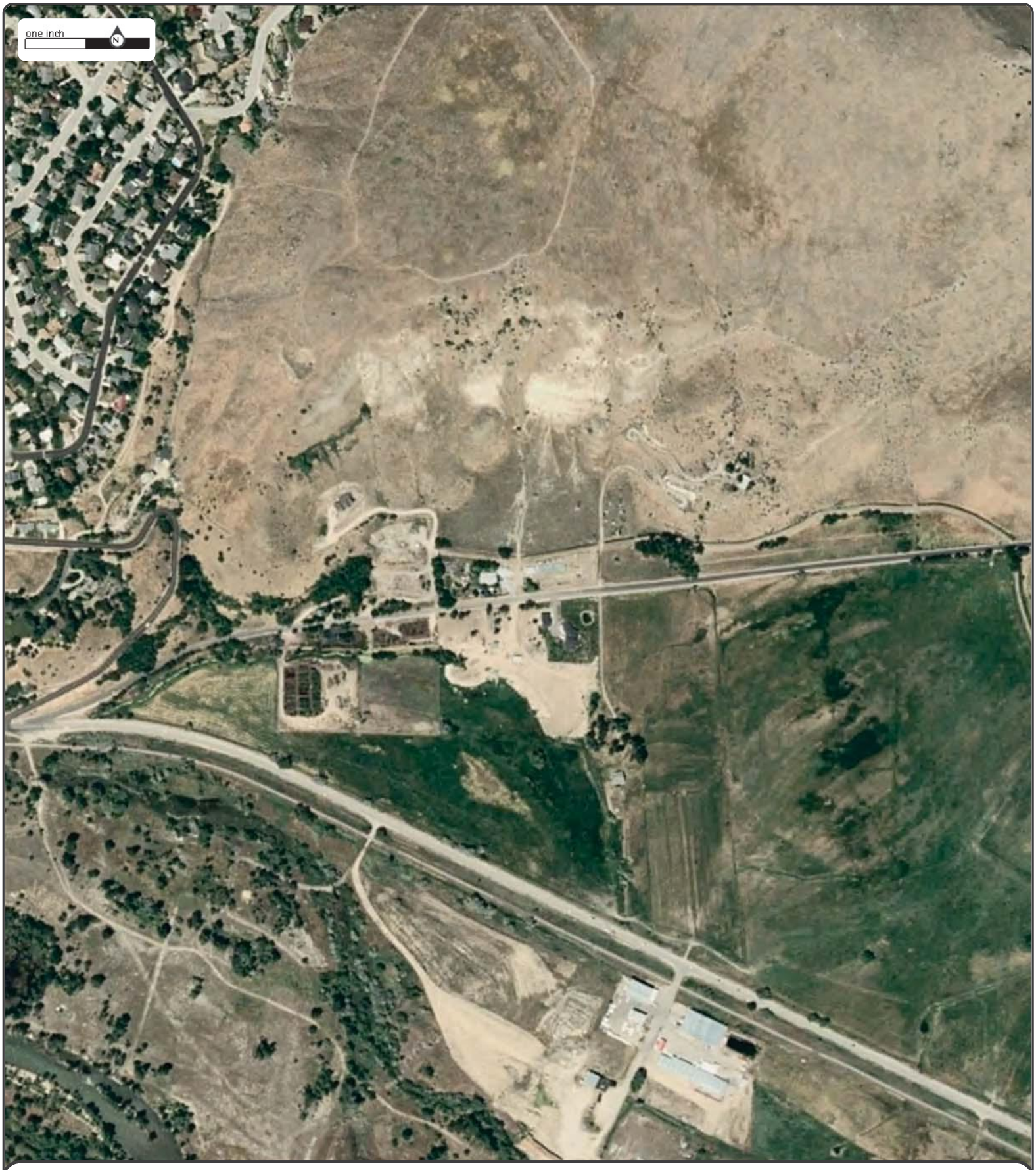
Date: **2011**
Source: **NAIP**
Scale: **1" to 500'**
Comments:

N

Subject: 3505, 3547, 3555 E. Warm Springs Avenue Boise ID
Approx Center: 43.57910 / -116.1402

ERIS
ENVIRONMENTAL RISK INFORMATION SERVICES

www.erisinfo.com | 1.866.517.5204



Date: **2006**
Source: **NAIP**
Scale: **1" to 500'**
Comments:

N

Subject: 3505, 3547, 3555 E. Warm Springs Avenue Boise ID
Approx Center: 43.57910 / -116.1402

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Date: **1998**
Source: **USGS**
Scale: **1" to 500'**
Comments:

N

Subject: 3505, 3547, 3555 E. Warm Springs Avenue Boise ID
Approx Center: 43.57910 / -116.1402

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Date: **1992**
Source: **USGS**
Scale: **1" to 500'**
Comments:

N

Subject: 3505, 3547, 3555 E. Warm Springs Avenue Boise ID
Approx Center: 43.57910 / -116.1402

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Date: **1981**
Source: **NHAP**
Scale: **1" to 500'**
Comments:

N

Subject: 3505, 3547, 3555 E. Warm Springs Avenue Boise ID
Approx Center: 43.57910 / -116.1402

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Date: **1971**
Source: **USGS**
Scale: **1" to 500'**
Comments:

N

Subject: 3505, 3547, 3555 E. Warm Springs Avenue Boise ID
Approx Center: 43.57910 / -116.1402

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Date: **1953**
Source: **AMS**
Scale: **1" to 500'**
Comments:

N

Subject: 3505, 3547, 3555 E. Warm Springs Avenue Boise ID
Approx Center: 43.57910 / -116.1402

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one inch

Date: **1938**
Source: **ASCS**
Scale: **1" to 500'**
Comments: *BEST COPY AVAILABLE*

Subject: 3505, 3547, 3555 E. Warm Springs Avenue Boise ID
Approx Center: 43.57910 / -116.1402

ENVIRONMENTAL RISK INFORMATION SERVICES

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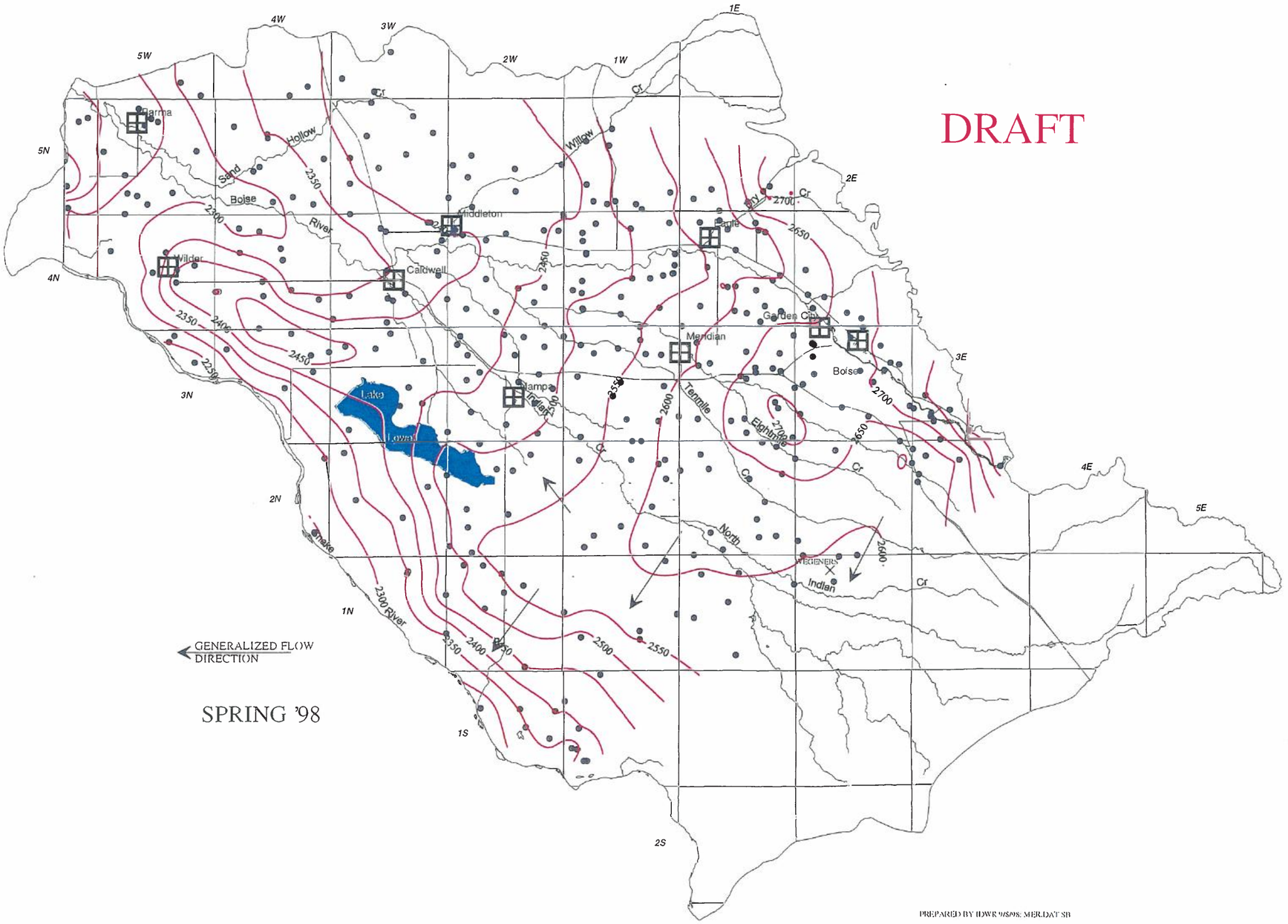
GROUNDWATER GRADIENT MAP

TREASURE VALLEY

GROUND WATER ELEVATIONS

DRAFT



GENERALIZED FLOW DIRECTION

SPRING '98

PREPARED BY IDWR 9/8/98; MERLDAT SB

Kevin Brunk

From: Natalie Lemas Hernandez <natalie@commercialnw.com>
Sent: Friday, June 30, 2017 12:13 PM
To: todd@borton-lakey.com
Cc: Nancy Lemas; Kevin Brunk; shawn@slnplanning.com
Subject: Notes for City Council Meeting

1. We are experiencing unprecedented demand for multi-family housing

2. The current Treasure Valley market vacancy rate is 3.7% from a Q1 study performed by Valbridge Appraisers this vacancy rate is below the market equilibrium of 5%.
   a. Units are being absorbed and supply is barely keeping up with demand
   b. There has been an increase of 1,191 units from 2016 to 2017 and the market vacancy still lower than =
   c. There is a need for workforce and housing for professionals
3. What are the demographics or similar properties in the Treasure Valley
   a. Results from an internal survey of similar properties show:
      1. Over 50% are single women
      2. The average household income is $75,000
      3. Employed in the medical or technology
      4. Also a strong number of retirees looking for maintenance free living and affordability
4. The 2015 study, *The State of the Nation's Housing* preformed by Harvard's Joint Center for Housing Studies shows the following
   a. Single people living alone is most common renter group
   b. Top income earners outpaced growth in any other income segment by 61% in past 10 yrs
   c. Changing national ziegeist and dropping homeownership rates
   d. Trend towards minimalism and simplicity

5. Local trends are in line with national trends.
   a. Moe Therrien, local economist and owner of Valbridge Appraisal shows a correlation of job creation to apartment housing. For every 7 new jobs created, 1 apartment unit is needed.
   b. Current Treasure Valley occupancy is stronger than predicted because the economy is stronger than predicted
   c. Current Treasure Valley Job growth and population growth is stronger than anticipated
   d. Between 2012-2016 30,000 new jobs were created in Ada County
   e. In that same time frame, only around 5,000 new apartment doors were built in Ada County
   f. We are barely keeping up with demand as it stands now.

POINTS TO BRING UP:

1. Comprehensive plan shows R-3 as an allowed use. We are asking for R-2 which is a lesser-density than R-3.
2. Project is medium density not high density
3. Traffic counts on our plan are LESS than a single family home use
4. The adjacent commercial developments need more rooftops in order to succeed

Sincerely,

Natalie Lemas Hernandez

ROCK SOLID CIVIL
Civil Engineering and Land Development Consulting

July 5, 2017

Mr. Hal Simmons – Planning Division Director
City of Boise Planning & Zoning Department
150 N. Capitol Blvd. 2nd Floor
Boise, ID 83702

Re: Storm Water Drainage Statement
Barber Hills Vistas - 3503, 3547, 3555 E. Warm Springs Avenue

Dear Hal:

This engineer has reviewed the Barber Hills Vista Interim Preliminary Wetland Delineation and Mitigation Report prepared by Karl Gebhardt, P.E., P.H. dated June 30, 2017. We have been providing civil engineering design services here in the Treasure Valley over the past 17 years and have reviewed many of these types of reports and worked on dozens of projects involving wetlands over the years. Karl's report presents a thorough history and analysis of the site and provides good solid recommendations for wetlands restoration and preservation. Mitigation would consist of re-routing the existing drain by setting aside a 0.56-acre area in the southwest portion of the site for creating a natural stream of approximately 750 linear feet. This stream would run west and then north and terminate at the current drain exit at the Antelope Springs Subdivision. The soil, water, and ground water would support the new wetlands vegetation. This mitigation plan should have little to no impact on the storm drain design plans and vice versa for the balance of the 8.65-acre site. Conceptual engineering plans were prepared based on the MTI Geotechnical Report #B170393g dated 4-20-17 and include utilization of shallow infiltration ponds and swales in the landscape areas and subsurface rock infiltration trenches in the paved parking areas. These systems are well suited for the proposed site and its geology. The Planning & Zoning Commission requested that these facilities be shown on the preliminary plat. The updated plat now shows these locations. The storm drain plans will be designed in accordance with the current 2015 Boise City Storm Water Design Manual. Should you have any questions regarding these plans please call.

Sincerely,

Jim E. Coslett

Jim E. Coslett, P.E
Project Engineer

Cc: Mr. J. Kevin Brunk – JKB Construction Management & Development, Inc.

S: /Projects/Barber Hills Vistas/City of Boise/Storm Water Drainage Statement.7-5-17.docx

www.rocksolidcivil.com ROCK SOLID CIVIL LLC 270 N. 27th Street Suite 100 Boise, ID 83702 jcoslett@rocksolidcivil.com
tel 208.342.3277 fax 208.376.1821

Todd Lakey

From: Stacey Yarrington <SYarrington@achdidaho.org>
Sent: Tuesday, June 27, 2017 10:49 AM
To: 'Shawn L Nickel'
Cc: 'Kevin Brunk'; 'Celine Acord'; Todd Lakey
Subject: RE: Barber Hill Vistas
Attachments: BOI17-0128 Barber Hill Vistas Rev.pdf

Shawn,
A revised report was sent out to you and the City on April 17th with the updated number of units, updated traffic counts, etc. The revised report only has a daily traffic count for the referenced street called out below. Here is the table that was included in the revised report with the ADT for those streets. This was the final report from ACHD. I will also attach the PDF of the report again for your records.

Roadway	Frontage	Functional Classification	PM Peak Hour Traffic Count	PM Peak Hour Level of Service
Warm Springs Ave. east of Starview Dr.	668-feet	2-lane Minor Arterial	227	Better than "E"
Parkcenter Blvd. East of Bown Way	0-feet	4/5-lane Principal Arterial	373	Better than "E"
Warm Springs Ave. east of Bacon Drive	0-feet	2-lane Minor Arterial	520	Better than "E"
Warm Springs Ave. north of Parkcenter	0-feet	2-lane Collector	240	Better than "D"
**Barber Drive west of Old Hickory	0-feet	2-lane Local	63	N/A

Average Daily Traffic Count (VDT): ***Average daily traffic counts are based on ACHD's most current traffic counts***

- The average daily traffic count for Warm Springs Avenue east of Starview Drive was 4,540 on 6/18/2014.
- The average daily traffic count for Parkcenter Boulevard east of Bown Way was 6,972 on 12/31/2014.
- The average daily traffic count for Warm Springs Avenue east of Bacon Drive was 8,910 on 9/24/2015.
- The average daily traffic count for Warm Springs Avenue east of Walnut Street was 13,126 on 9/24/2015.
- The average daily traffic count for Warm Springs Avenue north of Parkcenter Boulevard was 4,213 on 6/18/2014.
- The average daily traffic count for Barber Drive west of Old Hickory was 1,003 on 12/3/2015.

Thanks,
Stacey

From: Shawn L Nickel [mailto:shawn@slnplanning.com]
Sent: Tuesday, June 27, 2017 10:18 AM
To: Stacey Yarrington
Cc: 'Kevin Brunk'; 'Celine Acord'; 'Todd Lakey'
Subject: Barber Hill Vistas

Good morning, Stacey. During our Boise P&Z hearing a few weeks ago, one of the Commissioners made the following comment regarding the ACHD report for the Barber Hill Vistas application. I was hoping that you could take a look at the

comment below (excerpt from attached minutes) and give me your thoughts so that when it comes up at City Council, we have the correct information or can answer the question. Thanks Stacey.

Shawn

"Finally, just a technical note on our favorite topic up here for the last 20 years has been ACHD and their reports and what they say and their traffic. I just note that I don't understand on the third page of the ACHD report it says that Warm Spring Avenue, east of Walnut, is already at 629 trips per hour at PM Peak and then right under that it says acceptable is 575. It seems to be it's already over that but then in their level of service, they say it's Better Than E. So, I just have a technical question, I hope when this application comes back or we see something else we need a better ACHD thinking on what is the deal on Warm Springs. Maybe I'm calculating wrong or there's some hidden ACHD code. I'm not a traffic engineer but that just seems incongruous to me. 629 by the way is before we add in any impact of new development on Warm Springs so if you split the 71 vehicles per hour at PM Peak half, that adds 35 to 629, so now we're over by 75 cars an hour at PM Peak if I'm reading that right. I'm not sure. Those are my thoughts." – Planning and Zoning Commissioner Milt Gillespie, Vice-Chair Boise Planning and Zoning Commission, June 12, 2017

Shawn L. Nickel
Land Use Planning Consultant
SLN Planning
1589 N. Estancia Place
Eagle, Idaho 83616
208-794-3013
shawn@slnplanning.com

April 17, 2017

To: JKB Construction
7795 N Stonebriar Lane
Meridian, ID 83646

Subject: BOI17-0128/ CAR17-00004/ PUD17-00007
3555 E Warm Springs Avenue
Rezone from A-1 to R-2 and PUD to construct 125 unit Multi-family development

In response to your request for comment, the Ada County Highway District has reviewed the submitted application and site plan for the item referenced above. It has been determined that ACHD has site specific conditions of approval for this application.

A. Findings of Fact

1. **Right-of-Way & Improvements – Warm Springs Avenue**
   a. **Existing Conditions:** Warm Springs Avenue is improved with 2, 12-foot wide travel lanes, 5-foot wide paved shoulder, and no curb, gutter or sidewalk abutting the site. There is 50-feet of right-of-way for Warm Springs Avenue (25-feet from centerline).

   b. **Arterial Roadway Policy:** District Policy 7205.2.1 states that the developer is responsible for improving all street frontages adjacent to the site regardless of whether or not access is taken to all of the adjacent streets.

   Master Street Map and Typology Policy: District Policy 7205.5 states that the design of improvements for arterials shall be in accordance with District standards, including the Master Street Map and Livable Streets Design Guide. The developer or engineer should contact the District before starting any design.

   Frontage Improvements Policy: District Policy 7205.2.1 states that the developer shall widen the pavement to a minimum of 17-feet from centerline plus a 3-foot wide gravel shoulder adjacent to the entire site. Curb, gutter and additional pavement widening may be required (See Section 7205.5.5).

   Sidewalk Policy: District Policy 7205.5.7 requires a concrete sidewalk at least 5-feet wide to be constructed on both sides of all arterial streets. A parkway strip at least 6-feet wide between the back-of-curb and street edge of the side¬walk is required to provide increased safety and protec¬tion of pedestrians. Consult the District's planter width policy if trees are to be placed within the parkway strip. Sidewalks constructed next to the back-of-curb shall be a minimum of 7-feet wide.

   Detached sidewalks are encouraged and should be parallel to the adjacent roadway. Meandering sidewalks are discouraged.

   A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk.

Sidewalks shall either be located wholly within the public right-of-way or wholly within an easement.

ACHD Master Street Map: ACHD Policy Section 3111.1 requires the Master Street Map (MSM) guide the right-of-way acquisition, arterial street requirements, and specific roadway features required through development. This segment of Warm Springs Avenue is designated in the MSM as a Rural Arterial with 2-lanes and on-street bike lanes, a 40-foot street section within 50-feet of right-of-way.

c. **Applicant's Proposal:** The applicant is proposing to construct curb and gutter adjacent to the existing edge of pavement, and detached 6-foot wide sidewalk along Warm Springs Avenue to tie into existing conditions to the east and west.

d. **Staff Comments/Recommendations:** Staff recommends approval of the applicant's proposal to construct vertical curb and gutter adjacent to the existing edge of pavement, and detached 6-foot wide sidewalk along Warm Springs Avenue to tie into existing conditions to the east and west. No additional right-of-way is required. A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk.

The applicant should install "NO PARKING" signs on Warm Springs Avenue adjacent to the site.

2. **Driveways**

a. **Access Points Policy:** District Policy 7205.4.1 states that all access points associated with development applications shall be determined in accordance with the policies in this section and Section 7202. Access points shall be reviewed only for a development application that is being considered by the lead land use agency. Approved access points may be relocated and/or restricted in the future if the land use intensifies, changes, or the property redevelops.

Access Policy: District policy 7205.4.6 states that direct access to minor arterials is typically prohibited. If a property has frontage on more than one street, access shall be taken from the street having the lesser functional classification. If it is necessary to take access to the higher classified street due to a lack of frontage, the minimum allowable spacing shall be based on Table 1a under District policy 7205.4.6, unless a waiver for the access point has been approved by the District Commission.

Driveway Location Policy: District policy 7205.4.5 requires driveways located on minor arterial roadways from a signalized intersection with a single left turn lane shall be located a minimum of 330-feet from the nearest intersection for a right-in/right-out only driveway and a minimum of 660-feet from the intersection for a full-movement driveway.

Driveway Width Policy: District policy 7205.4.8 restricts high-volume driveways (100 VTD or more) to a maximum width of 36-feet and low-volume driveways (less than 100 VTD) to a maximum width of 30-feet. Curb return type driveways with 30-foot radii will be required for high-volume driveways with 100 VTD or more. Curb return type driveways with 15-foot radii will be required for low-volume driveways with less than 100 VTD.

Driveway Paving Policy: Graveled driveways abutting public streets create maintenance problems due to gravel being tracked onto the roadway. In accordance with District policy, 7205.4.8, the applicant should be required to pave the driveway its

full width and at least 30-feet into the site beyond the edge of pavement of the roadway and install pavement tapers in accordance with Table 2 under District Policy 7205.4.8.

b. **Applicant's Proposal:** The applicant is proposing to construct a 40-foot wide, full access driveway onto Warm Springs Avenue, located in alignment with ViaPrivada Lane and 440-feet west of Warm Springs Avenue, and (measured centerline to centerline).

   The applicant is proposing to construct a 22-foot wide emergency only access onto Warm Springs Avenue, located 144-feet west of ViaPrivada Lane. The applicant is proposing to place bollards within the driveway, located approximately 12-feet south of the north property line to restrict access.

c. **Staff Comments/Recommendations:** The applicant's proposal does not meet District policy because the proposed driveway exceeds the maximum width. The applicant should be required to construct a maximum 36-foot wide, curb return type driveway with 30-foot radii onto Warm Springs Avenue, located in alignment with ViaPrivada Lane.

   Staff recommends approval of the applicant's proposal to construct a 22-foot wide curb return type driveway with 30-foot radii onto Warm Springs Avenue, located 144-feet west of ViaPrivada Lane. This driveway is for emergency access only. The access should be gated or have bollards installed. Gates or bollards should be located outside of the right-of-way, and installed as determined by Boise Fire Department.

   The applicant should be required to pave the 2 driveways their full width and at least 30-feet into the site beyond the edge of Warm Springs Avenue.

3. **Warm Springs Avenue/Warm Springs Mesa (Off-Site)**
   The Warm Springs Mesa area, west of this site, is an active geological landslide area. The area experiences periodic erosion of the slope (and falling rocks) above Warm Springs Avenue and Starview Drive in several areas from Windsong Drive, to and including Starview Drive. These occurrences typically happen in winter months following heavy rain and freeze/thaw events. During the past 2016/2017 winter storm events, boulders have landed on Warm Springs Avenue and Starview Drive. Warm Springs Avenue and Starview Drive were immediately closed to traffic and a local geotechnical firm was engaged to assess the situation and advise ACHD of potential future long term remediation options.

   On April 5, 2017, the ACHD Commission approved the Warm Springs Avenue Interim Safety Treatment Plan. The Plan consists of the removal of loose rock on the slope (to be done under the observation of a licensed Geotechnical Engineer), removal of the existing chain link netting and fence posts, and the removal of the material that has accumulated behind the previously placed concrete guardrail. ACHD will continue to closely monitor the area, and proposes to address a long term solution moving forward.

   This system offers additional safety to the traveling public, as it will add mitigation to Warm Springs Avenue. While it is not considered a final solution for this area, it offers an interim treatment that is much safer than before the recent erosion events.

   In the event of temporary closure of this segment of Warm Springs Avenue, if all vehicle trips from the site were prohibited from traveling west on Warm Springs Avenue, there is sufficient capacity on adjacent streets to the east and south to accommodate this development.

4. **Parking – Special Note to City of Boise**
   The applicant has proposed to provide 222 parking stalls to accommodate the residents and guests of the proposed apartment project. The City requires 163 stalls. The Institute of

Transportation Engineers (ITE) Parking Generation Manual, 4th Edition, recommends 155 parking stalls for a 125 unit apartment project. The parking needs generated by this development should be provided on-site, as there is not adequate availability of on-street parking adjacent to the site.

B. Traffic Information

Trip Generation

This development is estimated to generate 821 additional vehicle trips per day (10 existing); and 77 additional vehicle trips per hour in the PM peak hour (1 existing), based on the Institute of Transportation Engineers Trip Generation Manual, 9th edition.

Below is a list of possible uses:

Proposed Designation (per unit)	ADT	ADT Count *(10 existing)*	VPH PM Peak Hour	PM Peak Hour Count *(1 existing)*
Apartment	6.65	821 ADT added	0.62	77 VPH added
Low-Rise Apartment	6.59	814 ADT added	0.58	72 VPH added
Townhouse/Duplex	5.81	716 ADT added	0.52	64 VPH added
Single Family detached	9.52	1,180 ADT added	1.00	124 VPH added

A traffic analysis was completed by Thompson Engineers and submitted to the City for the proposed Barber Hill Vistas. ACHD has not reviewed the traffic analysis because it was not conducted in accordance with ACHD policies and practices, as ACHD did not require a traffic analysis.

Condition of Area Roadways: ***Traffic Count is based on Vehicles per hour (VPH)***

Roadway	Frontage	Functional Classification	PM Peak Hour Traffic Count	PM Peak Hour Level of Service
Warm Springs Ave. east of Starview Dr.	668-feet	2-lane Minor Arterial	227	Better than "E"
Parkcenter Blvd. East of Bown Way	0-feet	4/5-lane Principal Arterial	373	Better than "E"
Warm Springs Ave. east of Bacon Drive	0-feet	2-lane Minor Arterial	520	Better than "E"
Warm Springs Ave. north of Parkcenter	0-feet	2-lane Collector	240	Better than "D"
**Barber Drive west of Old Hickory	0-feet	2-lane Local	63	N/A

* Acceptable level of service for a five-lane principal arterial is "E" (1,780 VPH).
* Acceptable level of service for a four-lane principal arterial is "E" (1,780 VPH).
* Acceptable level of service for a three-lane minor arterial is "E" (720 VPH).
* Acceptable level of service for a two-lane minor arterial is "E" (575 VPH).
* Acceptable level of service for a two-lane collector is "D" (425 VPH).
** Average Daily Traffic on a local street should typically be less than 2,000 (ADT).

Average Daily Traffic Count (VDT): ***Average daily traffic counts are based on ACHD's most current traffic counts***

- The average daily traffic count for Warm Springs Avenue east of Starview Drive was 4,540 on 6/18/2014.
- The average daily traffic count for Parkcenter Boulevard east of Bown Way was 6,972 on 12/31/2014.
- The average daily traffic count for Warm Springs Avenue east of Bacon Drive was 8,910 on 9/24/2015.
- The average daily traffic count for Warm Springs Avenue east of Walnut Street was 13,126 on 9/24/2015.
- The average daily traffic count for Warm Springs Avenue north of Parkcenter Boulevard was 4,213 on 6/18/2014.
- The average daily traffic count for Barber Drive west of Old Hickory was 1,003 on 12/3/2015.

C. Site Specific Conditions of Approval

1. Construct vertical curb and gutter adjacent to the existing pavement, and detached 6-foot wide concrete sidewalk along Warm Springs Avenue to tie into existing conditions to the east and west.
2. A permanent right-of-way easement shall be provided if public sidewalks are placed outside of the dedicated right-of-way. The easement shall encompass the entire area between the right-of-way line and 2-feet behind the back edge of the sidewalk.
3. Install "NO PARKING" signs on Warm Springs Avenue adjacent to the site.
4. Construct a maximum 36-foot wide curb return type driveway with 30-foot radii onto Warm Springs Avenue located in alignment with ViaPrivada Lane.
5. Construct a 22-foot wide emergency access on Warm Springs Avenue, located 144-feet west of ViaPrivada Lane. The access should be gated or have bollards installed. Gates or bollards should be located outside of the right-of-way, and installed as determined by Boise Fire Department.
6. Other than the access specifically approved with this application, direct lot access is prohibited to Warm Springs Avenue.
7. A Traffic Impact Fee will be assessed by ACHD and will be due prior to issuance of a building permit. Please contact the ACHD Planner (see below) for information regarding impact fees.
8. Plans shall be submitted to the ACHD Development Services Department for plans acceptance, and impact fee assessment (if an assessment is applicable).
9. Comply with the Standard Conditions of Approval as noted below.

D. Attachments

1. Vicinity Map
2. Site Plan
3. Standard Conditions of Approval
4. Request for Appeal of Staff Decision

If you have any questions, please feel free to contact me at (208) 387-6171.

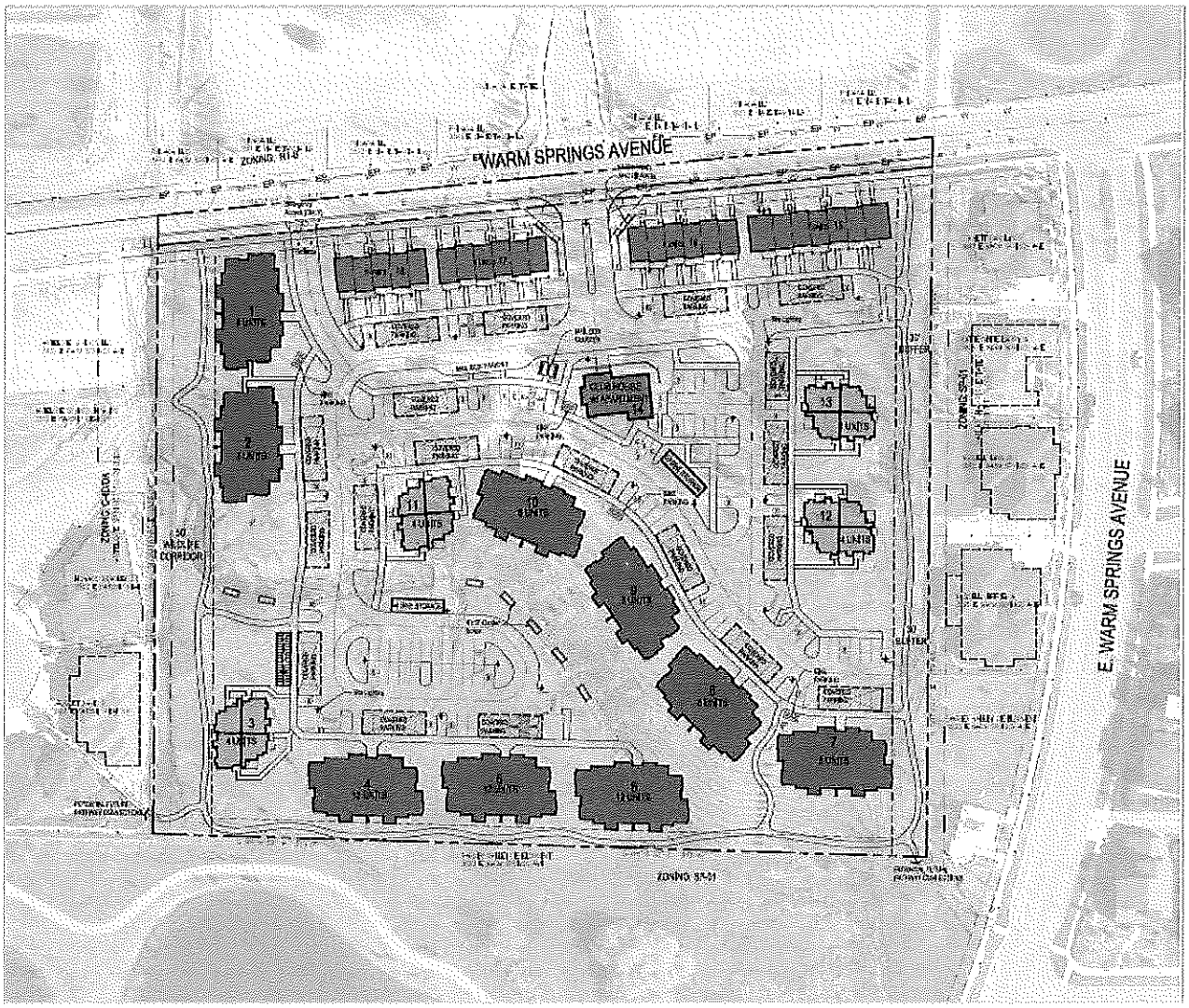
Sincerely,

Stacey Yarrington
Planner III
Development Services

cc: File
City of Boise
SLN Planning

VICINITY MAP

SITE PLAN



Standard Conditions of Approval

1. All proposed irrigation facilities shall be located outside of the ACHD right-of-way (including all easements). Any existing irrigation facilities shall be relocated outside of the ACHD right-of-way (including all easements).
2. Private Utilities including sewer or water systems are prohibited from being located within the ACHD right-of-way.
3. In accordance with District policy, 7203.6, the applicant may be required to update any existing non-compliant pedestrian improvements abutting the site to meet current Americans with Disabilities Act (ADA) requirements. The applicant's engineer should provide documentation of ADA compliance to District Development Review staff for review.
4. Replace any existing damaged curb, gutter and sidewalk and any that may be damaged during the construction of the proposed development. Contact Construction Services at 387-6280 (with file number) for details.
5. A license agreement and compliance with the District's Tree Planter policy is required for all landscaping proposed within ACHD right-of-way or easement areas.
6. All utility relocation costs associated with improving street frontages abutting the site shall be borne by the developer.
7. It is the responsibility of the applicant to verify all existing utilities within the right-of-way. The applicant at no cost to ACHD shall repair existing utilities damaged by the applicant. The applicant shall be required to call DIGLINE (1-811-342-1585) at least two full business days prior to breaking ground within ACHD right-of-way. The applicant shall contact ACHD Traffic Operations 387-6190 in the event any ACHD conduits (spare or filled) are compromised during any phase of construction.
8. Utility street cuts in pavement less than five years old are not allowed unless approved in writing by the District. Contact the District's Utility Coordinator at 387-6258 (with file numbers) for details.
9. All design and construction shall be in accordance with the ACHD Policy Manual, ISPWC Standards and approved supplements, Construction Services procedures and all applicable ACHD Standards unless specifically waived herein. An engineer registered in the State of Idaho shall prepare and certify all improvement plans.
10. Construction, use and property development shall be in conformance with all applicable requirements of ACHD prior to District approval for occupancy.
11. No change in the terms and conditions of this approval shall be valid unless they are in writing and signed by the applicant or the applicant's authorized representative and an authorized representative of ACHD. The burden shall be upon the applicant to obtain written confirmation of any change from ACHD.
12. If the site plan or use should change in the future, ACHD Planning Review will review the site plan and may require additional improvements to the transportation system at that time. Any change in the planned use of the property which is the subject of this application, shall require the applicant to comply with ACHD Policy and Standard Conditions of Approval in place at that time unless a waiver/variance of the requirements or other legal relief is granted by the ACHD Commission.

Request for Appeal of Staff Decision

1. **Appeal of Staff Decision:** The Commission shall hear and decide appeals by an applicant of the final decision made by the Development Services Manager when it is alleged that the Development Services Manager did not properly apply this section 7101.6, did not consider all of the relevant facts presented, made an error of fact or law, abused discretion or acted arbitrarily and capriciously in the interpretation or enforcement of the ACHD Policy Manual.

    a. Filing Fee: The Commission may, from time to time, set reasonable fees to be charged the applicant for the processing of appeals, to cover administrative costs.

    b. Initiation: An appeal is initiated by the filing of a written notice of appeal with the Secretary and Clerk of the District, which must be filed within ten (10) working days from the date of the decision that is the subject of the appeal. The notice of appeal shall refer to the decision being appealed, identify the appellant by name, address and telephone number and state the grounds for the appeal. The grounds shall include a written summary of the provisions of the policy relevant to the appeal and/or the facts and law relied upon and shall include a written argument in support of the appeal. The Commission shall not consider a notice of appeal that does not comply with the provisions of this subsection.

    c. Time to Reply: The Development Services Manager shall have ten (10) working days from the date of the filing of the notice of appeal to reply to the notice of the appeal, and may during such time meet with the appellant to discuss the matter, and may also consider and/or modify the decision that is being appealed. A copy of the reply and any modifications to the decision being appealed will be provided to the appellant prior to the Commission hearing on the appeal.

    d. Notice of Hearing: Unless otherwise agreed to by the appellant, the hearing of the appeal will be noticed and scheduled on the Commission agenda at a regular meeting to be held within thirty (30) days following the delivery to the appellant of the Development Services Manager's reply to the notice of appeal. A copy of the decision being appealed, the notice of appeal and the reply shall be delivered to the Commission at least one (1) week prior to the hearing.

    e. Action by Commission: Following the hearing, the Commission shall either affirm or reverse, in whole or part, or otherwise modify, amend or supplement the decision being appealed, as such action is adequately supported by the law and evidence presented at the hearing.