



## PLANNING COMMISSION MEETING STAFF REPORT

**DATE OF MEETING:** February 21, 2018

**NAME OF PROJECT:** Lucerne Estates

**NAME OF APPLICANT:** Berg Engineering

**AGENDA ITEM:** Preliminary Approval

**LOCATION OF ITEM:** 100 South 100 East

**ZONING DESIGNATION:** R-1-9

### **ITEM: 6**

Berg Engineering, agent for RD Development, is requesting preliminary approval for a subdivision that will be called Lucerne Estates. The proposal is for a 14-lot subdivision that is 4.77 acres in size and is in the R-1-9 zone. The property is located at approximately 100 South 100 East.

### **BACKGROUND:**

This request is for preliminary approval of a large-scale subdivision on 4.77 acres and will contain 14 lots. The 14 lots proposed in the subdivision will obtain frontage along new roads built within the subdivision (100 South and 180 East) and four lots will front the existing 100 East. The property is in the R-1-9 zones which allows single-family dwellings and duplex dwellings (duplex lots require more frontage, acreage, and water than single-family lots). None of the comply with the code requirements for duplexes because first, all the lots have only 0.8-acre feet of water which is enough for one culinary connection, second all the lots do not have both the required frontage and acreage for duplexes.

This R-1-9 zone does not require open space, so none has been included in the proposal. The parcel is located close to Main Street where many services are located. It is also close to the Midway Elementary School and an LDS chapel. The property has historically been used for agricultural. The sidewalks and the park strips in the development will both be 5' wide. The new sidewalks will greatly help the movement of pedestrians, especially school children, in the area with the added sidewalks. Many children use 200 East to access school which does not have sidewalk, now children will be able to use the new 5' sidewalks in the proposal which will allow a safer walk to school. The developer has included a 5' trail that will run from the end of the cul-de-sac to 185 South that will become school property.

The General plan describes the R-1-9 zone as the following:

*The R-1-9 zone (9,000 sf lot) provides a residential environment within the City which is characterized by smaller lots and somewhat denser residential environment than is characteristic of the R-1-11 Zone. Nevertheless, this zone is characterized by spacious yards and other residential amenities adequate to maintain desirable residential conditions. The principal uses permitted in this zone shall be one and two-family dwellings and certain other public facilities needed to promote and maintain stable residential neighborhoods. This zone should be planned with an emphasis on walkability.*

This proposal was noticed for two weeks in the Wasatch Wave, it was posted in three locations in Midway, and it was noticed on the State's webpage and the City's webpage.

#### **LAND USE SUMMARY:**

- 4.77-acre parcel
- R-1-9 zoning
- Proposal contains 14 lots
- Only single-family dwellings will be allowed
- Access from 100 South and 100 East
- The lots will connect to the Midway Sanitation District sewer, Midway City's culinary water line, and Midway Irrigation Company's secondary water line

## ANALYSIS:

*Access* – Access will be from 100 South, 100 East and 180 East. The proposed 100 South will access 200 East north of lot 17 of the Timpanogos View Estates where the City owns a 60’ wide area that was deeded to the City for a future road when the Timpanogos View Estates plat was recorded in August of 1973.

*Single-family dwellings* – Only single-family dwellings will be allowed on all 14 lots even though the R-1-9 zone does allow duplexes. The reason no duplexes are allowed is because none of the lots comply with the code requirements for duplexes because first, all the lots have only 0.8-acre feet of water which is enough for one culinary connection, second all the lots do not have both the required frontage and acreage for duplexes. A note should be included on the plat advising future lots owners of the limitation.

*Sidewalks and connectivity* – The developer will install 5’ sidewalks throughout the development. The new sidewalks will greatly help the movement of pedestrians, especially school children, in the area with the added sidewalks. Many children use 200 East to access school which does not have sidewalk, now children will be able to use the new 5’ sidewalks in the proposal which will allow a safer walk to school. The developer has included a 5’ trail that will run from the end of the cul-de-sac to 185 South that will become school property.

*City and School District agreement of 185 South* – The City and the Wasatch School District agreed to a property exchange in 2017 that allowed for the construction of Michie Lane (300 South). The agreement was that the school district would deed Michie Lane to the city to allow for construction of the road if the City, at a future date, would deed 185 South to the school district. The catalyst for deeding 185 South was determined to be when 100 South is built which, is part of the proposed Lucerne Estates. Basically, the City agreed to vacate one road if two new roads were in service. The deeding of 185 to the school district will allow the school to have flexibility regarding future plans for Midway Elementary and its surrounding property. Once 100 South is built and deeded to the City then the City will need to follow the process, as outlined in the State code, to vacate the road and then deed it to the school district.

*Water Connection* – The lots will connect to water lines that will be built by the developer and connect to the City’s water lines in the area.

*Sewer Connection* – The lot will connect to Midway Sanitations District’s sewer lines located in the area.

*Secondary Water Connection* – The lots will connect to Midway Irrigation Company’s secondary which is already servicing the property. Laterals will be created for all 14 lots. Secondary water meters are required for each lateral.

*Geotechnical report* – The applicant has submitted a geotechnical study. A summary of that study is attached to this report.

*Traffic study* – A traffic study is not required for this proposal since there are less than 15 lots proposed.

#### **WATER BOARD RECOMMENDATION:**

This item was reviewed by the Water Board on February 6, 2017. The board recommended that 17.6-acre feet of water are tendered to the City before the plat is recorded. This calculation is based on single-family dwellings constructed on each lot.

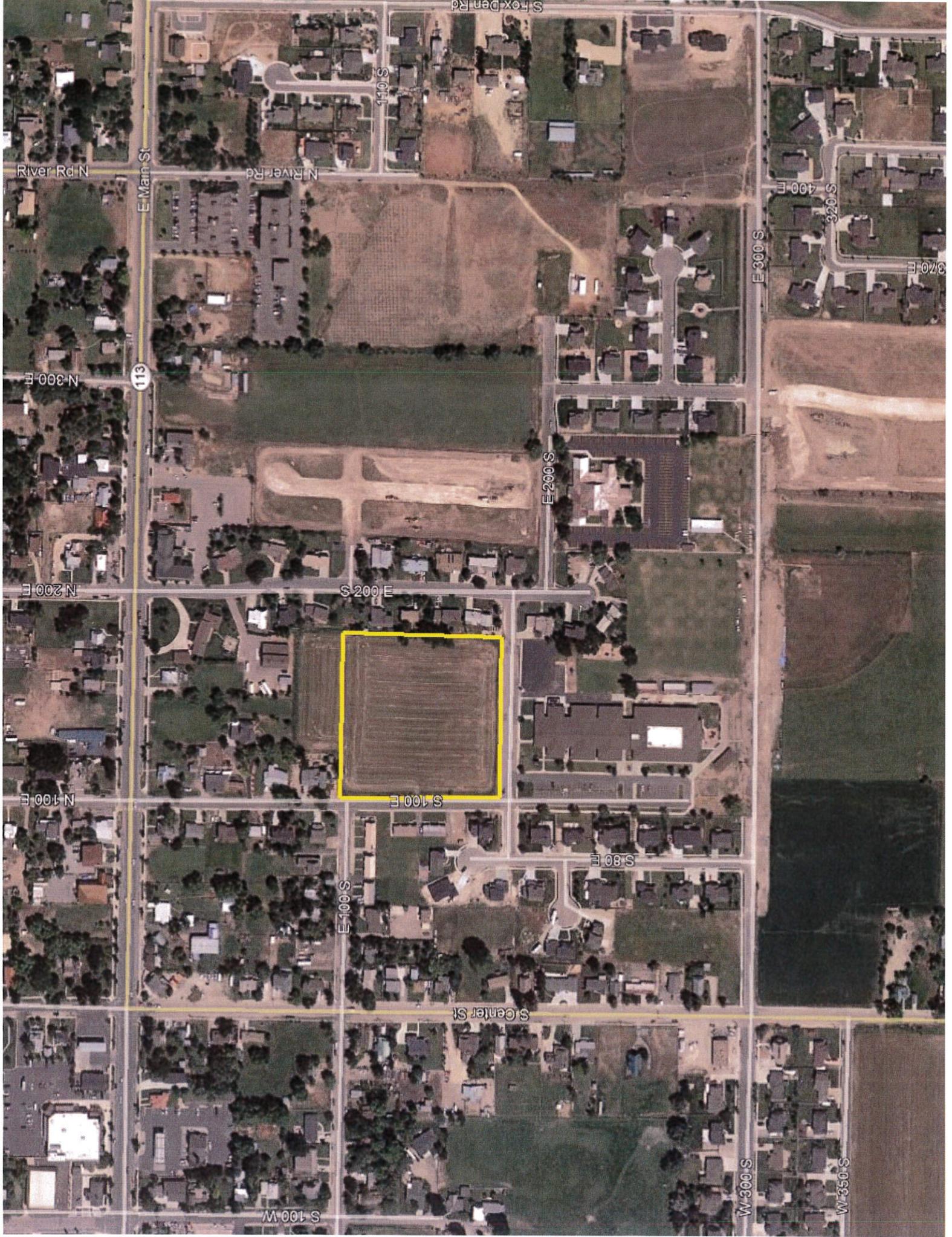
#### **POSSIBLE FINDINGS:**

- The proposal does meet the intent of the General Plan for the R-1-9 zoning district
- The proposal does comply with the land use requirements of the R-1-9 zoning district
- The sidewalks crossing the property and connecting to neighboring roads and existing sidewalks will benefit the community by allowing safe pedestrian access.

#### **ALTERNATIVE ACTIONS:**

1. Recommendation of Approval (conditional). This action can be taken if the Planning Commission feels 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 feels 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 feels that the request does not meet the intent of the ordinance.
  - a. Accept staff report
  - b. List accepted findings
  - c. Reasons for denial

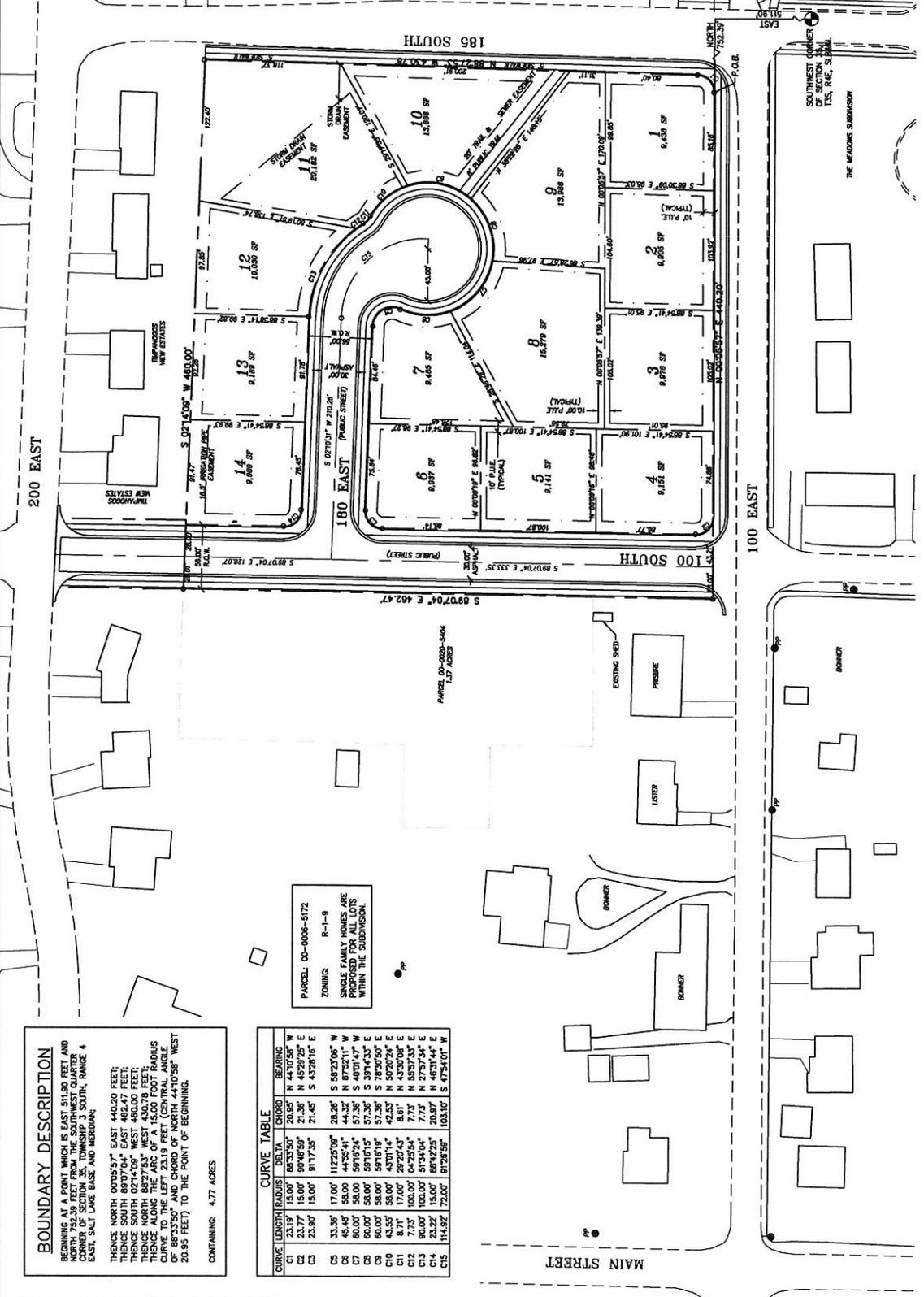




**BOUNDARY DESCRIPTION**  
 BEGINNING AT A POINT WHICH IS EAST 511.90 FEET AND NORTH 752.39 FEET FROM THE SOUTHWEST QUARTER CORNER OF SECTION 10, TOWNSHIP 36 SOUTH, RANGE 4 EAST, SALT LAKE BASE, AND MERIDIAN,  
 THENCE NORTH 00°05'57" EAST 440.20 FEET;  
 THENCE SOUTH 89°07'04" EAST 482.47 FEET;  
 THENCE SOUTH 02°44'43" WEST 430.00 FEET;  
 THENCE ALONG THE ARC OF A 15.00 FOOT RADIUS CURVE TO THE LEFT 23.19 FEET (CENTRAL ANGLE OF 88°33'50" AND CHORD OF NORTH 44°10'56" WEST 20.89 FEET) TO THE POINT OF BEGINNING.  
 CONTAINING 4.77 ACRES

CURVE	LENGTH	RADIUS	DELTA	CHORD	BEARING
C1	23.19	15.00	863359"	20.89	N 44°10'56" W
C2	43.55	15.00	811725"	21.45	S 82°28'16" E
C3	33.36	17.00	1122206"	28.26	S 58°22'08" W
C4	45.48	58.00	445241"	44.37	N 87°52'11" W
C5	60.00	58.00	591624"	57.36	S 40°01'47" W
C6	60.00	58.00	591615"	57.36	S 89°13'53" E
C7	43.55	15.00	811725"	21.45	N 87°52'11" W
C8	43.55	15.00	811725"	21.45	N 87°52'11" W
C9	8.71	17.00	292043"	8.61	N 43°00'08" E
C10	8.71	17.00	292043"	8.61	N 43°00'08" E
C11	7.75	100.00	0428254"	7.75	N 58°57'33" E
C12	90.00	100.00	513404"	7.75	N 27°57'54" E
C13	23.22	15.00	864225"	20.87	N 46°31'44" E
C14	114.52	72.00	1872825"	103.10	S 47°54'01" W

PARCEL 00-0006-5172  
 ZONING: R-1-9  
 SINGLE FAMILY HOMES ARE PERMITTED BY ZONING WITHIN THE SUBDIVISION.



THE DOCUMENT IS PREPARED FOR SERVICE ONLY. IT IS NOT TO BE USED FOR CONSTRUCTION UNLESS SIGNED AND SEALED BY THE ENGINEER.  
 PAUL S. BERG  
 LICENSED PROFESSIONAL ENGINEER  
 DATE: 30 JAN 2016

RD DEVELOPMENT GROUP LLC  
 LUCERNE ESTATES  
 SITE PLAN

**BERG ENGINEERING**  
 Paul S. Berg, P.E.  
 200 E Main St., Suite 204  
 Salt Lake City, UT 84111  
 801.462.1234

DATE: 30 JAN 2016  
 DRAWN BY: CSB  
 REV: 1

## 1.0 INTRODUCTION

This report presents the results of the geotechnical investigations for the proposed subdivision to be located at approximately 100 South 100 East in Midway, Utah. The general location of the site, with respect to existing roadways, is shown on Figure No. 1, *Vicinity Map*, at the end of this report.

This investigation was done to assist in evaluating the subsurface conditions and engineering characteristics of the foundation soils, strength of tufa deposits, and in developing our opinions and recommendations concerning appropriate foundation types, floor slabs, and pavements. This report presents the results of our geotechnical investigation including field exploration, laboratory testing, engineering analysis, and our opinions and recommendations. Data from the study is summarized on Figures 3 thru 7 and in the Laboratory Results.

## 2.0 PROPOSED CONSTRUCTION

We understand that the proposed development will consist of a single family residential subdivision. It is anticipated that these buildings will be single to multi-story slab on grade structures. We estimate that the maximum loads for the proposed structures will not exceed 6 kips per linear foot for bearing walls, 50 kips for columns, and 150 to 200 pounds per square foot for floor slabs. If structural loads are significantly greater than those discussed herein or if the project is substantially different than described above, our office should be notified so that we may review our recommendations, and if necessary, make modifications.

In addition to the structures described above it is anticipated that utilities will be constructed to service the buildings, that exterior concrete flatwork will be placed in the form of curb and gutter, and sidewalks, and that asphalt concrete paved roads will be constructed.

### 3.0 CONCLUSIONS

The following is a brief summary of our findings and conclusions:

1. The subject site is suitable for the proposed construction provided the recommendations presented in this report are followed.
2. Based upon the 5 boreholes drilled for this investigation, this site is covered with 18 inches of topsoil. The native soils below the topsoil generally consists of areas of a medium dense silty sand (SM) and bedrock tufa deposits of varying strength overlying a silty sand with clay (SM). Groundwater was encountered in all boreholes at depths of 10 to 14.5 feet below existing site grade.
3. Due to the risk of excessive differential settlement between the weathered tuffa bedrock and the silt and clay soils we recommend that footings be constructed on a single bearing type of material. If at least 18 inches of a similar bearing material exist below all footings on a building, or at least 6 inches of the tuffa bedrock, the footings may be constructed on the exposed native soils. If dissimilar materials are encountered within a single building, all footings should be constructed on at least 18 inches of properly placed and compacted structural fill.
4. Conventional strip and spread footings are recommended for supporting the proposed structures. Footings founded either on the undisturbed native soils, or on properly placed and compacted structural fill extending to the undisturbed native soils as indicated above, may be designed using a maximum bearing capacity of 2,000 psf. More detailed information pertaining to the construction of foundations is provided in Section 10.0, Foundations of this report.
5. Residential pavements should consist of 3 inches of asphalt and 8 inches of untreated aggregate base placed directly on the native subgrade. Additional pavement recommendations are stated in Section 14.0 of this report.

### 4.0 SITE CONDITIONS

The site is a near rectangular parcel of land consisting of approximately 6 acres. The subject property has an overall grade downward to the south at 1 to 3 percent. The entire site was vegetated with alfalfa and actively being irrigated and cultivated. An unlined irrigation ditch was observed running along the northern lot line, and an inactive ditch extends east-west across the bottom third of the site.

February 21, 2018

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

**Subject: Lucerne Estates Subdivision, – Preliminary Approval**

Dear Michael:

Horrocks Engineers recently reviewed the Lucerne Estates subdivision plans for preliminary approval. The proposed subdivision is located at approximately 100 South and 180 East just north of the Midway Elementary School. The proposed subdivision consists of 14 lots. The following issues should be addressed.

#### General Comments

- The roads, culinary water, pressurized irrigation system, and storm drain systems within this development will be public infrastructure and maintained by Midway City.

#### Water

- The proposed development will be served from the Gerber Mahogany pressure zone.
- The proposed development will connect to the existing 12" culinary water line in 100 East and the existing 6" culinary water line in 200 East.
- 8" water lines will be installed within the development. The proposed culinary water system will provide adequate fire flows.

#### Roads

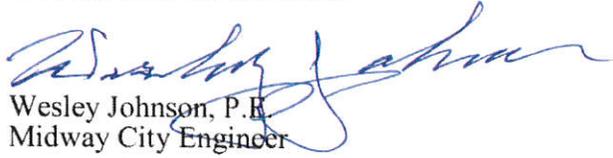
- A new road is proposed to be installed on 100 South from 100 East to 200 East. All new roads will have a cross section of 30' of asphalt, modified curb & gutter, a 5' park-strips and 5' sidewalks.
- Due to the roadway dedication on Michie Lane, Midway City will be dedicating 185 South, the roadway directly in front of the Midway Elementary to the Wasatch School District.

#### Storm Drain

- The storm water within the proposed development will be collected and dispersed through the use of catch basins, sumps, and retention basins.
- For maintenance a utility easement within 185 South needs to be provided to maintain access to the storm drain pond and sumps.

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