## PLANNING COMMISSION MEETING STAFF REPORT

| | |
|---|---|
| **DATE OF MEETING:** | October 8, 2019 |
| **NAME OF PROJECT:** | Lime Canyon Meadows |
| **NAME OF APPLICANT:** | Brett Walker |
| **AGENDA ITEM:** | Final |
| **LOCATION OF ITEM:** | 960 West Lime Canyon Road |
| **ZONING DESIGNATIONS:** | R-1-22 |

**ITEM: 4**

Brett Walker is requesting Final approval for the Lime Canyon Meadows Subdivision. The proposal is a large-scale subdivision located on two acres and will contain four lots. The property is located at 960 Lime Canyon Road and is in the R-1-22 zone.

**BACKGROUND:**

This request is for preliminary approval of a large-scale subdivision that will be known as Lime Canyon Meadows. The property is two acres in size and the proposal is to create a four-lot subdivision which will contain 0.5 acre lots. The property is the remnant parcel from the Lime Canyon Rural Preservation Subdivision that Brett Walker also developed. The property begins about one-quarter mile from the intersection of Homestead Drive and Lime Canyon Road. Lime Canyon is about three miles in length and this property is in the drainage area for the canyon. There is also a Rocky Mountain Power transmission line that crosses the property from north to south. The transmission line will affect where structures and trees can be located on two of the lots.

**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

**ANALYSIS:**

*Access* – Access will be from Lime Canyon Road for all four lots. Per Section 16.13.44, development along an existing City street does not require a second point of access if each lot fronts on the City street.

*Geotechnical Study* – A Geotechnical Study has not been required or submitted to the City since no new roads will be built with this proposal.

*Drainage and Hydraulics Study* – The City has required a hydraulics study because the area of the proposal is part of the drainage for Lime Canyon. During and after large runoff events, storm water flows onto this parcel from the west and then percolates into the ground. No water is known to flow off the property from the main drainage of Lime Canyon. The City required that a hydrologist study the impacts of runoff on the parcel to protect future dwellings. Staff was concerned that the four lots may be in area that could be flooded in the future. A hydraulics study was submitted to the City and reviewed by a hydrologist. A mitigation plan has been developed and reviewed (please attached letter from Paul Berg). Also, Matt Loughlin from Loughlin Water Associates, has reviewed the plan and has accepted the analysis and recommendations as stated in the following communication that was submitted to the City from Matt Loughlin to Paul Berg:

> *Your analysis and recommendations are correct and acceptable to me. With the improvements proposed to the outlet grate the 100 year storm could be routed without overtoping of the detention dam or running water down the local streets as long as the outlet grate spacings are large and is kept clean and clear with annual maintenance. An emergency overflow spillway should still be maintained, possibly down the streets, where you want any unintentional overflows to be directed (in case the outlet is clogged or a storm larger than the 100 year event occurs) so that the detention dam is never overtopped or compromised.*

*Water Connection* – The lots will to the City's culinary water lines in the area.

*60' Power Easement* – A 60' transmission line power easement crosses a section of the property. No buildings or trees will be allowed in this area as noted on the plat. The City will not approve any building permits in the easement area. Rocky Mountain Power will be responsible for enforcing any other rights associated with their easement.

*Sewer Service* – The lots will to Midway Sanitation District's sewer line in the area.

*Secondary Water Connection* – The lots will connect to Midway Irrigation Company's secondary which is in the area and is already servicing the lots in the Lime Canyon Rural Preservation subdivision. Laterals will be created for all four lots. Secondary water meters are required for each lateral.

*Lime Canyon Rural Preservation Subdivision Development Agreement* – The development agreement for the Lime Canyon Rural Preservation subdivision restricted the remnant parcel to agricultural uses only unless the remnant parcel was further subdivided and approved by the City. At the time of the approval of the rural preservation subdivision the City had a requirement of two access points for roads longer than 500'. Since that time the City has adopted a code that allows development along existing city streets if no new roads are constructed as part of the development. The revised code allows development to proceed on the two-acre parcel.

*Homestead Irrigation Easements* – The owners of The Homestead have irrigation lines that cross all four of the proposed lots. The proposed plans show easements that will contain the irrigation lines and will limit development in the easements. The owners of The Homestead will be responsible for enforcing their easement rights with future lot landowners.

**WATER BOARD RECOMMENDATION:**

The Water Board approved the following motion:

To recommend to City Council that the Lime Canyon Meadows located at 960 Lime Canyon Road be required to turn in 7.1-acre feet of water based on the water calculations presented tonight. The easement agreement with the Homestead Resort and pressurized irrigation source will also need to be resolved. Midway Irrigation Member Grant Kohler seconded the motion.

**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 along with a flood mitigation plan

**ALTERNATIVE ACTIONS:**

1. Recommendation of Approval (conditional). This action can be taken if the Planning Commission finds that conditions placed on the approval can resolve any outstanding issues.

    a. Accept staff report
    b. List accepted findings
    c. Place condition(s)

2. Continuance. This action can be taken if the Planning Commission finds that there are unresolved issues.

    a. Accept staff report
    b. List accepted findings
    c. Reasons for continuance
        i. Unresolved issues that must be addressed
    d. Date when the item will be heard again

3. Recommendation of Denial. This action can be taken if the Planning Commission finds that the request does not meet the intent of the ordinance.

    a. Accept staff report
    b. List accepted findings
    c. Reasons for denial

**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.

728 West 100 South
Heber, UT 84032
www.horrocks.com

HORROCKS ENGINEERS

Heber Office
Tel: 435.654.2226
Fax: 435.657.1160

April 9, 2019

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

**Subject: Lime Canyon Meadows Subdivision, Preliminary Review**

Dear Michael:

Horrocks Engineers recently reviewed the Lime Canyon Meadows Subdivision plans for Preliminary Approval. The following issues should be addressed.

General Comments

- The proposed plans is a four lot subdivision adjacent to Lime Canyon Road.

Water

- The proposed development will be served from the Cottages tank. Culinary water will be provided from the existing 8" water line adjacent to Lime Canyon Road.

Roads

- No road improvements will be required for the four lots within the proposed subdivision.

Trails:

- No trails are shown to be constructed within the development.

Storm Drain

- The proposed subdivision is at the bottom of the Lime Canyon drainage. The recessed areas of this land is the final retention basin for all of Lime Canyon. To protect the safety of each of the proposed lots/homes, the high water line of the 100 year, 24 hour storm should be shown on the plans prior to final approval,
- The existing swales along Lime Canyon Road will accommodate the storm water runoff from Lime Canyon road.

Landscaping

- No landscaping will be required as part of the proposed subdivision.

Please feel free to call our office with any questions.

Sincerely,
HORROCKS ENGINEERS

Wesley Johnson, P.E.
Midway City Engineer

cc: Paul Berg Berg Engineering, (sent by Email)


Lime Canyon Rd
Swiss Oaks Dr
Schneitter Ct
Urrutia


N

30' 0' 30' 60'

*Scale 1" = 30'*
*Scale 1" = 60' for 11x17*

LEGEND

25% OR GREATER SLOPES
UNBUILDABLE AREA

LAND USE CALCS

| | |
|---|---|
| TOTAL AREA: | 2.00 ACRES |
| ZONE: | R-1-22 |
| OPEN SPACE: | |
| # OF LOTS: | 4 LOTS |
| DENSITY: | 1 UNIT PER 0.50 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.

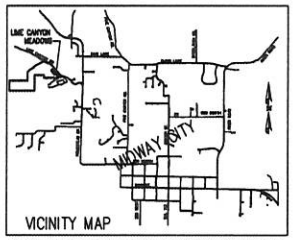
PAUL D. BERG _____ P.E.
SERIAL NO. 282980
DATE: 11 SEP 2019

BRETT WALKER
LIME CANYON MEADOWS

SITE PLAN

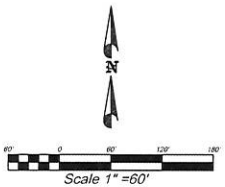
BERG ENGINEERING
380 E Main St. Suite 204
Midway, Ut 84049
ph 435.657.9749

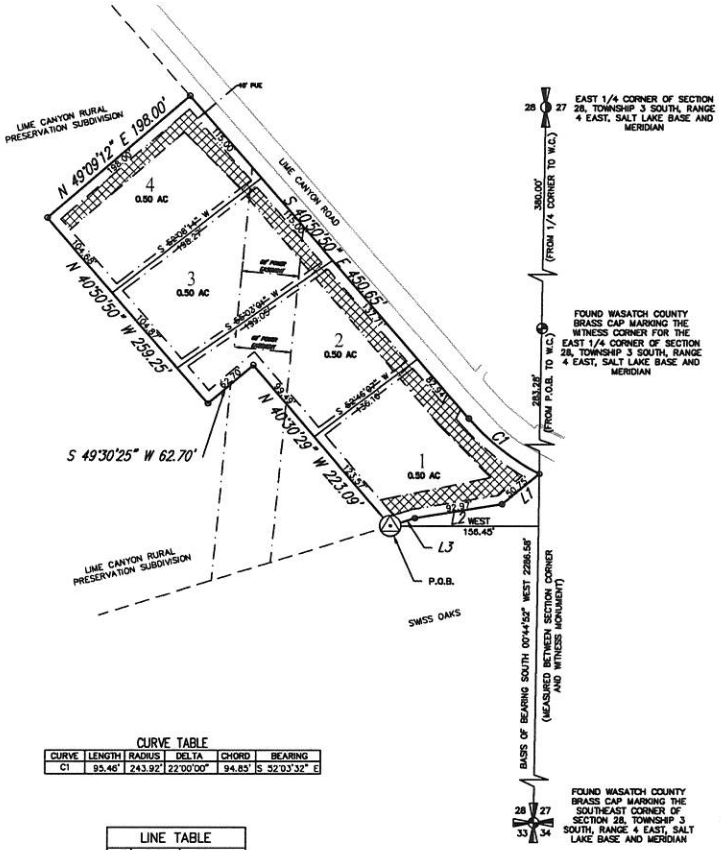
| | | |
|---|---|---|
| DESIGN BY: CNB | DATE: 11 SEP 2019 | SHEET |
| DRAWN BY: CNB | REV: | 1 |




VICINITY MAP

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




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.)

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

28 27 33 34 FOUND WASATCH COUNTY BRASS CAP MARKING THE SOUTHEAST CORNER OF SECTION 28, TOWNSHIP 3 SOUTH, RANGE 4 EAST, SALT LAKE BASE AND MERIDIAN

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 6854112
- FOUND REBAR WITH CAP
- FOUND SECTION CORNERS (AS NOTED ON DRAWING)
- 20' IRRIGATION EASEMENT (HOMESTEAD)

CURVE TABLE

| CURVE | LENGTH | RADIUS | DELTA | CHORD | BEARING |
|---|---|---|---|---|---|
| C1 | 95.46' | 243.92' | 22°00'00" | 94.85' | 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°45'04"W |

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

## 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°09'12" 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 95.46 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°45'04" 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 HEREON, 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 MICHELE WALKER

## ACKNOWLEDGMENT

STATE OF UTAH }
COUNTY OF WASATCH } S.S.

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 }
COUNTY OF WASATCH } S.S.

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 HEREON SHOWN.

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

APPROVED _____ MAYOR ATTEST _____ CLERK-RECORDER (SEE SEAL BELOW)

APPROVED _____ CITY ENGINEER (SEE SEAL BELOW) APPROVED _____ CITY ATTORNEY

## PLANNING COMMISSION APPROVAL

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

_____ PLANNING DIRECTOR _____ CHAIRMAN, PLANNING COMMISSION

## SURVEYOR'S CERTIFICATE

IN ACCORDANCE WITH SECTION 10-9a-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 58, 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 (SEE SEAL BELOW)

# 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 | NOTARY PUBLIC SEAL | CITY ENGINEER SEAL | CLERK-RECORDER SEAL |
|---|---|---|---|
| | | | |

## COUNTY SURVEYOR

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

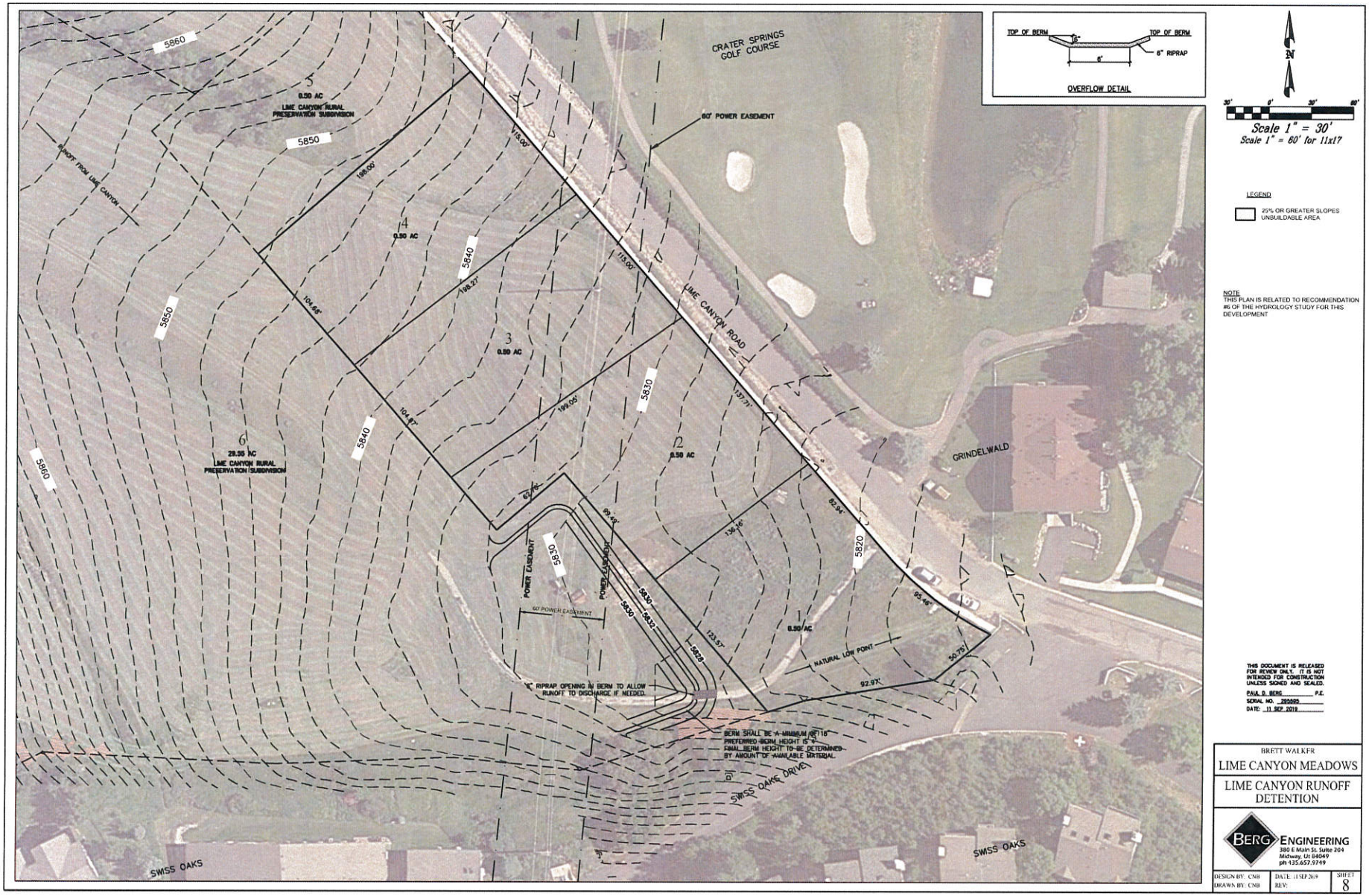
ROS # _____

_____ COUNTY SURVEYOR

LIME CANYON SUBDIVISION PLAT - 10 DECEMBER 2018

SURVEYOR:
TROY L. TAYLOR, PLS
ELEMENT LAND SURVEYING
2298 SOUTH 270 EAST
HEBER CITY, UTAH 84032
PHONE (801) 657-8748

DATE OF SURVEY: DECEMBER 2017

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PAUL D. BERG P.E.
SERIAL NO. 292085
DATE: 11 SEP 2019

BRETT WALKER

LIME CANYON MEADOWS

LIME CANYON RUNOFF DETENTION

BERG ENGINEERING
380 E Main St. Suite 204
Midway, Ut 84049
ph 435.657.9749

| DESIGN BY: CNB | DATE: 11SEP2019 | SHEET |
|---|---|---|
| DRAWN BY: CNB | REV: | 8 |

BERG ENGINEERING
RESOURCE GROUP, P.C.
380 E. Main St. Suite 204, Midway, Ut 84049 • ph 435.657.9749 • fax 435.657.9730
civil engineering land planning landscape architecture

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,

Paul Berg

Paul Berg, P.E.

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