To: Rosemary Padgett, Josephine County  
From: Seth Otto and Kyle Roslund  

Re: Environmental screening of Josephine County properties and the surrounding vicinity

At the request of Josephine County (the County), Maul Foster & Alongi, Inc. (MFA) conducted an environmental records and document review of 17 County-owned properties located near the intersection of Northwest Dimmick Street and Northwest A Street (see Figure 1) in Grants Pass, Oregon. Seven of the properties include the former Josephine General Hospital Campus (the Campus), while the additional 10 County-owned properties are located south and west of the Campus. The 17 properties will be collectively be referred to herein as “the Properties.”

PURPOSE
This memorandum represents an environmental screening assessment of the Properties and vicinity area including a review of updated environmental data to assess the potential for environmental impacts. While this memorandum does not meet the full requirements set forth by the American Society for Testing and Materials (ASTM) standard for a Phase I environmental site assessment (ESA), many components are similar and this report will be used to guide environmental investigations and decisions made in connection with the Properties.

BACKGROUND ENVIRONMENTAL CONDITIONS
Previous assessments have been limited to the Campus. A draft existing conditions report identified the following potential environmental issues or data gaps connected with the Campus based on review of available historical documents (MFA, 2013). The environmental issues and data gaps are described below:

- Underground storage tanks (USTs) and a potential dry well were identified as recognized environmental conditions (RECs) in connection with the Campus which warrant further investigation.

- The 2007 US Environmental Protection Agency (USEPA)/Oregon Department of Environmental Quality (DEQ) site-specific assessment (SSA) identified the potential for the presence of additional tanks in the alcove area of the north side of the “A” Street Building and recommended further assessment (DEQ, 2007). Due to the
suspected number of tanks, observation of product in one tank, potential for shallow groundwater, and the uncertainty of the proximity of the advanced boring to the suspected tanks, MFA recommends further investigation in this area.

- The SSA reported that an unregistered drywell may exist in the area around the Central Plant (DEQ, 2007). As part of that assessment, hand augured borings were advanced in the area of the drywell, but the exact location remains unknown. An exploratory investigation is recommended in this area to determine the presence of a dry well or associated pipes.

ENVIRONMENTAL SCREENING
To assess environmental issues and data gaps, MFA completed a public records and historical documentation review, follow-up investigation of subsurface features associated with the USTs and the potential dry well identified in the Phase I ESA and as recommended by the SSA (HAI, 2006a; DEQ, 2007).

Records Review
MFA contracted Environmental Data Resources, Inc. (EDR) to search state and federal agency record sources for information regarding the Properties and sites nearby. The sites identified by this database search are shown in the following table. A list of “Orphan” sites with inadequate address information for mapping was also researched, and Orphan sites found to be within the appropriate search radii are also included in this table. These sites do not include any within the Property or adjacent to the Property and are deemed to not be an issue. The EDR-generated report is included as Attachment A.

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<tr>
<th>Databases Searched</th>
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<td>Federal Delisted NPL</td>
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The Campus is listed on the DEQ ESCI and LUST database as well as a US Brownfields site and UIC site. The reasons for these listings are described in the Background Section above.

Based on MFA’s review of the report provided by EDR, one site is of interest to the Properties, as it is located adjacent to the west of the Properties on Burch Street (see Figure 2) and is listed as an EDR historical automotive station. Chucks Mobile RV Service: This site was listed in 2010 and no documentation is available pertaining to it. During the site reconnaissance site walk conducted on January 30, 2014, this site was in the process of being developed into a private residence making it unlikely to have the potential to impact the Property in the future. With no documentation of past impacts, this site does not meet the definition of an REC.
The remaining sites have no reported releases, have reported that cleanup is complete and/or have received NFA determinations from the DEQ, and/or have little potential to impact the Properties, based on their proximity and/or elevation in relation to the Properties.

**Historical Aerial Photographs Review**

Aerial photographs of the Properties from 1951, 1976, 1982, 1985, 1994, 2000, 2005, 2006, 2009, 2011, and 2012 were obtained from EDR and were reviewed to identify historical changes to the Properties and historical uses, if any (see Attachment B).

1951—The resolution of this image makes it difficult to review the Properties and surrounding area; however outlines of buildings are visible.

1976—An outline of the “A” street building and Dimmick Tower are visible. Much of the surrounding area appears to be vacant.

1982—The Property appears to have the configuration similar to present day. The health services building is present. The Planning office building across Dimmick Street is visible. Much of the surrounding area appears to be parking lots similar in the present day configuration.

1985—The Property and surrounding area appears largely unchanged.

1994—The Property and surrounding area appears largely unchanged.

2000—The Property and surrounding area appears largely unchanged.

2005—The Property and surrounding area appears largely unchanged.

2006—The Property and surrounding area appears largely unchanged.

2009—The Property and surrounding area appears largely unchanged.

2011—The Property and surrounding area appears largely unchanged.

2012—The Property and surrounding area appears largely unchanged.

**Sanborn Map Review**

Sanborn Fire Insurance Maps (SFIMs) were requested from EDR. SFIMs from 1907, 1911, 1930, 1950, and 1961 were reviewed to identify historical changes to the Properties and historical uses, if any (see Attachment C).

1907—This map shows private residences and associated buildings sparsely occupying the Properties and surrounding area, where coverage is available. A continuation of Clarke Street appears trending through the Campus that is not currently present. Private residences appear in the
vicinity of the existing Dimmick Tower and the “A” street buildings. Coverage does not extend north of the Properties.

1911—The Properties and surrounding area appear largely unchanged. Some additional private residences appear south of the Property. The coverage again does not extend north of the Properties.

1930—The Josephine General Hospital appears in the footprint of the existing “A” street building. A “nurse's home” appears north of the hospital building on the Campus. Clarke Street no longer extends through the Campus. Birch Street extends into the Campus to service access to the hospital. Much of the surrounding area appears unchanged.

1950—An extension of the east wing of the hospital building is present. A second “nurse's home” appears across A Street to the south of the hospital, and on the Properties. The former nurse's home is now labeled “employee’s quarters.” The configuration of the Property and surrounding area appears largely unchanged.

1961—The west wing extension of the hospital building is present. The “employee’s quarters” building is gone and has been replaced by automotive parking. The shop building and central plant building area visible; however the label on the central plant building is illegible. Much of the surround area appears unchanged.

**City Directories**
EDR provided city directories for 1964, 1996, 1999, 2003, 2008, and 2013 (see Attachment D). The Campus is listed in the 1964 directory provided by EDR as Josephine General Hospital. Later in the 1990s the Campus is listed as Josephine County Health Department, Mental Health, Probation, and Kiwanis Children’s Dental. In the 2000’s the Health Department and Three Rivers Community Hospital and Health and listed.

The city directories confirm the use and history of the surrounding area and Properties (outside of the Campus), including private residences and some private health and dental care facilities. In some cases doctors are listed in the directories but it is difficult to ascertain if these listings are private residences owned and occupied by doctors or if they are health providing facilities.

**Historical Topographic Maps**
EDR provided historical topographic maps for 1908, 1954, 1986, and 1996 (see Attachment E). While the Properties are visible, the resolution of the maps do not provide much value for the purposes of this report. The 1908 map shows that the area northwest of what appears to be the Dimmick Street and A Street intersection is not developed. In the 1954 map the “A” Street building is visible and the drainage located east of the Properties is labeled as Skunk Creek. In both the 1986 and 1996 maps the hospital campus including Dimmick Tower is present. The drainage directly to
the east of the Properties has been re-named Gilbert Creek. No other large structures are present in the vicinity of the Properties on the maps.

**Title Records**
Chain of title records were compiled by John McCafferty of the Josephine County Assessor’s office and are included as Attachment F. Also included in this attachment is the status of record title report obtained by Tricor Title Company of Oregon. These were reviewed to identify any environmental liens or activity or use limitations. The title documents provided for the Properties did not identify any ownerships or uses that would indicate issues with land use limitations. No environmental liens were identified during the record search (see Attachment F).

Figure 3 shows the complex nature of existing easements in connection to the Properties, all related to the Campus. Three original additions (Bourne’s First, Boundary Line, and Addition to the Railroad) to the city of Grants Pass (City) converge at the location of the Properties. Additionally, portions of all three additions were re-platted and subdivided later in the early 1900s and are known as the Oak Knoll Addition. According to the City, the re-platting of the Oak Knoll Addition included rights-of-way dedicated to the City; however, some of that land was conveyed to a third party after the subdivision was platted. The City vacated multiple rights-of-way for the benefit of the Campus (Birch Street was vacated twice). In most instances, the City retained an easement over, across, and under for the maintenance of existing utilities and for the installation of future utilities. However, with the exception of the original “A” street building, all of the main hospital structures are encumbered by a recorded City easement.

**Prior Environmental Site Assessment Reports**
As part of the 2006 Phase I ESA conducted to assess recognized environmental conditions (RECs) at the site, Forensic Analytical Inc. was contracted by Hahn and Associates, Inc. (HAI) to conduct a building materials survey (including an asbestos-containing material [ACM] and limited lead-based paint survey) and a universal waste inspection of the accessible areas of the Campus (HAI, 2006a,b). The inspection identified ACM in the Tower Building, A Street Building, Central Plant, and Carpentry Shop. Samples of painted surfaces were collected and analyzed, and the results confirmed the presence of lead-based paint and shielding, although the survey did not identify the buildings or areas from which samples were collected. Universal waste items identified included light fixtures containing ballasts, fluorescent light tubes, and high-intensity discharge lights.

In 2012, JBR Environmental Consultants, Inc. (JBR) prepared a draft analysis of brownfield cleanup alternatives (ABCA) for the Tower Building and performed a supplemental hazardous material building survey report to identify asbestos, lead, mold/fungus, and other hazardous or universal waste items present in the building. JBR found additional materials of concern, including lead-based paint; ACM; sheet lead; Freon®; fluorescent lamps, ballasts, and high-intensity discharge lights; and mercury switches in various areas of the building. JBR reported severe water damage to the Tower Building and observed fungal and mold growth throughout the building. Bird droppings were observed in the upper levels of the building; droppings may contain a fungus known to cause health
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March 25, 2014  
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effects (i.e., *Histoplasma capsulatum*) (JBR, 2012). According to the 2006 Phase I ESA, a microbial evaluation was conducted, but the report was not available at the time of this review (HAI, 2006). Petroleum products were also observed and are discussed in the sections below.

The ABCA presented a preferred alternative that involved abatement of all ACM throughout and on the exterior of the Tower Building (with the exception of the asbestos-containing wall vapor barrier and the exterior lead-based paint), and the removal of petroleum products and miscellaneous hazardous materials from the building. The County is currently pursuing funding for the demolition of the Tower Building pursuant to the recommended alternative identified in the ABCA report.

Drums and Containers
In 2012, JBR observed full or partially full containers and drums located in the Tower Building basement level. JBR subcontracted Belfor USA, Inc. to conduct a hazardous-material investigation and repackaged the containers into one 55-gallon drum and one 5-gallon bucket with an industrial degreaser and cleaner, one 30-gallon drum with used oil, and three 5-gallon containers that contained sulfuric acid. Two sumps in the elevator shafts of the Tower Building were observed to contain oily liquid. Oil was collected from the elevator shaft oil and analyzed for waste-characterization purposes. It was estimated in the ABCA that approximately 5,100 gallons of oil remains in the two elevator sumps (JBR, 2012).

Subsurface Conditions
The 2006 Phase I ESA identified several RECs, some of which were addressed by an additional investigation, described below:

- A UST near the Tower Building (one 1,000-gallon diesel fuel tank) and two USTs in the alcove of the “A” Street Building (identified by fill ports; of unknown size/contents)
- An area near the Central Plant, where an 8,000-gallon gasoline UST was removed (lack of sufficient detail pertaining to decommissioning)
- An active 10,000-gallon diesel UST near the Carpentry Shop
- A potential dry well and associated drains near the Central Plant and the Carpentry Shop.

Based on the results of the 2006 Phase I ESA, a site-specific assessment (SSA) was performed by DEQ in June 2007 to determine if environmental impacts existed on portions of the Campus and to assess the extent and magnitude of contamination related to the RECs identified above. The investigation included geophysical magnetic survey, soil and groundwater sampling, and tank assessments (HAI, 2006a; DEQ, 2007).

Metals, including arsenic, barium, chromium, and lead, were detected in the soil samples. Barium and lead were not detected above DEQ residential risk-based concentrations (RBCs). Arsenic and chromium were detected in the soil samples and in some cases at levels above residential RBCs. Petroleum-related compounds were not detected at the locations with metals detections above RBCs.
and the SSA concluded that the metals detected likely were attributable to naturally occurring metals, according to guidance available at the time of the report (DEQ, 2002).

A shallow soil sample taken near the alcove of the “A” Street Building detected total petroleum hydrocarbon (TPH) below the RBC for residential receptors; however, it was concluded that the source and extent of TPH were unknown. TPH was also detected in the boring located in the parking lot in the northwest portion of the Campus, but below RBCs, and it was concluded that the detection likely was associated with the asphalt-paved parking lot or its construction.

Groundwater analytical results were not included in the SSA, and therefore were not reviewed. The SSA reported that arsenic, chromium, and lead were detected near the west side of the Central Plant where the UST had been located. Chromium and lead were detected in groundwater near the northeast corner of the Tower Building in the area of the suspected UST. Petroleum-related compounds were not detected in these areas, and it was concluded that the elevated arsenic, chromium, and lead concentrations likely were associated with naturally occurring metals in the regional soil and bedrock. Naphthalene was detected in three borings below RBCs; however, no other volatile organic compounds or polycyclic aromatic hydrocarbons were detected, and the source of naphthalene is unknown.

The SSA concluded that the site does not appear to pose a risk to human health or the environment; however features still exist at the Properties, specifically the Campus, that have not been fully delineated with respect to environmental conditions (DEQ, 2007).

**SITE RECONNAISSANCE**

MFA personnel, Mr. Kyle Roslund, conducted a site reconnaissance of the Properties on January 30, 2014, during which the Properties were visually and/or physically observed for the presence of RECs, as defined by the ASTM standard for Phase I ESAs. Photographs taken during the site reconnaissance are included in Attachment G.

**Methodology and Limiting Conditions**

Mr. Roslund visited and inspected the Properties, including site structures, to search for indications of the presence of RECs, including evidence of USTs and ASTs, petroleum products, transformers containing polychlorinated biphenyls (PCBs), and use/storage of hazardous material. The interiors and exteriors of all structures were observed. The Properties and adjacent properties were also observed from public thoroughfares.

The only portion of the Properties that was inaccessible during the site reconnaissance was Dimmick Tower (see Figure 2) as it has been deemed unsafe to enter.
General Site Setting
The Properties are approximately 350 feet west of the Gilbert Creek which drains into the Rogue River located approximately 1 mile south. The area is comprised mostly of private residences and is zoned as moderate-high-high rise density residential.

Description of Structures
The Campus contains a five-story hospital building (the Tower Building), a three-story former Josephine General Hospital building (the “A” Street Building), the single-story annex (County Health Service) building, a two-story physical plant (the Central Plant), and a single-story utility building (the Carpentry Shop). A subsurface utility tunnel connects the Central Plant with the Tower Building and the “A” Street Building. The Campus is landscaped or is paved with concrete or asphalt for parking and walkways. The Campus’s street frontages are improved with curbs, gutters, paving, storm drains, and sidewalks. Beyond the hospital Campus, the County owns a building across Dimmick Street that houses County planners and engineers. The rest of the adjacent County-owned properties are comprised of asphaltic parking lots with associated landscaping. Potable water, sanitary sewers, and storm drains are all serviced by the City.

AREAS OF INTEREST
The Properties were visually investigated to evaluate for the presence of RECs. All buildings were accessible with exception to the Dimmick Tower building which has health and safety concerns dictating entrance to the building to not be safe. The Dimmick Tower was observed having broken and open windows.

USTs
UST fill ports were observed near the “A” Street and Dimmick Tower buildings and Carpentry Shop as reported in the 2006 Phase I ESA (HAI, 2006a). The fill ports appeared to be in good condition and were covered by metal grates or encapsulated in concrete.

Attachment H shows the most recent tank tightness testing performed on the existing 10,000-gallon diesel UST associated with the Central Plant and Carpentry Shop conducted on September 20, 2011. According to the site contact, Ryan Johnson, the tank is regularly serviced and tank tightness testing is completed approximately every two years. The tank tightness report shows a passing result and indicated that the fill lid requires a new seal, there is no overfill prevention, or a spill bucket associated with the fill port (see Attachment H). The other USTs are not tested.

PCBs
PCBs are a USEPA-regulated toxic substance. In 1980, PCBs above a concentration of 50 parts per million were banned from commerce for most applications. PCBs are commonly found in electrical equipment manufactured before 1980, including pole- and pad-mounted, fluid-filled electrical transformers, capacitors, and ballasts associated with fluorescent light fixtures.
One pad-mounted transformer was observed adjacent to the central plant building (see Figure 2). No stickers noting the PCB concentration contained within the pad-mounted transformer were observed. No leaks or staining on the concrete pad were observed.

**Drains, Sumps, UICs**

Floor drains were observed in the County Health Services building. According to Mr. Johnson, the ultimate fate of liquids entering this system is unknown. These drains appear to collect condensate generated by HVAC units located in the basement. Other uses in this area appears to be general storage for paperwork and used hospital hardware.

The UIC identified in the 2006 Phase I ESA is located in a small storage shed located adjacent to the Central Plant. This shed's ceiling is in disrepair and is open and exposed to weather. The floor of the shed is sloped to a central drain. This assumed UIC is located adjacent to a main stormwater gravity line that drains east to Gilbert Creek. The stormwater line is visible above ground east of Kinney Street and appears to be comprised of an approximately 12-inch diameter concrete line. Because of the proximity of this line, it is possible that the proposed UIC is not present and the drain could discharge into this utility.

**Stained Soil, Pavement, or Flooring**

Stained soil and pavement were not observed on the Properties, except for petroleum-like stained concrete flooring in the Health Services building observed in the basement. The source of the staining is presumed to be fluids from the nearby compressor.

**FINDINGS AND OPINIONS**

Environmental concerns were identified at the Property. The ultimate approach to these conditions, specifically those associated with potential soil or shallow groundwater concerns, may depend on the site's redevelopment. The following items represent environmental concerns in connection with the Property:

- The Tower building is slated for demolition in 2014. If this is delayed, broken and open windows may represent an ongoing release of mold or asbestos to the surrounding area. Good housekeeping practices should be implemented to cover broken or open windows if demolition does not proceed.

- The existing 10,000-gallon diesel-containing UST should continue to be serviced regularly and tightness testing should be completed regularly.

- Good housekeeping practices should be implemented within the existing, accessible structures. Fluids, specifically those leaking from compressors located near floor drains, should be cleaned and controlled as necessary. Any floor drains not in use should be plugged.
• The USTs located near the Central Plant, Dimmick Tower, and “A” Street buildings may require subsurface investigations and decommissioning.

• The assumed UIC could be investigated to understand if the structure is a UIC or if the floor drain is connected with the gravity stormwater system. Follow-up subsurface investigations and decommissioning may be required.
LIMITATIONS

The services undertaken in completing this memorandum were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our Client. This memorandum is solely for the use and information of our Client unless otherwise noted. Any reliance on this memorandum by a third party is at such party’s sole risk.

Opinions and recommendations contained in this memorandum apply to conditions existing when services were performed and are intended only for the Client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this memorandum.

The purpose of an environmental assessment is to reasonably evaluate the potential for or actual impact of past practices on a given site area. In performing an environmental assessment, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern. The following paragraphs discuss the assumptions and parameters under which such an opinion is rendered.

No investigation is thorough enough to exclude the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not, therefore, be construed as a guarantee of the absence of such materials on the site, but rather as the result of the services performed within the scope, limitations, and cost of the work performed.

Environmental conditions that cannot be identified by visual observation may exist at the site. Where subsurface work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions at unsampled locations.

Except where there is express concern of our Client, or where specific environmental contaminants have been previously reported by others, naturally occurring toxic substances, potential environmental contaminants inside buildings, or contaminant concentrations that are not of current environmental concern may not be reflected in this document.

REFERENCES


Figure 1
Property Location
Josephine General Hospital Campus
Grants Pass, Oregon

Legend

Josephine County
Properties

Source: Aerial photograph obtained from Esri, ArcGIS Online; site extent based on parcels obtained from City of Grants Pass

This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.
Listed as Chuck's Mobile RV Service

Two potential USTs in alcove, identified by presence of fill ports

1,000-gallon diesel UST

Decommissioned and removed 8,000-gallon UST

Active 10,000-gallon diesel UST

Potential dry well

Carpentry shop

Legend
- Josephine General Hospital Campus
- Additional County-Owned Properties
- Parcel Boundaries

1. Dimmick Tower
2. "A" Street Building
3. County Health Service
4. Central Plant

Source: Aerial photograph obtained from Esri, ArcGIS Online; parcel and road data obtained from City of Grants Pass

Print Date: 3/6/2014
Produced By: apadilla
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Figure 3
Site Easements
Josephine General Hospital Campus
Grants Pass, Oregon

Legend
- Easements (Approximate)
- Josephine General Hospital Campus
- Additional County-Owned Properties
- Parcel Boundaries

1. Dimmick Tower
2. "A" Street Building
3. County Health Service
4. Central Plant

Source: Aerial photograph obtained from Esri, ArcGIS Online; parcel and road data obtained from City of Grants Pass; locations of easements digitized from drawing provided by JGH

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