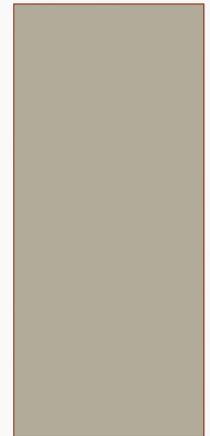


LIME CANYON MEADOWS

PRELIMINARY



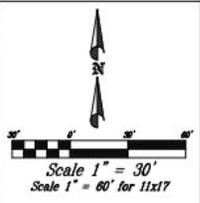
LAND USE SUMMARY

- 2-acre parcel
- R-1-22 zone
- Proposal contains four lots
 - Each lot is 0.5 acres
- Access from Lime Canyon Road
- The lots connect to the Midway Sanitation District's sewer line, Midway City's culinary water line, and Midway Irrigation Company's secondary water line









LEGEND
 25% OR GREATER SLOPES
 UNBUILDABLE AREA

LAND USE CALC
 TOTAL AREA: 2.00 ACRES
 ZONE: R-1-22
 OPEN SPACE: 4 LOTS
 DENSITY: 1 UNIT PER .50 ACRES

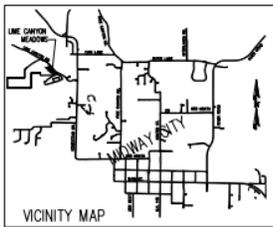
SENSITIVE LANDS
 NO SENSITIVE LANDS WERE IDENTIFIED IN THE SUBDIVISION.

THIS DOCUMENT IS RELEASED FOR REVIEW ONLY. IT IS NOT INTENDED FOR CONSTRUCTION UNLESS SIGNED AND SEALED.
 PAUL D. BERG P.E.
 SERIAL NO. 289286
 DATE 19 DEC 2018

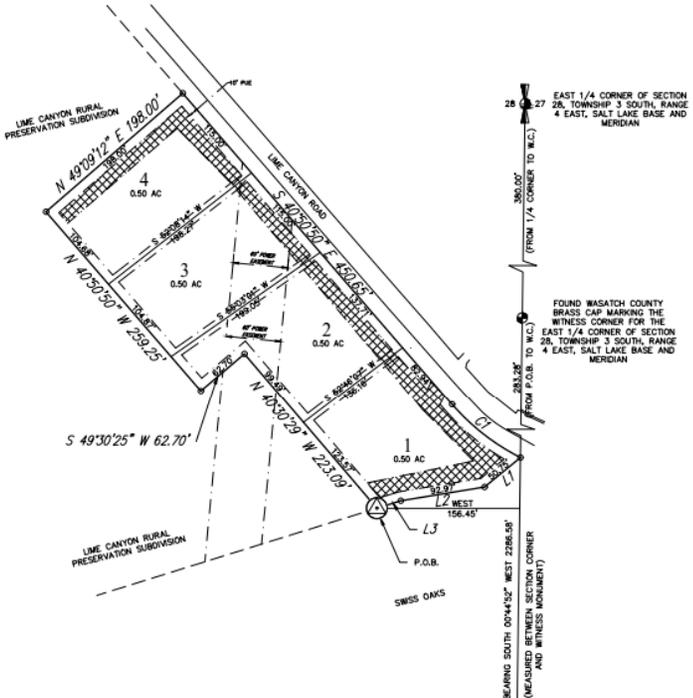
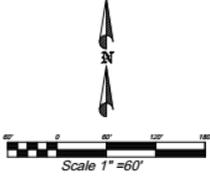
BRETT WALKER
 LIME CANYON MEADOWS
 SITE PLAN

ENGINEERING
 RESOURCE GROUP, P.C.
 380 E. Main St. Suite 204
 Midway, UT 84049
 ph (435) 657-9749

DESIGN BY: CNB DATE: 19 DEC 2018 SHEET
 DRAWN BY: CNB REV: 1



VICINITY MAP
 LOCATED IN THE NORTHEAST AND SOUTHEAST QUARTERS
 OF SECTION 28, TOWNSHIP 3 SOUTH, RANGE 4 EAST,
 SALT LAKE BASE AND MERIDIAN.



CURVE TABLE

CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
CT	95.46'	243.92'	22°00'00"	94.80'	S 52°03'32" E

LINE TABLE

LINE	LENGTH	BEARING
L1	50.75'	S50°36'20" W
L2	92.97'	S80°44'28" W
L3	27.50'	S72°40'04" W

POWER EASEMENT NOTE:

NO BUILDINGS, STRUCTURES OR TREES ARE ALLOWED IN THE 60 FOOT POWER EASEMENT.

SYMBOL LEGEND

- SURVEY BOUNDARY
- ⊙ SET REBAR WITH CAP STAMPED ELEMENT LAND SURVEYING PLS 684412
- ⊙ FOUND REBAR WITH CAP
- ⊕ FOUND SECTION CORNERS (AS NOTED ON DRAWING)
- ⊗ 20' IRRIGATION EASEMENT (HOMESTEAD)

ADDRESS TABLE

LOT	ADDRESS
1	XXXX WEST LIME CANYON ROAD XXXX WEST LIME CANYON WAY
2	XXXX WEST LIME CANYON ROAD
3	XXXX WEST LIME CANYON ROAD
4	XXXX WEST LIME CANYON ROAD

ADDRESSING TO BE DETERMINED BY WASATCH COUNTY GIS

DATE: _____
 WASATCH COUNTY HEALTH DEPARTMENT

DATE: _____
 MIDWAY IRRIGATION COMPANY

DATE: _____
 MIDWAY SANITATION DISTRICT

 COUNTY RECORDER

COUNTY SURVEYOR

APPROVED AS TO FORM ON THIS _____ DAY OF _____, 20____

RS: # _____

 COUNTY SURVEYOR

BOUNDARY DESCRIPTION

BEGINNING AT A POINT WHICH IS SOUTH 00°44'52" WEST 283.28 FEET AND WEST 156.45 FEET FROM THE FOUND WASATCH COUNTY BRASS CAP MARKING THE WITNESS CORNER FOR THE EAST 1/4 CORNER OF SECTION 28, TOWNSHIP 3 SOUTH, RANGE 4 EAST, SALT LAKE BASE AND MERIDIAN.

THENCE NORTH 40°30'29" WEST 223.09 FEET; THENCE SOUTH 49°30'25" WEST 62.70 FEET; THENCE NORTH 40°50'50" WEST 259.25 FEET; THENCE NORTH 49°07'12" EAST 198.00 FEET; THENCE SOUTH 40°50'50" EAST 450.65 FEET; THENCE ALONG THE ARC OF A 243.92 FOOT RADIUS CURVE TO THE LEFT 94.80 FEET (CENTRAL ANGLE OF 22°25'22" AND A CHORD BEARING SOUTH 52°03'32" EAST 94.85 FEET); THENCE SOUTH 50°36'20" WEST 50.75 FEET; THENCE SOUTH 80°44'28" WEST 92.97 FEET; THENCE SOUTH 72°40'04" WEST 27.50 FEET TO THE POINT OF BEGINNING.

CONTAINING: 2.00 ACRES

BASIS OF BEARING

THE BASIS OF BEARING IS SOUTH 00°44'52" WEST 2286.58' (MEASURED BETWEEN SECTION CORNER AND WITNESS MONUMENT).

OWNER'S DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT THE UNDERSIGNED OWNER(S) OF THE PROPERTY DESCRIBED HEREOF, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS, PUBLIC STREETS, AND EASEMENTS AND HEREBY DEDICATE, THOSE AREAS LABELED AS PUBLIC STREETS AND EASEMENTS FOR THE CONSTRUCTION AND MAINTENANCE OF PUBLIC UTILITIES AND EMERGENCY VEHICLE ACCESS.

DATED THIS _____ DAY OF _____, A.D. 20____

BY: BRETT ROBERT WALKER BY: DEBBY MORELE WALKER

ACKNOWLEDGMENT

STATE OF UTAH } S.S.
 COUNTY OF WASATCH }
 ON THE _____ DAY OF _____, A.D. 20____, PERSONALLY APPEARED BEFORE ME _____ WHO DULY ACKNOWLEDGED TO ME THAT HE/SHE DID EXECUTE THE SAME IN THE CAPACITY INDICATED.

MY COMMISSION EXPIRES: _____ NOTARY PUBLIC

ACKNOWLEDGMENT

STATE OF UTAH } S.S.
 COUNTY OF WASATCH }
 ON THE _____ DAY OF _____, A.D. 20____, PERSONALLY APPEARED BEFORE ME _____ WHO DULY ACKNOWLEDGED TO ME THAT HE/SHE DID EXECUTE THE SAME IN THE CAPACITY INDICATED.

MY COMMISSION EXPIRES: _____ NOTARY PUBLIC

ACCEPTANCE BY MIDWAY CITY

THE CITY COUNCIL OF MIDWAY CITY, WASATCH COUNTY, STATE OF UTAH, HEREBY APPROVES THIS SUBDIVISION AND ACCEPTS THE DEDICATION OF LOTS, EASEMENTS, STREETS AND PUBLIC RIGHTS-OF-WAY HEREOF SHOWN.

THIS _____ DAY OF _____, A.D. 20____

APPROVED _____ MAYOR ATTEST _____ CLERK-RECORDER
OR DE BRUN

APPROVED _____ CITY ENGINEER APPROVED _____ CITY ATTORNEY
OR DE BRUN

PLANNING COMMISSION APPROVAL

APPROVED THIS _____ DAY OF _____, A.D. 20____, BY THE _____ CITY PLANNING COMMISSION

PLANNING DIRECTOR _____ CHAIRMAN, PLANNING COMMISSION

SURVEYOR'S CERTIFICATE

IN ACCORDANCE WITH SECTION 10-90-603 OF THE UTAH CODE, I, TROY L. TAYLOR, DO HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR HOLDING LICENSE NUMBER 6854112 IN ACCORDANCE WITH TITLE 59, CHAPTER 22, OF THE PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS LICENSING ACT.

I FURTHER CERTIFY THAT I HAVE COMPLETED A SURVEY OF THE PROPERTY DESCRIBED ON THE PLAT IN ACCORDANCE WITH SECTION 17-23-17 OF THE UTAH CODE, AND HAVE VERIFIED ALL MEASUREMENTS, AND HAVE PLACED MONUMENTS AS REPRESENTED ON THE PLAT.

DATE: _____ SURVEYOR (OR DE BRUN)

LIME CANYON MEADOWS

MIDWAY CITY, WASATCH COUNTY, STATE OF UTAH

LOCATED IN THE NORTHEAST AND SOUTHEAST QUARTERS OF SECTION 28, TOWNSHIP 3 SOUTH, RANGE 4 EAST, SALT LAKE BASE AND MERIDIAN.

SCALE: 1" = 60' FEET

SURVEYOR'S SEAL	MIDWAY PUBLIC SEAL	CITY OWNER SEAL	CLERK-RECORDER SEAL

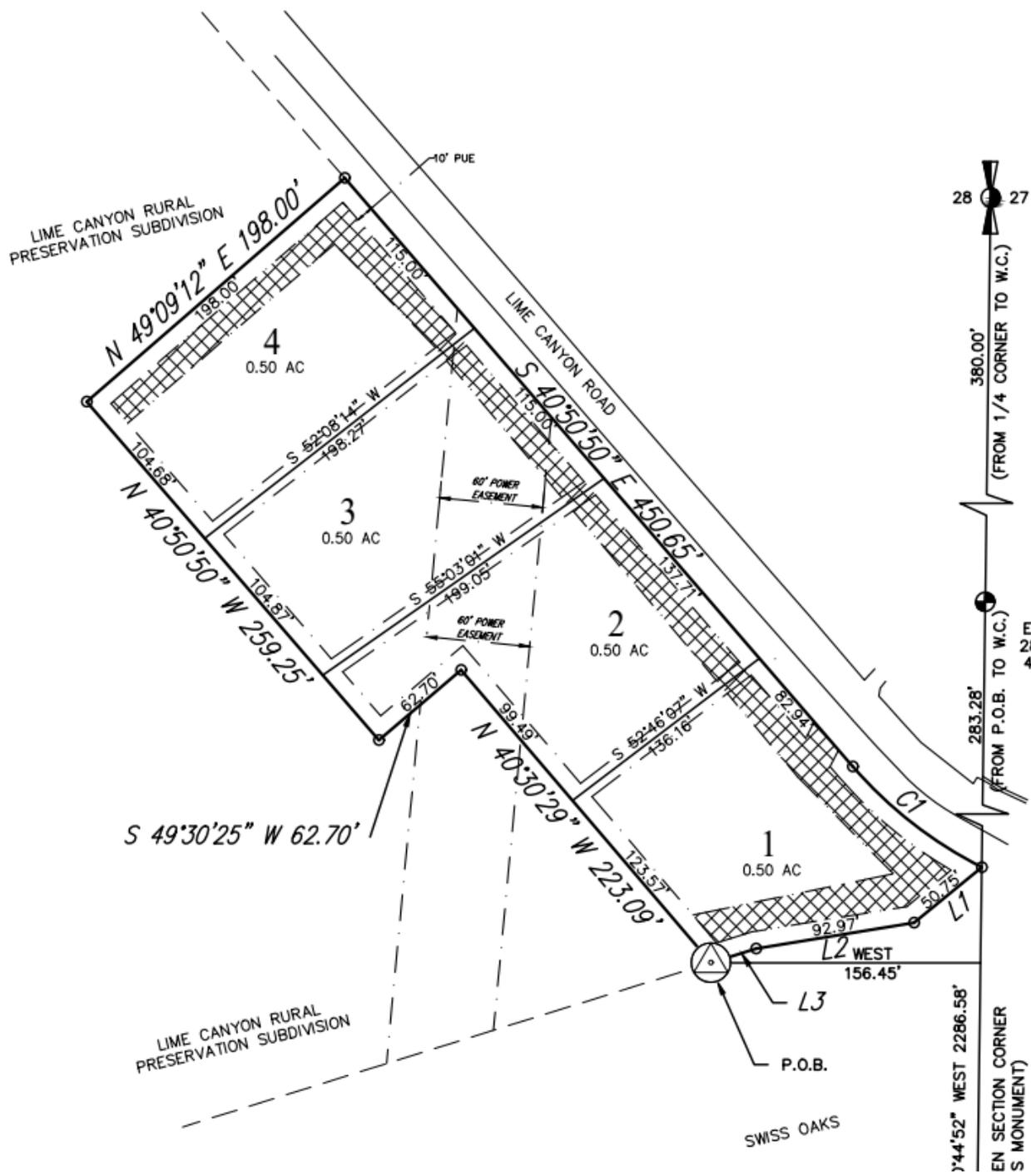
SURVEYOR
 TROY L. TAYLOR, PLS
 ELEMENT LAND SURVEYING
 2286 SOUTH 270 EAST
 PLEASANT CITY, UTAH 84052
 PHONE (801) 657-8748

DATE OF SURVEY: DECEMBER 2017

LIME CANYON SUBDIVISION PLAT - 10 DECEMBER 2018

1/4
QUARTERS
E 4 EAST,

180'



28 27
EAST 1/4 CORNER OF SECTION
28, TOWNSHIP 3 SOUTH, RANGE
4 EAST, SALT LAKE BASE AND
MERIDIAN

380.00'
(FROM 1/4 CORNER TO W.C.)

FOUND WASATCH COUNTY
BRASS CAP MARKING THE
WITNESS CORNER FOR THE
EAST 1/4 CORNER OF SECTION
28, TOWNSHIP 3 SOUTH, RANGE
4 EAST, SALT LAKE BASE AND
MERIDIAN

283.28'
(FROM P.O.B. TO W.C.)

1'44'52" WEST 2286.58'
EN SECTION CORNER
S MONUMENT)

DISCUSSION ITEMS

- Drainage and hydraulics study
- 60' transmission line easement
- Homestead irrigation easements



WATER BOARD RECOMMENDATION

- This Water Board has recommended that 7.1 acre feet is tendered to the City for the outdoor and indoor water requirements. The easement agreement with the Homestead Resort and pressurized irrigation source will also need to be resolved.

POSSIBLE FINDINGS

- The proposal does meet the intent of the General Plan for the R-1-22 zone
- The proposal does comply with the land use requirements of the R-1-22 zone
- A drainage/hydraulics study has been submitted to the City

PROPOSED CONDITIONS

- The hydraulics study and proposed improvements plan as described in the letter from Paul Berg dated August 8, 2019 and reviewed and accepted by Matt Loughlin is followed and is part of the required construction improvements for the subdivision.









August 20, 2019

Michael Henke
Midway City
75 North 100 West
Midway, Utah 84049

Re: Lime Canyon Meadows
Hydrology Study and Proposed Improvements

Dear Michael:

Midway City has required a hydrology study of the Lime Canyon drainage prior to granting preliminary approval of the Lime Canyon Meadows subdivision. Loughlin Water has completed a HECHMS model to determine the amount of runoff from a 100 year storm event in Lime Canyon that reaches the existing detention pond immediately west of the property. Berg Engineering has evaluated the model results, the existing detention pond and the needed improvements to mitigate a 100 year storm event on the Brett Walker property.

100 Year Storm Water Runoff

A summary of the HECHMS model completed by Loughlin Water is provided below. A copy of the model results are attached with this letter.

Lime Canyon Drainage Area	1.72 square miles
100 year peak storm water runoff from Lime Canyon	38.7 cfs
100 year peak runoff volume from Lime Canyon	53.7 acre-feet

Existing Retention Pond

The existing detention pond that is part of the adjacent Lime Canyon Estates subdivision captures some of the 100 year storm water flows. Loughlin Water has estimated that the pond reduces the peak flow to 32.6 cfs and that the pond has a capacity of 21.5 acre-feet.

The outlet for the existing detention pond is a 24" diameter circular grate that is 1' below the top of the pond in the common area parcel but is only 1.5" lower than the high point in Griffiths property immediately north of the pond. The lower level outlet shown on the original plans was not built or has been removed. Due to the outlet grates elevation near the top of the pond and its low flow capacity most of the storm water that passes through the existing detention pond will not flow on to the Brett Walker property. The elevation of the Griffiths front yard acts as a spillway at almost the same level as when water reaches the outlet grate.

During a large storm event the grate is likely to be partially clogged with weeds, branches and other debris. The capacity of the 24" diameter outlet grate with 1.5" of head and a 50% reduction in grate capacity, is only 2.50 cfs. Runoff that passes through the grate is then collected in a 36" pipe that discharges on to the Brett Walker property.

During large storm events, storm water will spill over the top of the pond near the northeast corner of the pond on the Griffiths property. The spill over released from the pond will drain on to Lime Canyon Way and then to Lime Canyon Road. This may explain why Lime Canyon Road has a history of flooding and drainage issues during large storm events but the Walker property is relatively free of signs of flooding and erosion.

Without the lower level outlet, collected runoff that is below the grate must infiltrate into the ground or evaporate. This explains the vegetation types and wet soils conditions in the bottom of the detention pond.

Recommended Improvements

A meeting was held on August 1, 2019 with Mayor Johnson, Wes Johnson, City Engineer, Michael Henke, City Planner, Brett Walker, developer and Paul Berg, project engineer. After reviewing the hydrology study results and the existing detention pond analysis the following improvements were agreed upon.

1. Raise the top of the pond elevation by the Griffiths property to match the top of the pond elevation in the common area for the existing detention pond in the Lime Canyon Estates subdivision.
2. Lower the outlet grate elevation by one foot (1') on the existing detention pond in Lime Canyon Estates.
3. Increase the outlet grate to a thirty inch (30") diameter grate for the existing detention pond in Lime Canyon Estates.
4. Allow runoff that is released on to the Walker property to drain over the entire 4.59 acre drainage easement that is being preserved as a hay field. During a 24 hour period, the drainage easement can absorb 9.2 acre-feet of runoff assuming a low infiltration rate of 1.0 inches per hour and that the water is allowed to run over the entire easement.
5. Install a stock water feature on the Walker property. This water feature is anticipated to hold about one (1) acre foot of runoff. This feature will provide additional storm water retention storage for runoff from Lime Canyon.
6. Install a berm near the east property line of the Walker property and along the south side of the Lime Canyon Meadows subdivision. This berm will help provide an additional factor of safety against flooding for the homes in the Lime Canyon Meadows subdivision. The berm will also create additional storm water retention storage for runoff from Lime Canyon. The current discharge location for the property shall be maintained with the berm construction.

The berm will be constructed as material becomes available from other construction activities in the area. At a minimum, the final height of the berm should be 18 inches at the current discharge location. The final height of the berm may increase depending on the available materials. The final storm water storage capacity will depend on the final height of the berm.

Brett Walker is responsible for the improvements listed in Items 1, 4, 5 and 6. Midway City is responsible to complete the improvements in Items 2 and 3.

If you have any questions about the hydrology study, existing detention pond analysis or the recommended improvements please call me at (435) 657-9749.

Respectfully,

A handwritten signature in blue ink that reads "Paul Berg". The signature is written in a cursive style with a long, sweeping underline.

Paul Berg, P.E.

Copy: Wes Johnson, Midway City Engineer
Brett Walker
Bill Loughlin, Loughlin Water