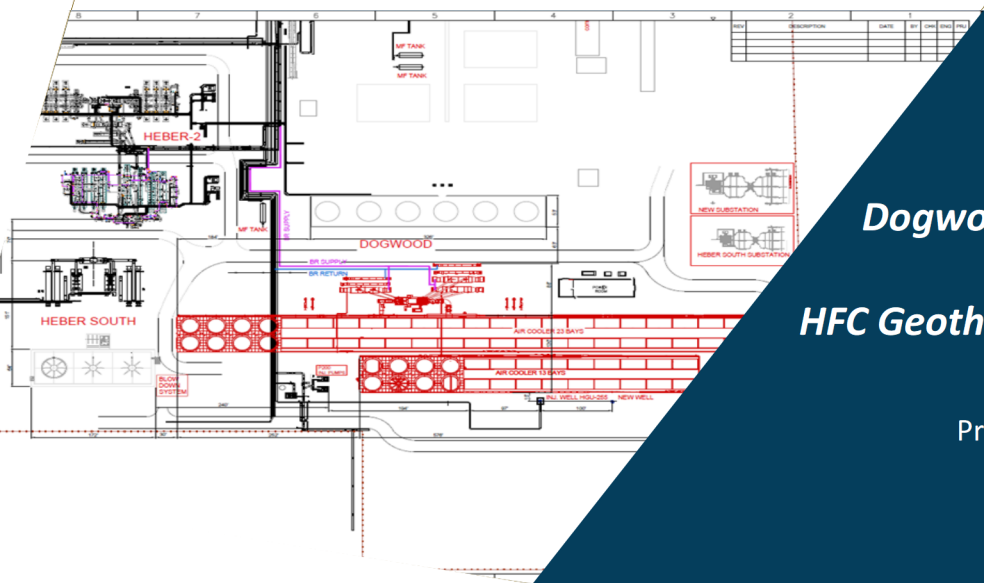


Water Quality Management Plan

Dogwood Geothermal Energy Project
Heber 2 Solar Energy Project
HFC Geothermal Wells & Pipeline Project

Prepared for: Imperial County Planning and Development Services

Submitted by: ORMAT

June 20, 2023

Document Information

Prepared for	OrHeber 3 LLC, Heber Field Company, and the Second Imperial Geothermal Company (collectively, the Applicants, all wholly owned subsidiaries of Ormat Technologies, Inc.)
Project Name	Dogwood Geothermal Energy Project, Dogwood Solar, and Heber 2 Solar Facilities APN 054-250-031; APN 059-020-001; APN 054-250-017
Address	ORMAT 6140 Plumas Street Reno, NV 89519-6075
Project Manager	Ben Pogue bpogue@ce.solutions
Project Engineer	Paden Voget, P.E. pvoget@ce.solutions State of California Professional Engineer #69238
Date	June 10, 2023

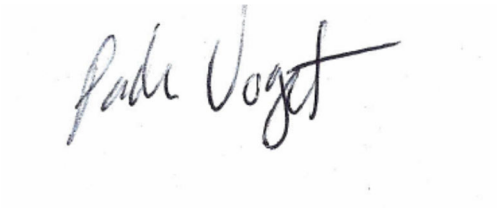
Professional Certification

Water Quality Management Plan

Dogwood Geothermal Energy Project, Dogwood Solar, and Heber 2 Solar Facilities

This report has been prepared by Catalyst Environmental Solutions Corporation under the professional supervision of the Principal(s) and/or staff whose signature(s) appear hereon.

The scope of work and specifications are presented in accordance with generally accepted professional engineering practice and those of the California State Water Resources Control Board Order No. 2013-001-DWQ. There is no other warranty either expressed or implied.



Paden Voget, PE
State of California Professional Engineer #69238

Project Owner's Certification

This Water Quality Management Plan (WQMP) has been prepared for OrHeber 3 (OH), LLC, Heber Field Company, LLC (HFC), and the Second Imperial Geothermal Company (collectively, the Applicants, all subsidiaries of Ormat Technologies, Inc. [ORMAT]) by Catalyst Environmental solutions. The WQMP is intended to comply with the requirements of the County of Imperial and the Phase II Small MS4 General Permit Imperial Valley Watershed. The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of the site consistent with the Phase II Small MS4 Permit and the intent of the County of Imperial and the unincorporated community of Heber. Once the undersigned transfers its interest in the property, its successors in interest and the city/county/town shall be notified of the transfer. The new owner will be informed of its responsibility under this WQMP. A copy of the approved WQMP shall be available on the subject site in perpetuity.

"I certify under a penalty of law that the provisions (implementation, operation, maintenance, and funding) of the WQMP have been accepted and that the plan will be transferred to future successors."

Project Data			
Permit/Application Number(s):	New CUP for Dogwood Geothermal Energy Project New CUP for Heber 2 Solar Energy Project Amendment to CUP No. 06-0028 for the HFC Geothermal Wells & Pipeline Project	Grading Permit Number(s)	N/A
Tract/Parcel Map Number(s):	APN 054-250-031 APN 059-020-001 APN 054-250-017	Building Permit Number(s)	N/A
CUP, SUP, and/or APN:			06-0028 (for HFC)
Owner's Signature			
Owner Name:	Alissa Sanchez		
Title:	Senior Manager, Environmental Permitting		
Company:	ORMAT		
Address:	6140 Plumas Road, Reno, NV		
Email:	asanchez@ormat.com		
Telephone:	775-356-9029 ext. 32234		
Signature:	Date:		June 20, 2023

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SECTION 1 Project Description

OrHeber 3, LLC, Heber Field Company, LLC, and the Second Imperial Geothermal Company (collectively, the Applicants, and all subsidiaries of Ormat Technologies, Inc. [ORMAT]) proposes to develop a new 25-megawatt (MW; net generation) geothermal energy facility (Dogwood Project), Dogwood Solar, and Heber 2 Solar Parasitic Facilities. Proposed developments would occur on Assessor Parcel Numbers (APNs) 054-250-31; APN 059-020-001; and APN 054-250-017, near the existing geothermal energy complex located at 855 Dogwood Road, Heber, California. The Project site(s) is within the Imperial County Geothermal Overlay Zone that allows for Major Geothermal Projects to be permitted via a Conditional use Permit (CUP) process (Imperial County General Plan; Renewable Energy and Transmission Element of County of Imperial General Plan, 2015). The following facilities are proposed for development, provided by the Applicant:

Dogwood Project (OrHeber 3, LLC) – New CUP

- One (1) Integrated Two Level Unit (ITLU) Air Cooled ORMAT Energy Converter (OEC) generating unit
- Two (2) 20,000-Gallon Isopentane Tanks for Motive Fluid Storage
- One (1) Project substation for transmission to the grid
- Ancillary and auxiliary facilities (including, compressed air system and fire prevention system)
- A seven (7) megawatt (MW) solar photovoltaic field dedicated to the Dogwood geothermal plant
- Underground medium voltage distribution cable from Dogwood solar facilities to Dogwood geothermal plant (and Heber 2 solar facilities to the Heber 2 OEC)

Heber 2 Parasitic Solar Energy Facilities (Second Imperial Geothermal Company) – Amendment to CUP No. 19-0017

- A fifteen (15) MW solar photovoltaic field dedicated to the Heber 2 geothermal plant
- Interconnecting cable line from Heber 2 solar facilities to Heber 2 geothermal plant

Wells and Pipeline (Heber Field Company, LLC) – Amendment to CUP No. 06-0028

- Up to six (6) new production wells (3 sited, 3 unsited)
- One (1) new injection well
- Brine pipelines

As provided in **Table 1** below, the total project disturbance from the proposed development is approximately 124 acres. **Figure 1** and **Figure 2** provide a site plan of the proposed facilities and brief descriptions of each facility are provided below.

Table 1. Dogwood Project Area of Disturbance Estimate

Facility	Disturbance (Acres)
Geothermal Energy Facilities and Project Substation	5 acres (site currently completely disturbed)
Solar Field and Connection Line	~ 95 acres
Production and Injection Wells and Connecting Pipeline	~ 24 acres
TOTAL	**124 acres**

The Project will result in approximately 1,400 square feet of area converted to impervious surface area resulting from installation of equipment footings/foundations. Although some minor grading will be performed for the installation of the parasitic solar fields, the existing drainage pattern of the sites will not be altered from existing conditions. Accordingly, the Project will not result in a change to the existing grade and stormwater flows and drainage will not be altered from existing conditions. **Figure 3** illustrates the existing drainage facilities in the vicinity of the Project. **Figure 4** provides a site plan of the proposed facilities.

1.1.1 Geothermal Production and Injection Wells

Heber Field Company (HFC) owns and operates the geothermal wells and pipeline network that provides geothermal fluid/brine to the entire Heber Geothermal Energy Complex (HGEC), which includes the existing Heber 2, Heber South, and Goulds II geothermal power plants. HFC holds a CUP (No. 06-0028) for this wellfield and through a CUP amendment process, the new production and injection wells and pipelines are proposed to be added to this existing CUP. HFC proposes to develop up to six production wells. Three of these wells are sited to support the new Dogwood geothermal facility. **Figure 1** provides the locations of the three Dogwood wells. HFC is also seeking to permit three unsited wells that would be developed in the future. The unsited wells would be developed within one-mile of the HGEC and not near any sensitive receptors. HFC would anticipate construction in close proximity to an existing well pad and pipeline connections. The surrounding area is predominantly agricultural and the unsited wells would likely convert a small amount for geothermal production or injection use (approximately 1.5 acres of disturbance per well pad).

The production wells would be completed to depths between 1,000 and 4,000 feet, averaging approximately 3,500 feet. Casing depth will comply with California Department of Conservation – Geologic Energy Management Division (CalGEM) Regulations (Chapter 4, Article 3, §§ 1723, 2018) and vary depending on the total depth of the well. After the production well is completed, a well head will be installed and connected to a transmission pipeline that will convey geothermal fluid to the Dogwood Project (as discussed below). An industrial grate will be placed over the well to prevent falls. An insulated electric conductor running from the OEC to the wellheads along the connecting pipelines will supply electricity to the wellhead pump motors. During normal well operations, total geothermal fluid production rates are expected to be approximately 8,000 gallons per minute (gpm) at 280°F. One new injection well would be installed directly adjacent to the Dogwood plant. This well would also be owned and operated by HFC. This well is designed to provide direct service to the Dogwood Project, in addition to the available capacity in the existing HFC injection well/system. Injection will occur at the same approximate levels (i.e., 8,000 gpm) but at lower temperatures of approximately 170°F.

1.1.2 Geothermal Fluid Pipeline

A short segment of new pipeline is proposed within the solar energy fields to collect and deliver the new geothermal fluid/brine from two of the new production wells. This new pipeline would connect to the existing pipeline network to deliver fluid/brine to the Dogwood plant. Construction of the pipeline segment would include auguring 24-inch diameter holes into the ground about three to five feet deep at approximately 30-foot intervals along the pipeline route. When complete, the top of the new geothermal pipelines will average three feet above the ground surface. Electrical power and instrumentation cables for the wells may also be installed in steel conduit constructed along the pipe.

1.1.3 ORMAT Energy Converter (Geothermal Energy Production Unit)

The proposed ORMAT Energy Converter (OEC) unit is a two-turbine combined cycle binary unit, operating on a subcritical Rankine cycle, with isopentane as the motive fluid. The OEC system consists of a generator, turbines, a vaporizer, Air Cooled condensers, preheaters and recuperators, and an evacuation skid/vapor recovery maintenance unit (VRMU) for purging and maintenance events. The design capacity for the unit is 25 MW (net).

1.1.4 Isopentane Storage Tanks

Two double-walled 20,000-gallon above-ground storage tanks would be installed for motive fluid (isopentane) storage. Numerous safety and fire prevention measures will be installed on/near the ABST, including:

- Concrete foundations with blast walls separating the tank from the OEC
- An automated water suppression system.
- Concrete containment areas.
- Two flame detectors, which will immediately detect any fire and immediately trigger the automatic fire suppression system.
- A gas detector, which will immediately detect any isopentane leak and notify the control room (manned by 24/7).

1.1.5 Cooling Tower

A cooling tower array will perform air-cooling operations of the geothermal fluid. The cooling tower will include a series of heat-absorbing evaporators and condensers to capture and transfer heat stored in the geothermal fluid.

1.1.6 Parasitic Solar Energy Facilities

Two separate solar photovoltaic energy fields are proposed – a seven (7) megawatt solar field to provide supplemental/auxiliary energy to the Dogwood geothermal plant and a fifteen (15) MW solar field to provide supplemental/auxiliary energy for the Heber 2 geothermal plant. These solar facilities are classified as behind-the-meter and would provide supplemental energy directly to the Dogwood and Heber 2 geothermal units (OECs), this energy would not enter the transmission grid. The solar facilities

will effectively reduce the margin between gross and net geothermal energy generation, allowing for the more efficient generation of geothermal energy and to allow more geothermal energy to enter the grid. The energy generated by the solar fields would be collected on-site by a XMR and switch and transmitted along a short interconnecting cable line (approximately 1,000 feet) on Dogwood Road to the Dogwood and Heber 2 OECs.

1.1.7 Project Substation

The Project will require a new substation to step up the low voltage electrical energy generated at the Dogwood geothermal unit to the higher voltage required for commercial transmission. No upgrades to off-site transmission facilities is necessary and the new Dogwood substation will connect directly to the existing point of interconnection with the Imperial Irrigation District (IID) controlled grid. The substation will include a 13.8 kV circuit breaker to protect the electric generator, a minimum of 80 megavolt ampere 13.8 kV/115 kV transformer, and 115 kV potential and current transformers for metering and system protection.

1.1.8 Water Use and Source

Water required for facility construction activities, including grading and dust control, will be obtained from the applicant's existing contract with IID. Up to 5,000 gallons per day (gpd) of water will be required for the first 2-4 months of development of the facility. Approximately 2,000 gpd will be consumed during the remaining development schedule of approximately 12-18 months. Thus, approximately 1.1 million gallons of water (10.1 acre-feet) will be used on-site during construction. Once operating, up to approximately 325 gpd (0.36 acre-feet per year) of non-potable water will be required and provided by the applicant's existing IID contract/allocation. Water required for well drilling would typically average 50,000 gpd. Water necessary for these activities would be obtained from local irrigation canals in conformance with IID requirements. Alternatively, a temporary pipeline from the respective irrigation canal could be used for water delivery to the well site. Any temporary pipeline would be laid on the surface immediately adjacent to the access road. The Project will not require additional water from the Imperial Irrigation District (IID) for operations and will be covered under the existing contract.

1.2 SITE LOCATION

The Site includes approximately 4 acres within the Heber quadrangle of the U.S. Geological Survey (USGS) 7.5" topographic map, and sits within Township 16 South, Range 14 East of the San Bernardino Base and Meridian in Imperial County, California.

1.3 LAND USE AND TOPOGRAPHY

The Project is located on private lands owned by ORMAT in southern Imperial County as shown in **Figure 1**. The Proposed development includes approximately 124 acres within APN 054-250-31; APN 059-020-001; and APN 054-250-017, near the existing geothermal energy complex located at 855 Dogwood Road, Heber, California. The Project site is zoned as A-2-G SPA, for General Agriculture (A-2), Geothermal Overlay Zone (G), and in the Heber Specific Plan Area (SPA). The Project site lies at an elevation of approximately 5 feet below mean sea level (msl) in the Imperial Valley region of the California low

desert. The surrounding properties lie on terrain, which is flat, part of a large agricultural valley. The existing geothermal energy complex is devoid of vegetation and is actively disturbed as part of the ongoing energy generation operations at Heber 2. The sites identified for the Dogwood Parasitic Solar Facility, Heber 2 Parasitic Solar Facility, and production wells are currently actively cultivated agricultural fields. Adjacent properties consist of agricultural land to the north and a solar farm to the west.

1.4 SITE GEOLOGY, HYDROGEOLOGY, AND SOILS

The part of Imperial County containing Heber lies within the Pliocene to Holocene, Q Geologic Unit (McCrink et al. 2011). Three natural geomorphic provinces underlay Imperial County, including the Peninsular Ranges, the Colorado Desert, and the Mojave Desert. The Colorado Desert geomorphic province spans central Imperial County and contains the Salton Sea and the Imperial valley. This Basin and Range province, sometimes referred to as the Salton Trough, is composed of a low-lying barren desert basin located between alluvium-covered, active branches of the San Andreas Fault containing Cenozoic sedimentary rocks and alluvial, lacustrine, and eolian deposits. The surface of sediments in the middle of the trough are about 275 feet below sea-level (bsl) (Digital Desert 2019).

Surface water in the area of the Site consists of canals and agricultural drains operated and maintained by the Imperial Irrigation District. Canals adjacent to the Project Site include Date Drain No. 3 and Beech Drain as illustrated in **Figure 3**. These canals ultimately drain to the Alamo River, a tributary to the Salton Sea. Surface runoff within the Project Site occurs primarily as sheetflow across the lot generally to the north, eventually flowing into the adjoining ditches.

The regional groundwater flow direction within the Imperial Valley is toward the Salton Sea, a closed basin with a surface elevation of approximately 225 feet below sea level. Groundwater flow in the Project area flows in a general northwest direction.

Dry lean silty clays dominate the project site surface extending to approximately 4 to 5 feet below ground surface (bgs). These silty clays are underlain by moist stiff clays from approximately 6 feet to 38-40 feet bgs. Silty clay to clayey silt dominate 40-50 feet bgs to the extent of geotechnical exploration (Landmark 2019).

1.5 HYDROMODIFICAITON APPLICABILITY

As discussed above, the Project would result in less than 1,400 square feet of impervious area from pre-Project conditions. For construction of the parasitic solar fields, limited grading is proposed for the Project that would not result in changes to the permeability of the site nor alter the existing drainage patterns. As such, the post-development runoff volume, time of concentration, and peak flow velocity would not be altered from that of the pre-development condition.

1.6 POTENTIAL STORMWATER POLLUTANTS

Table 2 summarizes expected stormwater pollutants of concern based on land use and site activities.

Table 2. Pollutants of Concern

Pollutant	Potential to Impact Stormwater (Y/N)	Additional Information and Comments
Pathogens (Bacterial/Virus)	N	--
Nutrients – Phosphorous	N	--
Nutrients - Nitrogen	N	--
Noxious Aquatic Plants	N	--
Sediment	Y	Overland flows over unpaved surface may result in sediment in stormwater runoff
Metals	Y	Leaks/spills in Project area may result in metals in stormwater runoff
Oil and Grease	Y	Leaks/spills in Project area may result in oil and grease in stormwater runoff
Trash/Debris	Y	Improperly disposed of trash/debris may result in trash in stormwater runoff
Pesticides/Herbicides	N	--
Other	N	--

SECTION 2 Best Management Practices

This section describes the Best Management Practices (BMPs) that will be implemented and maintained throughout the life of the project. The BMPs will be used to prevent and minimize water pollution that can be caused by stormwater runoff. **Table 3** details the BMPs selected to be implemented at the Project site based on the potential pollutants. Note that the OEC, isopentane tanks, cooling tower, and substation are located within the existing operational footprint and is subject to the existing policies and programs implemented by ORMAT for the facility as would the proposed development outside of the existing HGEC. Because the Project does not propose any changes to the existing stormwater volume, peak flow velocity, time of concentration or drainage patterns, no structural BMPs are proposed.

Table 3. Non-Structural Source Control BMPs

Pollutant Source	Pollutant	BMP	Existing?	New/Revised?
Stormwater run-on and runoff	Erosion, sediment, contaminated stormwater	• Stabilize drainage with rocks, gravel, vegetation, or riprap • Provide perimeter control to isolate sediment (loose dirt). Includes earthen berms, fiber rolls, silt fence, etc.	X	
Vehicle Track Out	Sediment, Dust	• Provide tracking control devise • Conduct street sweeping	X	
Work Areas	Trash	• Regularly monitor and clean trash • Provide employee training for good housekeeping	X	
Equipment Areas (OECs, ITLUs, pipes)	Isopentane, sediment	• Control drainage patterns with berms • Use water truck for dust control • Conduct routine inspections	X	X
Stored materials and equipment maintenance	Oil, grease, hydraulic fluid, anti-freeze, metals	• Provide good housekeeping training • Store materials in secondary containment • Spill kit and response training	X	

In addition to the activities listed above, ORMAT follows all approved operational guidelines that are currently in place. Temporary and permanent soil erosion control BMPs will be implemented in conformance with the BMP Fact Sheets provided in the California Stormwater Quality Association (CASQA) Stormwater Best Management Practice Handbook – Industrial and Commercial (2019).

2.1 NON-STRUCTURAL BMPS

The following are prevention practices utilized to minimize the probability of pollution of stormwater discharge.

2.1.1 Good Housekeeping

As a component of this program, good housekeeping practices are performed so that facility is kept in a clean and orderly condition. Proper housekeeping practices include:

- Periodic cleanup of equipment, as needed, based upon facility inspections,
- Sweeping impervious surfaces, as needed, based upon facility inspections,
- Proper waste disposal practices and covering of waste storage areas at all times,
- Proper storage and covering of materials at all times,
- Removal of any oil-stained soil/gravel, especially around equipment locations and loading areas,
- Cleaning of significant oil and grease stains on surfaces that drain to the stormwater drainage areas, and
- Cleaning the exterior of oil containers on hydraulic machinery upon discovery of an accumulation of hydraulic fluid.

2.1.2 Preventative Maintenance

As a component of this program, operations and maintenance staff perform preventative maintenance of stormwater management devices to assure their proper operation. Preventative maintenance of stormwater management devices includes the following:

- Cleaning of accumulated sediment, potential contaminants, and debris from the Site;
- Inspection of secondary containment structures as part of the regular daily visual inspections;
- Maintenance and inspection of secondary containment structures, as needed, based upon inspections;
- Daily inspection and maintenance of equipment and associated piping and valves as required by preventive maintenance procedures;
- Inspection and maintenance of rainfall protection coverings for waste storage bins and receptacles on a periodic basis; and
- A comprehensive preventive maintenance schedule is performed on all facility operations equipment as part of routine procedures.

2.1.3 Spill Response

Spill prevention and response is performed according to the facility's SPCC Plan . Copies of this plan are located in the on-site ORMAT office.

A limited amount of spill cleanup equipment is stored onsite. This equipment is found within hazardous material storage areas. Detailed information concerning spill cleanup equipment and resources is included in the SPCC Plan.

The volume of containment areas surrounding each potential source is designed to hold the contents of a spill from the largest vessel / container. The SPCC Plan summarizes the capacity of potential sources and volume of the respective secondary containment areas.

2.1.4 Material Handling and Storage

The primary hazardous material to be stored on-site is isopentane. The additional isopentane will be stored in the appropriately designed (2x) 20,000 gallon above ground storage tanks, as well as the existing (2x) 10,000 gallon tanks for Heber 2 OEC. The isopentane is used as a motive fluid for geothermal energy generation and is not directly discharged, rather is released as an air emission. Therefore, the isopentane would not be directly exposed to stormwater. All other hazardous waste would be stored in 55-gallon drums and other Department of Transportation (DOT) approved packaging within a contained area located on the Site. Stormwater that accumulates within the hazardous material and hazardous waste containment area is collected via vacuum truck and disposed of off-site or recycled back into the production system. A bill of lading, non-hazardous waste manifest or uniform hazardous waste manifest is used to document all such shipments.

2.1.5 Employee Training

A combined annual Storm Water Compliance / SPCC Plan training program is conducted for the Pollution Prevention Team members and operations personnel. Participants undergo stormwater management training for all areas and operations at this facility, as well as reviewing the spill response, control and countermeasure procedures. Other stormwater training is done on an as-needed basis.

2.1.6 Waste Handling/Recycling

At times, product or oily waste streams are transferred from the facility in 55-gallon drums. A bill of lading, non-hazardous waste manifest or uniform hazardous waste manifest is used to document all such shipments. Operations or contractor personnel closely monitor loading of transport vehicles. Collection and satellite accumulation containers for hazardous and non-hazardous waste are kept covered to prevent contact with stormwater. Appropriate spill control equipment and supplies are kept readily available in case of a spill.

2.1.7 Record Keeping and Internal Reporting

All inspection, sampling, maintenance, corrective action records, and any other information that is a part of this plan are maintained at the facility office. All records are maintained for a period of at least three (3) years.

2.1.8 Erosion Control and Site Stabilization

Permanent BMPs used at the existing HGEC facility to prevent soil erosion include routing runoff along earthen swales or drainage areas, and preventing run-off with berms along certain sections of the property line. Temporary BMPs used at the Site to prevent soil erosion include the use of sandbags, crushed rock, and silt fence. These BMPs are used as and where needed, especially in areas that are undeveloped or in the process of being developed.

SECTION 3 Operation and Maintenance Plan

The Dogwood Project is located within APN 054-250-31; APN 059-020-001; and APN 054-250-017, near the existing geothermal energy complex located at 855 Dogwood Road, Heber, California. The following non-structural water quality best management practices (BMPs) are proposed for the Project:

- Good Housekeeping
- Preventative Maintenance
- Spill Response
- Material Handling and Storage
- Employee Training
- Waste Handling/Recycling
- Record Keeping and Internal Reporting
- Erosion Control and Site Stabilization

3.1 MAINTENANCE RESPONSIBILITY

The Heber Field Company (subsidiary of ORMAT) is the property owner and is responsible for BMP maintenance. Since HFC/ORMAT is the owner, no access agreement or easement is necessary to maintain the BMPs. HFC/ORMAT funds will be used to support Operation and Maintenance (O&M) activities to maintain BMP functionality. HFC/ORMAT maintenance staff are expected to perform the maintenance.

3.2 MAINTENANCE ACTIONS AND FREQUENCY

Maintenance actions are generally grouped into two categories: routine and intermittent.

Routine Maintenance

Routine inspections of the Project facilities and grounds will be performed annually. During these inspections staff evaluate if there is significant accumulation of trash, debris, or sediment that would need to be removed. Cleaning is done as needed based on the results of the inspections. The inspection frequency may be adjusted based on experience at the site (e.g., if inspections rarely find any material that needs to be cleaned out, then the inspection frequency can be reduced).

Intermittent Maintenance

Intermittent maintenance activities include more substantial maintenance that is not required as frequently as routine maintenance. The most likely form of intermediate maintenance is removal of sediment from existing drainage infrastructure and detention basins where necessary to maintain the capacity of the basins. Given that the Project Site is pervious and will not be graded or significantly altered and that rain is infrequent in Heber, this type of maintenance is expected to be required approximately once every year.

3.3 MAINTENANCE PROCEDURES

During each maintenance visit, the maintenance crew will evaluate existing drainage paths and infrastructure by inspecting for the maintenance indicators in **Table 4**. When a maintenance indicator is observed, the action described in the "Maintenance Actions" column will be taken.

Note that regardless of the projected maintenance type (routine or intermittent) described in the previous section, when a maintenance indicator is observed, the required maintenance action will be taken. For example, if significant sediment accumulation is observed in year three instead, then the accumulated sediment will still be cleaned out, even though the estimated frequency was once every year.

Table 4. Maintenance Indicators and Actions for BMPs

Typical Maintenance Indicator	Maintenance Action
Erosion due to concentrated stormwater runoff flow	Repair eroded areas and make appropriate corrective measures such as adding berm or stone at flow entry points, or re-grading as necessary.
Accumulated sediment, litter, or debris	Remove and properly dispose of accumulated materials, without damage to stormwater drainage structures.
Standing water	Remove any obstructions or debris or invasive vegetation, loosing or replace top-soil to allow for better infiltration, or minor re-grading for proper drainage.
Obstructed inlet or outlet structures	Clear obstructions.
Damage to structural components such as inlet or outlet structures	Repair or replace as applicable.

SECTION 4 References

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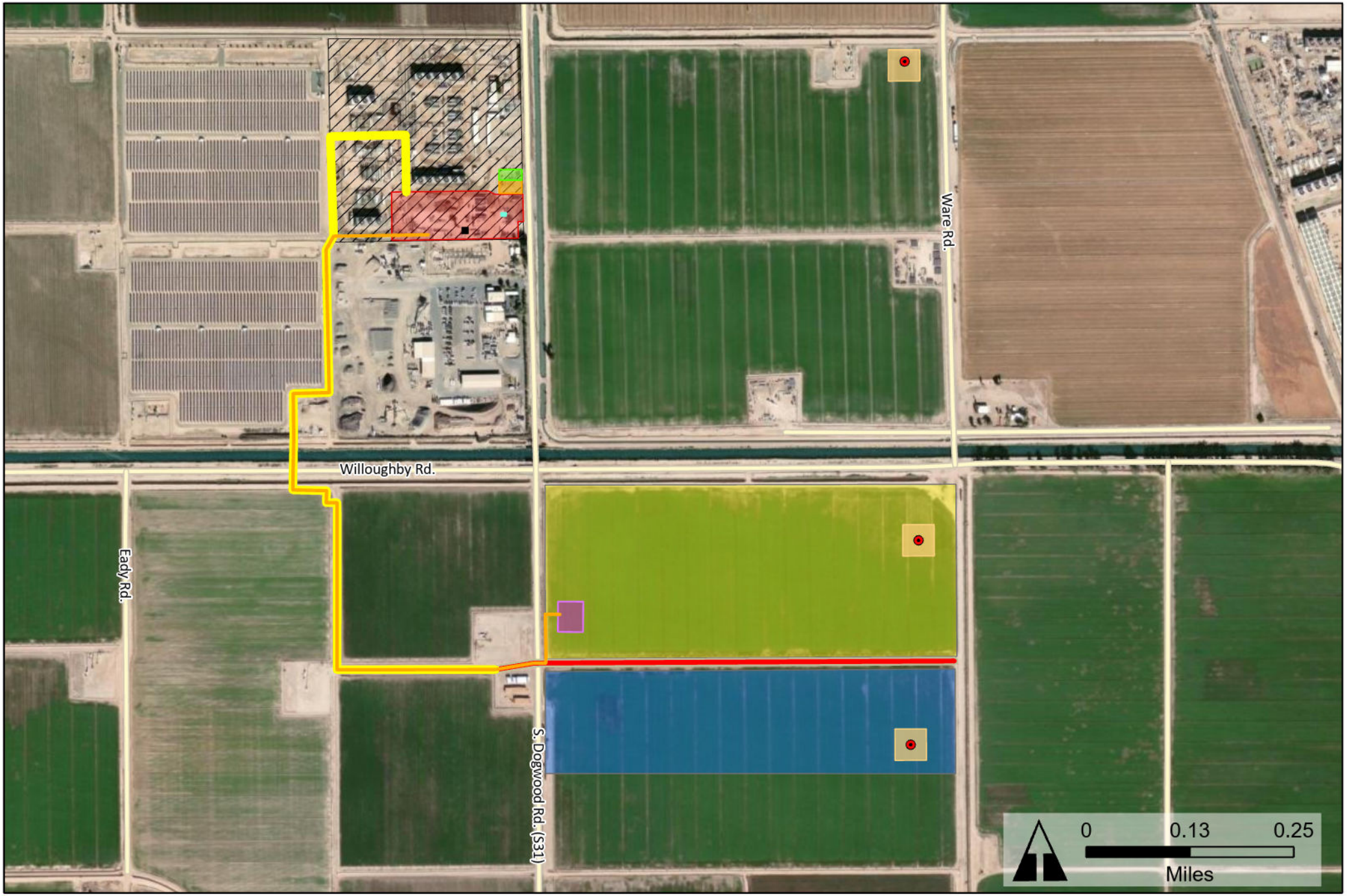
Figures





Legend

- Dogwood Geothermal Plant
- Dogwood Parasitic Solar Energy Facilities
- Heber 2 Parasititc Solar Facilities
- Approximate Well Pad
- Existing Heber Substation
- New Dogwood Substation
- XMR and Switch
- Heber Geothermal Energy Complex
- Isopentane Storage Tanks (25,000-gal)
- Medium Voltage Cable
- Exisiting Pipeline
- New Pipeline
- Proposed Production Wells
- Injection Well

EXISTING FACILITIES AND PROPOSED DOGWOOD AND SOLAR ENERGY FACILITY

Catalyst ENVIRONMENTAL SOLUTIONS

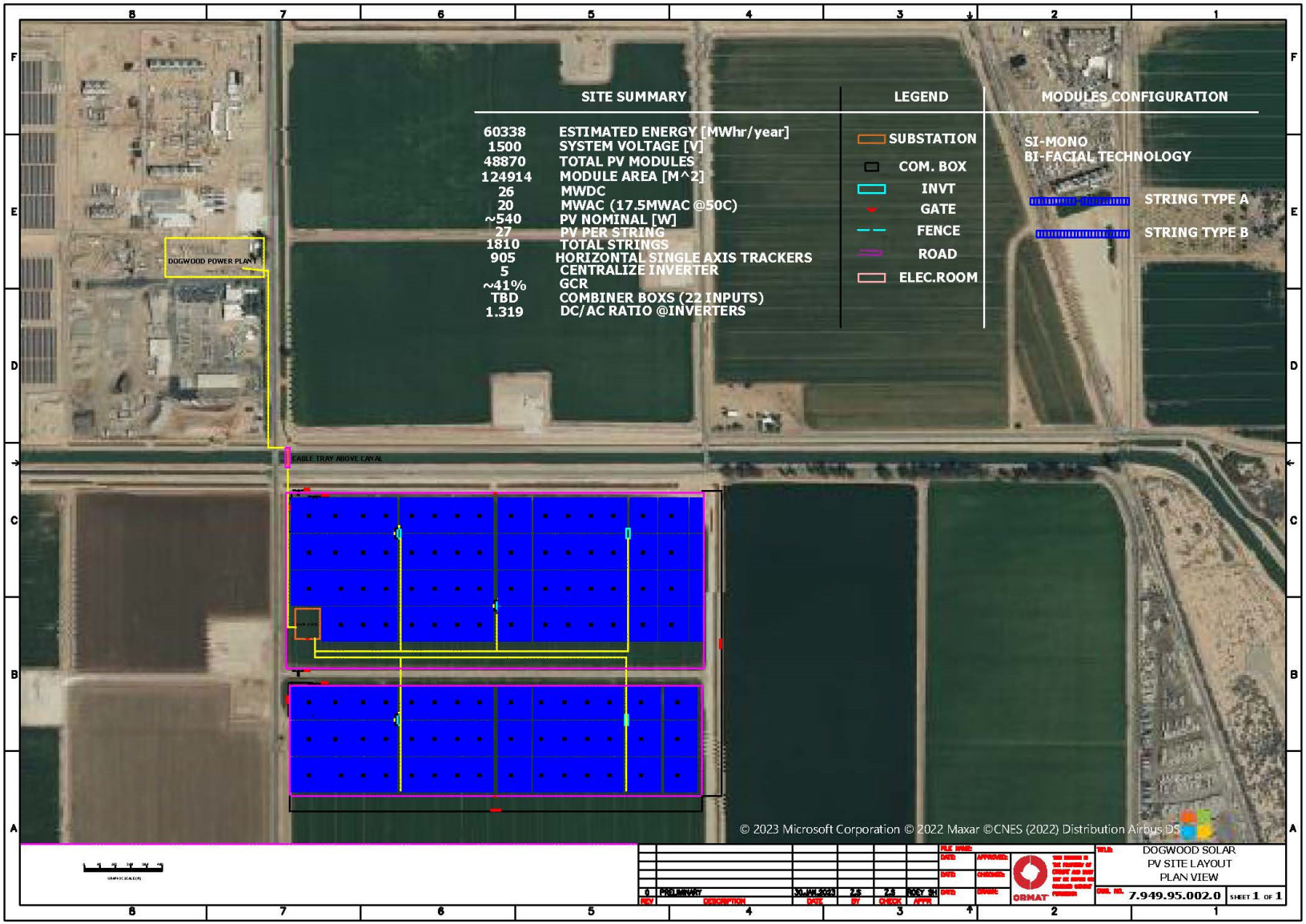


Figure 2. Dogwood and Heber 2 Solar Site Plan

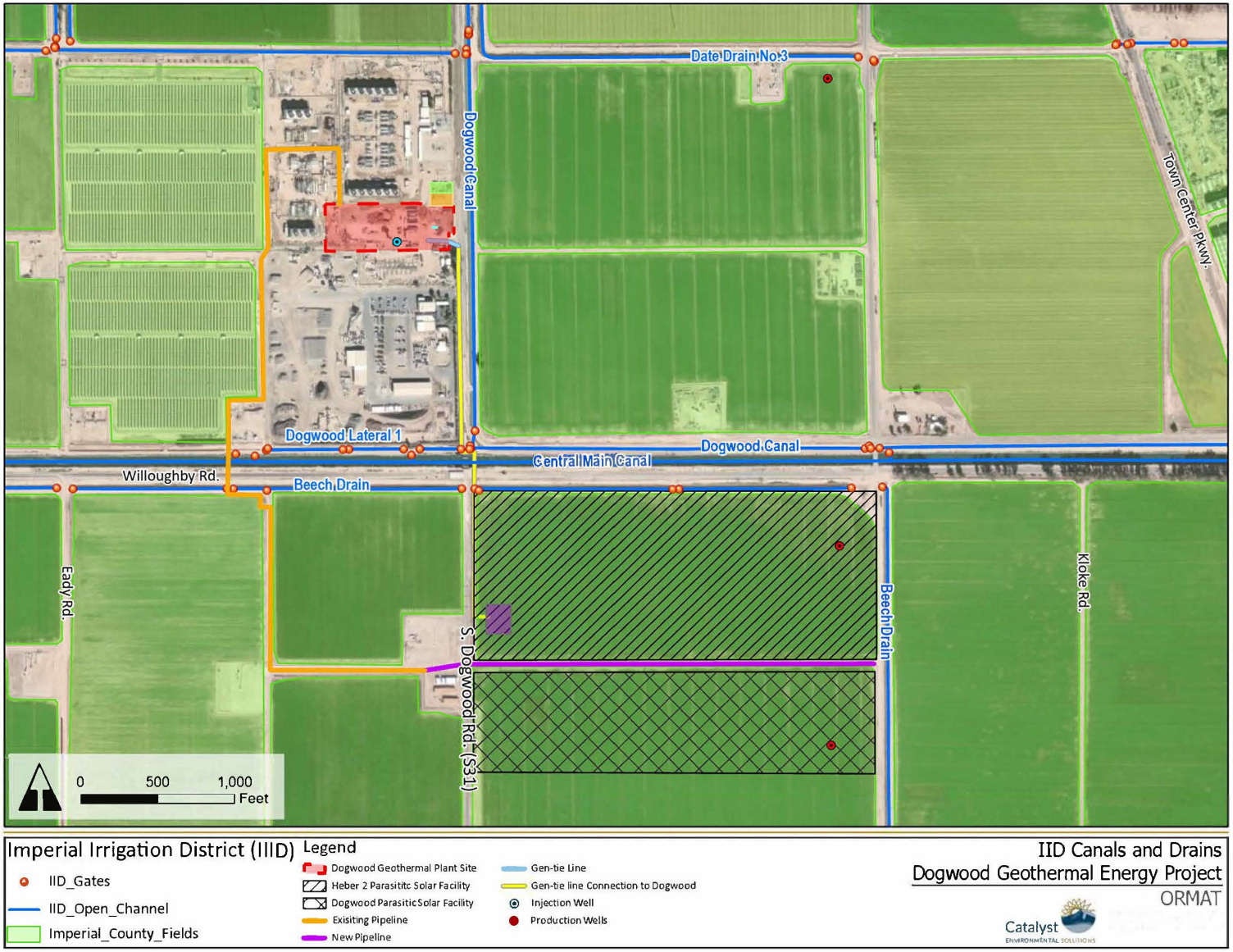


Figure 3. IID Canals and Drains.

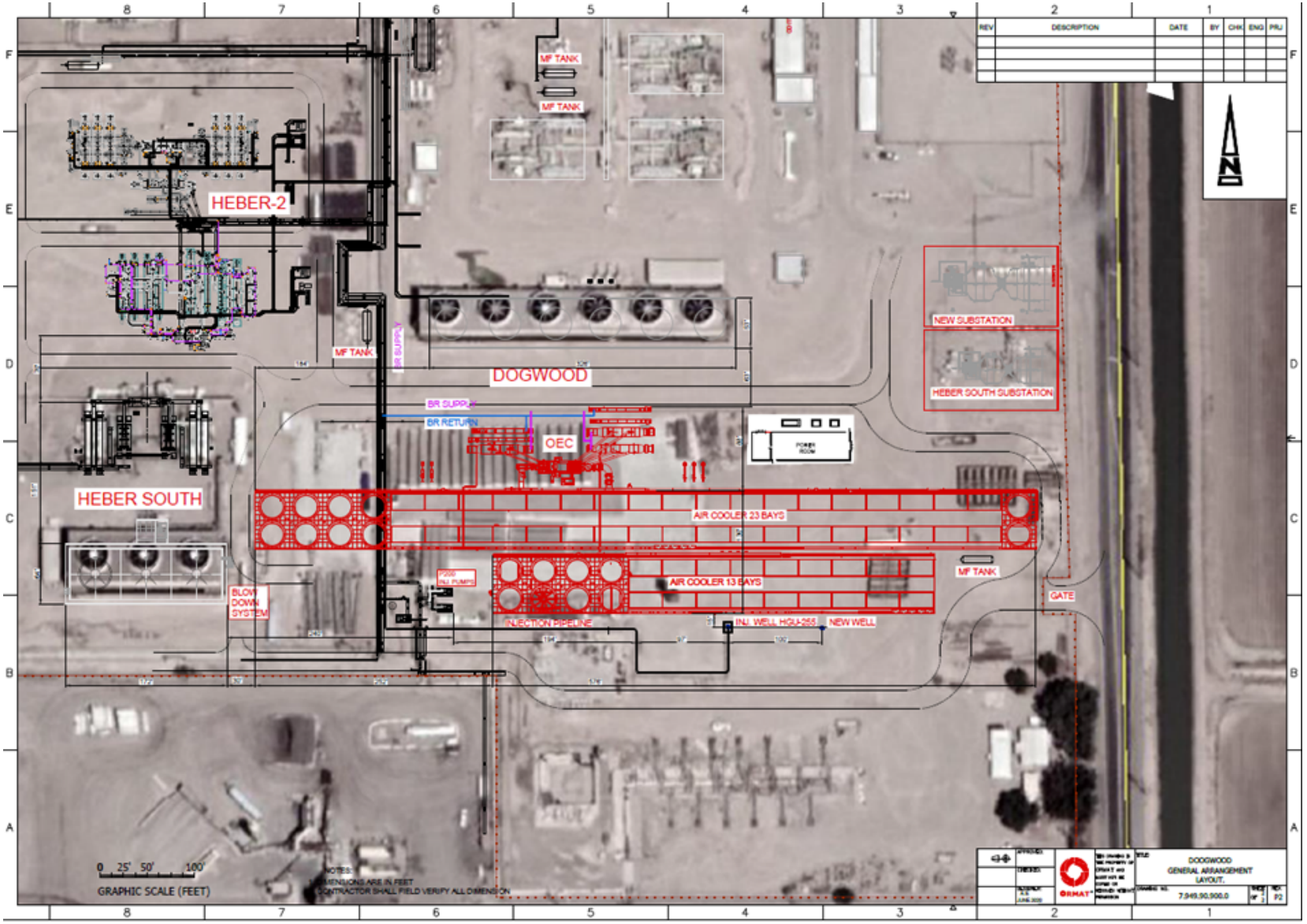


Figure 4. Dogwood Geothermal Site Plan