



VICINITY MAP
NOT TO SCALE



Storm Runoff Calculations
Anselmi Acres Subdivision
7152-19 1/27/2023

The following runoff calculations are based on the Rainfall - Intensity - Duration Frequency Curve for the West Weber City 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 0.1 cfs/acre.

The calculations are as follows:

Drainage Area:	Total Area = 15.37 acre or 669,594 ft ²	C = 0.9
Runoff Coefficient:	135,684	C = 0.9
20% Paved Area:	92,500	C = 0.2
66% Landscaped Area:	441,410	C = 0.44
Weighted Runoff Coefficient:		

LID Retention:

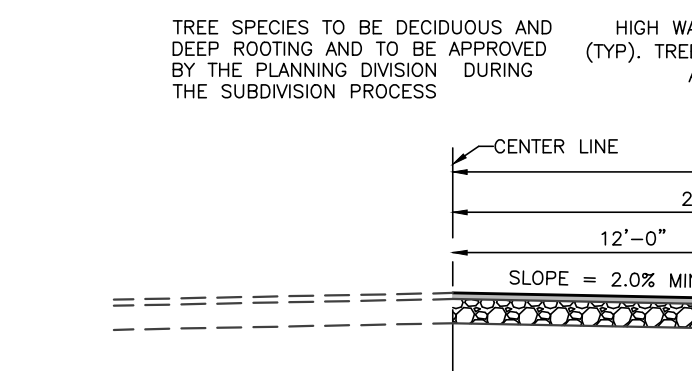
80 th Percentile Rainfall Event	0.6 in
Is the site feasible for LID?	Yes
Site Imperviousness	0.34
NRCS Soil Group	CD
R ₁ Equation	0.8071-1.22
R ₂	0.25
V _{max}	8,304 c.f.

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

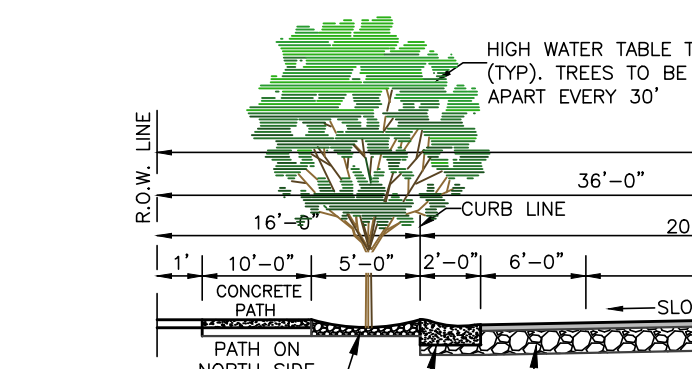
C ₁	0.44					
C ₂	See Below					
A	669,594.25 ft ²					
Q ₁₀₀	1.54 ft/s					
Time (min)	Time (sec)	I (in./hr)	Q (cfs)	Vol. in (cf)	Vol. out (cf)	Difference (cf)
5	300	6.50	44.18	13255	461	12794
10	600	4.86	33.85	20188	922	19266
15	900	4.09	27.80	25521	1383	24138
20	1200	3.75	25.69	33647	2767	30880
30	1800	3.20	22.14	41600	5534	36066
40	2400	2.93	20.61	45418	11068	34350
60	3600	2.50	18.69	46470	18602	27868
90	5400	2.20	17.00	51629	33033	18596
120	7200	2.02	16.00	53134	37272	15862
1440	86400	0.12	0.81	69888	132812	-62934

Summary:
The required 100-yr storage volume is 36,066 cubic feet
The required LID Retention volume is 8,304 cubic feet
Orifice size is 5.7 inches

WEST QUARTER CORNER OF SECTION 21, TOWNSHIP 6 NORTH, RANGE 2 WEST, SALT LAKE BASE AND MERIDIAN, U.S. SURVEY



1400 South Street Street Section (66' R.O.W.)
SCALE: NONE



1600 South Street Street Section (66' R.O.W.)
SCALE: NONE

PROVIDE 4" THICKNESS OF 3/4" OR 1" GRAVEL BASE COURSE UNDER SIDEWALK, DRIVEWAY APPROACHES AND CURB & GUTTER WHEN SUBGRADE IS CLAY OR C.B.R. IS LESS THAN 10 OR AS DIRECTED BY COUNTY ENGINEER

*VERIFY LOCATION WITH PHONE, GAS AND POWER COMPANIES.

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LEGEND

- = SECTION CORNER
- = BOUNDARY LINE
- = LOT LINE
- = ADJOINING PROPERTY
- = CENTERLINE
- = EASEMENTS
- = SECTION TIE LINE
- = PROPOSED SANITARY SEWER LINE
- = EX-S.S. = EXISTING SANITARY SEWER LINE
- = SW = PROPOSED SECONDARY WATER LINE
- = EX-SW = EXISTING SECONDARY WATER LINE
- = W = PROPOSED CULINARY WATER LINE (SIZE VARIES)
- = EX-W = EXISTING CULINARY WATER LINE
- = SD = PROPOSED STORM DRAIN (SIZE VARIES)
- = EX-SD = EXISTING STORM DRAIN
- = X X X = EXISTING FENCE LINE
- = [Circle with cross] = PROPOSED FIRE HYDRANT
- = [Circle with dot] = PROPOSED SANITARY SEWER MANHOLE
- = [Circle with cross] = EXISTING SANITARY SEWER/STORM DRAIN MANHOLE
- = [Circle with dot] = PROPOSED STORM DRAIN MANHOLE
- = [Square with cross] = PROPOSED SINGLE GRATE CATCH BASIN WITH BICYCLE-SAFE GRATE
- = [Square with cross] = PLUG W/ 2" BLOW-OFF
- = [Circle with cross] = FIRE HYDRANT
- = P.U.E. = PUBLIC UTILITY EASEMENT
- = [Dashed box] = EXISTING STRUCTURE
- = [Hatched box] = EXISTING PAVEMENT
- = [Solid box] = PROPOSED PAVEMENT
- = [Solid box] = PROPOSED CONCRETE

LINE TABLE

#	BEARING	DISTANCE
L1	S00°49'59"W	31.94'

NOTES

- CONTOURS ARE SHOWN IN ONE FOOT INTERVALS.
- PROPERTY IS IN ZONE X PER FEMA FLOOD PANEL 49057C0425E, EFFECTIVE 12/16/2005.
- PROJECT WILL BE RE-ZONED TO RE-15
- DEVELOPER WORKING WITH DITCH USERS TO IDENTIFY/CONCLUDE IF DITCHES WILL BE PIPED OR ABANDONED. INFORMATION WILL BE PROVIDED WITH FINAL DESIGN.

CURVE TABLE

CURVE	RADIUS	ARC LTH	CHD LTH	CHD BEARING	DELTA
C1	120.00'	28.41'	28.36'	S05°44'26"E	13°34'
C2	180.00'	34.43'	34.32'	S20°44'40"E	16°28'28"
C3	180.00'	43.09'	42.99'	S20°06'23"E	13°43'03"
C4	180.00'	49.51'	49.36'	S07°22'02"E	15°45'38"
C5	150.00'	77.17'	76.33'	N14°13'34"W	29°28'41"
C6	150.00'	78.56'	77.67'	N13°37'40"W	30°00'28"
C7	180.00'	67.71'	67.31'	S09°43'58"E	21°33'04"
C8	180.00'	26.57'	26.54'	S24°44'12"E	8°27'24"
C9	120.00'	55.34'	54.86'	S15°45'09"E	26°25'30"
C10	120.00'	6.39'	6.39'	S01°00'49"E	3°03'11"
C11	180.00'	71.19'	70.73'	S11°50'37"W	22°39'41"
C12	180.00'	24.91'	24.89'	S27°08'18"W	7°55'39"
C13	120.00'	62.33'	61.63'	S16°13'18"W	29°45'39"
C14	150.00'	79.24'	78.33'	N15°58'03"E	30°16'08"
C15	150.00'	80.08'	79.13'	N15°48'27"E	30°35'20"
C16	121.00'	64.60'	63.83'	S15°48'27"W	30°35'20"
C17	180.00'	12.32'	12.32'	S29°08'28"W	3°55'19"
C18	180.00'	81.71'	81.01'	S14°10'33"W	26°00'31"



BOUNDARY DESCRIPTION

PART OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 6 NORTH, RANGE 2 WEST, SALT LAKE BASE & MERIDIAN, U.S. SURVEY; DESCRIBED AS FOLLOWS:
BEGINNING AT A POINT, SAID POINT BEING 945.51 FEET SOUTH 89°12'03" EAST FROM THE WEST QUARTER CORNER OF SAID SECTION 21 (SAID QUARTER CORNER BEING NORTH 89°12'03" WEST 5295.89 FEET FROM THE EAST QUARTER CORNER OF SAID SECTION 21); THENCE SOUTH 89°12'03" EAST 380.56 FEET; THENCE SOUTH 00°36'26" WEST 172.17 FEET; THENCE NORTH 89°29'13" WEST 6.00 FEET; THENCE SOUTH 00°36'26" WEST 215.00 FEET; THENCE SOUTH 89°29'13" EAST 6.00 FEET; THENCE SOUTH 00°36'26" WEST 929.89 FEET; THENCE NORTH 89°10'04" WEST 746.41 FEET; THENCE NORTH 00°30'47" EAST 413.81 FEET; THENCE SOUTH 89°29'13" EAST 341.10 FEET; THENCE NORTH 00°30'47" EAST 638.53 FEET; THENCE SOUTH 89°29'13" EAST 26.91 FEET; THENCE NORTH 00°30'47" EAST 262.47 FEET TO THE POINT OF BEGINNING.
CONTAINING 668,304 SQUARE FEET OR 15.342 ACRES.

Streets 'A' & 'B' Street Section (60' R.O.W.)
SCALE: NONE
*VERIFY LOCATION WITH PHONE, GAS AND POWER COMPANIES.

Reeve & Associates, Inc.
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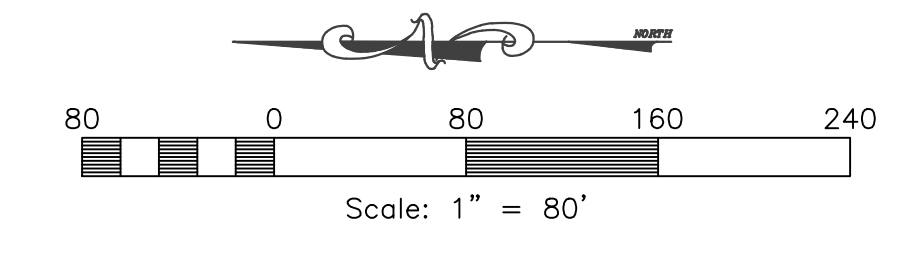
TRA
LAND PLANNERS • CIVIL ENGINEERS • LAND SURVEYORS
TRAFFIC ENGINEERS • STRUCTURAL ENGINEERS • LANDSCAPE ARCHITECTS

REVISIONS	DESCRIPTION	DATE

Anselmi Acres Subdivision
PART OF THE NW 1/4 OF THE SW 1/4 OF SECTION 21, T.6N., R.2W., S.1B.&M., U.S. SURVEY
WEBER COUNTY, UTAH

Preliminary Plan

Project Info.
Engineer: N. Reeve
Planner: C. Cove
Designer: E. Roche
Date: 1-24-23
Name: ANSELMI ACRES SUBDIVISION
Number: 7152-19



Reeve & Associates, Inc.
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REVISIONS	DESCRIPTION

Anselmi Acres Subdivision
 PART OF THE NW 1/4 OF THE SW 1/4 OF SECTION 21, T.6N., R.2W., S.13B.&M., U.S. SURVEY
 WEBER COUNTY, UTAH

Preliminary Utility Connection Plan

Project Info.
 Engineers: N. Reeve
 Planner: C. Cove
 Designer: E. Roche
 Date: 1-24-23
 Name: ANSELMI ACRES SUBDIVISION
 Number: 7152-19

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