HOOPER CITY
PLANNING COMMISSION AGENDA
AUGUST 8, 2024 7:00PM

COUNCIL CHAMBERS
5580 W. 4600 S.
Hooper, UT 84315

Notice is hereby given that the Hooper City Planning Commission will hold a work meeting and their regularly scheduled meeting on Thursday, August 8, 2024, starting at 7:00pm at the Hooper Municipal Building located at 5580 W 4600 S Hooper, UT 84315.

Work Meeting – 6:30pm

1. Discussion on Agenda Items

Regular Meeting – 7:00pm

1. Meeting Called to Order
2. Opening Ceremony
    a. Pledge of Allegiance
    b. Reverence
3. Consent Items
    a. Motion – Approval of Minutes dated July 11, 2024
4. Action Items
    a. Conditional Use Permit Request for Steven Maughan for an oversized structure totaling 1,710 sq ft located at 5890 S 5900 W
        i. Enter a public hearing to receive public input on request.
        ii. Close the public hearing and proceed with the regular meeting.
        iii. Planning Commission Discussion and/or Motion on request
    b. Conditional Use Permit Request for Joshua Muir for an oversized structure totaling 1,536 sq ft with an accessory dwelling unit totaling 952 sq ft located at 4372 S 5400 W.
        i. Enter a public hearing to receive public input on request.
        ii. Close the public hearing and proceed with the regular meeting.
        iii. Planning Commission Discussion and/or Motion on request
    c. Motion- Condition Use Permit Request for Hooper Water Improvement District for a drinking water well and accessory buildings located at 4769 W 5100 S.
5. Citizen Comment *(Resident(s) attending this meeting will be allotted 3 minutes to express a concern about any issue that IS NOT ON THE AGENDA. No action can or will be taken on any issue presented.)*
6. Adjournment

Morghan Yeoman

Morghan Yeoman, City Recorder

In compliance with the American with Disabilities Act, persons needing special accommodations, including auxiliary communicative aids and services, for this meeting should notify the city recorder at 801-732-1064 or admin@hoopercity.com at least 48 hours prior to the meeting.

CERTIFICATE OF POSTING

The undersigned, duly appointed city recorder, does hereby certify that the above notice has been posted at the Hooper City Civic Center; the Utah Public Meeting Notice website; and hoopercity.com on or before July 11, 2024.

HOOPER CITY
PLANNING COMMISSION MEETING MINUTES
THURSDAY, JUNE 13, 2024, 7:00PM

COUNCIL CHAMBERS
5580 W. 4600 S.
Hooper, UT 84315

The Hooper City Planning Commission held a work meeting at 6:30pm and their regular meeting at 7pm on July 11, 2024, at the Hooper City Civic Center located at 5580 W. 4600 S, Hooper, UT 84315.

PLANNING COMMISSION MEMBERS PRESENT:
Amanda Prince- Chair
Blake Cevering
Sheldon Greener – Vice Chair
Bryce Widdison
Jessica Smith

COMMISSION MEMBERS EXCUSED:

CITY STAFF & CITY COUNCIL PRESENT:
Morghan Yeoman – City Recorder
Lieutenant Lavely – Weber County Sheriff

AUDIENCE PRESENT:
Jenny Stanger, Travis Bates, Kamie Hubbard, Brian Dalton, Clint Osiek, Linda Osiek, Efrain Perez, Thane Fowers, Bruce Taylor, Patrick Grieco, Staci Grieco, BJ Hatch, Drew Miskin, Teanna Hancock

6:30PM WORK MEETING

1. Discussion on Agenda Items

   The Planning Commission held a work session where agenda items were discussed.

7:00PM REGULAR MEETING

1. Meeting Called to Order

   At 7:00pm Commissioner Greener called the meeting to order.

2. Opening Ceremony
   a. Pledge of Allegiance

      Commissioner Greener led in the Pledge of Allegiance.

   b. Reverence

Commissioner Prince offered reverence.

3. Consent Items
   a. Motion – Approval of Minutes dated June 13, 2024
   Changes have been made.

COMMISSIONER CEVERING MOTIONED TO APPROVE THE MINUTES DATED JUNE 13, 2024 WITH THE MINOR CHANGES THAT WERE LISTED BY COMMISSIONER PRINCE. COMMISSIONER WIDDISON SECONDED THE MOTION. VOTING AS FOLLOWS:

COMMISSIONER:	VOTE:
GREENER	AYE
PRINCE	AYE
SMITH	AYE
WIDDISON	AYE
CEVERING	AYE

MOTION PASSED.

4. Action Items

   a. Motion- Appointment of 2024 Planning Commission Chair

COMMISSIONER CEVERING MOTIONED TO APPOINT AMANDA PRINCE AS THE PLANNING COMMISSION CHAIR FOR 2024. COMMISSIONER WIDDISION SECONDED THE MOTION. VOTING AS FOLLOWS:

COMMISSIONER:	VOTE:
GREENER	AYE
PRINCE	AYE
WIDDISON	AYE
SMITH	AYE
CEVERING	AYE

MOTION PASSED.

   b. Motion- Appointment of 2024 Planning Commission Vice- Chair

COMMISSIONER PRINCE MOTIONED TO APPOINT SHELDON

GREENER AS THE PLANNING COMMISSION VICE CHAIR FOR 2024. COMMISSIONER WIDDISION SECONDED THE MOTION. VOTING AS FOLLOWS:

COMMISSIONER:	**VOTE:**
WIDDISON	**AYE**
GREENER	**AYE**
PRINCE	**AYE**
SMITH	**AYE**
CEVERING	**AYE**

MOTION PASSED.

c. Conditional Use Permit request for Clint & Linda Osiek for an oversized structure totaling 2,460 sq ft located at 5526 S 6700 W.

Morghan Yeoman, the city recorder, gave a presentation. Morghan explained what the structure will look like. The size and height of the structure. Explained that it will be used for storage. Clint Osiek will be putting plumbing and electrical within the building. Clint mentioned that there will be a hydrant on the outside of the building. Commissioner Cevering questioned if there will be plumbing inside the building. If so, they have a septic system and would need to talk with the health department on a plan.

No Public Comments

COMMISSIONER PRINCE MOTIONED TO TABLE THE FINAL APPROVAL OF THE FOWERS LEGACY SUBDIVISION LOCATED AT 4815 S 6700 W UNTIL JULY 2024. COMMISSIONER WIDDISION SECONDED THE MOTION. VOTING AS FOLLOWS:

COMMISSIONER:	**VOTE:**
WIDDISON	**AYE**
GREENER	**AYE**
PRINCE	**AYE**
CEVERING	**AYE**
CEVERING	**AYE**

MOTION PASSED.

d. Conditional Use Permit request for BJ Hatch for an oversized structure totaling 2,496 sq ft located at 5113 S 5300 W.

Morghan Yeoman, the city recorder, gave a presentation. Morghan explained what the structure will look like. Explained that the structure will not have

plumbing or electrical, possibly in the future and will be used for storage. Will be accessing it from 5100 S. BJ confirmed it will used for storage as well as the access point from 5100 S.

COMMISSIONER CEVERING MOTIONED TO APPROVE THE CONDITIONAL USE PERMIT REQUEST FOR BJ HATCH FOR AN OVERSIZED STRUCTURE TOTALING 2,496 SQ FT LOCATED AT 5113 S 5300 W. COMMISSIONER WIDDISON SECONDED THE MOTION. VOTING AS FOLLOWS:

COMMISSIONER:	**VOTE:**
WIDDISON	**AYE**
GREENER	**AYE**
PRINCE	**AYE**
SMITH	**AYE**
CEVERING	**AYE**

MOTION PASSED.

e. Final review for Perez Subdivision located at 5998 S 5100 W

Morghan Yeoman, the city recorder, gave an explanation on the Subdivision. Morghan also explained that the plat had been updated like requested from City Staff. Brandon Richards, our city attorney explained the issues with the dirt that is on the remainder parcel. The city will still need to enforce the ordinance and have it come in compliance, but doesn't have anything to do with the one acre that is being requested. Brandon Richards suggested that all items notated on the memo needs to be turned into the city before going onto the city council agenda. Planning Commissioners and Efrain discussed items on the memo.

Thane Fowers located at 4615 S 6700 W commented that JUB should be here to the meetings.

COMMISSIONER CEVERING MOTIONED TO APPROVE THE FINAL REVIEW OF THE PEREZ SUBDIVISION LOCATED AT 5998 S 5100 W. WITH THE CONDITION THAT ALL TEN ITEMS ARE TAKEN CARE OF FROM THE JUB MEMO DATED JULY 9 AND JARED HANCOCK EMAIL DATED JULY 11 BEFORE GOING TO CITY COUNCIL . COMMISSIONER GRENNER SECONDED THE MOTION. VOTING AS FOLLOWS:

COMMISSIONER:	**VOTE:**

WIDDISON	**AYE**
GREENER	**AYE**
PRINCE	**AYE**
CEVERING	**AYE**
GREENER	**AYE**

MOTION PASSED.

f. Discussion – Ordinance 10-4A-18; Fencing

Commissioner Prince explained that the Public Works Director, Jared Hancock, and our previous engineer, Briant Jacobs, created a proposed language for the Ordinance. Commissioner Cevering questioned the wording 'applicant' if that is for a subdivision applicant, developer, or anybody. Commissioner Prince mentioned some additional changes that she though would be beneficial. Commissioner Greener talked about getting the permit issued until fence is installed.

g. Moderate Housing Plan

Mayor Bingham explained what the information in the packet is and what the report entails. Mayor explained that she would like to be looking into this report throughout the year. Discussion and comments between the mayor and planning commissioners were made. Brandon Richards, our city attorney, explained to just submit the three (3) strategies that we have and if council would like to add more, they can.

5. Citizen Comment

(Resident(s) attending this meeting will be allotted 3 minutes to express a concern about any issue that IS NOT ON THE AGENDA. No action can or will be taken on any issue presented.)

No public comment.

Mayor Bingham explained that there will be two (2) planning commission meetings happening in August. Discussion between commissioners on what day would work best for all.

6. Adjournment

AT APPROXIMATELY 8:17 PM, COMMISSIONER GREENER MOTIONED TO ADJOURN THE MEETING. COMMISSIONER WIDDISON SECONDED THE MOTION. VOTING AS FOLLOWS:

COMMISSIONER:	**VOTE:**
WIDDISON	**AYE**
GREENER	**AYE**
PRINCE	**AYE**
CEVERING	**AYE**
SMITH	**AYE**

MOTION PASSED.

Date Approved: _____

_____

Morghan Yeoman, City Recorder

Mailers $29.00

Hooper City
5580 W. 4600 S.
Hooper, UT 84315
Office 801-732-1064

Fee: $200.00
Date Submitted 7/10/24

Conditional Use Permit: Oversized Structure

Print Applicant Name: Steven Maughan
Address: 5640 S. 5900 W. Hooper, UT
Phone #: [redacted]
Day Time Phone #: [redacted] Email: [redacted]

☐ **Provide site plan drawings including all of the following: (Site plan must be to scale).**

- Map of property showing adjacent streets
- Building dimensions and distance from other structure
- Distance from property lines. (The drip edge must be at least 5 feet from property lines. If you are on a corner lot or have easements attached to your property it may be more than the 5 feet.)
- List any easements on property
- Roof pitch, roof height, roofing material and drip line distance to other structure and property lines
- Concept drawing of what structure will look like
- Building materials
- Driveway materials
- Landscaping design

Total Sq. footage of Structure: 1,710 sq ft.
Height of Structure: 21.10 1/16"

☐ What will the structure be used for? Storage
☐ Will any plumbing be installed in the structure? Yes ____ No X
☐ Will any electricity be installed in the structure? Yes X No ____
☐ Will structure be used for a business? Yes X No ____
If yes, have you applied for a business license with Hooper City? Yes X No ____
Explain: manufacturing/storage of product.

❖ The State requires all property owners within 600 feet from your parent property (front, sides and back) to be notified. There will be an additional fee of $1.00 for every notice that is sent out.

Please address these issues on the back of this application.

Traffic problems	Safety issues	Noise	Parking
Fencing	Pollution	Odors	Design
Business operation	Use of structure	Easements	

I hereby certify that the above information is accurate to the best of my knowledge. I certify that I will comply with all state and local requirements before and after building this structure. I understand that if conditional use does not start within (12) months and also if the conditional use is discontinued for (12) consecutive months, the Conditional Use Permit will expire. If my conditional use changes I will notify Hooper City for a Conditional Use Permit review. I or a representative will be present at the Planning Commission Meeting.

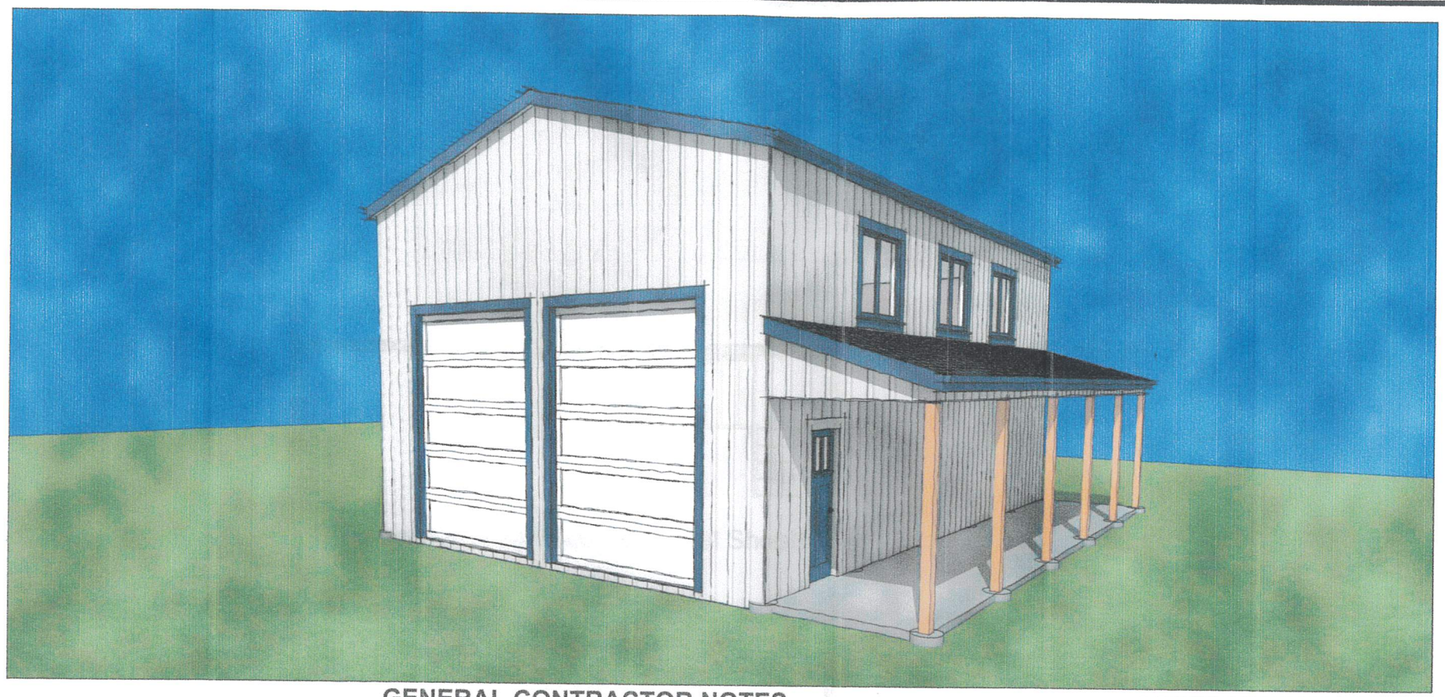
Signature: [signature] Date: 07/10/2024

****

_____ Approval Date: _____ Disapproval Date: _____
Planning Commission Chairman

Comments/Conditions: _____

Completed application, fee and all other documents must be submitted three weeks before a Planning Commission Meeting which is the 2nd Thursday of the month unless otherwise specified.



INDEX

SHEET	DESCRIPITON
1	TITLE PAGE
2	1ST FLOOR PLAN
3	2ND FLOOR PLAN
4	FOUNDATION PLAN
5	ROOF PLAN
6	2ND FLOOR FRAMING PLAN
7	FRONT & REAR ELEVATION
9	LEFT & RIGHT ELEVATION

GENERAL CONTRACTOR NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE TO THE 2021 INTERNATIONAL RESIDENTIAL CODE.

THE GENERAL CONTRACTOR ASSUMES FULL RESPONSIBILITY TO FIELD-VERIFY THE CONDITIONS, DIMENSIONS, AND STRUCTURAL DETAILS OF THE BUILDING. UNLESS OTHERWISE NOTED, ALL DETAILS, SECTIONS AND NOTES SHOWN ON THE CONTRACT DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR CONDITIONS ELSEWHERE.

ALL OMISSIONS AND/OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE CONTRACT DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF BOTH THE DESIGNER AND ENGINEER BEFORE PROCEDDING WITH ANY WORK INVOLVED.

THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF AND THE SAFETY IN AND AROUND THE JOB SITE.

THE GENERAL CONTRACTOR AND/OR OWNER SHALL KEEP LOADS ON THE STRUCTURE WITHIN THE LIMITS OF THE DESIGN BOTH DURING AND AFTER CONSTRUCTION.

COMPLIANCE WITH CODES AND ORDINANCES GOVERING THE WORK SHALL BE MADE AND ENFORCED BY THE GENERAL CONTRACTOR MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION OF MATERIALS SHALL BE FOLLOWED.

THE GENERAL CONTRACTOR ASSUMES FULL LIABILTY FOR ANY PROBLEMS THAT MAY ARISE DUE TO POTENTIAL ERRORS, OMMISONS, AND/OR CONFLICTS ON THESE PLANS. USE OF THESE PLANS FOR BUILDING PURPOSES CONSTITUTES COMPLIANCE WITH THE ABOVE TERMS.

ACCEPABLE USAGE POLICY

THE CUSTOMER UNDERSTANDS THAT THESE HOUSE PLANS ARE THE INTELLECTUAL PROPERTY OF ELITE DRAFTING & DESIGN, LLC, AND ALL ROYALTIES DERIVED THEREFROM ARE THE SOLE PROPERTY OF ELITE DRAFTING & DESIGN, LLC.

ANY MODIFICATIONS, DUPLICATIONS, OR DERIVATIVE WORKS OF THESE PLANS WITHOUT THE EXRESS WRITTEN CONSENT OF ELITE DRAFTING & DESIGN, LLC. IS STRICTLY PROHIBITED BY COPY RIGHT LAW.

THE CUSTOMER IS GRANTED A ONE-TIME USAGE LICENSE FOR THESE PLANS.

THIS USAGE LICENSE IS ONLY VALID FOR THE CUSTOMER SPECIFIED ON THESE PLANS. USAGE BY ANY OTHER COMPANY OR PERSON IS STRICTLY FORBIDDEN AND IS A VIOLATION OF COPYRIGHT LAW.

THIS USAGE LICENSE IS NON-TRANSFERABLE AND AS SUCH THE USAGE LICENSE HAS NO RESALE VALUE.

ELITE DRAFTING & DESIGN, LLC. RESERVES THE RIGHT TO MODIFY THE ACCEPTABLE USAGE POLICY IN THE FUTURE AS NECESSARY TO MAINTAIN COPYRIGHT PROTECTION.

USAGE OF THESE PLANS FOR BUILDING PURPOSES CONSTITUTES COMPLIANCE WITH THE ABOVE TERMS.

11"x17" = SCALE: 1/8"=1'
22"x34" = SCALE: 1/4"=1'

DRAWN BY:	KF	1/1/18
CHECKED BY:		
APPROVED BY:		
ISSUED BY:		

ELITE DRAFTING & DESIGN, LLC
PHONE: (435) 881-0140
EMAIL: elitedrafting23@gmail.com
WEBSITE: designmyhouseplans.com

ELITE DRAFTING & DESIGN

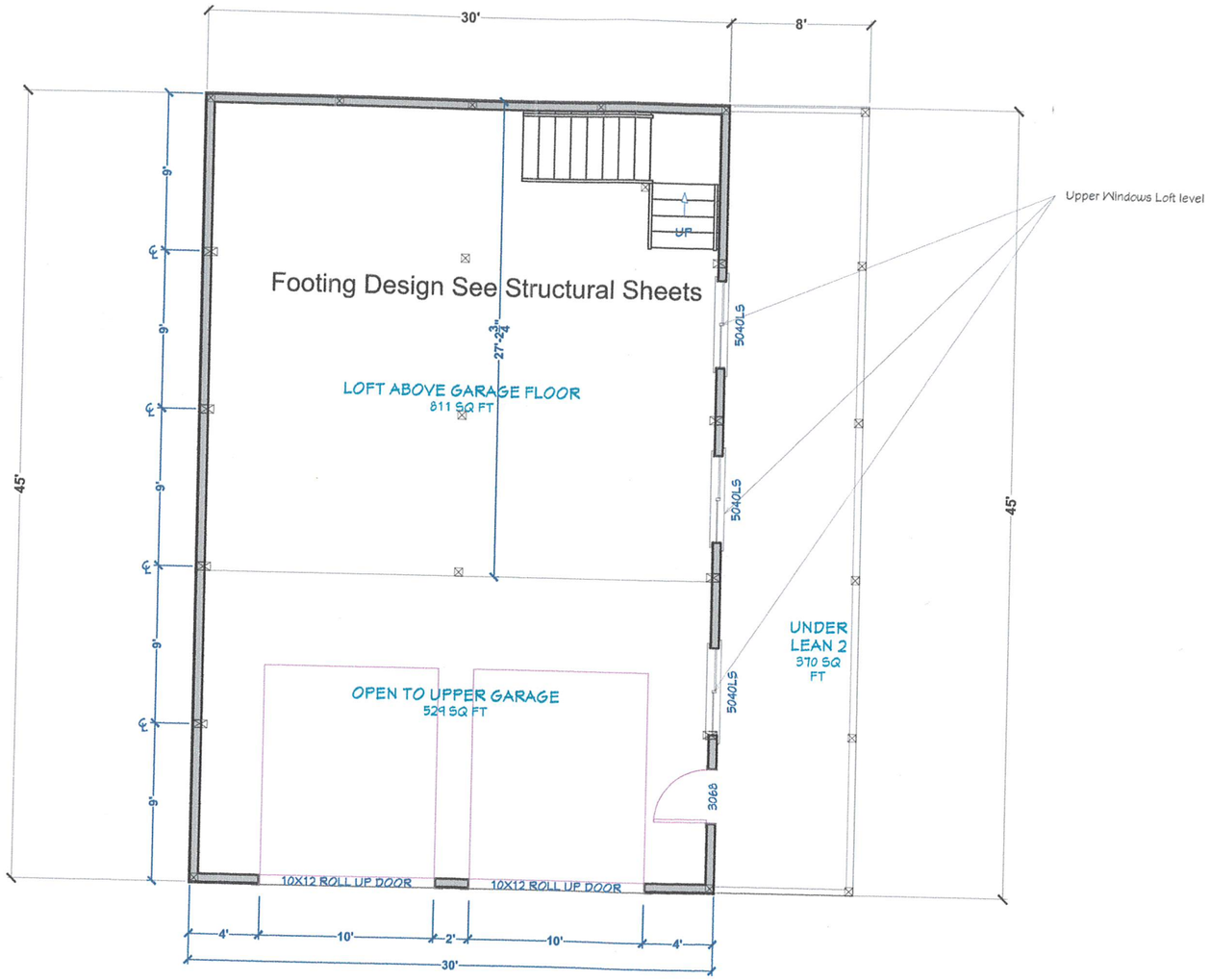
STEVEN MAUGHAN

PROJECT ADDRESS:
5890 S 5900 W,
HOOPER, UTAH, 84315

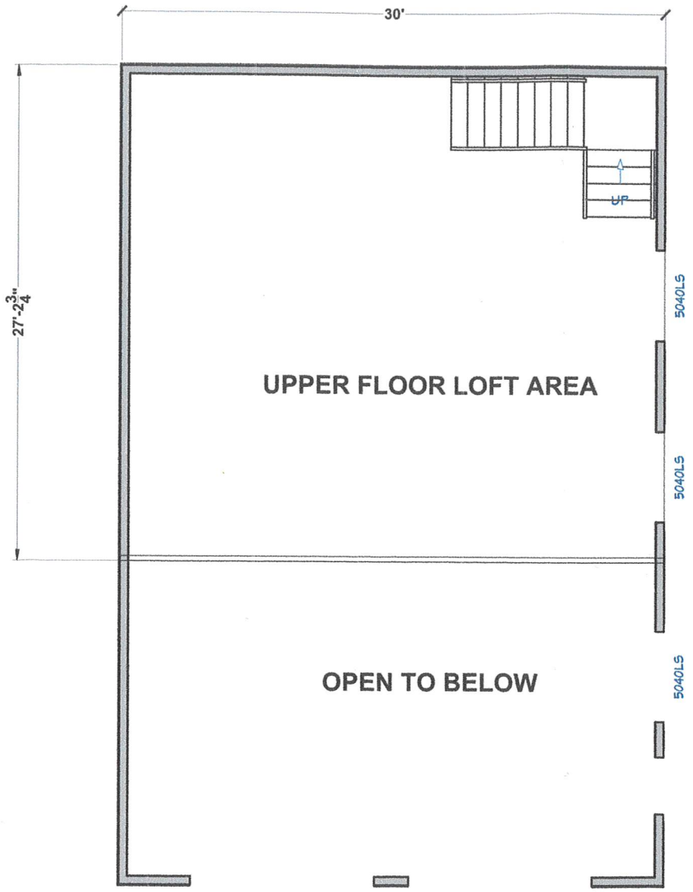
DRAWING NUMBER

SHEET: 1 OF 8

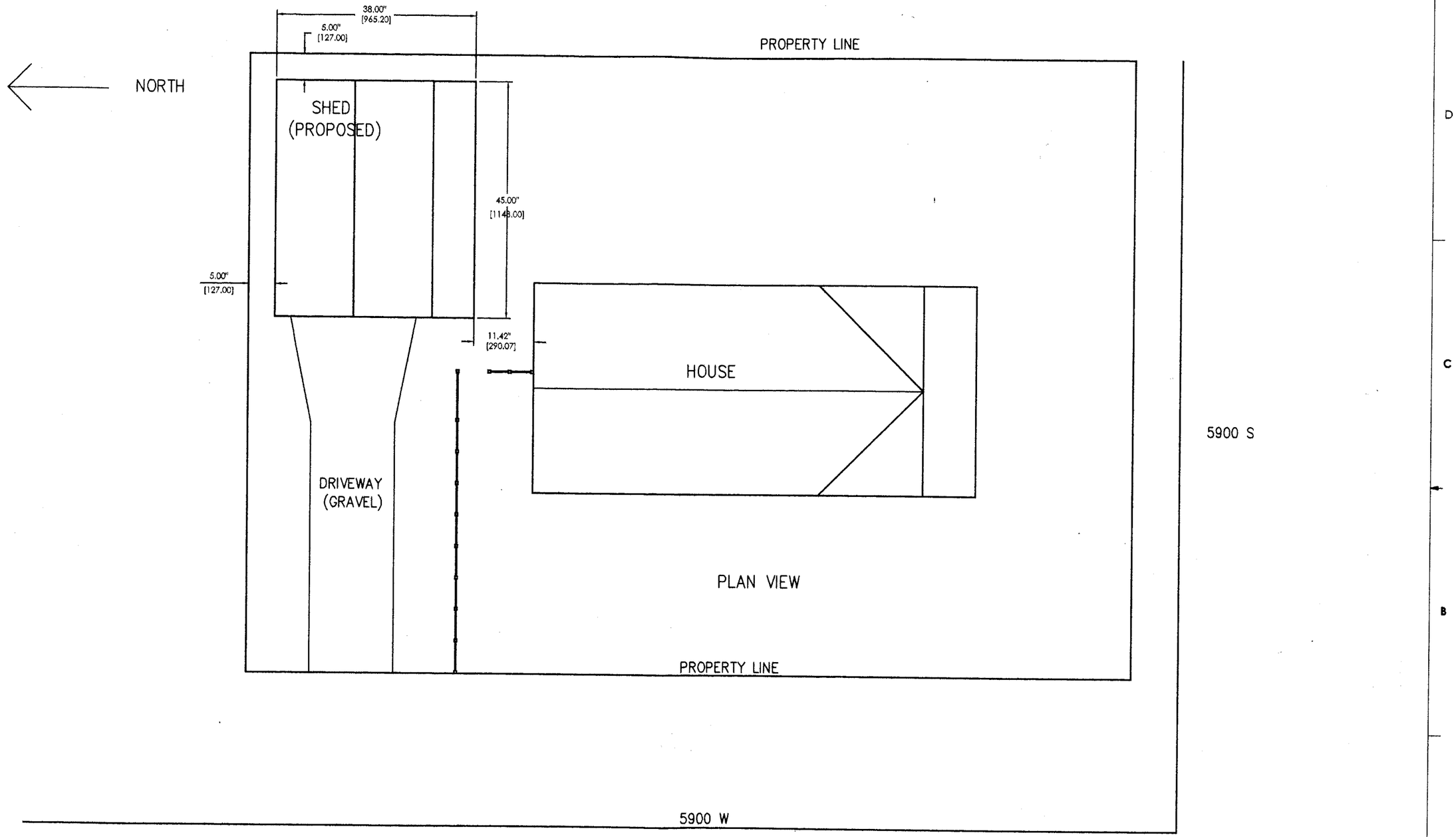
REV:



DESIGN BY:	DRAWN BY:	KF	2/23/16	THIS DRAWING IN DESIGN AND DETAILS IS THE PROPERTY OF THE USG CORPORATION AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	**ELITE DRAFTING & DESIGN**
	CHECKED BY:				**STEVEN MAUGHAN**
	APPROVED BY:				**PROJECT ADDRESS:** 5890 S 5900 W, HOOPER, UTAH, 84315
	ISSUED BY:				
11"x17"= SCALE: 1/8"=1' 22"x34"= SCALE: 1/4"=1'	**ELITE DRAFTING & DESIGN, LLC** PHONE: (435) 881-0140 EMAIL: elitedrafting23@gmail.com WEBSITE: designmyhouseplans.com				DRAWING NUMBER SHEET: 2 OF 8 REV:



DESIGN BY:	DRAWN BY:	KF	2/23/16	THIS DRAWING IN DESIGN AND DETAILS IS THE PROPERTY OF THE USG CORPORATION AND IN ST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	ELITE DRAFTING & DESIGN
	CHECKED BY:				STEVEN MAUGHAN
	APPROVED BY:				PROJECT ADDRESS: 5890 S 5900 W, HOOPER, UTAH, 84315
	ISSUED BY:				
11"x17"= SCALE: 1/8"=1' 22"x34"= SCALE: 1/4"=1'	ELITE DRAFTING & DESIGN, LLC PHONE: (435) 881-0140 EMAIL: elitedrafting23@gmail.com WEBSITE: designmyhouseplans.com				DRAWING NUMBER SHEET: 3 OF 8 REV:



NOTES:

REV	DESCRIPTION	NAME	DATE
A	INITIAL RELEASE	SRM	07/09/24

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES:
FRACTIONAL ±1/16"
ANGULAR BEND ±1°
TWO PLACE DECIMAL ± .06
THREE PLACE DECIMAL ± .003

PREMIER AIR SOLUTIONS, INC.

CUSTOMER:	PO. NO:		WO. NO:	DESCRIPTION: MAUGHAN SHED PLAN VIEW	
LOCATION:		NAME	DATE	MATERIAL:	THICKNESS:
	DRAWN:	SRM	07/09/24		
MODEL NO:	APPR:			FINISH:	
	SCALE: N/A	SHEET 1 OF 1		DRAWING NO: 400001	REV A

☐ 34 Mailers
☐ Fee: $200.00
Date Submitted_____

Hooper City
5580 W. 4600 S.
Hooper, UT 84315
Office 801-732-1064

Conditional Use Permit: ADU

Print Applicant Name: Joshua Muir
Address: 4372 S 5400 W
Phone #: [redacted]
Day Time Phone #: [redacted]

Reason for conditional use: MOTHER IN LAW IS DECLINING IN HEALTH

Describe use of property: MOTHER IN LAW APARTMENT

HOOPER CITY
PAID
JUL 08 2024
Amt $234.00 Int. MY
Check ☑ 250 Cash ☐

If building on property provide site plan drawings including:

- Map of property showing adjacent streets
- Building/structure dimensions and distance from other structures
- Distance from property lines.
- List any easements on property
- Roof pitch, roofing material, Building materials, driveway materials
- Concept drawing of what structure will look like
- Building materials
- Driveway materials
- Landscaping design

Total Sq. footage of Structure: 1534
Total Sq. footage of ADU: 952
Height of Structure: 18 1/2
Acreage of Property: 1/2 ACRE

❖ The State requires all property owners within 600 feet from your parent property (front, sides and back) to be notified. There will be an additional fee of $1.00 for every notice that is sent out.

This application will be evaluated by, but not limited to, the following items. You may want to address these issues on the back of this application.

Traffic problems	Safety issues	Noise	Parking
Fencing	Pollution	Odors	Design
Business operation	Use of structure	Easements	

I hereby certify that the above information is accurate to the best of my knowledge. I also certify that I will comply with all state and local requirements. I also understand that if the conditional use does not start within (12) months and also if the conditional use is discontinued for (12) consecutive months this Conditional Use Permit will expire. If my conditional use changes I will notify Hooper City for a Conditional Use Permit review.

Signature: [signature] Date: 7-2-24

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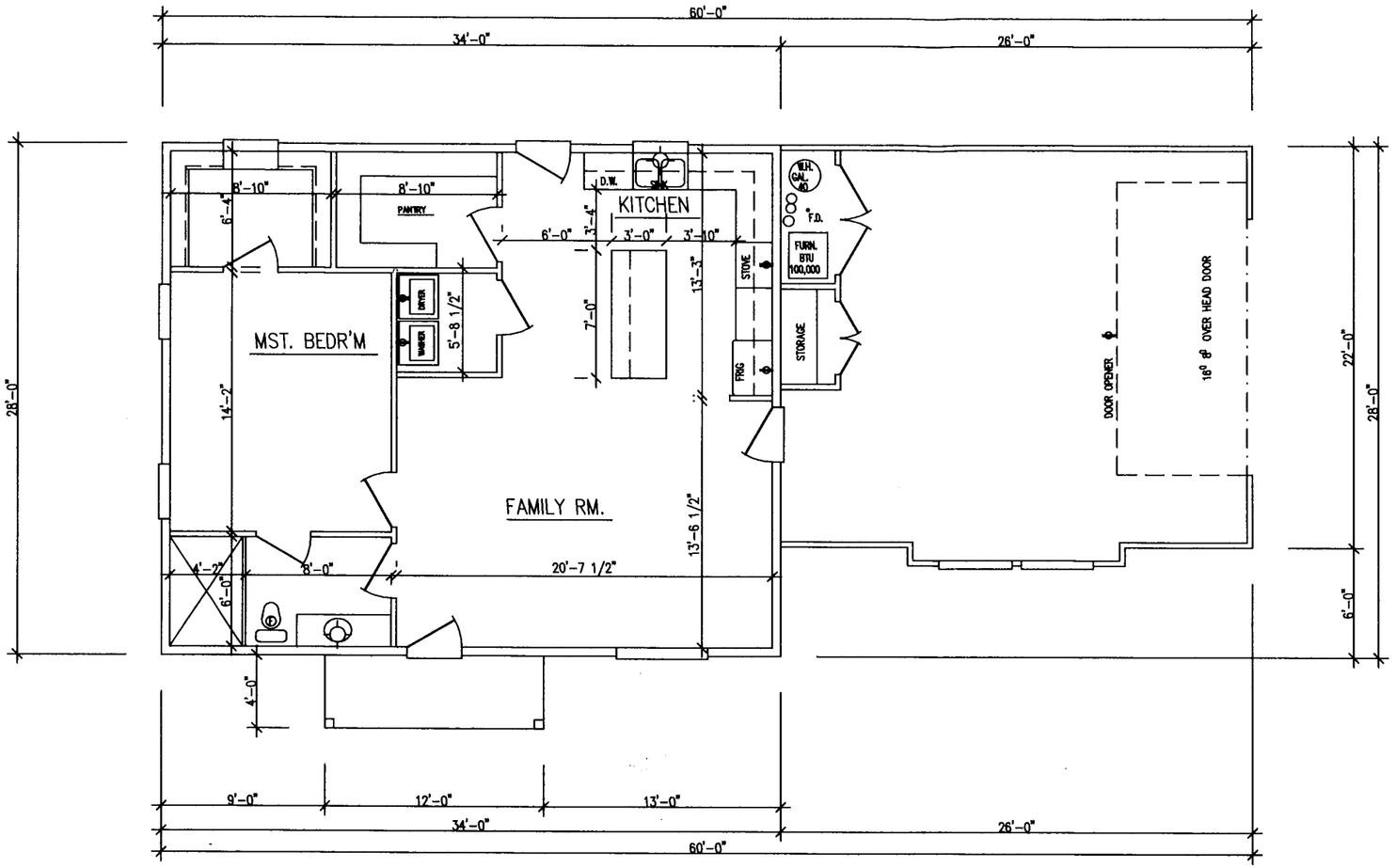
_____ Approval Date: _____ Disapproval Date: _____
Planning Commission Chairman

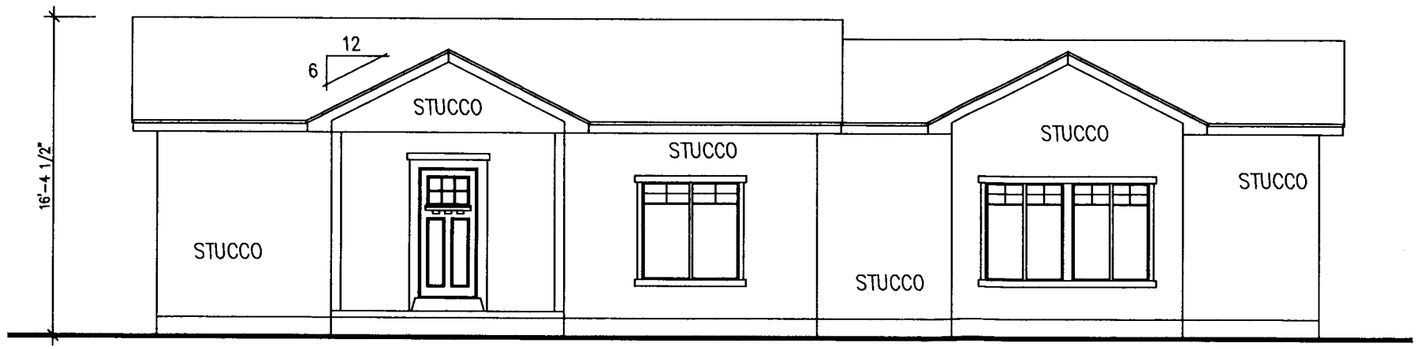
Comments/Conditions: _____

Completed applications must be submitted three (3) weeks prior to a Planning Commission Meeting which is the 2nd Thursday of the month unless otherwise specified



MAIN FLOOR PLAN

SCALE 1/8" = 1'-0"
952 SQ. FT.



FRONT ELEV. VIEW

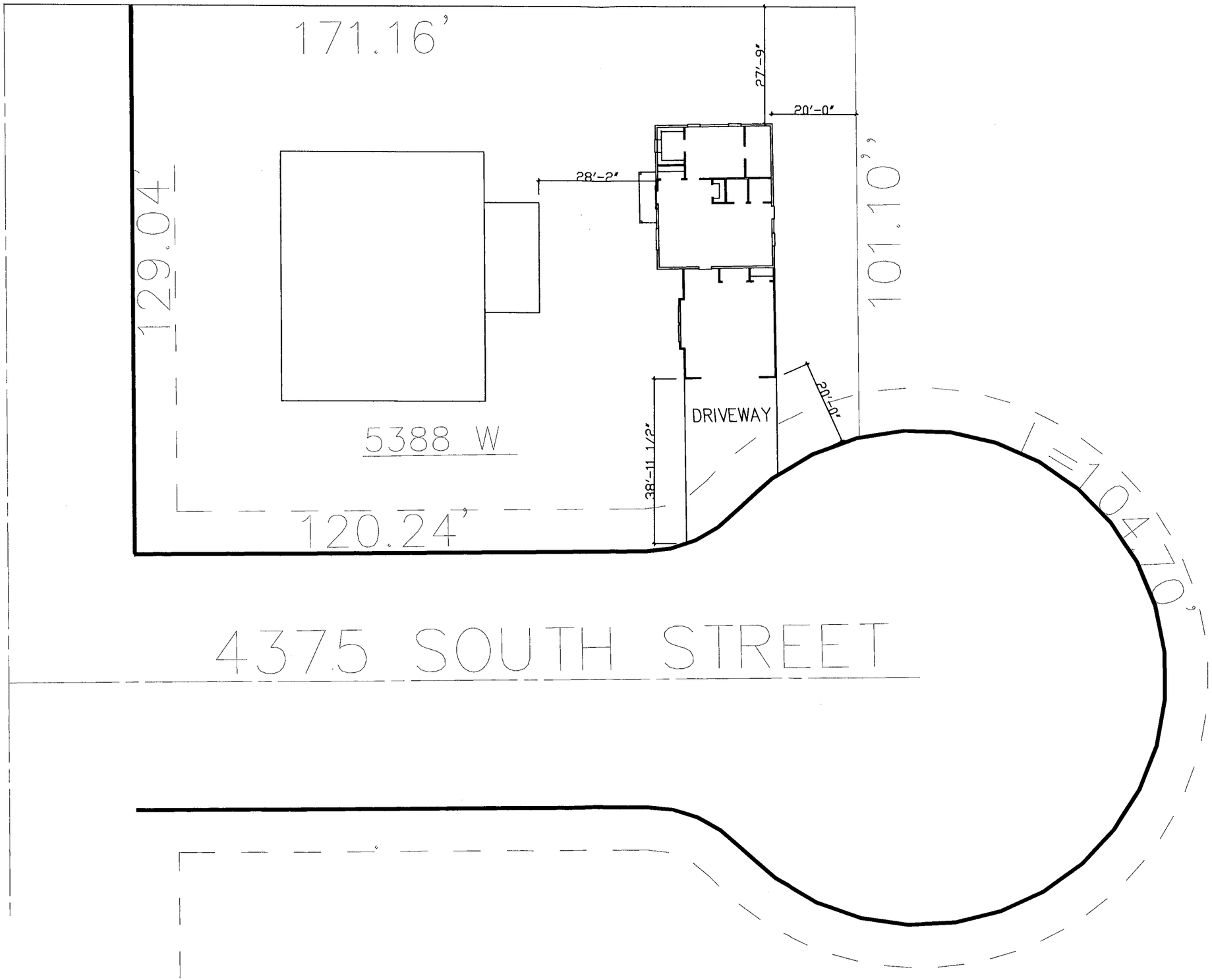
SCALE 1/8" = 1'-0"

BID SET - NOT FOR CONSTRUCTION
LOT 11 HADLEY VALLEY
JAIMIE PYLE ADU

Kustom House Plans
RESIDENTIAL / COMMERCIAL DESIGN & ENGINEERING
NATE KARRAS P.E. (801) 786-0849 email: KustomNK@gmail.com

SCALE
1/8" = 1'-0" 11x17
1/4" = 1'-0" 24x36

PLAN NUMBER
xxxxxx A1


171.16'
129.04'
27'-9"
20'-0"
101.10'
28'-2"
DRIVEWAY
20'-0"
38'-11 1/2"
5388 W
120.24'
4375 SOUTH STREET

Hooper City
5580 W. 4600 S.
Hooper, UT 84315
Office 801-732-1064

□ Mailings: $43
□ Fee: $200.00
Date Submitted 05/9/24

HOOPER CITY
PAID
MAY 15 2024
Amt 243.00 Int. MY
Check ☒ 1719 Cash □

Conditional Use Permit: Property

Print Applicant Name: Hooper Water Improvement District, Cole Allen – District Manager; Ryan Christensen, Gardner Engineering, Project Manager
Address: 4769 W 5100 S Project Address, 5555 W 5500 S Office Address;
Phone #: 801.985.1991 – District office; 801.476.0202 - Engineering Office
Day Time Phone #: [redacted]
Sq feet/ Acreage of property: 1.91 AC
Reason for conditional use: Construction of a drinking water well (a.k.a. Well #4) and accessory buildings plus water storage tank.
Describe use of property: Proposed use of property is for a deep well pump, filter plant and storage tanks to provide drinking water to customers of the Hooper Water Improvement District.

If building on property provide site plan drawings including:

- Map of property showing adjacent streets
- Building/structure dimensions and distance from other structures
- Distance from property lines.
- List any easements on property
- Roof pitch, roofing material, Building materials, driveway materials
- Concept drawing of what structure will look like
- Building materials
- Driveway materials
- Landscaping design

❖ The State requires all property owners within 600 feet from your parent property (front, sides and back) to be notified. There will be an additional fee of $1.00 for every notice that is sent out.

This application will be evaluated by, but not limited to, the following items. You may want to address these issues on the back of this application.

Traffic problems	Safety issues	Noise	Parking
Fencing	Pollution	Odors	Design
Business operation	Use of structure	Easements	

I hereby certify that the above information is accurate to the best of my knowledge. I also certify that I will comply with all state and local requirements. I also understand that if the conditional use does not start within (12) months and also if the conditional use is discontinued for (12) consecutive months this Conditional Use Permit will expire. If my conditional use changes I will notify Hooper City for a Conditional Use Permit review.

Signature: _____ Date: _____

****

_____ Approval Date: _____ Disapproval Date: _____
Planning Commission Chairman

Comments/Conditions: _____

Completed applications must be submitted three (3) weeks prior to a Planning Commission Meeting which is the 2nd Thursday of the month unless otherwise specified.

Narrative addressing items listed on Conditional Use Permit application to Hooper City by the Hooper Water Improvement District

HISTORICAL CONTEXT:

The Hooper Water Improvement District (HWID) has developed a master plan of facilities needed to serve its current and future customers. Among other items, the master plan identifies the need for the ability to produce more water than its current wells can produce. The HWID started to keep an eye out for available properties to purchase on which the needed wells could be constructed. The ideal property would be one bounded by large-diameter pipelines, located in the center of the District. In 2019, HWID was able to purchase a parcel within the District boundaries large enough and bounded by large diameter water lines on which a well would ideally be suited to help meet the anticipated needs of the District's customers: the subject property located at 4769 W 5100 S.

In 2020, HWID applied for a Conditional Use Permit on the property, for the development of a well and construction of accessory structures. The Conditional Use Permit application was submitted to formally establish the HWID's intent to construct such facilities at some future date on the property. The 2020 Conditional Use Permit application was not considered because the permit would expire prior to construction, effectively denying the permit, but not officially voting on it.

Elected officials and staff from both Hooper City and HWID worked together over the next two years to propose a land use zone specifically reserving property for the needed facilities to the residents of Hooper City.

In 2022, after extensive public input, the Hooper City Council adopted an update to the City's General Plan. The Plan identifies the subject parcel purchased by HWID in 2019 as an area "RESERVED FOR CULINARY WATER WELL TANK". HWID requests that the City allow the District to utilize their property in accordance with the land use shown on the City's Future Land Use Map.

As the need for an additional source of water to meet the demands of HWID customers continued to draw closer (projected need for another source of water is 2026), HWID commissioned the construction of a temporary test well at the subject property in 2023. The intent of the test well was to determine probable water quality and quantity production that could be expected if a permanent well were constructed at the site.

After determination that a potential production well at the subject site would produce suitable quantity and quality of water, HWID applied in 2023 to Hooper City for a Conditional Use Permit to develop a well and construct accessory structures on the subject property. The 2023 Conditional Use Permit application was denied.

The public hearing for the 2023 Conditional Use Permit application was a great example of the public involvement process working for the benefit of Hooper City citizens, as intended. The hearing allowed HWID to receive vital feedback on how to be a good neighbor and mitigate real and perceived negative impacts to neighbors.

According to Hooper City Code 10-5-5.5 B.1. "A conditional use *shall be approved* if reasonable conditions are proposed, or can be imposed, to mitigate the reasonably anticipated detrimental effects of the proposed use in accordance with applicable city standards, including but not limited to, the health, safety, and general welfare of the population of Hooper City."

The feedback from residents received at the 2023 public hearing are herein acknowledged and addressed in this 2024 Conditional Use Permit Application, "...to mitigate the reasonably anticipated detrimental effects of the proposed use...". HWID requests that the City consider the mitigation measures proposed and allow the District to construct the needed facilities to serve residents within the District boundaries including Hooper City residents.

NARRATIVE

The Hooper Water Improvement District is applying for a conditional use permit to construct a well with associated structures on property it owns with an "R1" zoning designation on the Current Zoning Map and with "RESERVED FOR CULINARY WATER WELL TANK SITES" designation on the Future Land Use Map . The District intends to demonstrate in the following narrative that all "reasonably anticipated detrimental effects of the proposed use" can be mitigated, thereby warranting the issuance of a Conditional Use Permit. Comments received during the public hearing for the District's Conditional Use Permit on November 9, 2023, are addressed, with further discussion of specific citations and following the narrative.

Well Construction: Before construction starts on the well, a sound curtain at least 16' tall will be erected around all 4 sides of the District's property where drilling activities will take place, to mitigate both light and sound impacts on neighboring properties. The well will be constructed using a drilling method (as opposed to a percussive, or hammering, method), which minimizes abrupt banging noises. It is anticipated that up to 5 semi tractors with trailers will enter and exit the site for setup.

It is expected that drilling will take up to 2 months, during which time there will be an anticipated 5 passenger vehicles leaving and entering the site daily.

Drilling activity will include discharge of produced water, as the well gets "developed" to be used as a culinary water source. The discharge water will be about about 400 gallons per minute (GPM) (roughly 1 cubic foot per second (CFS)) for a period of 1 week. The drill rig will then be removed from the site, which will again cause up to 5 semi tractors and trailers to enter and leave the site. Following removal of the well rig, a smaller truck will come on site to pump the well at an estimated 900 GPM (2 CFS) up to 3,500 GPM (7 CFS) over the course of about 4 days. All of the produced water will be pumped into mobile tanks near the well, to allow any sands and silts to settle out, then clear water will be pumped into the Wilson Irrigation Company piped ditch along the west side of 4700 W, which piped ditch flows into the City's storm drain system. Note that well development activities resulting in any discharged water will occur outside of the irrigation season. It is critical to the District that well development water is sent down the piped ditch alone, without adding to the flow of water that would otherwise be present during the irrigation season, so that the potential of overburdening the storm drain system is mitigated.

Site Planning and Design: At conclusion of well construction, the sound curtain will be removed from the site and the only visible structure will be a 3 or 4 foot tall section of 16" or 18" diameter steel pipe sticking up out of the ground. The property will return to its pre-drilling condition as a graveled surface in a pasture, for an estimated 12 months. Improvement plans, meeting the requirements of City and State agencies, will be developed during those 12 months.

The wellhouse and tank designs will be reviewed by the State Division of Drinking Water (DDW) for design elements required for culinary water facilities. The structural features will be designed by a professional structural engineer licensed in Utah, and submitted to Hooper City for review. Appropriate modifications to the plans will be made.

The civil site design will be prepared by a professional civil engineer, licensed in Utah, and submitted to Hooper City for review. Appropriate modifications to the plans will be made.

Site Improvements: Construction activities will then take place over approximately the next 18-22 months. Construction will take place only during daytime hours and will generally involve the same types of contractors and activities that would be present in a residential development. The anticipated structures include two water tanks and a well house. The tanks would be no more than 20' tall, one being 100' in diameter and the other being 30' in diameter. The well house would be less than 25' tall and be no more than 60'x100' <For reference, the well 2 filter building is 48'x 84', but it does not house the well>. A 6'fence will be installed around the site. Landscaping within the fence will be installed to screen the structures and mitigate the visual impacts of the building and tanks on neighbors.

Operations: Day-to-day operations of the wellhouse would include 1-2 passenger vehicles per day. On a regular basis, only District personnel will visit the site to perform operation and maintenance tasks. Operation and maintenance tasks will include landscape maintenance as well as other operations that will be performed inside the building.

During operation and maintenance, it is anticipated that no vehicles will be parked on the site for longer than a short check-up visit each day. There will be a paved driveway from the public street and paved parking and turnaround space provided on the site to accommodate multiple vehicles.

Occasionally, maintenance issues requiring a specialty contractor will arise, these specialty contractors will typically visit the site with a passenger vehicle, such as a pickup truck with utility boxes.

There will be a backup generator on site that will be exercised weekly to verify proper operation. The generator will be housed in a sound attenuation enclosure, designed for use in a residential neighborhood (technically, the enclosure is specified to reduce sound to 78 dBA at 23 feet; 78 dBA is typical of what a person standing 3' away from a garbage disposal would hear, see attached image downloaded from the Federal Aviation Administration site).

Chlorine will also be generated in a low concentration at the well house. The process of generating chlorine utilizes common rock salt. The required salt will be stored in the dry well house on pallets until ready for use. The chlorine will have full spill containment. The low concentration means that it poses no threat to the environment as a gas or a liquid. The chlorine will be injected at appropriate levels to disinfect the water for consumption by District customers.

Part of the intended improvements on the site will include a filtration process that will make the well water more aesthetically pleasing. The by-products of the filtration process will be stored in the smaller of the two tanks, and removed from the site as needed, by either tanker truck or, when available and permitted, sanitary sewer. A bathroom will likely be constructed in the wellhouse for the future when a sewer system is available. Until that time, the site will not have an operable bathroom.

There will be no unusual odors associated with the operation of the well site. During operation and maintenance of the completed well, it is anticipated that no vehicles will be parked on the site for longer than a short check-up visit each day. There will be paved parking provided on the site and turnaround space on the site for multiple vehicles.

ANTICIPATED DETRIMENTAL EFFECTS NOTED AT THE NOVEMBER 9, 2023 PUBLIC HEARING

Feedback from residents received at the 2023 public hearing are hereafter acknowledged and addressed in this 2024 Conditional Use Permit Application, "...to mitigate the reasonably anticipated detrimental effects of the proposed use...".
The public comments from the November 9, 2023 public hearing are presented here in the form of Concern <#> and Response <#>. Only those comments related to the merit of the subject site are included below, to help maintain a focus on the application at hand. Only unique factual comments (as opposed to duplicate comments or statements of preference) from residents are included.

Anticipated Detrimental Effect #1:	[Resident]...stresses his concern for the cracks on the walls of his home from the banging of construction.
Response #1:	The method of construction for the test well was a method of drilling, similar to drilling a screw through a piece of wood as opposed to hammering a nail; no banging was associated with well construction. There was, prior to construction of the test well, placement and construction of a granular surface (e.g., a parking lot made of gravel) to support the weight of the drilling equipment and materials. Construction of the granular surface may have produced vibration during compaction of the granular materials and be what the resident was referring to. A locally experienced geotechnical engineer, when asked about cracks in the resident's home, said "it is very unlikely that cracks were developed from the construction of the building pad. Typically, when people feel vibrations, they start looking and see what was there before and they never saw because they never looked. It's possible, though not likely, that cracking could have occurred if the compaction was taking place 10' away from the existing structure". The vibratory compaction previously took place 250' away from the resident's home. It is anticipated that any compaction efforts related to future construction on the site will be for footing preparation for a building and tanks and for a paved driving surface. These future efforts would not be any different than compaction efforts for construction of a residential structure and driveway.
Anticipated Detrimental Effect #2:	[Resident]: concerned about the lighting and noise.
Response #2:	Two distinct methods of construction would occur on the site: drilling and site improvement. Sound walls will be erected to mitigate sounds during drilling. The walls are 16' tall blankets of insulation, wrapped in tarps for longevity, and secured to "telephone poles" around the site. All ground level lights and noises will be deflected up. Site improvement construction will be by traditional methods that are common to residential construction...masons, roofers, concrete trucks and pumpers. All future lighting at the site will be downthrown to minimize impacts to neighboring properties. Once construction is complete, minimal light and noise will be generated from daily operation.
Anticipated Detrimental Effect #3:	[Resident]: is...[not] happy with the 8-foot barb wire fence.
Response #3:	A fence without barbed wire will be constructed around the perimeter to mitigate this concern.
Anticipated Detrimental Effect #4:	[Resident]: asked what happens when the water tank floods? The retention pond will attract mosquitoes.
Response #4:	The water tank will be designed to only receive water from the well when pumping. When the tank reaches a full level, the well will stop pumping to prevent overflow. A *retention* pond is designed to hold water until it evaporates or infiltrates. The pond will be designed as a *detention* pond. A detention pond slows the flow of water into the City drainage system but does drain. The designed detention pond will not attract any more mosquitoes than a detention pond in any of the residential subdivisions in the City with properly draining *detention* ponds.

Anticipated Detrimental Effect #5: [Resident]: feels that they should build in an open field. Asked for planning commission to vote as if they lived there.

Response #5: There is no "reasonably anticipated detrimental effect" in this comment to mitigate, so it should not be considered in approving a Conditional Use Permit on the site.

Anticipated Detrimental Effect #6: [Resident]: asked...the engineer, a geology question. How do you know what the process is to pick this site.

Response #6: The suitability of the site was determined through industry-standard technical methods, and construction of a test well to verify suitability. The initial study identified an optimal "band" of land running north and south through the District where a well would be recommended. East of the identified "band" and a new well would violate terms of a settlement agreement with Roy City. West of the identified "band" and produced water would have a greater likelihood of being unacceptably saline. Based on the results of the study, the District started to look for available properties within the optimal "band" of land. The subject property became available, and the District purchased it.

However, there is no "reasonably anticipated detrimental effect" in this comment to mitigate, so it should not be considered in approving a Conditional Use Permit on the site.

Anticipated Detrimental Effect #7: [Resident]: "Do not take away the views for the residents."

Response #7: Proposed structures will conform with applicable portions of the Hooper City Code, which code is intended to reasonably mitigate the impacts of development on existing residents.

Anticipated Detrimental Effect #8: [Resident]: Not happy with how the Perez Subdivision was dealt with for having dirt piles on the property that no one can see, but the water department can sneak into a subdivision to build a water well. Feels that the 5500 West site makes more sense to him. Not fair for the 12-15 people to take the burden for the Water well.

Response #8: There is no "reasonably anticipated detrimental effect" in this comment to mitigate. See also Response #7. The District needs wells at both this site and the proposed 5500 West site. **(The 5500 West site will affect 2x as many people as the 5100 South site will).**

Anticipated Detrimental Effect #9: [Resident]: Mentions that the water department states that it will take 3 years to complete, does not want to have damaged property.

Response #9: The project, once approved, may take 3 years to complete. Approximately 2 months will be for construction of the well. Approximately 1 year will be for design and approval (through City and State reviewers) during which no construction activity will take place, and approximately 18 months will be for construction of a wellhouse, tanks and associated infrastructure. The estimated 20 months of construction activities will be similar to construction of a residential subdivision, as far as impacts (construction noise, traffic, activities, personnel, lights) to neighboring properties is concerned.

Proposed structures and construction activities will conform with applicable portions of the Hooper City Code, which code is intended to reasonably mitigate the impacts of development on existing residents.

Anticipated Detrimental Effect #10: [Resident]: stresses her concern for the decrease on the value of her other homes.

Response #10: Aside from complying with applicable portions of the Hooper City Code, the District submits the proposed facilities will not have negative impacts on property values. There will always be a paid crew to take care of the yard, building and fences. A set of structures with minimal traffic during daytime hours.

Anticipated Detrimental Effect #11: Marvin Zaugg, Chairman at the Water Improvement District: states that once it is in, there will be no noise. They will make it look nice in landscaping. This is not a breeding place for mosquitoes due to the pond draining and not having standing water.

Response #11: See also Responses #4 and #10.

Anticipated Detrimental Effect #12: [Resident]: has heard that the city can be sued if they don't accept it.

Response #12: From the hearing minutes…response was given during the public hearing.

Brandon Richards, our city attorney, states that Hooper is not getting guided by a lawsuit.

Anticipated Detrimental Effect #13: [Resident]: complaints on the wood posts and black tarp for noise control.

Response #13: The wood posts and black tarps referred to are industry-standard "sound curtains" for light and sound control around a drill rig to mitigate the effects of construction noise and lights on nearby properties. The sound curtains were erected to a height of 16', and will be again for future well construction, to deflect light and sound originating from near ground level.

Anticipated Detrimental Effect #14: [Resident]: also agrees on getting compensated for the damage being done to their homes.

Response #14: From the hearing minutes…response was given during the public hearing.

Commissioner Simpson states that it is a civil dispute between them and the water district.

Anticipated Detrimental Effect #15: [Resident]: commenting on Zaugg's comments. Not happy with the building size of the tank and pump house.

Response #15: From the hearing minutes…response was given during the public hearing.

Commissioner Greener asked the audience if there were a height you would like to see for the tank? The audience commented no.

Response #15a: Proposed structures will conform with applicable portions of the Hooper City Code, which code is intended to reasonably mitigate the impacts of development on existing residents.

Specifically, tanks will be less than 20' tall and the wellhouse will be less than 25' tall. Hooper City Code allows for structures up to 25' tall before a conditional use permit is required. As precedence, two applications for over-sized structures were considered and approved in the same public hearing at which the District's 2023 Conditional Use application was considered.

Issues raised at public hearing that were not captured in the minutes:

Issue #1: There is no sanitary sewer available for this property and the proposed improvements rely on sewer…therefore the conditional use permit should be denied.

Response to Issue #1: It is acknowledged that sewer works do not *currently* exist for the property. The proposed improvements will be designed to operate properly without the use of a sanitary sewer. Provisions will be incorporated into the design to connect to a future sanitary sewer system.

Issue #2: There is no storm drain system to take well construction and/or storm water from the site.

Response to Issue #2: It is acknowledged that there is a limited storm drainage system on the proposed well site's 5100 South frontage. There is, however, an established, piped drainage system along 4700 W street. The District is coordinating with landowners to gain access to said drainage system

End of Conditional Use Permit Application

Well #4 Noise Modeling Report

July 31, 2024

Prepared for:

Hooper Water Improvement District
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Hooper, UT 84315

Prepared by:

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Justin Puggioni
Principal Acoustical Engineer

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1. Introduction

The following report provides a noise modeling assessment of the proposed water well drilling operations at the Well #4 site (the "Project") to be operated by Hooper Water Improvement District. The Well #4 site (41.169380°, -112.094991 is located in Hooper, Utah and is shown below in Figure 1-1.

To assess the noise levels of the proposed well site, historical noise level data previously measured by Behrens and Associates Environmental Noise Control (BAENC) typical of water well drilling equipment was used in the noise models. The noise model was developed using SoundPLAN 9.0 software. An unmitigated and mitigated noise modeling scenarios were included.

The following is provided in this report:

- A brief introduction to the fundamentals of noise.
- A review of noise standards applicable to the Project.
- Discussion of noise modeling methodology and results.

Figure 1-1 Water Well Drill Site Location

2. Noise Fundamentals

Sound is most commonly experienced by people as pressure waves passing through air. These rapid fluctuations in air pressure are processed by the human auditory system to produce the sensation of sound. The rate at which sound pressure changes occur is called the frequency. Frequency is usually measured as the number of oscillations per second or Hertz (Hz). Frequencies that can be heard by a healthy human ear range from approximately 20 Hz to 20,000 Hz. Toward the lower end of this range are low-pitched sounds, including those that might be described as a "rumble" or "boom". At the higher end of the range are high-pitched sounds that might be described as a "screech" or "hiss".

2.1 Environmental Noise

Environmental noise generally derives, in part, from a combination of distant noise sources. Such sources may include common experiences such as distant traffic, wind in trees, and distant industrial or farming activities. These distant sources create a low-level "background noise" in which no particular individual source is identifiable. Background noise is often relatively constant from moment to moment but varies slowly from hour to hour as natural forces change or as human activity follows its daily cycle.

Superimposed on this low-level, slowly varying background noise is a succession of identifiable noisy events of relatively brief duration. These events may include the passing of single-vehicles, aircraft flyovers, screeching of brakes, and other short-term events. The presence of these short-term events causes the noise level to fluctuate. Typical indoor and outdoor A-weighted sound levels are shown in Figure 2-1. Detailed acoustical definitions have been provided in Appendix – A.

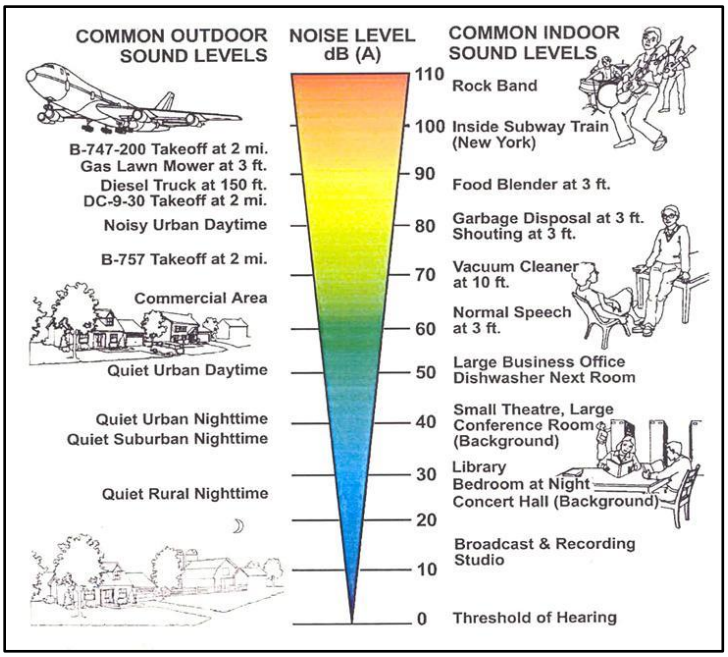


Figure 2-1 Typical Indoor and Outdoor A-Weighted Sound Levels

2.2 Relative Loudness of Environmental Noise

Published data exists describing how humans generally respond to changes in relative loudness. Table 2-1, adapted from the Highway Traffic Noise: Analysis and Abatement Guidance (revised December 2011) published by the Federal Highway Administration, shows typical responses to changes in relative loudness.

Table 2-1 Decibel Changes, Loudness, and Relative Loudness[1]

Sound Level Change	Relative Loudness
0 dB(A)	Reference
-3 dB(A)	Barely Perceptible Change
-5 dB(A)	Readily Perceptible Change
-10 dB(A)	Half as Loud
-20 dB(A)	1/4 as Loud
-30 dB(A)	1/8 as Loud

The table describes reductions in noise levels, but the opposite holds true for increases in noise level.

[1] Table adapted from FHWA Highway Traffic Noise: Analysis and Abatement Guidance, revised December 2011

3. Noise Standards

The Project is located in the City of Hooper which is within Weber County, Utah. Neither the city ordinance nor the county ordinance contains specific restrictions related to noise emitting from water well drilling activities.

A nearby jurisdiction, the City of West Haven, contains a noise ordinance that was used as a guideline for the Project. The noise ordinance states that noise is generally prohibited to 60 dBA during the day (7am to 10pm) and 50 dBA at night (10pm to 7am the following day) in residential areas. Additionally, noise is limited to 10 dBA above the ambient sound pressure level during the day and 5 dBA above the ambient sound pressure level during the night.

Ambient sound pressure levels measured by Behrens and Associates and were 46 dBA during the day and 43 dBA during the night. See the Ambient Sound Level report dated July 12, 2024 for more details regarding the ambient measurements.

4. Noise Modeling

4.1 Noise Modeling Methodology

The noise modeling was completed with use of three-dimensional computer noise modeling software. All models in this report were developed with SoundPLAN 9.0 software using the ISO 9613-2 standard. Noise levels were predicted based on the locations, noise levels and frequency spectra of the noise sources, and the geometry and reflective properties of the local terrain, buildings and barriers. To ensure a conservative assessment and compliance with ISO 9613-2 standards, light to moderate winds were assumed to be blowing from the source to receptor. The predicted noise levels represent only the contribution of the proposed operations and do not include ambient noise or noise from other facilities. Actual field sound level measurements may vary from the modeled noise levels due to other noise sources such as traffic, other facilities, other human activity, or environmental factors.

The sound level data utilized in the model were based on file data previously measured by Behrens and Associates of a similar water well drilling rig in operation. The predicted modeling results are dependent on equipment and mitigation orientation as indicated. The modeled equipment and associated sound power levels are presented in Table 4-1. Figure 4-1 shows the proposed water well pad location provided by the Hooper Water Improvement District and used in this study.

Table 4-1 Modeled Equipment and Sound Power Levels (Lw)

Quantity	Equipment Type	Proposed Equipment	Data Source	Source Sound Power Level (Lw, dBA)
1	Air Compressor	Sullair HH700	File data, FHWA	*114.3
1	Rig Engine	CAT C-15, 475 hp @ 2100 rpm	File Data	115.9
1	Rig Engine Silencer Exhaust	Not Specified	File Data	110.8
1	Mud Shaker	MiSWACO Mongoose Pro Linear Shaker	File Data	97.7
1	Small Generator	Generac MM130, 100kw	File Data	98.5

*Sound power level calibrated using data from the U.S. Department of Transportation, Federal Highway Administration, Construction Noise Handbook; https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm

This assessment considers airborne vibration (sound) only and does not include analysis regarding groundborne vibration. It is the opinion of Behrens and Associates that drilling rigs such as the one analyzed in this report, do not typically cause high groundborne vibration levels, especially at a distance of 385 ft, which is the distance to the nearest residence. The risk of property damage or disturbance due to groundborne vibration is therefore low. It is advised to distinguish this from low frequency noise which has potential to cause loose object in home to rattle. This effect is dependent on the object rattling and home construction and is therefore difficult to predict. Any acoustical sound walls recommended in this report will be a minimum Sound Transmission Class (STC) of 32 which is generally more effective at mitigating low frequency noise than acoustical walls with a lower STC.

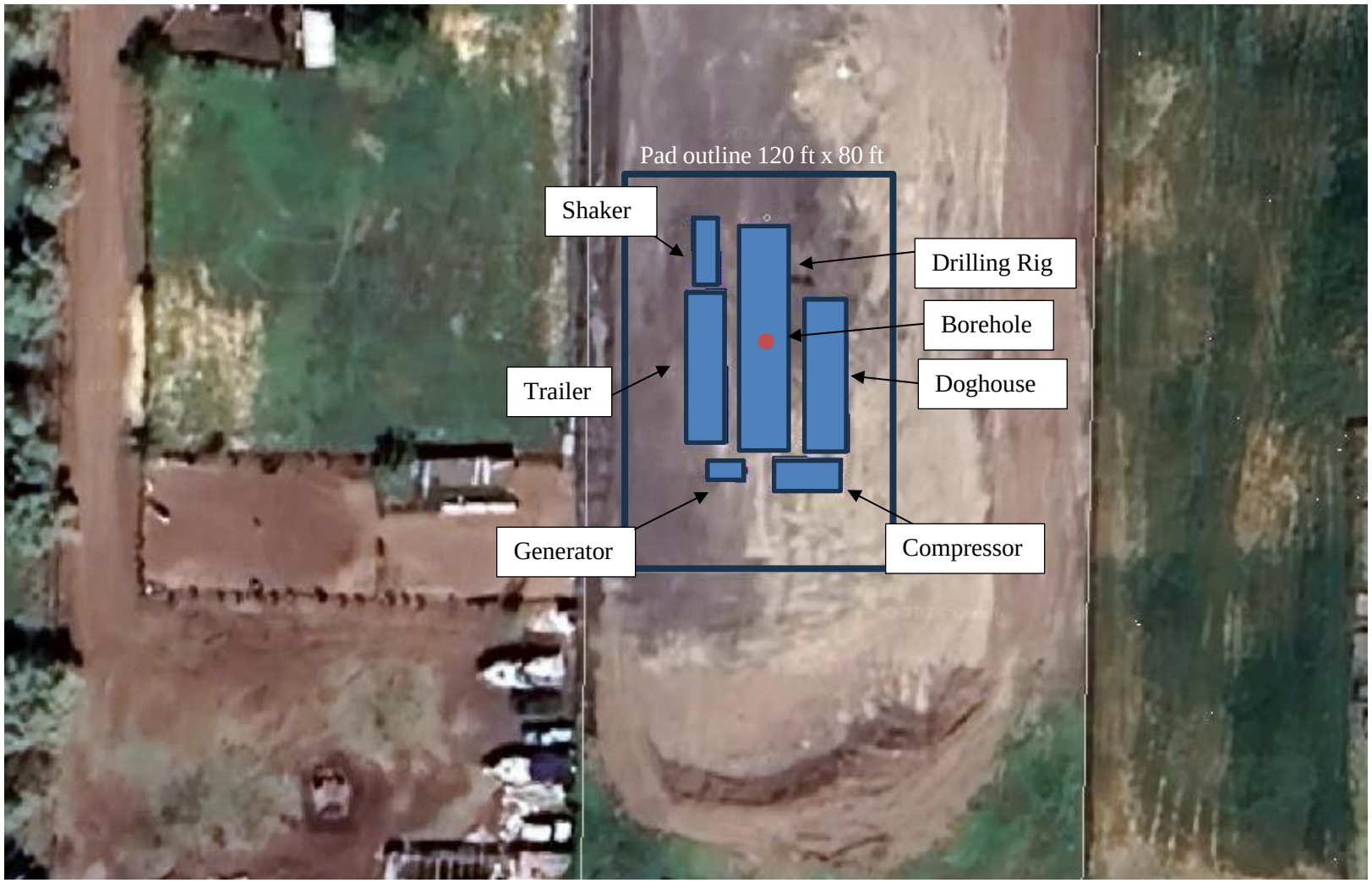


Figure 4-1 Water Well Pad Layout

4.2 Noise Sensitive Receptors

The noise sensitive receptors have been placed at the closest nearby residential homes in all directions for evaluation at a height of 5 ft above ground level. Figure 4-2 shows the dBA noise sensitive receptor locations.

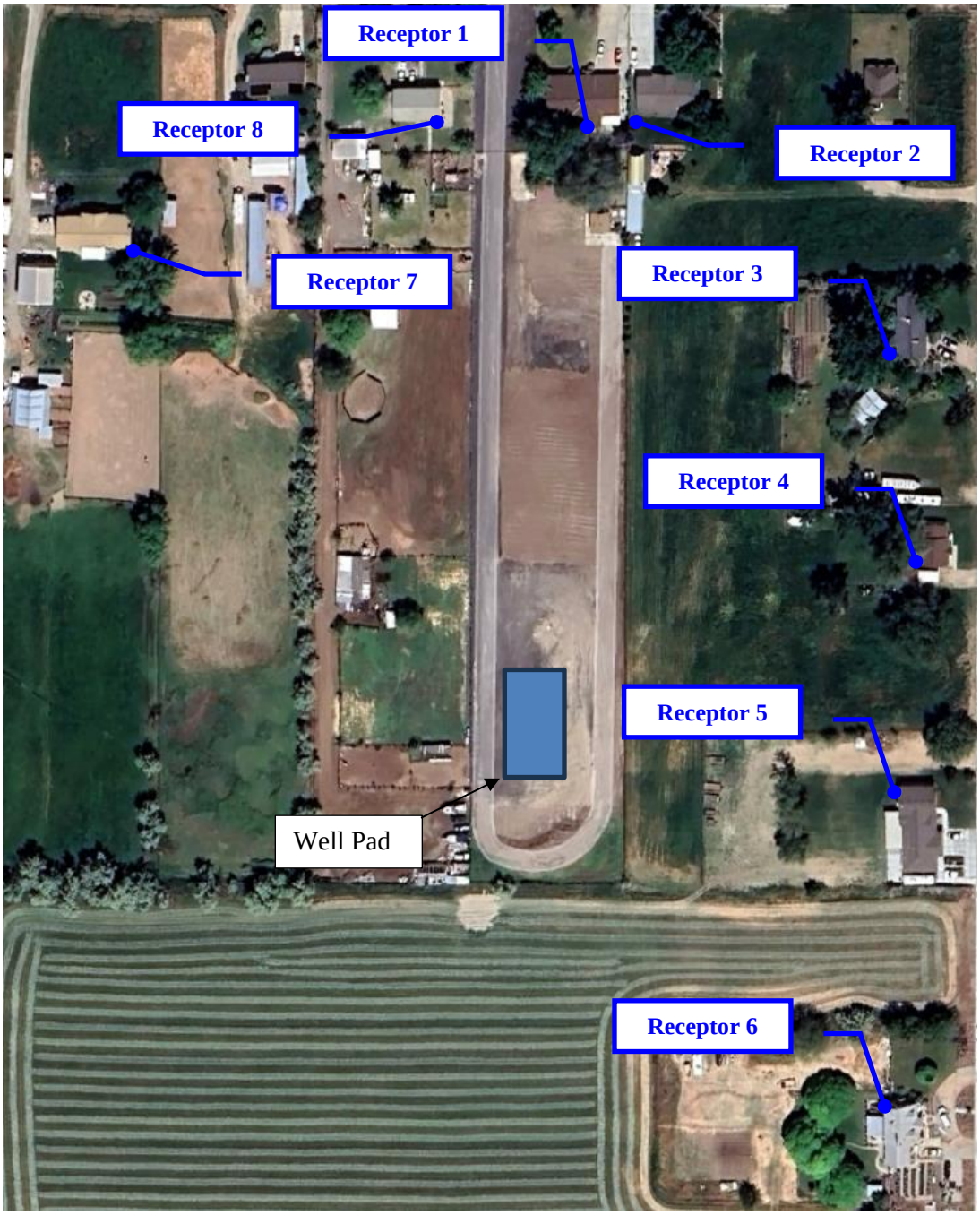


Figure 4-2 Receptor Locations

4.3 Unmitigated Noise Modeling Results

The proposed drilling operations will operate for 24 hours per day for multiple days. The results of the unmitigated noise modeling are presented in Table 4-2. The locations in the tables correspond to the receptor locations identified in Figure 4-2. The results of the unmitigated noise modeling are also shown as a noise contour map in Figure 4-3. The noise contours are provided in 5 dB increments with the color scale indicating the sound level of each contour.

The results of the unmitigated modeling indicate that the proposed drilling activities are greater than the guideline limit of 50 dBA and the limit of 5 dB above the ambient sound level during the night at all modeled receptor locations. Therefore, mitigation will be recommended to reduce sound levels from the drilling equipment.

Table 4-2 Unmitigated Noise Modeling Results

Receptor	Predicted Noise Level (dBA Leq)
Location 1	57
Location 2	55
Location 3	60
Location 4	61
Location 5	62
Location 6	61
Location 7	57
Location 8	57

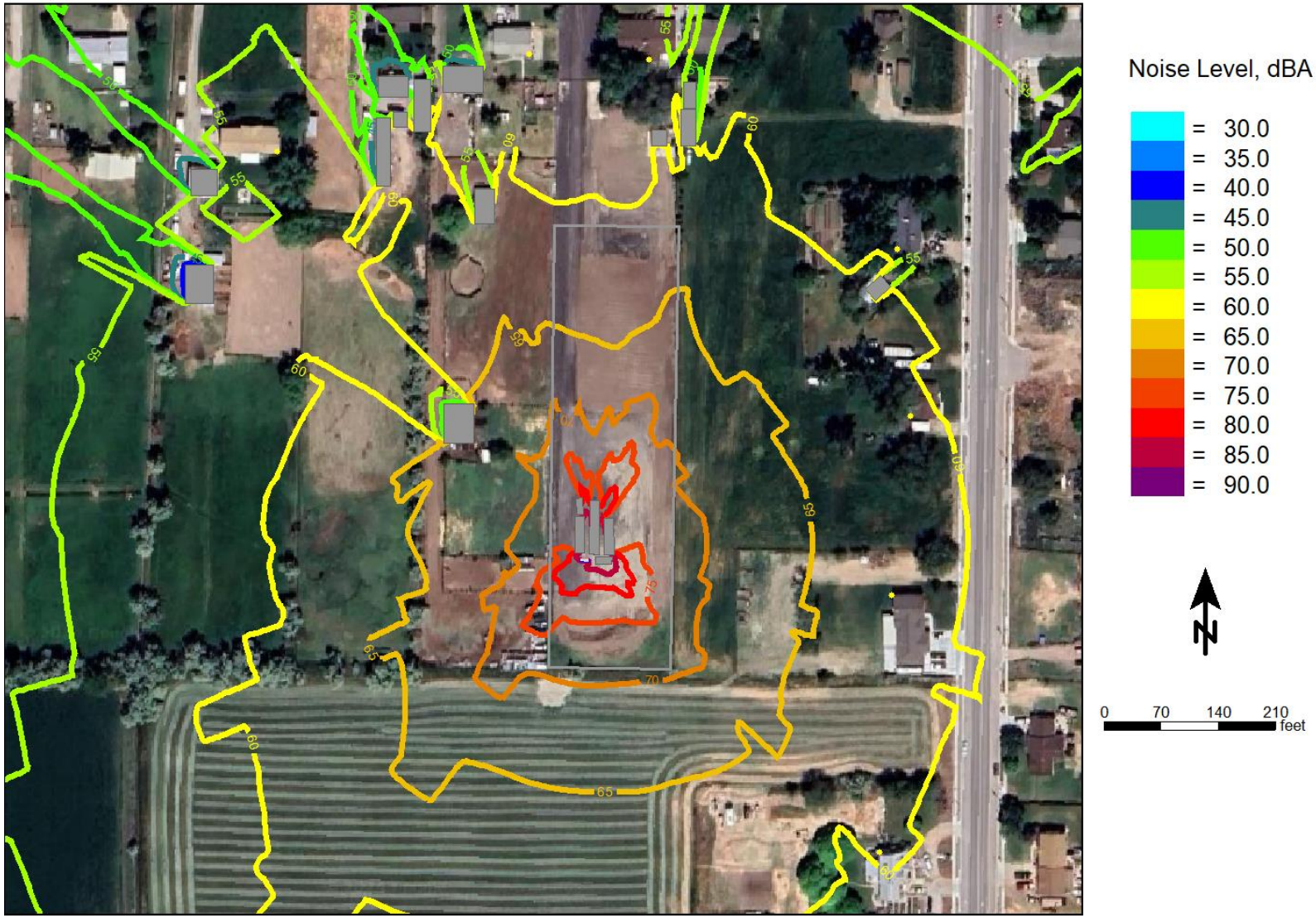


Figure 4-3 Unmitigated Noise Contour Map (dBA)

4.4 Drilling Mitigated Modeling Results

Noise mitigation for drilling operations has been included in the modeling to reduce noise levels in the surrounding environment. The noise mitigation included in the modeling is shown in two separate scenarios as described below:

1. Approximately 380 total linear feet of 24-foot-high, Sound Transmission Class (STC) 32 acoustical wall installed on the of the perimeter of the site.
2. Approximately 380 total linear feet of 32-foot-high, Sound Transmission Class (STC) 32 acoustical wall installed on the of the perimeter of the site.

The layout for both mitigation scenarios is shown in Figure 4-4.

Figure 4-4 Mitigation Layout

The mitigated modeling includes the acoustical mitigation shown in Figure 4-4. The results of the mitigated noise modeling are presented in Table 4-3 and Table 4-4. The locations in the tables correspond to the locations identified in Figure 4-2. The predicted noise levels represent only the contribution of the drilling operations and do not include ambient noise or noise from other facilities. Actual field sound level measurements may vary from the modeled noise levels due to other noise sources such as traffic, other facilities, other human activity, or environmental factors.

The results of the mitigated noise modeling are also shown as noise contour maps. Figure 4-5 and Figure 4-6 shows the Mitigated Drilling Rig Contour Map in the A-weighted scale for the 24-ft-high wall and the 32-ft-high wall respectively.

Table 4-3 Mitigated Noise Modeling Results (dBA)

Receptor	Scenario 1 24-ft-high Predicted Noise Level (dBA Leq)	Scenario 2 32-ft-high Predicted Noise Level (dBA Leq)
Location 1	52	47
Location 2	48	43
Location 3	50	46
Location 4	53	49
Location 5	53	49
Location 6	54	47
Location 7	50	46
Location 8	51	47

Table 4-4 Mitigated Noise Modeling Reduction (dBA)

Receptor	Scenario 1 24-ft-high Predicted Noise Level Reduction (dBA Leq)	Scenario 2 32-ft-high Predicted Noise Level Reduction (dBA Leq)
Location 1	5	10
Location 2	7	12
Location 3	10	14
Location 4	8	12
Location 5	9	13
Location 6	7	14
Location 7	7	11
Location 8	6	10

With the implementation of the 24-ft-high wall, the resulting sound levels are reduced by at least 5 decibels at all receptors. This corresponds with a readily perceptible change according to Table 2-1. It is noted that the resulting sound levels are above the 50 dBA guideline from the West Haven Noise Ordinance.

With the implementation of the 32-ft-high wall, the resulting sound levels are reduced by at least 10 decibels at all receptors. This corresponds with a halving of loudness change according to Table 2-1. It is noted that the resulting sound levels are below the 50 dBA guideline from the West Haven Noise Ordinance but above the 5 dB plus ambient threshold at Receptor 4 and Receptor 5 by 1 dBA.

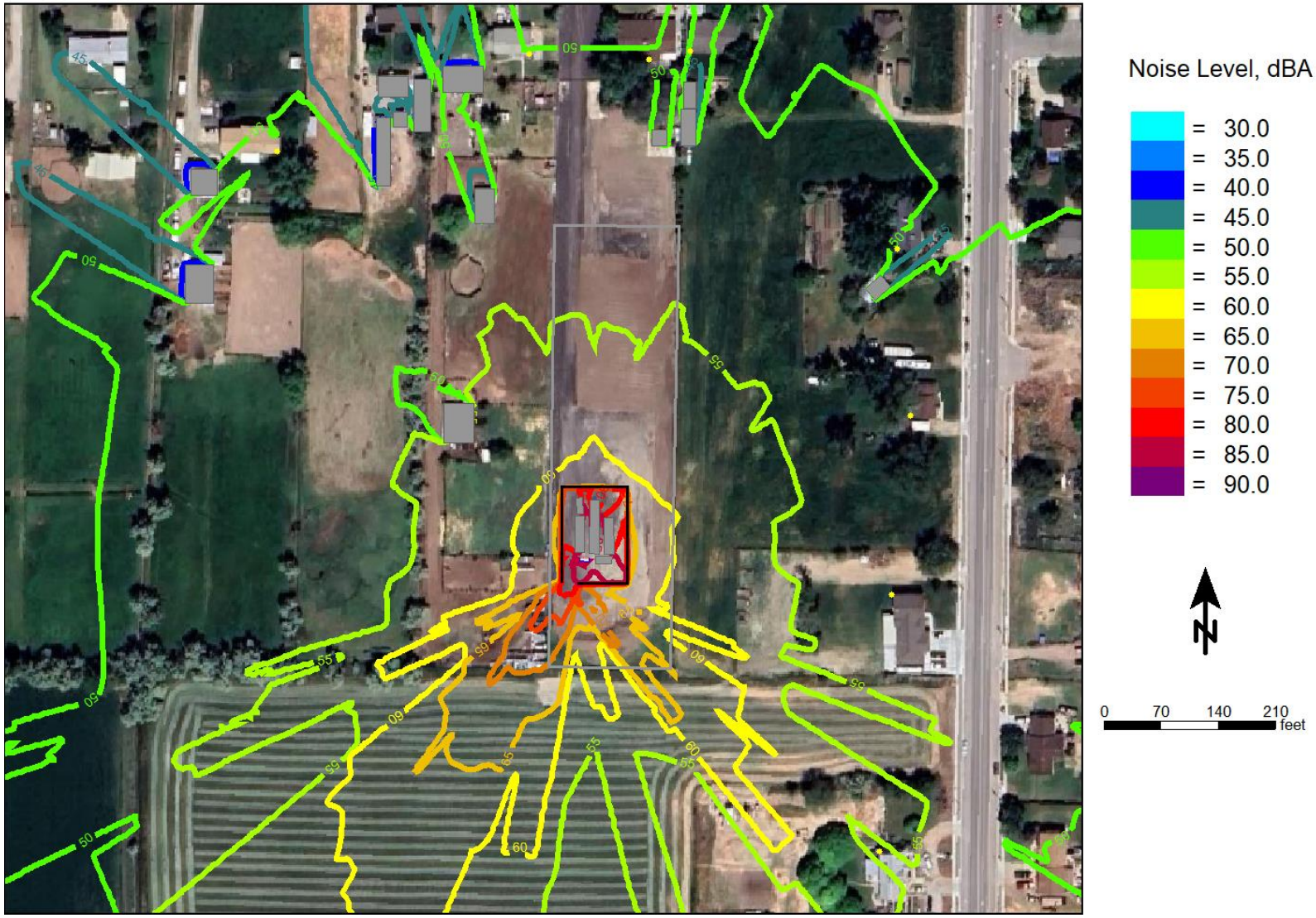


Figure 4-5 Mitigated Noise Contour Map 24-Foot-High Acoustical Wall (dBA)

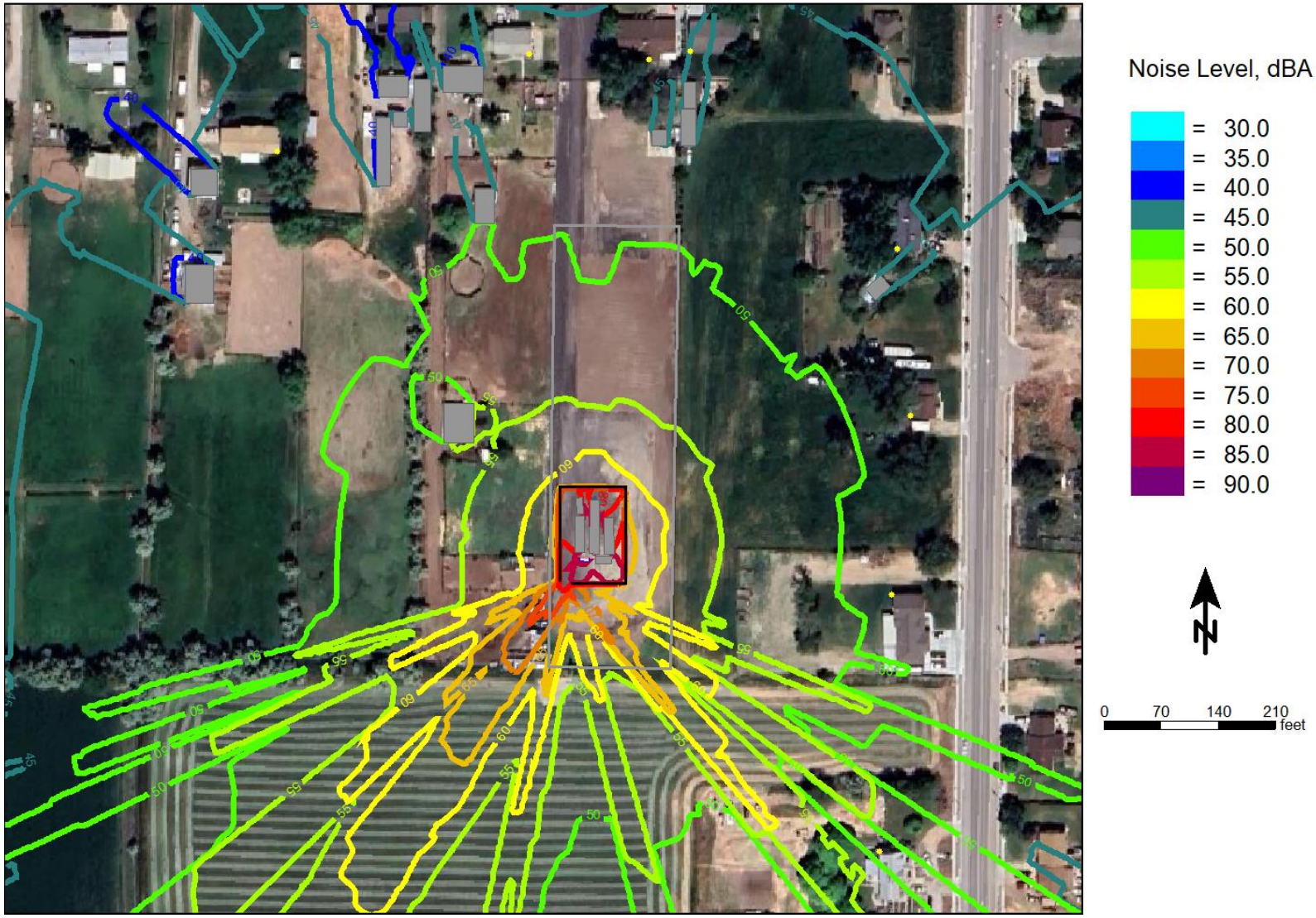


Figure 4-6 Mitigated Noise Contour Map 32-Foot-High Acoustical Wall (dBA)

5. Conclusion

A predictive noise model representing the proposed drilling operations at the Well #4 site was created to assess the operational drilling noise levels and determine the effect of the noise mitigation. To assess the noise levels of the proposed well site, historical noise level data previously measured by Behrens and Associates Environmental Noise Control (BAENC) and typical of water well drilling equipment was used in the noise model. The noise model was developed using SoundPLAN 9.0 software.

The results of the unmitigated modeling indicate that mitigation is required to reduce sound levels when comparing to the West Haven Noise Ordinance limit of 50 dBA at night. Modeling of sound mitigation was conducted in two scenarios to evaluate the effect of a wall height of 24 ft vs a height of 32 ft.

With the implementation of the 24-ft-high wall, the resulting sound levels are reduced by at least 5 decibels at all receptors. This corresponds with a readily perceptible change according to Table 2-1. It is noted that the resulting sound levels are above the 50 dBA guideline from the West Haven Noise Ordinance.

With the implementation of the 32-ft-high wall, the resulting sound levels are reduced by at least 10 decibels at all receptors. This corresponds with a halving of loudness change according to Table 2-1. It is noted that the resulting sound levels are below the 50 dBA guideline from the West Haven Noise Ordinance but above the 5 dB plus ambient threshold at Receptor 4 and Receptor 5 by 1 dBA.

This assessment considers airborne vibration (sound) only and does not include analysis regarding groundborne vibration. It is the opinion of Behrens and Associates that drilling rigs such as the one analyzed in this report, do not typically cause high groundborne vibration levels, especially at a distance of 385 ft, which is the distance to the nearest residence. The risk of property damage or disturbance due to groundborne vibration is therefore low. It is advised to distinguish this from low frequency noise which has potential to cause loose object in home to rattle. This effect is dependent on the object rattling and home construction and is therefore difficult to predict. Any acoustical sound walls recommended in this report will be a minimum Sound Transmission Class (STC) of 32 which is generally more effective at mitigating low frequency noise than acoustical walls with a lower STC.

Appendix A - Glossary of Acoustical Terms

Ambient Noise
The all-encompassing noise associated with a given environment at a specified time, usually a composite of sound from many sources both near and far.

Average Sound Level
See Equivalent-Continuous Sound Level

A-Weighted Decibel Scale
The human ear is more sensitive to some sound frequencies than others. It is therefore common practice to apply a filter to measured sound levels to approximate the frequency sensitivity of the human ear. One such filter is called the A-weighted decibel scale which emphasizes sounds between 1,000 and 5,000 Hertz by discounting the frequencies outside of this range. As the human ear is less sensitive to low frequency noise, the A-weighted decibel scale begins to increasingly discount noise below 500 Hertz.

Measurements conducted utilizing the A-weighted decibel scale are denoted with an "(A)" or "A" after the decibel abbreviation (dB(A) or dBA). The A-weighted scale is nearly universally used when assessing noise impact on humans.

Decibel (dB)
The basic unit of measurement for sound level.

Equivalent-Continuous Sound Level (Leq)
The average sound level measured over a specified time period. It is a single-number measure of time-varying noise over a specified time period. It is the level of a steady sound that, in a stated time period and at a stated location, has the same A-Weighted sound energy as the time-varying sound. For example, a person who experiences an Leq of 60 dB(A) for a period of 10 minutes standing next to a busy street is exposed to the same amount of sound energy as if he had experienced a constant noise level of 60 dB(A) for 10 minutes rather than the time-varying traffic noise level. It is measured in decibels, dB.

Frequency
The number of oscillations per second of a sound wave

Inverse Square Law
A rule by which the sound intensity varies inversely with the square of the distance from the source. This results in a 6dB decrease in sound pressure level for each doubling of distance from the source.

Noise Reduction
The difference in sound pressure level between any two points.

Octave
The frequency interval between two sounds whose frequency ratio is 2. For example, the frequency interval between 500 Hz and 1,000 Hz is one octave.

Octave-Band Sound Level
For an octave frequency band, the sound pressure level of the sound contained within that band.

One-Third Octave
The frequency interval between two sounds whose frequency ratio is 2^(1/3). For example, the frequency interval between 200 Hz and 250 Hz is one-third octave.

One-Third-Octave-Band Sound Level
For a one-third-octave frequency band, the sound pressure level of the sound contained within that band.

Point Source
A source that radiates sound as if from a single point.

Receiver / Receptor
A person (or persons) or equipment which is affected by noise.

Sound
A physical disturbance in a medium (e.g., air) that is capable of being detected by the human ear.

Sound Absorption Coefficient
A measure of the sound-absorptive property of a material.

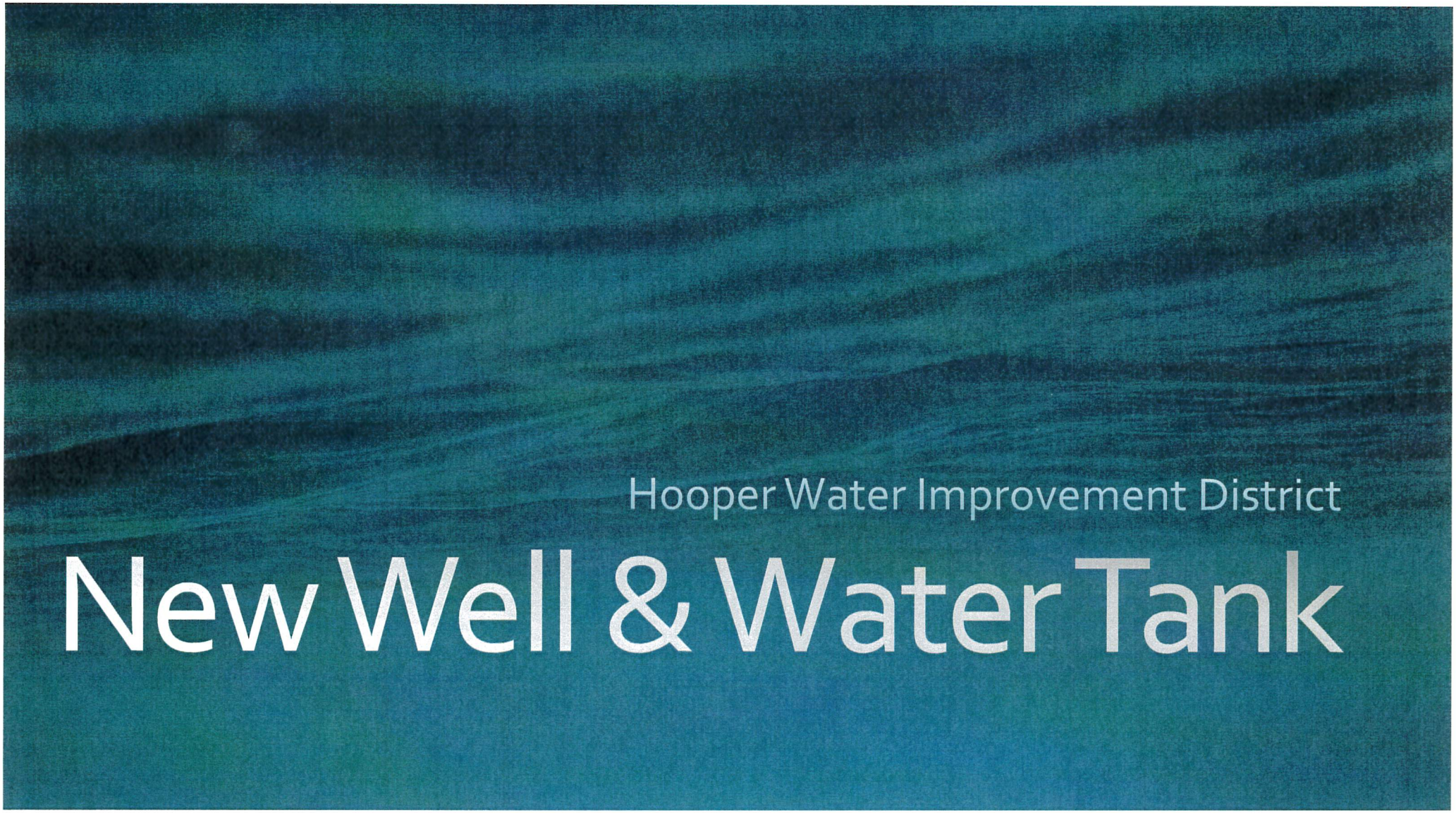
Sound Level Meter (SLM)
An instrument used for the measurement of sound level, with a standard frequency-weighting and standard exponentially weighted time averaging.

Sound Power Level
A physical measure of the amount of power a sound source radiates into the surrounding air. It is measured in decibels.

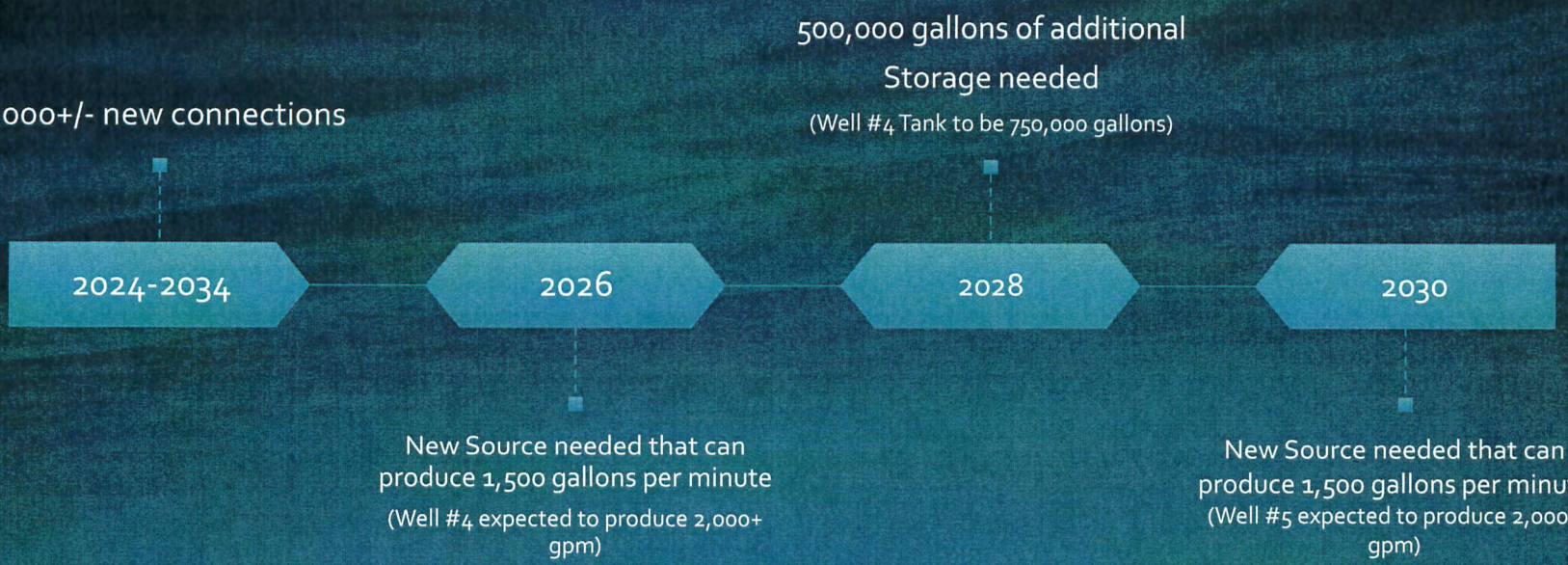
Sound Pressure Level
A physical measure of the magnitude of a sound. It is related to the sound's energy. The terms sound pressure level and sound level are often used interchangeably.

Sound Transmission Class (STC)
A single number rating used to compare the sound insulation properties of walls, floors, ceilings, windows, or doors. This rating is designed to correlate with subjective impressions of the ability of building elements to reduce the overall loudness of speech, radio, television, and similar noise sources in offices and buildings.

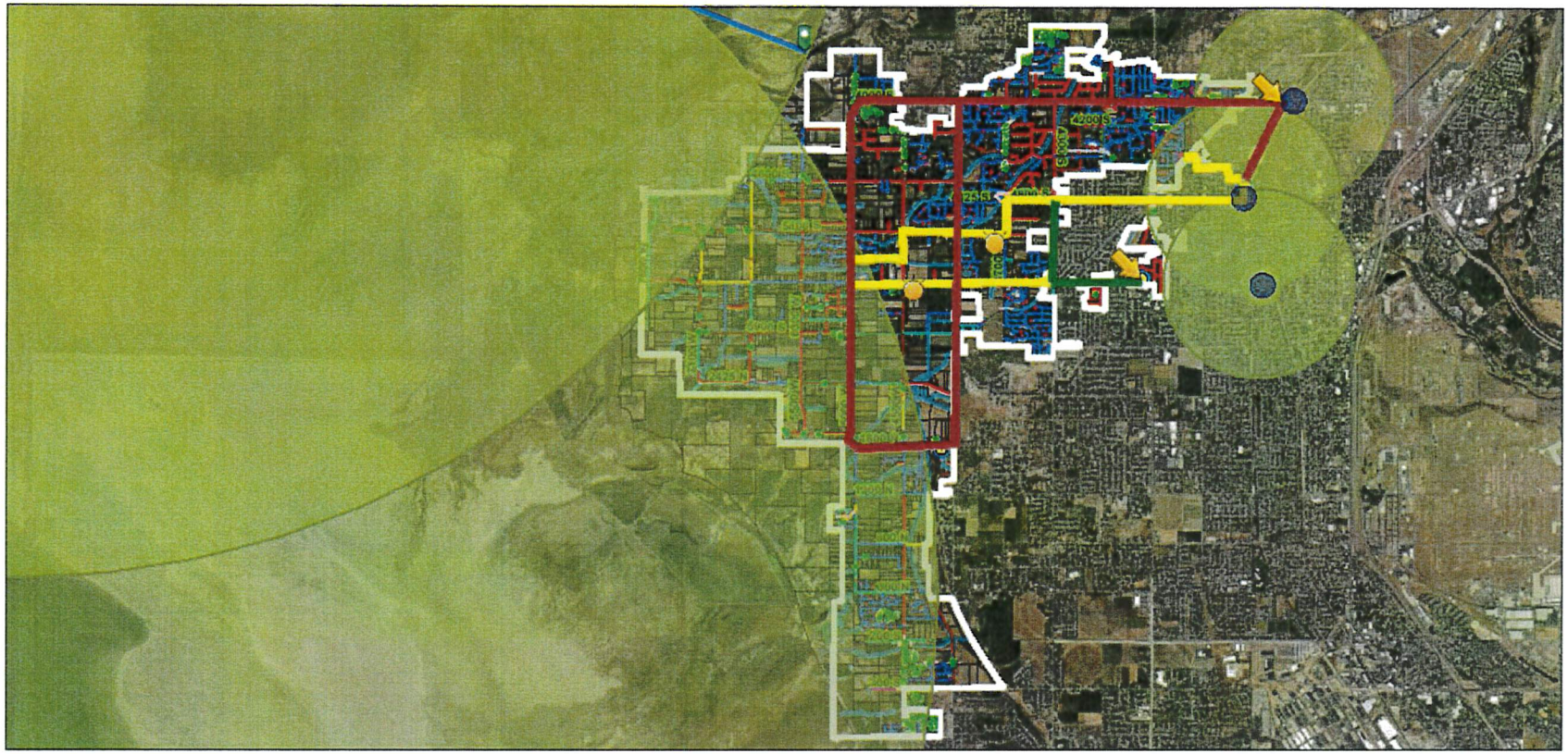
Transmission Loss (TL)
A property of a material or structure describing its ability to reduce the transmission of sound at a particular frequency from one space to another. The higher the TL value the more effective the material or structure is in reducing sound between two spaces. It is measured in decibels.


Hooper Water Improvement District
New Well & Water Tank

Water Outlook



New Production Well Location



4/24/2024, 9:04:13 AM

1:82,535

0 0.5 1 2 mi

0 1 2 4 km

Earthstar Geographics

Cole Allen
Hooper Water Improvement District


4769 W 5100 S
Well #4 Site
Well #4 Site
Redshirt Guitars
Google Earth
500 ft
N

West Point City Water Well and Tank

Hooper Water Improvement District
Well #1

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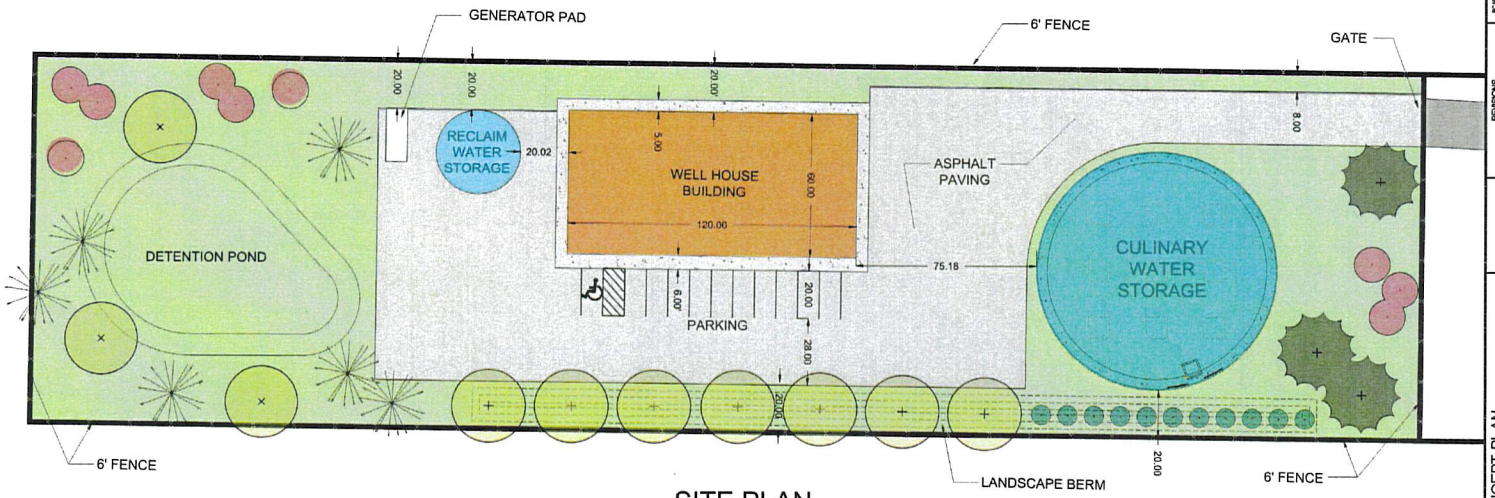
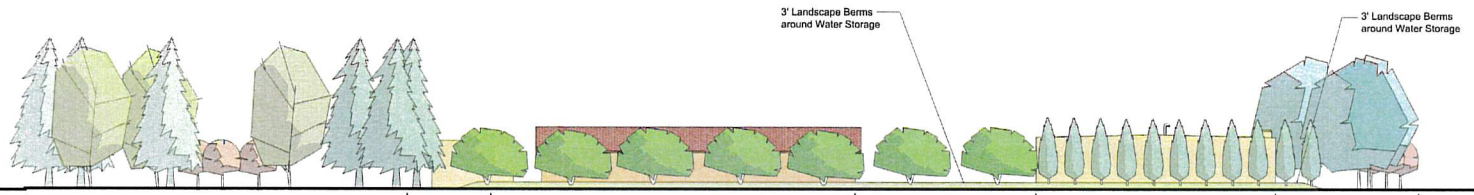
SITE OVERVIEW
HWID CONCEPTUAL 5100S WELL
4769W 5100S
HOOPER, WEBER, UTAH
C-1
REVISIONS
DATE DESCRIPTION
DWG:
W 5100 S
S 4700 W
S 4950 W
PROJECT LOCATION
4760 W. 5100 S.
HOOPER, UTAH



SITE PLAN



EAST ELEVATION

0' 10' 20' 40' 80'
Scale in Feet
1" = 20'

REVISIONS

DATE	DESCRIPTION

SCALE: 1" = 20'
DATE: 04.09.2024
DESIGN: RPEW
DRAWN: AJB
CHECKED: DK
DWG:

CONCEPT PLAN
WELL H4
4769W 5100S
HOOPER, WEBER, UTAH

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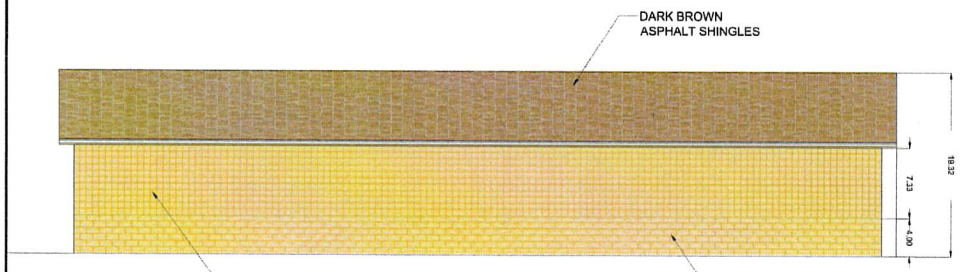
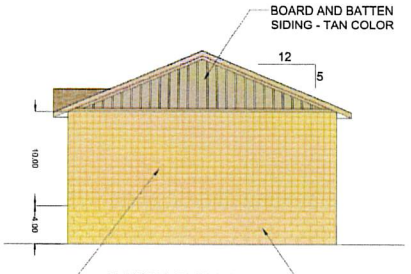
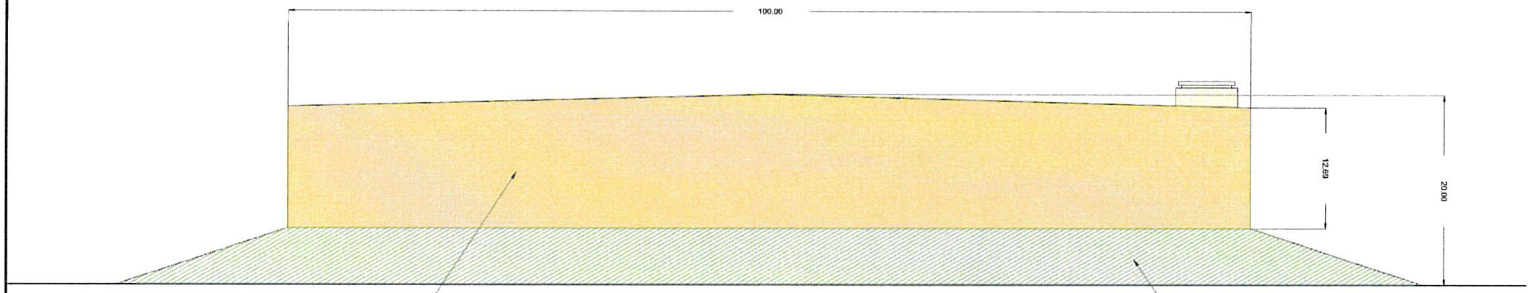
C-2



WEST ELEVATION



SOUTH ELEVATION



WATER STORAGE TANK ELEVATION

0' 3' 5' 10' 15'
Scale in Feet
1" = 5'

REVISIONS

DATE	DESCRIPTION

SCALE 1" = 5'
DATE 04.04.2024
DESIGN PMCW
DRAWN AB
CHECKED DK
DWG

BUILDING ELEVATIONS
WELL H4
4769W 5100S
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6465

C-3

Permits

Conditional Use Permit

(Hooper City)

Application in 2020:

Hooper City Planning Commission did not vote on the permit because the 12-month construction period would have certainly lapsed, so they felt no need to issue a permit at that time.

Application in 2023:

The Conditional Use Permit was denied.

Test Well

(State of Utah)

Permit to drill a test well was issued in 2022.

Test Well Drilled in 2023.

Point of Diversion

(State of Utah)

Application 2024.

Point of Diversion Approval:

April 23, 2024.

Cost of New Source

Well #4

- Current investment in the well is: ~$2 million. (Paid by impact fees)
- Remaining cost to develop the well: ~$4 million. (Paid by future impact fees)

On-Going Costs

- Operation: $100,000 per year (Paid by water rates; everyone uses the water, so everyone pays for it)
- Maintenance: Unknown. But is anticipated to be similar to current well and tank sites. (Paid by water rates)

Conditional Use Permit Concerns and Mitigation Plans

Hooper City Code 10-5-5.5 B.1. "A conditional use *shall be approved* if reasonable conditions are proposed, or can be imposed, to mitigate the reasonably anticipated detrimental effects of the proposed use..." RCO

Topic	Concern	Mitigation
Zoning:	Current: R1 (on Current Zoning Map)	Future Planned Use: Reserved for Culinary Water Tank Sites (Future Land Use Map)
Construction:	Lengthy construction period	Drilling of the well will take 2-3 months, 12 months dormancy, then 18 months to construct the buildings and tank
Traffic:	Increase in traffic and large vehicles	5 semi rigs at startup and take down to drill the well then normal construction equipment for buildings and tank
Noise:	Construction will be loud	16-foot sound barriers will be installed on all 4 sides of work
Lights:	Bright lights on 24 hours a day	Easements are being obtained to use Wilson Irrigation's ditch/storm drain and sewer in 4700 West when it is available
Utilities:	No sewer, or storm drain	Lights will be pointed down to minimize light
Visual Concerns:	Tall tank, unkempt landscaping	Tank will be 20 feet tall. Lot will be fully landscaped
Fence:	8-foot barbed wire	6-foot fence can be installed (Security is high priority)
Operations:	Loud and increase in people	1-2 vehicles per day will visit the site for maintenance