

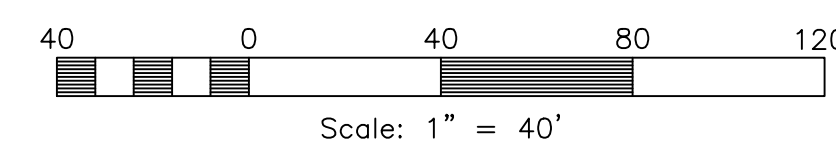


VICINITY MAP

SCALE: NONE

CURVE TABLE

#	RADIUS	ARC LENGTH	CHORD LENGTH	TANGENT	CHORD BEARING	DELTA ANGLE
C1	1959.86'	254.84'	254.66'	127.60'	S80°41'48"E	7°27'01"
C2	1134.18'	117.20'	117.15'	58.65'	S07°46'W	5°55'15"
C3	1959.86'	82.32'	82.31'	41.17'	S71°10'50"E	2°24'24"
C4	1959.86'	83.10'	83.09'	41.55'	S60°35'34"E	2°25'45"
C5	1959.86'	89.43'	89.42'	44.72'	S83°06'53"E	2°36'52"
C6	28.00'	43.98'	39.60'	28.00'	S57°03'47"W	90°
C7	28.00'	43.98'	39.60'	28.00'	N32°56'13"W	90°



NORTH QUARTER CORNER OF SECTION 24 TOWNSHIP 6 NORTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN, U.S. SURVEY. FOUND WEBER COUNTY SURVEY BRASS CAP MONUMENT MARKED "2020" IN RING AND LID 8" BELOW GROUND

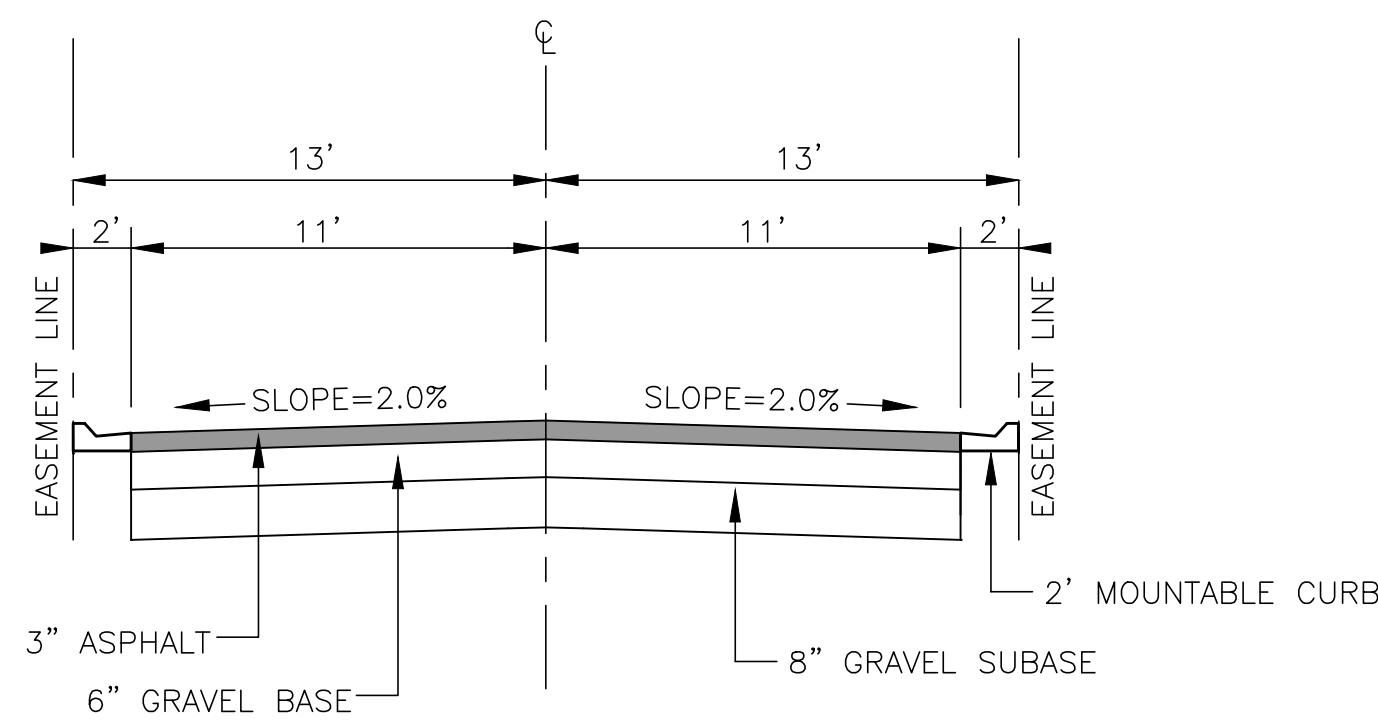
NORTHWEST CORNER OF SECTION 24 TOWNSHIP 6 NORTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN, U.S. SURVEY. FOUND WEBER COUNTY SURVEY BRASS CAP MONUMENT MARKED "2006" IN CONCRETE 15" BELOW GROUND

BOUNDARY DESCRIPTION

PART OF THE NORTHWEST QUARTER OF SECTION 24, TOWNSHIP 6 NORTH, RANGE 1 EAST, SALT LAKE BASE & MERIDIAN, U.S. SURVEY. MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT ON THE SOUTHERLY RIGHT-OF-WAY OF STATE HIGHWAY 39, SAID POINT BEING S89°36'46"E 477.61 FEET AND S00°23'14"W 2.34 FEET FROM THE FOUND MONUMENT AT THE NORTHWEST CORNER OF SAID SECTION 24; THENCE ALONG SAID SOUTHERLY LINE, A NON-TANGENT CURVE TURNING TO THE LEFT WITH A RADIUS OF 1959.86 FEET, AN ARC LENGTH OF 254.84 FEET, A DELTA ANGLE OF 07°27'01", A CHORD BEARING OF S80°41'48"E, AND A CHORD LENGTH OF 254.66 FEET TO THE WESTERLY RIGHT-OF-WAY LINE OF OLD SNOW BASIN ROAD; THENCE ALONG SAID WESTERLY LINE THE FOLLOWING TWO (2) COURSES: (1) S04°48'23"W 313.97 FEET; (2) ALONG A TANGENT CURVE TURNING TO THE RIGHT WITH A RADIUS OF 1134.18 FEET, AN ARC LENGTH OF 117.20 FEET, A DELTA ANGLE OF 05°55'15", A CHORD BEARING OF S07°46'00"W, AND A CHORD LENGTH OF 117.15 FEET TO THE NORTH LINE OF CHALETS AT SKI LAKE PHASE 1; THENCE ALONG SAID NORTH LINE THE FOLLOWING TWO (2) COURSES: (1) N77°56'06"W 194.61 FEET; (2) N77°56'13"W 271.39 FEET TO THE EAST LINE OF CHALETS AT SKI LAKE PHASE 3; THENCE ALONG SAID EAST LINE THE FOLLOWING THREE (3) COURSES: (1) N12°03'47"E 156.02 FEET; (2) S77°56'13"E 158.81 FEET; (3) N13°01'42"E 260.03 FEET TO THE SOUTHERLY RIGHT-OF-WAY LINE OF STATE HIGHWAY 39 AND TO THE POINT OF BEGINNING.

CONTAINING 144,146 SQUARE FEET OR 3.309 ACRES MORE OR LESS.



26' Private Roadway

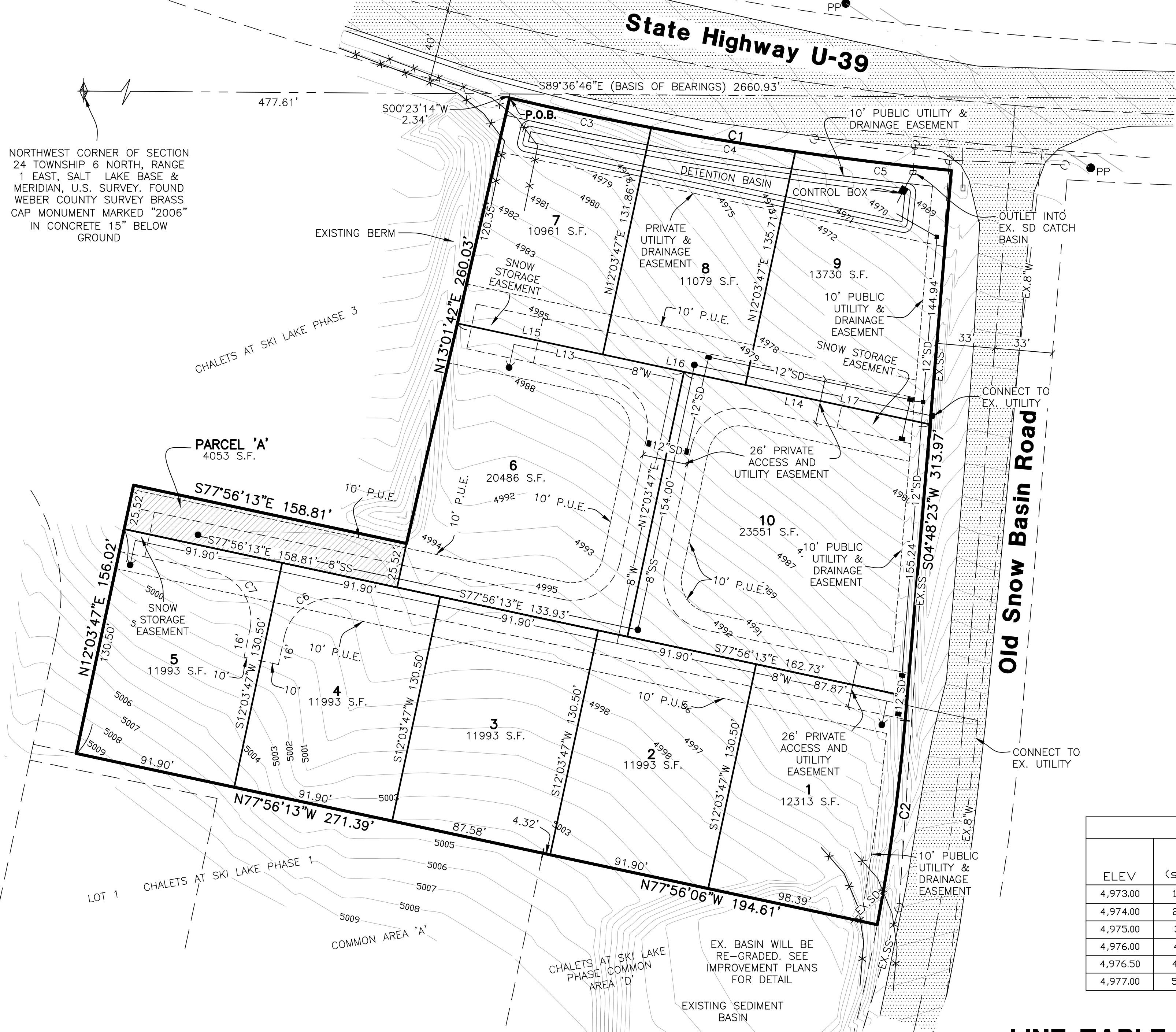
SCALE: NONE

LEGEND

- = SECTION CORNER
- = BOUNDARY LINE
- = LOT LINE
- = ADJOINING PROPERTY
- = EASEMENTS
- = SECTION TIE LINE
- = PROPOSED SANITARY SEWER LINE
- = EXISTING SANITARY SEWER LINE
- = PROPOSED CULINARY WATER LINE
- = EXISTING CULINARY WATER LINE
- = PROPOSED STORM DRAIN
- = SWALE
- = POWER LINE
- = EXISTING POWER POLE
- = PROPOSED FIRE HYDRANT
- = PROPOSED SANITARY SEWER/STORM DRAIN MANHOLE
- = EXISTING SANITARY SEWER/STORM DRAIN MANHOLE
- = PLUG W/ 2" BLOW-OFF
- = PROPOSED STORM DRAIN MANHOLE
- = PROPOSED SINGLE GRATE CATCH BASIN WITH BICYCLE-SAFE GRATE
- = EXISTING CATCH BASIN
- = PUBLIC UTILITY EASEMENT
- = EXISTING PAVEMENT
- = BUILDABLE AREA

NOTES

1. CONTOURS ARE SHOWN IN ONE FOOT INTERVALS.
2. PROPERTY IS IN ZONE X PER FEMA FLOOD PANEL 49057C0475F EFFECTIVE 6-2-2015
3. PARCEL 'A' WILL BE OWNED AND MAINTAINED BY THE HOA.



Storm Runoff Calculations

THE BASIN
7562-03 2/12/2022

The following runoff calculations are based on the Rainfall-Intensity-Duration-Frequency Curve for the Hurlsville, UT area taken from the NOAA Atlas 14 database. Calculations have been completed for the 100-yr 24-hr storm event. Storm water runoff has been calculated for a fully developed site and limited to a release rate of 0.2 cfs/acre.

Drainage Area:
Total Area = 3.31 acre or 144,146 ft²
Runoff Coefficients
19% Paved Area 27,628 C = 0.8
14% Roof 20,000 C = 0.9
67% Landscaped Area 96,518 C = 0.2
Weighted Runoff Coefficient C = 0.43

LID Retention:
90% Percentile Rainfall Event 0.45 in
Is the site Feasible for LID? Yes
Site Imperviousness 0.33
NRCS Soil Group C/D 0.83/1.122
Rv Equation 0.24
Year 1296 c.f.

Volume of Run-off for 100-year Storm Event:

time (min)	Q (cfs)	I (in/hr)	Vol. in (cfs)	Vol. out (cfs)	Difference (cfs)
0	0.00	0.00	0	0	0
5	300	7.48	10.76	199	3031
10	600	5.68	8.17	4904	4507
15	900	4.7	6.78	6087	5492
30	1800	3.16	4.55	8186	6994
60	3600	1.96	2.82	10154	2983
120	7200	1.13	1.63	11708	6843
180	10800	0.777	1.12	12076	7146
360	21600	0.437	0.63	12984	14295
720	43200	0.275	0.40	17096	28591
1440	86400	0.156	0.23	19645	57162

Orifice Sizing:
Given: Q = 0.66 cfs
 2q = 64.4 lbs/s
 H = 3.00 ft
 Cd = 0.62 for circular openings
 R = SQRT(Cd*pi*(0.7)^(64.4*H^0.5))
 = 0.16 feet
 = 1.88 inches
 D = 3.75 inches
 A = 11.06 inches^2

SUMMARY:
The required 100-yr storage volume is 7,772 cubic feet
The required LID Retention volume is 1,295 cubic feet
Orifice size is 4 inches

STAGE STORAGE TABLE

ELEV	AREA (sq. Ft.)	DEPT H (ft)	CONIC INC. VOL. (cu. ft.)	CONIC TOTAL VOL. (cu. ft.)	LID VOLUME
4,973.00	1,097.05	N/A	N/A	0.00	
4,974.00	2,033.12	1.00	1541.21	1541.21	
4,975.00	3,002.11	1.00	2501.93	4043.14	
4,976.00	4,004.01	1.00	3491.06	7534.20	
4,976.50	4,517.28	0.50	2129.04	9663.23	HIGH WATER
4,977.00	5,038.35	0.50	2387.72	12050.96	

BASIN
4976.50 HIGH WATER
4974.00 TOP LID
4973.00 BOTTOM

LINE TABLE

LINE	BEARING	DISTANCE
L1	S77°56'13"E	158.81'
L2	S77°56'13"E	73.00'
L3	S77°56'13"E	80.00'
L4	N12°03'47"E	35.52'
L5	S77°56'13"E	80.00'
L6	S77°56'13"E	133.93'
L7	S77°56'13"E	73.00'
L8	S77°56'13"E	164.01'
L9	S77°56'13"E	73.00'
L10	S77°56'13"E	77.75'
L11	N12°03'47"E	82.00'
L12	N12°03'47"E	82.00'
L13	S77°56'13"E	131.77'
L14	S77°56'13"E	143.12'
L15	S77°56'13"E	84.53'
L16	S77°56'13"E	83.00'
L17	S77°56'13"E	107.36'
L18	S12°03'47"W	16.00'
L19	N77°56'13"W	10.00'
L20	N77°56'13"W	10.00'
L21	N12°03'47"E	16.00'

The Basin

Weber County, Utah

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LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS

DATE	DESCRIPTION
8-11-21	LOT LAYOUT REVISIONS
11-18-21	LOT LAYOUT REVISIONS
1-17-22	LOT LAYOUT REVISIONS
1-18-22	LOT LAYOUT REVISIONS
2-4-22	EASEMENT REVISIONS

The Basin
PART OF THE NW 1/4 OF SECTION 24, T.6N., R.1E., S.11B. & W.1, U.S. SURVEY
WEBER COUNTY, UTAH

Preliminary Plan

Project Info.
Engineer: N. Reeve
Designer: C. Gave
Begin Date: 5-6-21
Name: THE BASIN
Number: 7562-03

Sheet **1** of 1 Sheets