

	<b>Planning and Zoning Commission</b>  <b>STAFF REPORT</b>	Agenda # _____
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**TO:** CASA GRANDE PLANNING AND ZONING COMMISSION  
**FROM:** James Gagliardi, AICP, Planner  
**MEETING DATE:** November 6, 2014

**REQUEST**

**Request by Ben Lee of Water Works Engineers** for Arizona Water Company for the following land use approval at 1300 N Henness Rd (James Gagliardi):

1. **DSA-14-00171: Major Amendment to a Major Site Plan** to modify the existing site plan to show the placement of new equipment and storage tanks and arsenic treatment vessels for Arizona Water’s well site filtration facility.

**APPLICANT/OWNER**

Ben Lee, Water Works Engineers  
 7580 N Dobson RD #200  
 Scottsdale, AZ 85256  
 Phone: 480-661-1742 X112  
 Email: [benl@wwengineers.com](mailto:benl@wwengineers.com)

Arizona Water Company  
 3805 N Black Canyon Hwy  
 Phoenix, AZ 85015  
 Phone: 602-240-6860  
 Email: [jwilson@azwater.com](mailto:jwilson@azwater.com)

**HISTORY**

- October 2, 1989: The developed site was annexed into the City limits of Casa Grande with Ordinance No. 1178.18 known as the “I-194 Ordinance” and subsequently zoned UR.
- May 5, 2005: Conditional Use Permit and Site Plan approved (CGPZ-088-005) by the Planning & Zoning Commission for the allowance of a well site and arsenic treatment facility upon a UR-zoned property.
- May 10, 2005: Variance approved by the Board of Adjustment (BOA-01-005) allowing for an 8 ft. rear yard and 8 ft. side yard setback where 50 ft. is required to accommodate the facility.

October 6, 2014: Variance approved by the Board of Adjustment (DSA-14-00158) approving relief from setbacks to the R-1 zone district allowing a front setback of 10 ft. where 20 ft. is required, a rear setback 5 ft. where 20 ft. is required, and a side setback of 6.5 ft. where 10 ft. is required from the south-side property line.

October 20, 2014: City Council approved Ordinance No. 1178.366 changing the zoning of the property from UR (Urban Ranch) to R-1 (Single-family residential) allowing for less restrictive setbacks to help accommodate existing and proposed equipment on the property.

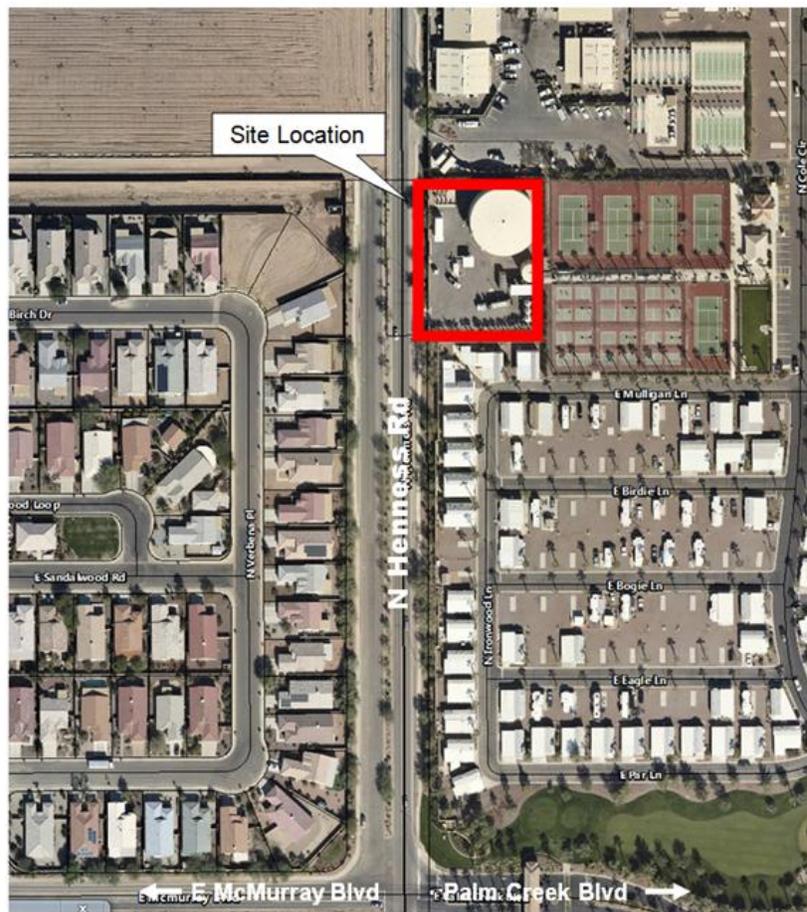
**PROJECT DESCRIPTION**

<b>Site Area</b>	.74 acres
<b>Current Land Use</b>	Arizona Water Company Well Site and Treatment facility
<b>Existing Zoning</b>	R-1 with a Conditional Use for well-site
<b>Existing General Plan 2020 Land Use</b>	<i>Neighborhoods</i>

**Surrounding Land Use and Zoning**

<b>Direction</b>	<b>General Plan Designation</b>	<b>Existing Zoning</b>	<b>Current Uses</b>
<b>North</b>	<i>Neighborhoods</i>	PAD – Palm Creek	Manufactured housing
<b>South</b>	<i>Neighborhoods</i>	PAD – Palm Creek	Manufactured housing
<b>East</b>	<i>Neighborhoods</i>	PAD – Palm Creek	Manufactured housing
<b>West</b>	<i>Neighborhoods</i>	R-2 (multi-family residential)	Single family residences

## SITE CONTEXT/AERIAL



### General Discussion

Arizona Water Company is requesting the approval of an amendment to their site plan that was approved in 2005 when modifications to the site were made to add equipment to their water treatment facility at that time. The applicant is proposing to place additional equipment and structures on the site to accommodate plans to expand the water treatment facility on the site (Exhibit A). Per the explanation provided within their project statement (Exhibit B), this expansion is necessary to the operations of removing arsenic out of the City's water supply.

### **Compliance with Major Site Plan Review Criteria**

Section 17.68.070 of the Zoning Code sets forth review criteria that need to be evaluated in conjunction with the consideration of a Major Site Plan application. Staff's analysis of how the proposed Major Site Plan complies with each of these criteria is as follows:

#### **1. Relationship of the plan elements to conditions both on and off the property**

As a well site and water treatment facility, the subject property serves a unique function, allowed via a conditional use permit within the zone district. To offset this use from surrounding development, there is an 8 ft. wall around the site with landscaping along the right of way in front of the site and enhanced landscaping

to the south of the site between the subject property and the residential area of Palm Creek RV Park.

**2. Conformance to the City's zoning ordinance**

The site was recently zoned R-1(single-family residential) from UR (Urban Ranch). The use of the site is approved through a Conditional Use Permit, which applies in either zone district.

**3. Conformance to the City's general plan**

The subject site is designated as *Neighborhoods* in the City's General Plan 2020. Though the General Plan does not provide specifics for utility-type purposes such as water tanks and treatment facilities, the site's use is designed to serve the community; and particularly supporting residential properties, which is the primary use found within the Neighborhoods category.

**4. The impact of the plan on the existing and anticipated traffic and parking conditions**

No Traffic Impact Analysis was needed for this application based upon the finding that the proposed expansion would not result in any significant traffic generation. The trips required by Arizona Water Company are not increasing due to the expansion.

**5. The adequacy of the plan with respect to land use**

The area is bordered by a principal arterial road (Henness) to the west, and the Palm Creek RV Park to the north, east, and south. There is an eight-foot wall that provides screening and a barrier between the uses and structures of the well site and Palm Creek. To the north and east of the site are Palm Creek's maintenance facility and tennis courts. There are not particular compatibility issues from those two directions. The biggest area of concern is to the south of the well site, where there are leased park models for seasonal residents of Palm Creek. Necessary steps were taken in 2005 in conjunction with approval of the original site plan to alleviate the impact that the equipment could have on the adjacent resident's enjoyment of their space. The condition of approval for that Site Plan was that the 8 ft. wall be constructed and that palm trees be planted with trunks as tall as the wall. Further steps were taken at that time to provide additional screening by planting evergreens in addition to the palm trees. This serves as added benefit because as the palm trees grew, their canopies became much taller than the wall; therefore they no longer specifically screen the site. The stoutness of the evergreens, however, sufficiently buffers the well site from the RV Park. This landscaping is not proposed to be disturbed. There will not be any increased noise as a result of the additional equipment. The Board of Adjustment approved the recent variances to the setbacks with the condition that if there is any noise beyond the limits of the enclosed site, the City, with the cooperation of the applicant, shall determine the most suitable noise mitigation to be implemented by the applicant (Exhibit C).

**6. Pedestrian and vehicular ingress and egress**

No additional vehicular access points, or modifications to the existing access, are being proposed with this amendment. As a well site and treatment facility there is no need for pedestrian access, a public sidewalk is adjacent to the site and is not affected by this proposal.

**7. Building location and height**

A conditional use within the R-1 Zone District requires front and rear setbacks of 20 ft. and side setbacks of 10 ft. The Board of Adjustment recently approved variances to allow the new equipment and treatment tanks to be placed 6.5 ft. from the south side property line, 5 ft. from the rear property line, and 10 ft. from the front property line. These variances were justified because the existing equipment is placed the same feet away as the variances being requested for the new equipment. The maximum height of the equipment is 17 ft.

**8. Landscaping**

The Major Site Plan identifies the types and sizes of existing trees and shrubs that surround the site. No additional landscaping is proposed, nor is any going to be displaced by the result of the proposed project.

**9. Lighting**

No lighting is proposed with the project, however a photometric plan was provided and no light emission occurs beyond the property boundary.

**10. Provisions for utilities**

The site is served by APS to provide power needed to run pumps and filtration equipment.

**11. Site drainage**

The site was developed prior to annexation into the City and there is no existing drainage report on file. This expansion of the facility necessitates that a drainage report be submitted and evaluated to determine if retention is required and to identify how any developed flows will be retained. The surface is gravel; so there already is a high degree of permeability on the site, and the equipment also consists of containment at their base which is used to catch some water run-off. As a condition of approval, however, a drainage report is to be submitted, and any modifications necessary to the site be made to support the findings of the drainage report.

**12. Open space**

N/A

**13. Loading and unloading areas**

No formal loading and unloading areas are proposed. Any loading activity will occur within the confines of the walls of the facility.

**14. Grading**

A grading plan has been provided (Exhibit D) however may need to be modified per the findings of the Drainage Report.

**15. Signage**

No signage is proposed with this Major Site Plan.

**16. Screening**

The site is currently screened with an 8 ft. masonry wall. Additionally, there is landscaping along the south side of the property and along Henness Rd.

**17. Setbacks**

See discussion under “building location and height”.

**18. Other related matters**

Elevations have been provided (Exhibit E) that provide detail of what the proposed treatment facility expansion looks like. There was a concern expressed by the Board of Adjustment regarding the management of the chemical handling at the site. There are state and federal agencies that monitor Arizona Water facilities. Locally, the fire department also monitors the storage and handling of hazardous chemicals, but did not have any comment regarding this site.

<p><b>Public Notification/Comments</b></p>
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Public hearing notification efforts for this request meet the requirements set out by City Code. They include:

- A notice was published in the Casa Grande Dispatch on October 21, 2014 at least fifteen (15) days before for the November 6, 2014 Planning Commission public hearing.
- Notice was mailed by the City on October 22, 2014 at least ten (10) days before the November 6, 2014 Planning Commission public hearing to each owner of property situated within 200 feet of the subject property. An affidavit confirming this is located in the project file.
- A sign was posted by the applicant before October 22, 2014 on the subject site informing the public that this application would be considered by the Planning Commission at November 6, 2014 meeting. An affidavit confirming this posting was supplied by the applicant.

**Inquiries/Comments**

At the time of this writing, no comments have been received. Palm Creek management was notified directly by staff of Arizona Water Company’s plans and they have not provided comment.

<b>RECOMMENDED MOTION</b>
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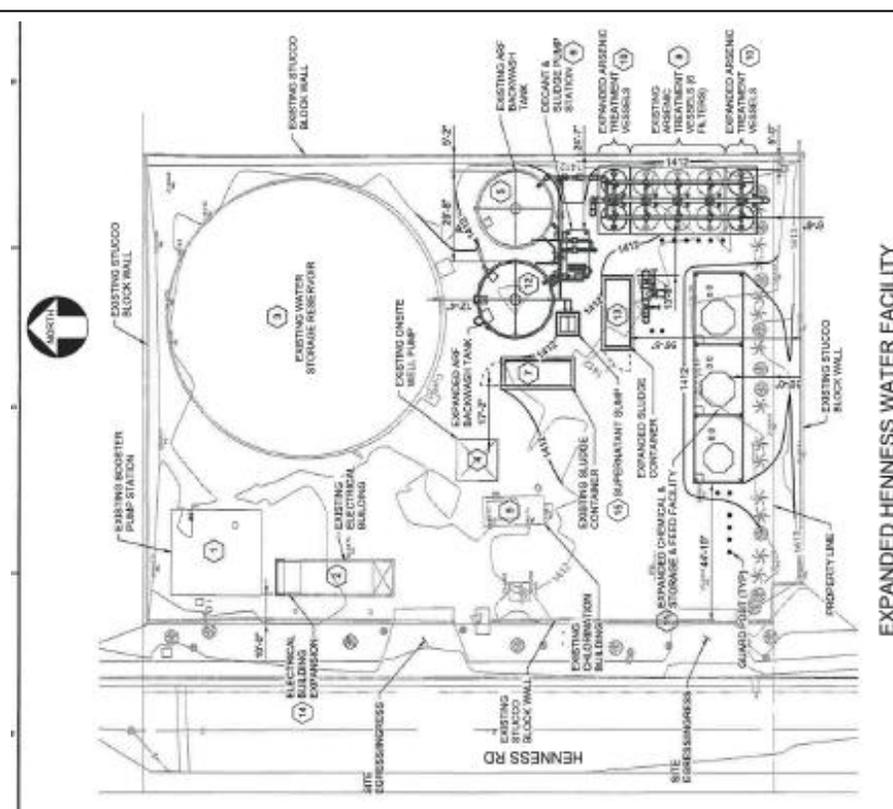
Staff recommends the Commission approve the **Major Site Plan Amendment DSA-14-00171** for the Arizona Water Company Arsenic Treatment Facility Site at 1300 N Hennes Rd, subject to the following condition:

1. A drainage report is to be submitted and approved, and the site plan modified to reflect any drainage facilities required by the drainage report.

**Exhibits**

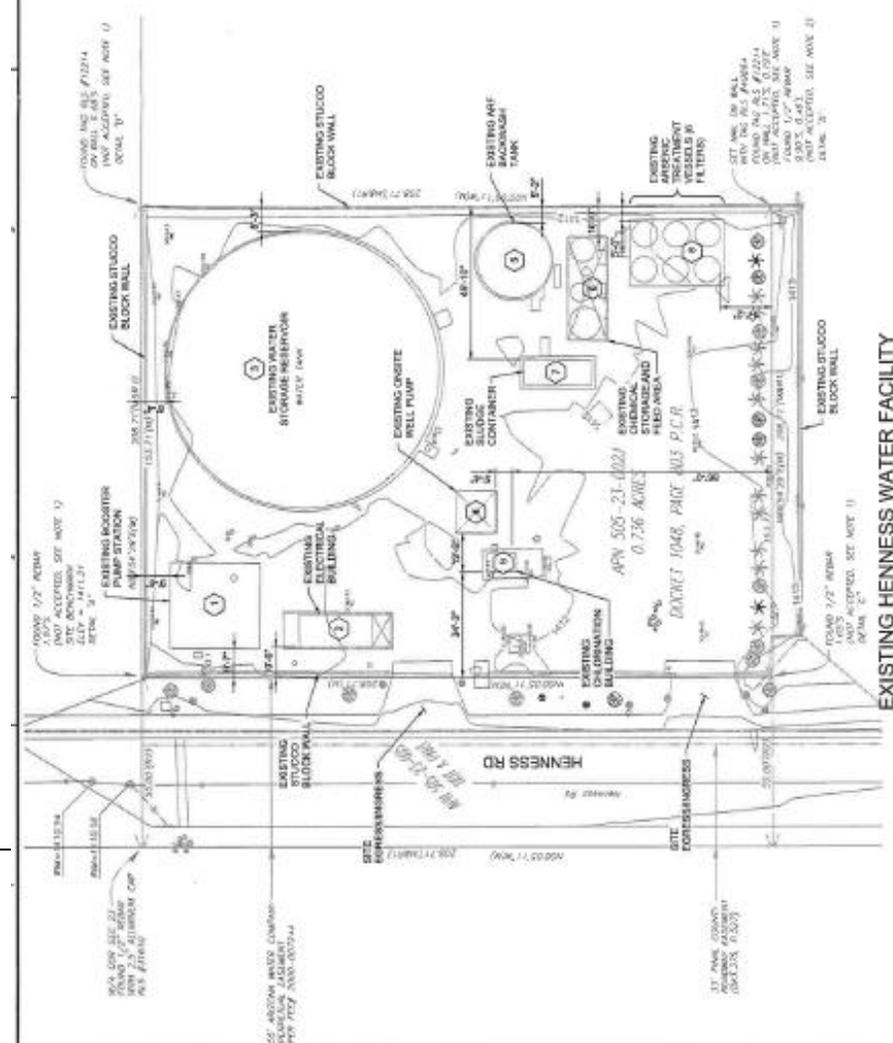
- Exhibit A- Major Site Plan
- Exhibit B- Project Narrative
- Exhibit C- Board of Adjustment minutes
- Exhibit D – Grading Plan
- Exhibit D – Elevations

Exhibit A – Major Site Plan



EXISTING HENNESS WATER FACILITY  
15.20

ITEM #	STRUCTURE	DIMENSION	USE
1	EXISTING BOOSTER PUMP STATION	28 FT X 30 FT	DELIVERS POTABLE WATER TO WATER DISTRIBUTION SYSTEM
2	EXISTING DIRTIE WELLS PUMP	30 FT X 36 FT	SECTION 14
3	EXISTING ELECTRICAL BUILDING	30 FT X 36 FT	DELIVERS POTABLE WATER TO WATER DISTRIBUTION SYSTEM
4	EXISTING ELECTRICAL BUILDING	15.8 FT X 13.8 FT	POTABLE WATER PUMP
5	EXISTING STUCCO BLOCK WALL	24.5 FT DIAMETER	AERobic TREATMENT BACKWASH WATER STORAGE
6	EXISTING AIR BACKWASH TANK	15.8 FT X 13.8 FT	HAPPS (SCANT AND S. BROS) TO TREATMENT PROCESSES
7	EXISTING SLUDGE CONTAINER	8 FT X 22 FT	SECTION 14
8	EXISTING CHEMICALS STORAGE AND FEED FACILITY	8 FT X 30 FT	DISINFECTION STORAGE AND FEED FOR THE WELL WATER
9	EXISTING TREATMENT VESSELS (6 FILTERS)	22 FT X 20 FT	EXPANDED AERobic TREATMENT FILTER VESSELS
10	EXISTING AERobic TANK	26.5 FT X 60.4 FT	CHEMICAL STORAGE AND FEED FACILITY
11	EXISTING AIR BACKWASH TANK	26.5 FT X 60.4 FT	CHEMICAL STORAGE AND FEED FACILITY
12	EXISTING SLUDGE CONTAINER	10.5 FT X 25.5 FT	TWO SLUDGE DEWATERING AND STORAGE
13	EXISTING ELECTRICAL BUILDING	12 FT X 41 FT	ELECTRICAL AND CONTROL CENTER FOR HENNESS FACILITY
14	NEW SUPERNATANT SLUMP	7 FT X 7 FT	PRETREATS AND PUMPS SLUDGE SUPERNATANT



EXPANDED HENNESS WATER FACILITY  
15.20

ITEM #	STRUCTURE	DIMENSION	USE
1	BOOSTER PUMP STATION	28 FT X 30 FT	DELIVERS POTABLE WATER TO WATER DISTRIBUTION SYSTEM
2	ELECTRICAL BUILDING	30 FT X 36 FT	ELECTRICAL AND CONTROL CENTER FOR HENNESS FACILITY
3	WATER STORAGE RESERVOIR	115.7' DIAMETER	POTABLE WATER STORAGE
4	DIRTIE WELLS PUMP	30 FT X 36 FT	GROUNDWATER WELLS PUMP
5	AIR BACKWASH TANK	24.5 FT DIAMETER	AERobic TREATMENT BACKWASH WATER STORAGE
6	CHEMICAL STORAGE AND FEED AREA	33 FT X 31 FT	CHEMICAL STORAGE AND FEED FACILITY
7	SLUDGE CONTAINER	22 FT X 21 FT	SLUDGE DEWATERING AND STORAGE
8	AERobic TREATMENT VESSELS (6 FILTERS)	22 FT X 21 FT	AERobic TREATMENT FILTER VESSELS
9	CHLORINATION BUILDING	6 FT X 10 FT	DISINFECTION STORAGE AND FEED FOR THE WELL WATER



# Project Narrative

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## **Project Description**

The Hennes Water Facility (Site) is owned and operated by Arizona Water Company (Company) and has been serving the City of Casa Grande community since 1980. Currently the Site consists of an Arsenic Removal Facility (ARF), water storage reservoir, onsite well, a booster pump station and ancillary equipment. The Hennes Water Facility is an essential part of the City's potable water infrastructure.

The Company must increase water production at the site to maintain a safe and reliable supply of drinking water to satisfy the community's growing water demand. The Company is currently in the design process to expand the ARF capacity to satisfy the community's growing water demand. Expansion of the ARF includes the addition of four arsenic treatment vessels, backwash and sludge handling facility, chemical storage and feed facility, and ancillary equipment necessary to comply with the United States Environmental Protection Agency (USEPA) Safe Drinking Water Act requirements. The ARF expansion design integrates the necessary equipment and also considers the minimum space required for operation and maintenance of the ARF, the onsite well, booster pump station, and the ancillary equipment within the Site.

**B. Request by Ben Lee of Water Works Engineers, on behalf of Arizona Water Company** for the following land use approval for a new water treatment and equipment within the R-1 zone district at 1300 N Henness Rd (APN # 505-23-002J):

1. **DSA-14-00158: Variance request** from Table 17.20.140 of the City Code to allow:
  - a. A front setback of 10 ft. where 20 ft. is required
  - b. A rear setback 5 ft. where 20 ft. is required
  - c. A side setback of 6.5 ft. where 10 ft. is required from the south-side property line. (Planner: James Gagliardi)

James Gagliardi, Planner came forward to present a brief overview of the case as stated in the Staff Report. Mr. Gagliardi read the Variance requests into the record. He explained the well site, arsenic treatment facility is located adjacent to Palm Creek RV Resort and was annexed into the City in 1989, therefore the use has been “grand fathered” in as a legal non-conforming use. Since this time Arizona Water Company has applied for and received a Conditional Use Permit (CUP), Variance, and their Zone Change request has received first reading by City Council and the 2<sup>nd</sup> reading of the Ordinance granting the Zone Change request will be considered by City Council on October 20<sup>th</sup> and become effective on November 18, 2014. Mr. Gagliardi stated the applicant requested the zone change from Urban Ranch (UR) to Residential (R-1) to make the site more conforming to the setback requirements of their existing and proposed structures. Mr. Gagliardi mentioned that the applicant is only proposing a new chemical storage and feed area. The remaining structures included in this request already exist and will only be expanded. He then overviewed the criteria for a Variance

mentioning the south side of this site that abuts the RV resort was mitigated in 2005, during the CUP process. The applicant planted trees and constructed a wall to address the visual impact to the abutting lots. Mr. Gagliardi read the conditions into the record. No public comments were received by staff.

Member Beck asked what chemicals were stored/used on site. He then stated the chemicals can cause a public hazard.

Mr. Gagliardi commented he did not know the specific names of the chemicals but stated the chemicals used are to extract the arsenic from the water. He indicated that the applicant could probably better address this issue for the Board.

Vice-Chairman Zeibak questioned if the Fire Department reviewed the access, setbacks and chemical storage.

Mr. Gagliardi replied the Fire Department reviewed the request; no comments were received.

Member Shaw-Rhodes questioned the noise and if any one from Palm Creek RV has commented. She then questioned the thickness of the wall.

Mr. Gagliardi stated no complaints regarding the noise were received from Palm Creek RV. He mentioned the applicant stated the noise is similar to a vacuum; this request will not intensify the noise. Mr. Gagliardi deferred the wall thickness question to the applicant.

Member Wright questioned the on-site retention.

Director Tice cited that if this Variance is approved the applicant will then need to go through the Major Site Plan (MSP) process, which is heard by the Planning and Zoning Commission. The MSP will address the access and drainage issues. Director Tice noted the MSP request is tentatively scheduled for the November 6, 2014, Planning Commission meeting.

Member Wright commented that the site has been through the original approval in 2005, and the drainage was not addressed at that time. He questioned how they can be assured the drainage will be addressed at MSP review.

Mr. Gagliardi stated drainage will be reviewed by the Planning Commission at the MSP stage. He pointed out most of the site is largely covered with pervious material, and the Engineer who reviewed this request did not have comments.

Member Beck questioned who will monitor the noise.

Mr. Gagliardi commented the best form of noise monitoring is complaint driven. When staff receives a complaint we ask Code Enforcement to go to the site and if the

complaint in valid then a notice will be sent to the property owner.

Vice-Chairman Zeibak made a call for the applicant to come forward.

James Wilson, 9094 E Halifax, Mesa, Senior Engineer with Arizona Water Company, came forward to address the Board. Mr. Wilson thanked staff and stated they are in agreement with the conditions. He then addressed the Boards questions. Mr. Wilson stated the chemicals they currently have on-site is ferric chloride, which is a coagulant that is added to the water to bond with the arsenic so it can be filtered out of the water. They also have hydrochloric acid, which improves the efficiency of the process and sodium hydrochloride bleach for disinfection. These chemicals have been on-site since 2005. Mr. Wilson then addressed the noise citing they have only received one complaint from Palm Creek and it was on a weekend when they were conducting on-site repairs and Palm Creek was holding a tennis tournament. When the complaint about the dust and noise was received they shut down working at the site until the tournament was over. He mentioned when they discharge their water it is directed to go into the Palm Creek RV Resorts ponds. Mr. Wilson stated the noise is like a vacuum and comes from the pumps; they are not requesting additional pumps so the noise level will be the same. He also added that the expansion should cut down on the site visits, which presently are daily; they have a weekly chemical delivery and waste removal visit.

Member Beck asked if there are any EPA restrictions and monitoring of the on-site chemicals.

Mr. Wilson stated there are restrictions. They have a compliance officer that monitors and tracks all the required information. He noted they do use secondary containment which is one of the requirements; it is a tank within a tank. They are proposing to demolish the existing chemical storage area and construct a new one which will incorporate a concrete spill containment area.

Member Beck questioned if the chemicals can become gas.

Mr. Wilson replied that if the hydrochloric acid or ferric chloride mixed with the chlorine it could release chlorine gas, but they have separate containment areas, so they will not combine. He noted they have been operating seven of these facilities and had no cross contamination issues. The facilities are regulated by ADEQ and EPA.

Vice-Chairman Zeibak questioned the height of the wall that abuts to Palm Creek RV Resort.

Mr. Wilson stated the wall is 8 feet tall and 8 inches thick.

Vice-Chairman Zeibak made a call to the public; no one came forward.

Member Shaw-Rhodes made a motion to approve DSA-14-00158 Variance to allow a front setback of ten (10) feet where twenty (20) feet is required, and a rear setback of

five (5) feet where twenty (20) feet is required and to allow a side setback of six and a half (6.5) feet where ten (10) feet is required from the south-side property line, with the following conditions:

1. This variance is for relief of setbacks from R-1 development standards, to become enacted by ordinance on November 18, 2014. If this property does not become R-1 zoned by ordinance, a new variance request shall be required to seek relief to setbacks within the UR zone.
2. If the equipment makes noise beyond the limits of the enclosed site, the City, with the cooperation of the applicant, shall determine the most suitable noise mitigation to be implemented by the applicant.

Chairman Garcia seconded the motion.

Member Beck asked that planning staff go over safety issues with chemicals and the EPA evacuation plan.

Director Tice stated he will ask the Fire Department to take a close look at the containment areas in conjunction with the Major Site Plan review.

The following roll call vote was recorded:

Member Shaw-Rhodes	Aye
Member Wright	Aye
Member Beck	Aye
Vice-Chairman Zeibak	Aye
Chairman Garcia	Aye

The motion passed 5 – 0.

# Exhibit D – Grading Plan



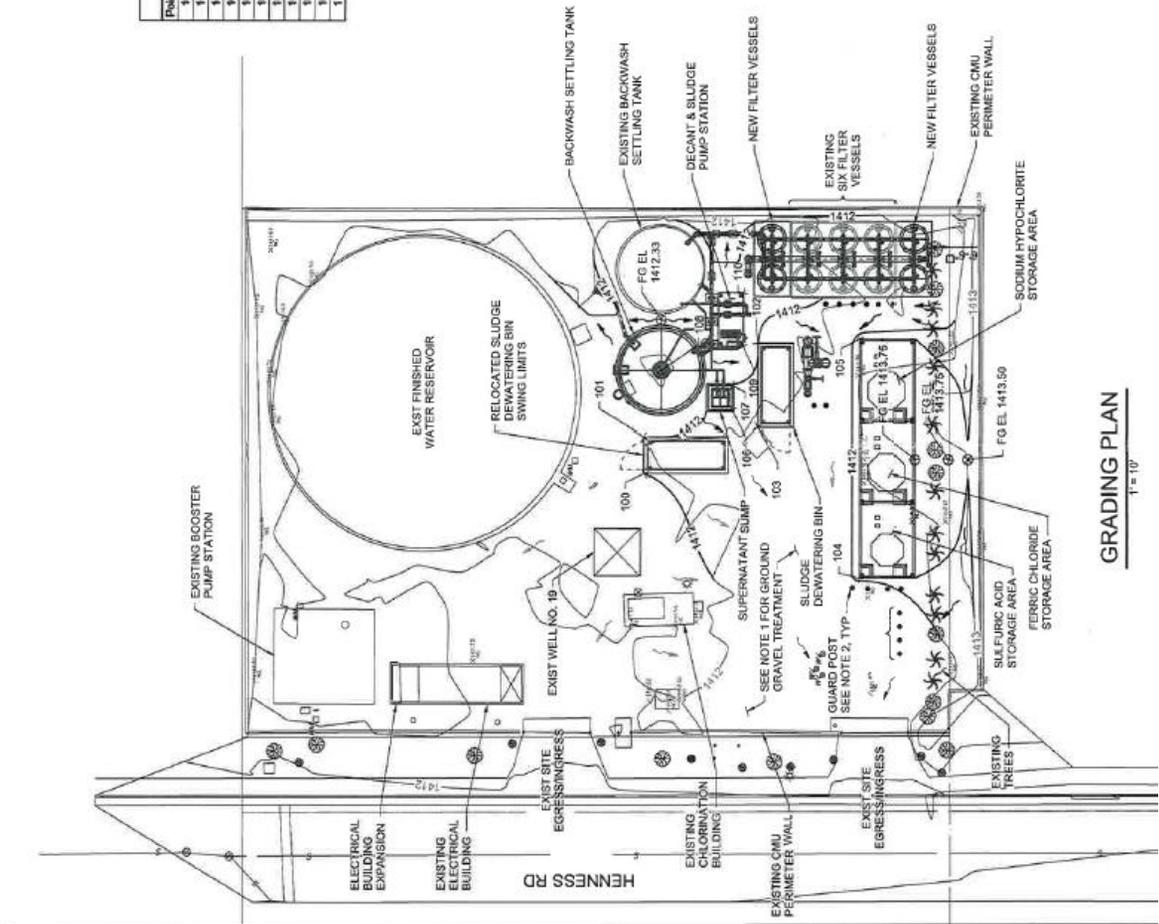
**NOTES**

1. GROUND GRAVEL TREATMENT SHALL BE REPLACED IN KIND.
2. FIELD LOCATE GUARD POST. LOCATION SHALL BE APPROVED BY ENGINEER PRIOR TO INSTALLATION.

Point ID	Northing	Easting	FG	Description
100	23245.74	36586.54	1412.00	SLUDGE DEWATERING BIN 40WB750
101	23245.74	36509.87	1412.00	SLUDGE DEWATERING BIN 40WB750
102	23216.48	36624.90	1412.00	SLUDGE DEWATERING BIN 40WB751
103	23216.48	36509.85	1411.95	SLUDGE DEWATERING BIN 40WB751
104	23171.60	36559.02	1412.25	CHEMICAL FACILITY
105	23171.60	36628.02	1412.25	CHEMICAL FACILITY
106	23219.15	36607.65	1412.00	SUPERNATANT SUMP
107	23219.15	36614.85	1412.00	SUPERNATANT SUMP
108	23240.26	36619.15	1412.67	CTR OF BACKWASH SETTLING TANK 2
109	32315.93	36623.05	1412.15	DECANT AND SLUDGE PUMP STATION
110	23215.94	36641.72	1412.15	DECANT AND SLUDGE PUMP STATION

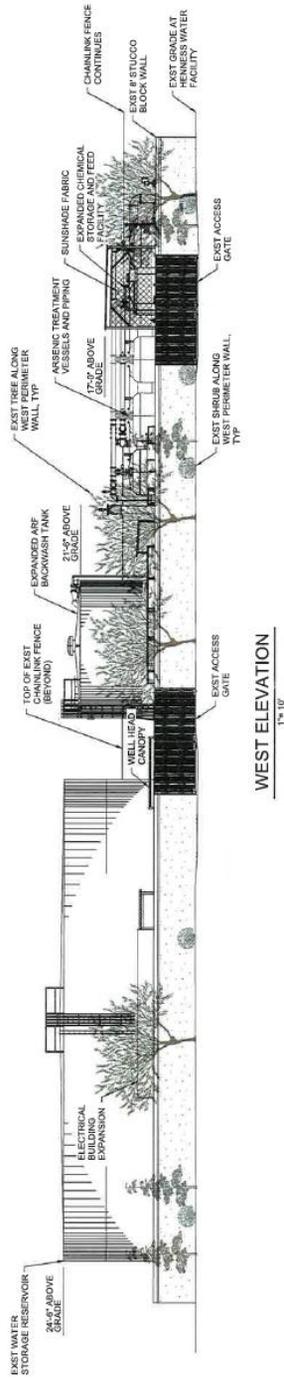
**LEGEND**

- 1412 — PROPOSED CONTOURS
- - - 1412 - - - EXISTING CONTOURS
- DRAINAGE ARROW

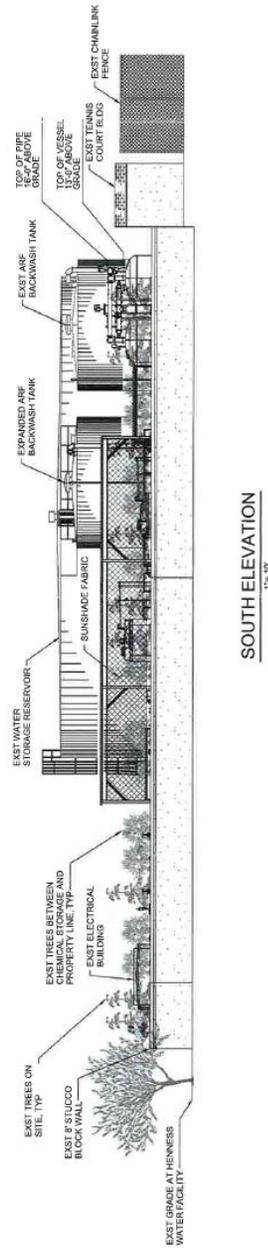


**GRADING PLAN**  
1" = 10'

# Exhibit E – Elevations



**WEST ELEVATION**  
1" = 10'



**SOUTH ELEVATION**  
1" = 10'